State of Utah

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Department of
Environmental Quality

Tim Davis
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DIVISION OF AIR QUALITY
Bryce C. Bird
Director

RN162900001

July 27, 2026

Aaron McDougal
Joule Capital Partners, LLC
2352 West Old Rosebud Lane
South Jordan, UT 84095
aaron@joulepower.ai

Dear Aaron McDougal,

Re: Engineer Review: New Natural Gas-Powered Datacenter
Project Number: N162900001

Please review and sign this letter and attached Engineer Review (ER) within **10 business days**.

Please contact **John Persons** at (385) 306-6503 if you have any questions or concerns about the ER. If you accept the contents of this ER, please email this signed cover letter to John Persons at **jpersons@utah.gov.** After receipt of the signed cover letter, the DAQ will prepare an Intent to Approve (ITA) for a 30-day public comment period. When the public comment period ends, the DAQ will consider any comments received and will issue the Approval Order.

If you do not respond to this letter within **10 business days,** the project will move forward without your approval. If you have concerns that we cannot resolve, the DAQ Director may issue an Order prohibiting construction.

Approval Signature _____ 7/27/2026_____
(Signature & Date)

UTAH DIVISION OF AIR QUALITY
ENGINEER REVIEW

SOURCE INFORMATION

Project Number	N162900001
Owner Name	Joule Capital Partners, LLC
Mailing Address	2352 West Old Rosebud Lane South Jordan, UT, 84095
Source Name	Joule Capital Partners, LLC
Source Location	Site 2: West 11700 North Street 2675' East of North City Road 4866 39°12'35.8"N 112°21'29.2"W Fillmore, UT 84631
UTM Projection	382,765 m Easting, 4,340,957 m Northing
UTM Datum	NAD83
UTM Zone	UTM Zone 12
SIC Code	4911 (Electric Services)
Source Contact	Aaron McDougal
Phone Number	(801) 413-8707
Email	aaron@joulepower.ai
Billing Contact	Aaron McDougal
Phone Number	(801)413-8707
Email	aaron@joulepower.ai
Project Engineer	John Persons, Engineer
Phone Number	(385) 306-6503
Email	jpersons@utah.gov
Notice of Intent (NOI) Submitted	July 7, 2025
Date of Accepted Application	December 9, 2025

SOURCE DESCRIPTION

General Description
Joule Capital Partners (JCP) has requested to operate a new natural gas-powered datacenter in Millard County. The facility will be recognized as Site #2 and will consist of natural gas-fired generator engines, diesel-fired emergency generator engines, boiler chillers, and diesel storage tanks. The facility will be a new Major Title V and HAP Source but not a PSD source.

NSR Classification:
New NSR Minor, Title V Major Source

Source Classification
Located in an Attainment Area
Millard County
Airs Source Size: A

Applicable Federal Standards
NSPS (Part 60), A: General Provisions
NSPS (Part 60), IIII: Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
NSPS (Part 60), JJJJ: Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
MACT (Part 63), A: General Provisions
MACT (Part 63), ZZZZ: National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
MACT (Part 63), DDDDD: National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters

Project Proposal
New Natural Gas-Powered Datacenter

Project Description
Joule Capital Partners (JCP) has requested to install a natural gas-powered datacenter. The facility will consist of sixty-nine (69) 3,392 hp natural gas-fired engines, sixty-nine (69) 3,633 hp diesel-fired emergency generator engines, sixty-nine (69) boiler chillers, and six (6) diesel storage tanks.

EMISSION IMPACT ANALYSIS

Emissions from the facility include PM_{10}, $PM_{2.5}$, NO_x, CO, SO_2, and HAPs. The emission rates for NO_x, PM_{10}, $PM_{2.5}$, and CO triggered the requirement to perform an emissions impact analysis (model) under R307-410-4. Therefore, modeling for these pollutants against the NAAQS (National Ambient Air Quality Standards) was performed by the Applicant and reviewed and confirmed by DAQ. The HAP emissions from this facility are exempt from modeling due to applicable MACT requirements. Additionally, the HAP emissions did not exceed the HAP modeling thresholds listed in R307-410-5. The results of this modeling are shown below. Additionally, due to the modeling results two (2) operating conditions were added to the permit. These conditions are listed below.

The owner/operator shall not operate the emergency-use generators for non-emergency purposes before 9:00 am or after 2:00 pm.
The owner/operator shall operate no more than five emergency generators at the same time for non-emergency purposes.

Carbon Monoxide (CO)

Air Pollutant: CO
Period: 1-Hour
Prediction: 304.7 ug/m3
Class II Significant Impact Level: 2000 ug/m3
Background: 1380.0 ug/m3
Nearby Sources: 0.2 ug/m3
Total: 1684.9 ug/m3
NAAQS: 40,000 ug/m3
Percent NAAQS: 4.2 %

Air Pollutant: CO
Period: 8-Hour
Prediction: 127.4 ug/m3
Class II Significant Impact Level: 500 ug/m3
Background: 920.0 ug/m3
Nearby Sources: 0.0 ug/m3
Total: 1047.4 ug/m3
NAAQS: 10,300 ug/m3
Percent NAAQS: 10.2 %

Nitrogen Dioxide (NO_2)

Air Pollutant: NO_2
Period: 1-Hour
Prediction: 113 ug/m3
Class II Significant Impact Level: 7.5 ug/m3
Background: 24.5 ug/m3
Nearby Sources: 0.2 ug/m3
Total: 137.7 ug/m3
NAAQS: 188 ug/m3
Percent NAAQS: 73.2 %

Air Pollutant: NO_2
Period: Annual
Prediction: 0.3 ug/m3
Class II Significant Impact Level: 1.0 ug/m3
Background: 2.4 ug/m3
Nearby Sources: 7.7 ug/m3
Total: 10.4 ug/m3
NAAQS: 100 ug/m3
Percent NAAQS: 10.4 %

Particulate Matter (PM_{10})

Air Pollutant: PM_{10}
Period: 24-Hour
Prediction: 0.8 ug/m3
Class II Significant Impact Level: 5 ug/m3

Background: 65.7 ug/m3
Nearby Sources: 19.2 ug/m3
Total: 85.7 ug/m3
NAAQS: 150 ug/m3
Percent NAAQS: 57.1 %

Particulate Matter ($PM_{2.5}$)

Air Pollutant: $PM_{2.5}$
Period: 24-Hour
Prediction: 0.1 ug/m3
Class II Significant Impact Level: 1.2 ug/m3
Background: 18.3 ug/m3
Nearby Sources: 7.7 ug/m3
Total: 26.1 ug/m3
NAAQS: 35 ug/m3
Percent NAAQS: 74.6 %

Air Pollutant: $PM_{2.5}$
Period: Annual
Prediction: 0.12 ug/m3
Class II Significant Impact Level: 0.3 ug/m3
Background: 3.68 ug/m3
Nearby Sources: 2.85 ug/m3
Total: 6.65 ug/m3
NAAQS: 9 ug/m3
Percent NAAQS: 73.9 %
[Last updated July 1, 2026]

SUMMARY OF EMISSIONS

The emissions listed below are an estimate of the total potential emissions from the source. Some rounding of emissions is possible.

Criteria Pollutant	Change (TPY)	Total (TPY)
CO_2 Equivalent		865632.00
Carbon Monoxide		203.34
Nitrogen Oxides		230.12
Particulate Matter - PM_{10}		60.89
Particulate Matter - $PM_{2.5}$		60.89
Sulfur Dioxide		3.80
Volatile Organic Compounds		191.98

Hazardous Air Pollutant	Change (lbs/yr)	Total (lbs/yr)
Acetaldehyde (CAS #75070)		48002
Acrolein (CAS #107028)		29600
Benzene (Including Benzene From Gasoline) (CAS #71432)		2610
Formaldehyde (CAS #50000)		76800
Generic HAPs (CAS #GHAPS)		14780
Hexane (CAS #110543)		2020
Methanol (CAS #67561)		14380
Toluene (CAS #108883)		2368
	Change (TPY)	**Total (TPY)**
Total HAPs		95.28

Note: Change in emissions indicates the difference between previous AO and proposed modification.

Review of BACT for New/Modified Emission Units

1. **BACT review regarding Natural Gas-Fired Generator Engines**

Joule Capital Partners (JCP) has requested to install sixty-nine (69) 3,392 hp natural gas-fired prime power generator engines. These engines will have the potential to emit NO_x, CO, VOC, SO_2, PM_{10}, $PM_{2.5}$, and HAPs. Several emissions control technologies exist that can help reduce these emissions. These control technologies include the use of selective catalyst reduction (SCR) and the use of an oxidative catalyst (OC). SCR is an effective method to reduce NO_x emissions. The use of an OC is an effective way to reduce CO, VOC, and Formaldehyde emissions. The use of both SCR and an OC is technologically and economically feasible. As a result of SCR, the NO_x emissions rate from the engines will be 0.06 g/hp-hr. This meets or exceeds all BACT results in the EPA BACT Clearinghouse as well as meeting the 1.0 g/hp-hr NO_x requirement of 40 CFR 60 (NSPS) Subpart JJJJ. As a result of OC, the CO and VOC emissions rates will be 0.08 g/hp-hr and 0.078 g/hp-hr respectively. This also meets or exceeds the BACT results in the EPA BACT Clearinghouse as well as meeting the 2.0 g/hp-hr CO and 0.7 g/hp-hr VOC requirements in Subpart JJJJ. Because NSPS Subpart JJJJ excludes formaldehyde from VOC calculations, deducting it reduces the engines' VOC emission rate to 0.061 g/hp-hr, achieving compliance with the subpart.

The Selected BACT is as follows:
The owner/operator shall install SCR and an OC on all natural gas-fired engines.
The owner/operator shall maintain records that show the engines will meet the emissions rates of 0.08 g/hp-hr CO, 0.078 g/hp-hr VOC, and 0.06 g/hp-hr NO_x.
The owner/operator shall operate all natural gas -fired engines in accordance with the manufacturer's operational and maintenance guidelines.
The owner/operator shall ensure that all visible emissions from the natural gas-fired engines do not exceed 10% opacity.
[Last updated July 27, 2026]

2. **BACT review regarding Diesel-Fired Emergency Generator Engines**

JCP has requested to install and operate sixty-nine (69) 3,633 hp Tier 2 diesel-fired emergency generator engines. These engines will have the potential to emit NO_x, CO, PM_{10}, $PM_{2.5}$, SO_2, VOCs, and HAPS. There are several control options available to control these emissions. These control options include selective catalytic reduction (SCR), diesel oxidative catalysts (DOC), ultra-low sulfur fuel, diesel particulate filters (DFP), use of Tier 2 certified engines, good combustion practices, and limited hours of operation.

Each engine will not exceed 50 hours of operation per year for maintenance and testing purposes. Due to the inconsistent and low volume of air pollutants emitted from the engines during testing and maintenance, the cost to replace the Tier 2 engines with Tier 4 engines is considered cost prohibitive.
The remaining control options are ranked below from most effective to least effective

SCR
Limited hours of operation
DFP
Tier 2 certified engines
Ultra low-sulfur diesel
Good combustion practices

SCR can significantly reduce NO_x emissions rates and is even capable of allowing a Tier 2 engine to meet the Tier 4 standard. However, the use of SCR is economically infeasible. Incorporating SCR results in a BACT cost of $33,630 per ton of NO_x reduced. DOC utilizes a catalyst such as platinum or palladium to oxidize the engine's exhaust, which includes VOCs, to CO_2 and water. Use of a DOC can result in approximately 90% reduction in VOC emissions. In addition to controlling VOC, a DOC also has the potential to reduce PM emissions by 30% (based on the concentration of soluble organics) and CO emissions by 50% if low sulfur diesel fuel is used. each diesel emergency generator engine will only produce 0.15 tpy of CO, 0.02 tpy of VOCs, and less than 0.01 tpy of HAPs. Use of a DOC is considered cost prohibitive due to the low volume of air pollutants emitted from the engines as a result of the limited runtime of 50 hours per year per engine. The use of DFP is also economically infeasible because (due to the limited runtime of 50 hours per year per engine) the total annual PM_{10} from all the diesel-fired emergency generator engines combined is 0.69 tpy.

The Selected BACT is as follows:
The owner/operator shall limit the runtime of each diesel-fired emergency generator engine to no more than 50 hours per rolling 12-month period.
The owner/operator shall ensure all diesel-fired emergency generator engines onsite meet the Tier 2 certification standards.
The owner/operator shall only use ultra-low sulfur diesel (ULSD) in all diesel-fired emergency engines onsite.
The owner/operator shall operate all diesel-fired emergency generator engines according to the manufacturer's operational and maintenance guidelines.
The owner/operator shall ensure that the visible emissions from all diesel-fired emergency generator engines do not exceed 20% opacity.

Additionally, two conditions were added as a result of the NAAQS modeling. Those conditions are listed below.
The owner/operator shall not operate the emergency-use generators for non-emergency purposes before 9:00 am or after 2:00 pm.
The owner/operator shall operate no more than five emergency generators at the same time for non-emergency purposes.

[Last updated July 2, 2026]

3. **BACT review regarding Boiler Chillers**

JCP has requested to install and operate sixty-nine (69) boiler chillers. The boilers on these units are rated to operate at 6.338 MMBtu/hr. However, this facility is being designed so that the natural gas prime engines will serve as dual heat and power systems, sending their waste (exhaust) heat to partially heat the boilers. At standard full operation each boiler will only need an additional 1.9 MMBtu/hr of natural gas input. To ensure the boilers do not use any additional natural gas input the natural gas input will be limited to 131.2 MMBtu/hr combined for all boilers onsite. This equipment is used to cool the servers at the datacenter through an absorption cooling process. The boilers will produce NO_x, CO, PM_{10}, $PM_{2.5}$, VOCs, SO_2, and HAPs. The BACT for boilers of this size is the use of ultra-low-NO_x burners capable of achieving emissions rates of 9 ppm NO_x and 40 ppm CO. The burners being installed on these units meet these standards along with the boiler requirements of UAC R307-316. Furthermore, visible emissions from each boiler is required to stay below 10% opacity.

Additionally, because this is a major source of HAPs, the boilers are also Subject to 40 CFR 63

(MACT) Subpart DDDDD.

The Selected BACT is as follows:
The owner/operator shall install and operate the burners on all boilers that are certified to meet an emissions rate of 9 ppm NO_x and 40 ppm CO.
The owner/operator shall not exceed a combined total natural gas heat input of 131.2 MMBtu per hour from all boilers onsite per 1-hour block average period.
The owner/operator shall only fire the boilers using natural gas.
The owner/operator shall operate the boiler chillers according to the manufacturers' operational and maintenance guidelines.
The owner/operator shall ensure that the visible emissions from all boiler chillers do not exceed 10% opacity.

[Last updated July 1, 2026]

4. **BACT review regarding Diesel Storage Tanks**

JCP has requested to install six (6) 10,000-gallon diesel storage tanks which will emit VOC and HAP emissions. Emissions from the fixed roof tanks come from displacement of headspace vapor during filling (working losses) and from temperature and heating variations (breathing loses). Due to the size and estimated throughputs of diesel in the tanks the VOC and HAP emissions from the tanks is less than 0.01 tpy, each. Because these emissions are so minimal, BACT is considered to be the use of best management and operational practices. This will include regular inspection of the tanks and associated piping for leaks. [Last updated July 27, 2026]

SECTION I: GENERAL PROVISIONS

The intent is to issue an air quality AO authorizing the project with the following recommended conditions and that failure to comply with any of the conditions may constitute a violation of the AO. **(New or Modified conditions are indicated as "New" in the Outline Label):**

I.1	All definitions, terms, abbreviations, and references used in this AO conform to those used in the UAC R307 and 40 CFR. Unless noted otherwise, references cited in these AO conditions refer to those rules. [R307-101]
I.2	The limits set forth in this AO shall not be exceeded without prior approval. [R307-401]
I.3	Modifications to the equipment or processes approved by this AO that could affect the emissions covered by this AO must be reviewed and approved. [R307-401-1]
I.4	All records referenced in this AO or in other applicable rules, which are required to be kept by the owner/operator, shall be made available to the Director or Director's representative upon request. Unless otherwise specified in this AO or in other applicable state and federal rules, records shall be kept for a minimum of five (5) years. [R307-401-8]

I.5	At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any equipment approved under this AO, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. All maintenance performed on equipment authorized by this AO shall be recorded. [R307-401-4]
I.6	The owner/operator shall comply with UAC R307-107. General Requirements: Breakdowns. [R307-107]
I.7	The owner/operator shall comply with UAC R307-150 Series. Emission Inventories. [R307-150]
I.8	The owner/operator shall submit documentation of the status of construction or modification to the Director within 18 months from the date of this AO. This AO may become invalid if construction is not commenced within 18 months from the date of this AO or if construction is discontinued for 18 months or more. To ensure proper credit when notifying the Director, send the documentation to the Director, attn.: NSR Section. [R307-401-18]

SECTION II: PERMITTED EQUIPMENT

The intent is to issue an air quality AO authorizing the project with the following recommended conditions and that failure to comply with any of the conditions may constitute a violation of the AO. **(New or Modified conditions are indicated as "New" in the Outline Label):**

II.A THE APPROVED EQUIPMENT

II.A.1 NEW	**Natural Gas Power Facility with Datacenter**
II.A.2 NEW	**Sixty-Nine Natural Gas-Fired Generator Engines** Quantity: 69 Power: 3,392 hp each (2,531 kW) 40 CFR 63 MACT Applicability: Subpart ZZZZ 40 CFR 60 NSPS Applicability: Subpart JJJJ Controls: Selective Catalytic Reduction (SCR) and Oxidative Catalyst
II.A.3 NEW	**Sixty-Nine Diesel-Fired Emergency Generator Engines** Quantity:69 Power: 3,633 hp each (2,711 kW) 40 CFR 63 MACT Applicability: Subpart ZZZZ 40 CFR 60 NSPS Applicability: Subpart IIII Controls: Tier 2 and ULSD

II.A.4 NEW	**Sixty-Nine Boiler Chillers** Quantity: 69 Rating: 6.338 MMBtu/hr each Controls: Ultra-low-NO_x Burner (9 ppm) 40 CFR 63 MACT Applicability: Subpart DDDDD
II.A.5 NEW	**Six Diesel Storage Tanks** Quantity: 6 Capacity: 10,000 gallons each

SECTION II: SPECIAL PROVISIONS

The intent is to issue an air quality AO authorizing the project with the following recommended conditions and that failure to comply with any of the conditions may constitute a violation of the AO. **(New or Modified conditions are indicated as "New" in the Outline Label):**

II.B REQUIREMENTS AND LIMITATIONS

II.B.1 NEW	**Natural Gas Generator Engine Requirements**
II.B.1.a NEW	The owner/operator shall not allow visible emissions from each natural gas fired engine on site to exceed 10% opacity. [R307-401-8]
II.B.1.a.1 NEW	Opacity observations of emissions from stationary sources shall be conducted in accordance with 40 CFR 60, Appendix A, Method 9. [R307-401-8]
II.B.1.b NEW	The owner/operator shall install and operate selective catalytic reduction (SCR) and oxidative catalyst (OC) systems on each of the natural gas-fired generator engines. [R307-401-8]
II.B.1.b.1 NEW	The owner/operator shall operate each SCR in accordance with manufacturer specification and recommendations to minimize ammonia slip. [R307-401-8]
II.B.1.b.2 NEW	The owner/operator shall inspect the SCRs each calendar year and replace the catalyst in accordance with manufacturer recommendations. Records of SCR inspections and catalyst replacement shall be kept for the life of the equipment. [R307-401-8]
II.B.1.c NEW	The owner/operator shall operate all natural gas-fired engines in accordance with the manufacturer's operational and maintenance guidelines. [R307-401-8]
II.B.1.d NEW	The owner/operator shall combust only pipeline-quality natural gas as fuel in each natural gas-fired engine. [R307-401-8]
II.B.1.e NEW	The owner/operator shall operate all natural gas-fired generator engines in accordance with the applicable requirements of 40 CFR 60 (NSPS) Subpart JJJJ and 40 CFR 63 (MACT) Subpart ZZZZ. [40 CFR 60 Subpart JJJJ, 40 CFR 63 Subpart ZZZZ, R307-401-8]
II.B.2 NEW	**Natural Gas Fired Engine Stack Testing Requirements**

II.B.2.a NEW	The owner/operator shall not emit more than the following rates and concentrations from each Natural Gas Fired Engine Exhaust Stack: Pollutant g/hp-hr NO_x 0.06 CO 0.08 VOCs 0.078 [R307-401-8]
II.B.2.a.1 NEW	**Initial Test** The owner/operator shall conduct an initial stack test on the emission unit within 180 days after startup of the emission unit. [R307-165-2]
II.B.2.a.2 NEW	**Compliance Demonstration** To demonstrate compliance with the emission limitations above, the owner/operator shall perform stack testing on the emissions unit according to the stack testing conditions contained in this AO. [R307-165-2, R307-401-8]
II.B.2.a.3 NEW	**Test Frequency** The owner/operator shall conduct a stack test on each emissions unit within three (3) years or 8,760 hours of operation, whichever occurs first, following the date of the most recent stack test for that unit. The Director may require the owner/operator to perform a stack test at any time. [40 CFR 60 Subpart JJJJ, R307-165-2, R307-401-8]
II.B.2.b NEW	The owner/operator shall conduct any stack testing required by this AO according to the following conditions. [R307-401-8]
II.B.2.b.1 NEW	**Notification** At least 30 days prior to conducting a stack test, the owner/operator shall submit a source test protocol to the Director. The source test protocol shall include the items contained in R307-165-3. If directed by the Director, the owner/operator shall attend a pretest conference. [R307-165-3, R307-401-8]
II.B.2.b.2 NEW	**Testing & Test Conditions** The owner/operator shall conduct testing according to the approved source test protocol and according to the test conditions contained in R307-165-4. [R307-165-4, R307-401-8]
II.B.2.b.3 NEW	**Access** The owner/operator shall provide Occupational Safety and Health Administration (OSHA)- or Mine Safety and Health Administration (MSHA)-approved access to the test location. [R307-401-8]
II.B.2.b.4 NEW	**Reporting** No later than 60 days after completing a stack test, the owner/operator shall submit a written report of the results from the stack testing to the Director. The report shall include validated results and supporting information. [R307-165-5, R307-401-8]

II.B.2.b.5 NEW	**Possible Rejection of Test Results** The Director may reject stack testing results if the test did not follow the approved source test protocol or for a reason specified in R307-165-6. [R307-165-6, R307-401-8]
II.B.2.b.6 NEW	**Test Methods** When performing stack testing, the owner/operator shall use the appropriate EPA-approved test methods as acceptable to the Director. Acceptable test methods for pollutants are listed below. [R307-401-8]
II.B.2.c NEW	**Standard Conditions** A. Temperature - 68 degrees Fahrenheit (293 K) B. Pressure - 29.92 in Hg (101.3 kPa) C. Averaging Time - As specified in the applicable test method [40 CFR 60 Subpart A, 40 CFR 63 Subpart A, R307-401-8]
II.B.2.c.1 NEW	**NO_x** 40 CFR 60, Appendix A, Method 7; Method 7E; or other EPA-approved testing method as acceptable to the Director. [R307-401-8]
II.B.2.c.2 NEW	**CO** 40 CFR 60, Appendix A, Method 10 or other EPA-approved testing method as acceptable to the Director. [R307-401-8]
II.B.2.c.3 NEW	**VOC** 40 CFR 60, Appendix A, Method 18; Method 25; Method 25A; 40 CFR 63, Appendix A, Method 320; or other EPA-approved testing method as acceptable to the Director. [R307-401-8]
II.B.3 NEW	**Diesel-Fired Emergency Generator Engine Requirements**
II.B.3.a NEW	The owner/operator shall not allow visible emissions from each diesel-fired emergency generator engine on site to exceed 20% opacity. [R307-201-3, R307-401-8]
II.B.3.a.1 NEW	Opacity observations of emissions from stationary sources shall be conducted in accordance with 40 CFR 60, Appendix A, Method 9. [R307-401-8]
II.B.3.b NEW	The owner/operator shall operate no more than five emergency generators at the same time for non-emergency purposes. [R307-401-8]
II.B.3.c NEW	The owner/operator shall ensure all diesel-fired emergency generator engines onsite meet the Tier 2 standards. [R307-401-8]
II.B.3.c.1 NEW	The owner/operator shall keep records demonstrating that all diesel-fired generator engines onsite meet the Tier 2 standards. These records shall be kept onsite for the lifetime of the equipment. [R307-401-8]

II.B.3.d NEW	The owner/operator shall operate the diesel-fired emergency generator engines in accordance with the manufacturer's operational and maintenance guidelines. [R307-401-8]
II.B.3.e NEW	The owner/operator shall not operate each emergency engine on site for more than 50 hours per rolling 12-month period during non-emergency situations. There is no time limit on the use of the engines during emergencies. [40 CFR 63 Subpart ZZZZ, R307-401-8]
II.B.3.e.1 NEW	The owner/operator shall not operate the emergency-use generators for non-emergency purposes before 9:00 am or after 2:00 pm. [R307-401-8]
II.B.3.e.2 NEW	To determine compliance with a rolling 12-month total, the owner/operator shall calculate a new 12-month total by the 20th day of each month using data from the previous 12 months. Records documenting the operation of each emergency engine shall be kept in a log and shall include the following: A. The date the emergency engine was used B. The duration of operation in hours C. The reason for the emergency engine usage. [40 CFR 63 Subpart ZZZZ, R307-401-8]
II.B.3.e.3 NEW	To determine the duration of operation, the owner/operator shall install a non-resettable hour meter for each emergency engine. [R307-401-8, 40 CFR 63 Subpart ZZZZ]
II.B.3.f NEW	The owner/operator shall only use diesel fuel (e.g. fuel oil #1, #2, or diesel fuel oil additives) as fuel in each emergency engine. [R307-401-8]
II.B.3.f.1 NEW	The owner/operator shall only combust diesel fuel that meets the definition of ultra-low sulfur diesel (ULSD) in 40 CFR 1090.305, which has a sulfur content of 15 ppm or less. [R307-401-8]
II.B.3.f.2 NEW	To demonstrate compliance with the ULSD fuel requirement, the owner/operator shall maintain records of diesel fuel purchase invoices or obtain certification of sulfur content from the diesel fuel supplier. The diesel fuel purchase invoices shall indicate that the diesel fuel meets the ULSD requirements. [R307-401-8]
II.B.4 NEW	**Boiler Chiller Requirements**
II.B.4.a NEW	The owner/operator shall not allow visible emissions from each boiler chiller on site to exceed 10% opacity. [R307-401-8]
II.B.4.a.1 NEW	Opacity observations of emissions from stationary sources shall be conducted in accordance with 40 CFR 60, Appendix A, Method 9. [R307-401-8]
II.B.4.b NEW	The owner/operator shall operate each boiler chiller in accordance with the manufacturer's operational and maintenance guidelines. [R307-401-8]
II.B.4.c NEW	The owner/operator shall use only natural gas as fuel in all boilers onsite. [R307-401-8]

II.B.4.d NEW	The owner/operator shall install and operate an ultra-low NO_x burner on each boiler that is certified by the manufacturer to emit 9 ppm or less of NO_x and 40 ppm or less of CO at a 3% volume stack gas oxygen on a dry basis. [R307-316, R307-401-8]
II.B.4.d.1 NEW	The owner/operator shall keep the manufacturer certification for the ultra-low NO_x burners on site. [R307-401-8]
II.B.4.e NEW	The owner/operator shall not exceed a combined total natural gas heat input of 131.2 MMBtu per hour from all boilers onsite per 1-hour block average period. [R307-401-8]
II.B.4.e.1 NEW	The owner/operator shall: A. Determine combined natural gas heat input utilizing dedicated fuel flow meters located at the natural gas supply line of each individual boiler burner and the higher heating value (HHV) of the natural gas B. Record natural gas consumption and calculated natural gas heat input for all boilers onsite on an hourly basis C. Use the natural gas flow and heating value data to calculate the combined 1-hour block average natural gas heat input for all boilers onsite at the conclusion of each hour D. Keep the natural gas flow, heating value, and heat input calculation records for all periods the plant is in operation. [R307-401-8]

PERMIT HISTORY

When issued, the approval order shall supersede (if a modification) or will be based on the following documents:

Is Derived From	NOI dated July 7, 2025
Incorporates	Additional Information dated July 29, 2025
Incorporates	Additional Information dated August 21, 2025
Incorporates	Additional Information dated August 26, 2025
Incorporates	Additional Information dated September 18, 2025
Incorporates	Additional Information dated September 22, 2025
Incorporates	Additional Information dated October 21, 2025
Incorporates	Additional Information dated October 28, 2025
Incorporates	Additional Information dated November 25, 2025
Incorporates	Additional Information dated November 26, 2025
Incorporates	Additional Information dated December 9, 2025

REVIEWER COMMENTS

1. **Comment regarding Emissions Calculations:**
The emissions from the sixty-nine (69) natural gas-fired engines were calculated using manufacturer data and emissions factors from AP-42 Table 3.2-2.

The emissions from the sixty-nine (69) diesel-fired emergency generator engines were calculated using manufacturer data and emissions factors from AP-42 Tables 3.4-1, 3.4-3, and 3.4-4.

The emissions from the sixty-nine (69) boiler chillers were calculated based on manufacturer data, natural gas consumption estimates, and emissions factors from AP-42 Section 1.4-2.

The boiler chillers at this facility are heated by both waste heat from the exhaust of the natural gas prime engines and from additional natural gas usage. The boiler chiller emissions were calculated assuming the natural gas prime engines were operating at full load 8,760 hours per year. In this scenario each boiler, which has a nameplate rating of 6.338 MMBtu/hr, only needs 1.9 MMBtu/hr of supplemental natural gas. To ensure this quantity of natural gas usage is not exceeded, permit condition II.B.4.e and II.B.4.e.1 were added to limit natural gas firing of all boilers onsite to not exceed 131.2 MMBtu/hr combined. Additionally, this condition also prevents the source from triggering PSD by ensuring the total MMBtu/hr of fossil fuel boiler input stays below the 250 MMBtu/hr threshold in the 28 listed source category list.

The emissions from the six (6) 10,000 gallon diesel fixed roof storage tanks was calculated using the EPA tanks program. [Last updated July 27, 2026]

2. **Comment regarding MACT and NSPS Applicability:**
The source is subject 40 CFR 60 (NSPS) Subparts JJJJ and IIII. The source is also subject to 40 CFR 63 (MACT) Subparts ZZZZ and DDDDD.

40 CFR 60 (NSPS) Subpart IIII applies to owners and operators of stationary CI ICEs that commenced construction after July 11, 2005, where the stationary CI ICE are manufactured after April 1, 2006. The diesel-fired emergency generator engines that this source operates fall under this. Therefore, Subpart IIII applies to this source. However, because these engines are classified as

emergency generator engines and have limited runtime, these engines are exempt from the maintenance and testing requirements of this subpart.

40 CFR 60 (NSPS) Subpart JJJJ applies to owners and operators of stationary SI ICE that commence construction after June 12, 2006, where the stationary SI ICE are manufactured on or after July 1, 2007, for engines with a maximum engine power greater than or equal to 500 HP. The source operates engines that meet these criteria. Therefore, Subpart JJJJ applies to this source.

40 CFR 63 (MACT) Subpart ZZZZ applies to owners or operators of a stationary RICE at a major or area source of HAP emissions. The source operates stationary RICEs and is a major source of HAP emissions. Therefore, Subpart ZZZZ applies to this source.

40 CFR 63 (MACT) Subpart DDDDD applies if you own or operate an industrial, commercial, or institutional boiler or process heater as defined in 40 CFR 63.7575 that is located at, or is part of, a major source of HAP. The source operates boilers and is a major source of HAP emissions. Therefore, Subpart DDDDD applies to this source [Last updated April 21, 2026]

3. **Comment regarding Major Source Determination, Offsets, and PSD Determination:**
Major Source Determination:Joule Capital Partner's (JCP) Site #2, new natural gas power facility and datacenter has the following total potential emissions: 230.12 tpy NO_x, 203.34 tpy CO, 60.89 tpy PM_{10}, 60.89 tpy $PM_{2.5}$, 3.80 tpy of SO_2, 191.98 tpy VOCs, and 95.28 tpy HAPs. JCP's new facility is not one of the 28 listed source categories in 40 CFR 52.21(b)(1)(i)(a). Therefore, the criteria pollutant NSR major source threshold for this facility is 250 tpy for each of the criteria pollutants. None of the criteria pollutant PTEs exceed that. However, the major source threshold for HAPs is 10 tpy for any one HAP or/and 25 tpy of all HAPs combined. JCP's new facility emits 24 tpy of Acetaldehyde, 14.8 tpy of Acrolein, 38.4 tpy of Formaldehyde, and 95.28 tpy of all HAPs combined. Therefore, this facility is a major source for HAPs but is minor for all criteria pollutants for NSR purposes.

While the criteria pollutant NSR Major threshold for NSR and PSD purposes is 250 tpy, the Part 70 Title V major source threshold is 100 tpy for each criteria pollutant. Therefore, this site is considered a Title V major source.

PSD Determination:
Because this facility is not one of the 28 listed source categories in 40 CFR 52.21(b)(1)(i)(a). The PSD threshold for this site is 250 tpy of any criteria pollutant. The PTEs of each criteria pollutant are below this threshold. Therefore, PSD requirements do not apply to this source. Although the aggregate nameplate capacity of the onsite boilers exceeds 250 MMBtu/hr, the total fossil fuel heat input is restricted to 131.2 MMBtu/hr pursuant to Permit Conditions II.B.4.e and II.B.4.e.1. Because these enforceable conditions limit the fossil fuel input below the 250 MMBtu/hr threshold, the 'fossil-fuel boiler' listed source category classification does not apply to this facility. The majority of the thermal demand for the boiler-chiller systems is instead supplied by recovered waste heat from the primary natural gas-fired engines.

SIP and Offsets:
This facility is in an attainment area for all criteria pollutants. Therefore, this facility has no effect on any current SIP and no offsetting requirements apply. [Last updated July 27, 2026]

4. **Comment regarding Title V Applicability:**
Title V of the 1990 Clean Air Act (Title V) applies to the following:

1. Any major source
2. Any source subject to a standard, limitation, or other requirement under Section 111 of the Act, Standards of Performance for New Stationary Sources;
3. Any source subject to a standard or other requirement under Section 112 of the Act, Hazardous Air Pollutants.
4. Any Title IV affected source.

This source is a major source for HAPS and is a Part 70 Title V major source. This source is also subject to 40 CFR 60 (NSPS) Subparts JJJJ and NSPS Subpart IIII. This source is also subject to 40 CFR 63 (MACT) Subpart ZZZZ and Subpart DDDDD. Therefore, Title V applies to this facility.

[Last updated July 27, 2026]

5. **Comment regarding Site Independent AO Determination :**

The proposed datacenter facilities were permitted as distinct independent stationary sources under the New Source Review (NSR) and Title V Operating Permit programs. According to 40 CFR 52.21(b)(6), a "stationary source" is defined as "any building, structure, facility, or installation which emits or may emit a regulated NSR pollutant." "Building, structure, facility, or installation" is later defined in 40 CFR 52.21 as "all of the pollutant-emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control)". All three criteria must be independently satisfied before a single-source determination is appropriate.

The facilities fail on the second criterion: they are neither contiguous nor adjacent. The Facilities are separated by at least 0.4 miles measured boundary to boundary at their closest and are not "nearby, side-by-side, or neighboring" as required by controlling guidance. Further, independently and distinct from each other, the facilities each represent a "common sense notion of a plant," as described in applicable case law. Consequently, each site qualifies for its own independent Approval Order. [Last updated July 23, 2026]

ACRONYMS

The following lists commonly used acronyms and associated translations as they apply to this document:

40 CFR	Title 40 of the Code of Federal Regulations
AO	Approval Order
BACT	Best Available Control Technology
CAA	Clean Air Act
CAAA	Clean Air Act Amendments
CDS	Classification Data System (used by EPA to classify sources by size/type)
CEM	Continuous emissions monitor
CEMS	Continuous emissions monitoring system
CFR	Code of Federal Regulations
CMS	Continuous monitoring system
CO	Carbon monoxide
CO_2	Carbon Dioxide
CO_2e	Carbon Dioxide Equivalent - 40 CFR Part 98, Subpart A, Table A-1
COM	Continuous opacity monitor
DAQ/UDAQ	Division of Air Quality
DAQE	This is a document tracking code for internal UDAQ use
EPA	Environmental Protection Agency
FDCP	Fugitive dust control plan
GHG	Greenhouse Gas(es) - 40 CFR 52.21 (b)(49)(i)
GWP	Global Warming Potential - 40 CFR Part 86.1818-12(a)
HAP or HAPs	Hazardous air pollutant(s)
ITA	Intent to Approve
LB/HR	Pounds per hour
LB/YR	Pounds per year
MACT	Maximum Achievable Control Technology
MMBTU	Million British Thermal Units
NAA	Nonattainment Area
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emission Standards for Hazardous Air Pollutants
NOI	Notice of Intent
NO_x	Oxides of nitrogen
NSPS	New Source Performance Standard
NSR	New Source Review
PM_{10}	Particulate matter less than 10 microns in size
$PM_{2.5}$	Particulate matter less than 2.5 microns in size
PSD	Prevention of Significant Deterioration
PTE	Potential to Emit
R307	Rules Series 307
R307-401	Rules Series 307 - Section 401
SO_2	Sulfur dioxide
Title IV	Title IV of the Clean Air Act
Title V	Title V of the Clean Air Act
TPY	Tons per year
UAC	Utah Administrative Code
VOC	Volatile organic compounds

Project Summary Emissions Estimates

Configuration	NOx	CO	PM10	PM2.5	VOC	SO2	HAP
	Pounds Per Hour						
Natural Gas Engines	30.96	40.09	13.12	13.12	0.00	0.77	28.52
Diesel Backup Engines	255.50	30.44	2.00	2.00	5.61	0.22	0.20
Chiller Boiler	1.45	3.94	0.63	0.63	3.28	0.08	0.24
Total	**287.91**	**74.46**	**15.75**	**15.75**	**8.89**	**1.07**	**28.97**

Configuration	NOx	CO	PM10	PM2.5	VOC	SO2	HAP	GHG
	Tons Per Year							
Natural Gas Engines	135.60	175.60	57.45	57.45	0.00	3.38	124.94	744,227
Diesel Backup Engines	88.15	10.50	0.69	0.69	1.93	0.08	0.07	54,272
Chiller Boiler	6.37	17.24	2.76	2.76	14.36	0.34	1.06	67133.78
Total	**230.12**	**203.34**	**60.89**	**60.89**	**16.30**	**3.80**	**126.07**	**865,632**

0.15218 0.02803 0.001

141.97

Natural Gas Engines

Rating (hp)	**3392**	hp
Operational Hours	**8760**	hr/yr
Engine Type	4-Stroke lean burn	
Number of Units	**69**	
Engine Fuel Consumption	**5611**	Btu/bhp-hr

2531.34 kW

163.46 mmscf/yr/eng
11278.44 mmscf/yr
19.0325

1.66725E+11
Btu / bhp-hr | hr / yr | bhp | is | Btu / yr

Criteria Pollutants	g/hp-hr	lb/MMBtu	lb/hr	Tons/yr	Reference
NOx	0.06		30.96	135.60	Manufacturer Data or AP-42 Table 3.2-2
CO	0.08		40.09	175.60	
PM10		9.99E-03	13.12	57.45	
PM2.5		9.99E-03	13.12	57.45	
VOC			0.00	0.00	
SO2		5.88E-04	0.77	3.38	
HAP			28.52	124.94	See Below

The g/hp-hr rates are based on site specific 100% loading.

NOx is controlled by SCR at 94%

CO and VOCs are controlled by Oxidation Catalyst at 93 and 50%, respectively.

0.0004425

Hazard Pollutant	lb/MMBtu	lb/hr	Tons/yr	Reference
1,1,2,2-Tetrachloroethane	4.00E-05	2.63E-02	1.15E-01	Manufacturer Data or AP-42 Table 3.2-2
1,1,2-Trichloroethane	3.18E-05	2.09E-02	9.15E-02	
1,3-Butadiene	2.67E-04	1.75E-01	7.68E-01	
1,3-Dichloropropane	2.64E-05	1.73E-02	7.59E-02	
2,2,4-Trimethylpentane	2.50E-04	1.64E-01	7.19E-01	
2-Methylnaphthalene	3.32E-05	2.18E-02	9.55E-02	
Acenaphthene	1.25E-06	8.21E-04	3.60E-03	
Acenaphthylene	5.53E-06	3.63E-03	1.59E-02	
Acetaldehyde	8.36E-03	5.49E+00	2.40E+01	
Acrolein	5.14E-03	3.38E+00	1.48E+01	
Benzene	4.40E-04	2.89E-01	1.27E+00	
Benzo(b)fluoranthene	1.66E-07	1.09E-04	4.77E-04	
Benzo(e)pyrene	4.15E-07	2.72E-04	1.19E-03	
Benzo(g,h,i)perylene	4.14E-07	2.72E-04	1.19E-03	
Biphenyl	2.12E-04	1.39E-01	6.10E-01	
Carbon Tetrachloride	3.67E-05	2.41E-02	1.06E-01	
Chlorobenzene	3.04E-05	2.00E-02	8.74E-02	
Chloroform	2.85E-05	1.87E-02	8.20E-02	
Chrysene	6.93E-07	4.55E-04	1.99E-03	
Ethylbenzene	3.97E-05	2.61E-02	1.14E-01	
Ethylene Dibromide	4.43E-05	2.91E-02	1.27E-01	
Fluoranthene	1.11E-06	7.29E-04	3.19E-03	
Fluorene	5.67E-06	3.72E-03	1.63E-02	
Formaldehyde*	1.70E-01	1.58E+01	6.92E+01	
Methanol	2.50E-03	1.64E+00	7.19E+00	
Methylene Chloride	2.00E-05	1.31E-02	5.75E-02	
n-Hexane	1.11E-03	7.29E-01	3.19E+00	
Naphthalene	7.44E-05	4.89E-02	2.14E-01	
PAH	2.69E-05	1.77E-02	7.74E-02	
Phenanthrene	1.04E-05	6.83E-03	2.99E-02	
Phenol	2.40E-05	1.58E-02	6.90E-02	
Pyrene	1.36E-06	8.93E-04	3.91E-03	
Styrene	2.36E-05	1.55E-02	6.79E-02	
Tetrachloroethane	2.48E-06	1.63E-03	7.13E-03	
Toluene	4.08E-04	2.68E-01	1.17E+00	
Vinyl Chloride	1.49E-05	9.78E-03	4.29E-02	
Xylene	1.84E-04	1.21E-01	5.29E-01	

0.0004425

#DIV/0!

* Formaldehyde is in g/hp-hr and controlled by 82% per SCR

GHG Pollutant	g/hp-hr	lb/hr	Tons/yr	GWP	Reference*
CO2	329	169,757	743,536	1	EPA GHG Emission Factors * CAT data
CH4**	1	2.90	12.68	28	
N2O**	0.1	0.29	1.27	265	
CO2e		169,915	744,227		

*https://www.epa.gov/system/files/documents/2025-01/ghg-emission-factors-hub-2025.pdf; CO2 is 329 g/hp-hr

** Emission factors are in g/MMBtu

1 engine	69 engines
166724.805	11504011.55
MMBtu/hr	935492881.50

Emergency Diesel Engines

Rating (hp)	**3633**	hp
Operational Hours	**50**	hr/yr
Engine Type	Diesel	
Tier Certification	**2**	
Number of Units	**69**	
Max Number per hr	**5**	
Engine Fuel Consumption	**7000**	Btu/bhp-hr

2711.19 kW

Criteria Pollutants	g/hp-hr	lb/hp-hr	lb/hr	Tons/yr	Reference
NOx	6.38		255.50	88.15	Manufacturer Data or AP-42 Table 3.4-1
CO	0.76		30.44	10.50	
PM10	0.05		2.00	0.69	
PM2.5	0.05		2.00	0.69	
VOC	0.14		5.61	1.93	
SO2		1.21E-05	0.22	0.08	
HAP			0.20	0.07	See Below

Hazard Pollutant	g/hp-hr	lb/MMBtu	lb/hr	Tons/yr	Reference
Benzene		7.76E-04	9.87E-02	3.40E-02	AP-42 Table 3.4-3 & 3.4-4
Toluene		2.81E-04	3.57E-02	1.23E-02	
Xylene		1.93E-04	2.45E-02	8.47E-03	
Formaldehyde		7.89E-05	1.00E-02	3.46E-03	
Acetaldehyde		2.52E-05	3.20E-03	1.11E-03	
Acrolein		7.88E-06	1.00E-03	3.46E-04	
Naphthalene		1.30E-04	1.65E-02	5.70E-03	
Acenaphthylene		9.23E-06	1.17E-03	4.05E-04	
Acenaphthene		4.68E-06	5.95E-04	2.05E-04	
Fluorene		1.28E-05	1.63E-03	5.62E-04	
Phenanthrene		4.08E-05	5.19E-03	1.79E-03	
Anthracene		1.23E-06	1.56E-04	5.40E-05	
Fluoranthene		4.03E-06	5.12E-04	1.77E-04	
Pyrene		3.71E-06	4.72E-04	1.63E-04	
Benzo(a)anthracene		6.22E-07	7.91E-05	2.73E-05	
Chrysene		1.53E-06	1.95E-04	6.71E-05	
Benzo(b)fluoranthene		1.11E-06	1.41E-04	4.87E-05	
Benzo(k)fluoranthene		2.18E-07	2.77E-05	9.56E-06	
Benzo(a)pyrene		2.57E-07	3.27E-05	1.13E-05	
Indeno(1,2,3-cd)pyrene		4.14E-07	5.26E-05	1.82E-05	
Dibenz(a,h)anthracene		3.46E-07	4.40E-05	1.52E-05	
Benzo(g,h,i)perylene		5.56E-07	7.07E-05	2.44E-05	

GHG Pollutant	lb/hp-hr	lb/hr	Tons/yr	GWP	Reference
CO2	1.16	21,071	7,270	1	AP-42 Table 3.4-1
CH4**	3	0.84	580	28	
N2O**	0.6	0.17	116.05	265	
CO2e		21,140	54,272		

GWP values are derived from 40 CFR Part 98 Table A-1

** Emission factors are in g/MMBtu

NOx MW	46.01	g/mol	
CO MW	28.01	g/mol	
NG MV	379.7	scf/lb-mol	Molar Volume NG
NG MW	20	lb/lb-mol	Molecular weight NG
NG Fd	8710	scf/MMBtu	EPA Method 19
NG HHV	1020	btu/scf	
Gas flow Rate	4094.3	scfm	
O2% correction	3		
NOx PPM	9	R307-315	
CO PPM	40	R307-315	
NOx lb/MMBtu	1.11E-02		
CO lb/MMBtu	3.00E-02		
20% Chiller/100% Eng Fuel Consumption	1.901	MMBtu/hr	

$$\frac{lb}{MMBtu} = ppm * 10^{-6} * \frac{1}{molar\ volume} * Molar\ Weight * F_d * \frac{20.9}{(20.9 - \%O_2)}$$

https://www.ourair.org/wp-content/uploads/PPMV-to-lb-per-MMBTU.xlsx

				69 Units		
NOx	0.0211	lb/hr	0.0923	tpy	6.371928	tpy
CO	0.0570		0.2499		17.24048	
PM2.5/10	0.0091		0.0400		2.757697	
VOC	0.0475		0.2082		14.36301	
SO2	0.0011		0.0049		0.337953	

PM2.5/10, and VOC from Broad USA

SO2 from AP-42 1.4-2

Engine % load	Engine Waste Heat recovery (approx. tons)	Chiller Installed capacity / Burner Capacity	load on Burner	capacity (tons) by Burner	Nat. Gas supplemental consump. kBtu/hr (MBH)	Flue gas Outlet temp	Flue Gas Flow rate ft3/hr	Nox PPM
97%	**600**	**750 tons**	20%	150	1901	320 F	9358	9
61%	**375**		50%	375	3169	320 F	15607	9
30%	**188**		75%	563	4753	320 F	23402	9
0 / Shut down status			100%	750	6338	320 F	31206	9

Provided by Broad USA

HAPS	lb/scf	lb/hr	TPY	69 TPY
Benzene	2.10E-03	3.91E-06	1.71E-05	1.18E-03
Dichlorobenzene	1.20E-03	2.24E-06	9.80E-06	6.76E-04
Formaldehyde	7.50E-02	1.40E-04	6.12E-04	4.22E-02
Hexane	1.8	3.35E-03	1.47E-02	1.01E+00
Naphthalene	6.10E-04	1.14E-06	4.98E-06	3.44E-04
Toluene	3.40E-03	6.34E-06	2.78E-05	1.92E-03
Arsenic	2.00E-04	3.73E-07	1.63E-06	1.13E-04
Beryllium	1.20E-05	2.24E-08	9.80E-08	6.76E-06
Cadmium	1.10E-03	2.05E-06	8.98E-06	6.20E-04
Chromium	1.40E-03	2.61E-06	1.14E-05	7.89E-04
Cobalt	8.40E-05	1.57E-07	6.86E-07	4.73E-05
Manganese	3.80E-04	7.08E-07	3.10E-06	2.14E-04
Mercury	2.60E-04	4.85E-07	2.12E-06	1.46E-04
Nickel	2.10E-03	3.91E-06	1.71E-05	1.18E-03
Selenium	2.40E-05	4.47E-08	1.96E-07	1.35E-05
Total POM		1.64E-07	7.20E-07	4.97E-05
Total HAPs		**3.52E-03**	**1.54E-02**	**1.06E+00**

All factors from AP-42 1.4-3 and 1.4-4

POM HAPs	lb/scf	lb/hr	TPY	69 TPY
2-Methylnaphthalene	2.40E-05	4.47E-08	1.96E-07	1.35E-05
3-Methylcholantrene	1.80E-06	3.35E-09	1.47E-08	1.01E-06
7,12-Dimethylbenz(a)anthracene	1.60E-05	2.98E-08	1.31E-07	9.01E-06
Acenaphthlene	1.80E-06	3.35E-09	1.47E-08	1.01E-06
Acenaphthylene	1.80E-06	3.35E-09	1.47E-08	1.01E-06
Anthracene	2.40E-06	4.47E-09	1.96E-08	1.35E-06
Benzo(a)anthracene	1.80E-06	3.35E-09	1.47E-08	1.01E-06
Benzo(a)pyrene	1.20E-06	2.24E-09	9.80E-09	6.76E-07
Benzo(b)fluoranthene	1.80E-06	3.35E-09	1.47E-08	1.01E-06
Benzo(g,h,i)perylene	1.20E-06	2.24E-09	9.80E-09	6.76E-07
Benzo(k)fluoranthene	1.80E-06	3.35E-09	1.47E-08	1.01E-06
Chrysene	1.80E-06	3.35E-09	1.47E-08	1.01E-06
Dibenzo(a,h)anthracene	1.20E-06	2.24E-09	9.80E-09	6.76E-07
Fluoranthene	3.00E-06	5.59E-09	2.45E-08	1.69E-06
Fluorene	2.80E-06	5.22E-09	2.29E-08	1.58E-06
Indeno(1,2,3-cd)pyrene	1.80E-06	3.35E-09	1.47E-08	1.01E-06
Phenanathrene	1.70E-05	3.17E-08	1.39E-07	9.58E-06
Pyrene	5.00E-06	9.32E-09	4.08E-08	2.82E-06

GHG Emissions	kg/MMBtu	lb/hr	TPY	GWP
CO2	53.06	221.91	971.9549902	1
CH4	1.00E-03	4.18E-03	1.83E-02	28
N2O	1.00E-04	4.18E-04	1.83E-03	265
CO2e		15327.35	67133.78	

https://www.epa.gov/system/files/documents/2025-01/ghg-emission-factors-hub-2025.pdf

	Gen Bldg	
	X	Y
SW	382620.24	4340682.19
SE	382900.86	4340682.19
NE	382900.86	4340848.43
NW	382620.24	4340848.43

	Boundary	
	X	Y
NW	380595.00	4338539.00
NE	381448.44	4338539.00
SE	381448.44	4337624.60
SW	380595.00	4337624.60

Grid Info	Spacing (m)	Distance (m)
PAB	25	N/A
Grid1	25	100
Grid2	50	350
Grid3	100	850
Grid4	250	1850
Grid5	500	4350
Grid6	1000	10350
Grid7	5000	35350

Domain Anchors (AERMAP)		
	X	Y
NE	423064.26	4385970.13
SW	329692.97	4299144.45

380881.41	4337998.68

180

Building			PAB				
	545.42 ft	width	3000 ft	width			
	920.67 ft	length	2800 ft	length			
G3520K							
from NW	47.33 ft			Chiller dia	16 in		
	63.25 ft				33.5 in		
Space each 10	67.33 ft	869.33			24.9 in		
Spacing	20 ft						
Diesel to NG	27.58 ft						
Diesel to Chill	13.79 ft						9.23197

Sources		X	Y	Height	Temp	Diameter	Flow	Velocity
		(m)	(m)	(ft)	(F)	(in)	(cfm)	(m/s)
SITE2_ENG1	ite 2 - Engine#	382634.67	4340829.15	50	320	24	14882	24.0644
SITE2_ENG2	ite 2 - Engine#	382640.76	4340829.15	50	320	24	14882	24.0644
SITE2_ENG3	ite 2 - Engine#	382646.86	4340829.15	50	320	24	14882	24.0644
SITE2_ENG4	ite 2 - Engine#	382652.96	4340829.15	50	320	24	14882	24.0644
SITE2_ENG5	ite 2 - Engine#	382659.05	4340829.15	50	320	24	14882	24.0644
SITE2_ENG6	ite 2 - Engine#	382665.15	4340829.15	50	320	24	14882	24.0644
SITE2_ENG7	ite 2 - Engine#	382671.24	4340829.15	50	320	24	14882	24.0644
SITE2_ENG8	ite 2 - Engine#	382677.34	4340829.15	50	320	24	14882	24.0644
SITE2_ENG9	ite 2 - Engine#	382683.44	4340829.15	50	320	24	14882	24.0644
SITE2_ENG10	te 2 - Engine#	382689.53	4340829.15	50	320	24	14882	24.0644
SITE2_ENG11	te 2 - Engine#	382710.05	4340829.15	50	320	24	14882	24.0644
SITE2_ENG12	te 2 - Engine#	382716.15	4340829.15	50	320	24	14882	24.0644
SITE2_ENG13	te 2 - Engine#	382722.25	4340829.15	50	320	24	14882	24.0644
SITE2_ENG14	te 2 - Engine#	382728.34	4340829.15	50	320	24	14882	24.0644
SITE2_ENG15	te 2 - Engine#	382734.44	4340829.15	50	320	24	14882	24.0644
SITE2_ENG16	te 2 - Engine#	382740.53	4340829.15	50	320	24	14882	24.0644
SITE2_ENG17	te 2 - Engine#	382746.63	4340829.15	50	320	24	14882	24.0644
SITE2_ENG18	te 2 - Engine#	382752.73	4340829.15	50	320	24	14882	24.0644
SITE2_ENG19	te 2 - Engine#	382758.82	4340829.15	50	320	24	14882	24.0644
SITE2_ENG20	te 2 - Engine#	382764.92	4340829.15	50	320	24	14882	24.0644
SITE2_ENG21	te 2 - Engine#	382785.44	4340829.15	50	320	24	14882	24.0644
SITE2_ENG22	te 2 - Engine#	382791.54	4340829.15	50	320	24	14882	24.0644
SITE2_ENG23	te 2 - Engine#	382797.63	4340829.15	50	320	24	14882	24.0644
SITE2_ENG24	te 2 - Engine#	382803.73	4340829.15	50	320	24	14882	24.0644
SITE2_ENG25	te 2 - Engine#	382809.83	4340829.15	50	320	24	14882	24.0644
SITE2_ENG26	te 2 - Engine#	382815.92	4340829.15	50	320	24	14882	24.0644
SITE2_ENG27	te 2 - Engine#	382822.02	4340829.15	50	320	24	14882	24.0644
SITE2_ENG28	te 2 - Engine#	382828.11	4340829.15	50	320	24	14882	24.0644
SITE2_ENG29	te 2 - Engine#	382834.21	4340829.15	50	320	24	14882	24.0644
SITE2_ENG30	te 2 - Engine#	382840.31	4340829.15	50	320	24	14882	24.0644
SITE2_ENG31	te 2 - Engine#	382860.83	4340829.15	50	320	24	14882	24.0644
SITE2_ENG32	te 2 - Engine#	382866.92	4340829.15	50	320	24	14882	24.0644
SITE2_ENG33	te 2 - Engine#	382873.02	4340829.15	50	320	24	14882	24.0644
SITE2_ENG34	te 2 - Engine#	382879.12	4340829.15	50	320	24	14882	24.0644
SITE2_ENG35	te 2 - Engine#	382885.21	4340829.15	50	320	24	14882	24.0644
SITE2_ENG36	te 2 - Engine#	382634.67	4340701.47	50	320	24	14882	24.0644
SITE2_ENG37	te 2 - Engine#	382640.76	4340701.47	50	320	24	14882	24.0644
SITE2_ENG38	te 2 - Engine#	382646.86	4340701.47	50	320	24	14882	24.0644
SITE2_ENG39	te 2 - Engine#	382652.96	4340701.47	50	320	24	14882	24.0644
SITE2_ENG40	te 2 - Engine#	382659.05	4340701.47	50	320	24	14882	24.0644
SITE2_ENG41	te 2 - Engine#	382665.15	4340701.47	50	320	24	14882	24.0644
SITE2_ENG42	te 2 - Engine#	382671.24	4340701.47	50	320	24	14882	24.0644
SITE2_ENG43	te 2 - Engine#	382677.34	4340701.47	50	320	24	14882	24.0644
SITE2_ENG44	te 2 - Engine#	382683.44	4340701.47	50	320	24	14882	24.0644
SITE2_ENG45	te 2 - Engine#	382689.53	4340701.47	50	320	24	14882	24.0644
SITE2_ENG46	te 2 - Engine#	382710.05	4340701.47	50	320	24	14882	24.0644
SITE2_ENG47	te 2 - Engine#	382716.15	4340701.47	50	320	24	14882	24.0644
SITE2_ENG48	te 2 - Engine#	382722.25	4340701.47	50	320	24	14882	24.0644
SITE2_ENG49	te 2 - Engine#	382728.34	4340701.47	50	320	24	14882	24.0644
SITE2_ENG50	te 2 - Engine#	382734.44	4340701.47	50	320	24	14882	24.0644
SITE2_ENG51	te 2 - Engine#	382740.53	4340701.47	50	320	24	14882	24.0644
SITE2_ENG52	te 2 - Engine#	382746.63	4340701.47	50	320	24	14882	24.0644
SITE2_ENG53	te 2 - Engine#	382752.73	4340701.47	50	320	24	14882	24.0644
SITE2_ENG54	te 2 - Engine#	382758.82	4340701.47	50	320	24	14882	24.0644
SITE2_ENG55	te 2 - Engine#	382764.92	4340701.47	50	320	24	14882	24.0644
SITE2_ENG56	te 2 - Engine#	382785.44	4340701.47	50	320	24	14882	24.0644
SITE2_ENG57	te 2 - Engine#	382791.54	4340701.47	50	320	24	14882	24.0644
SITE2_ENG58	te 2 - Engine#	382797.63	4340701.47	50	320	24	14882	24.0644
SITE2_ENG59	te 2 - Engine#	382803.73	4340701.47	50	320	24	14882	24.0644
SITE2_ENG60	te 2 - Engine#	382809.83	4340701.47	50	320	24	14882	24.0644
SITE2_ENG61	te 2 - Engine#	382815.92	4340701.47	50	320	24	14882	24.0644
SITE2_ENG62	te 2 - Engine#	382822.02	4340701.47	50	320	24	14882	24.0644
SITE2_ENG63	te 2 - Engine#	382828.11	4340701.47	50	320	24	14882	24.0644
SITE2_ENG64	te 2 - Engine#	382834.21	4340701.47	50	320	24	14882	24.0644
SITE2_ENG65	te 2 - Engine#	382840.31	4340701.47	50	320	24	14882	24.0644
SITE2_ENG66	te 2 - Engine#	382860.83	4340701.47	50	320	24	14882	24.0644
SITE2_ENG67	te 2 - Engine#	382866.92	4340701.47	50	320	24	14882	24.0644
SITE2_ENG68	te 2 - Engine#	382873.02	4340701.47	50	320	24	14882	24.0644
SITE2_ENG69	te 2 - Engine#	382879.12	4340701.47	50	320	24	14882	24.0644

Engine temp and flow rate directly from spec sheet.

Sources		X	Y	Height	Temp	Diameter	Flow	Velocity
		(m)	(m)	(ft)	(F)	(in)	(cfm)	(m/s)
SITE2_DENG1	Site 2 - Diesel En	382634.67	4340837.56	40	853.1	24	18497.4	29.9106
SITE2_DENG2	Site 2 - Diesel En	382640.76	4340837.56	40	853.1	24	18497.4	29.9106
SITE2_DENG3	Site 2 - Diesel En	382646.86	4340837.56	40	853.1	24	18497.4	29.9106
SITE2_DENG4	Site 2 - Diesel En	382652.96	4340837.56	40	853.1	24	18497.4	29.9106
SITE2_DENG5	Site 2 - Diesel En	382659.05	4340837.56	40	853.1	24	18497.4	29.9106
SITE2_DENG6	Site 2 - Diesel En	382665.15	4340837.56	40	853.1	24	18497.4	29.9106
SITE2_DENG7	Site 2 - Diesel En	382671.24	4340837.56	40	853.1	24	18497.4	29.9106
SITE2_DENG8	Site 2 - Diesel En	382677.34	4340837.56	40	853.1	24	18497.4	29.9106
SITE2_DENG9	Site 2 - Diesel En	382683.44	4340837.56	40	853.1	24	18497.4	29.9106
SITE2_DENG10	Site 2 - Diesel En	382689.53	4340837.56	40	853.1	24	18497.4	29.9106
SITE2_DENG11	Site 2 - Diesel En	382710.05	4340837.56	40	853.1	24	18497.4	29.9106
SITE2_DENG12	Site 2 - Diesel En	382716.15	4340837.56	40	853.1	24	18497.4	29.9106
SITE2_DENG13	Site 2 - Diesel En	382722.25	4340837.56	40	853.1	24	18497.4	29.9106
SITE2_DENG14	Site 2 - Diesel En	382728.34	4340837.56	40	853.1	24	18497.4	29.9106
SITE2_DENG15	Site 2 - Diesel En	382734.44	4340837.56	40	853.1	24	18497.4	29.9106
SITE2_DENG16	Site 2 - Diesel En	382740.53	4340837.56	40	853.1	24	18497.4	29.9106
SITE2_DENG17	Site 2 - Diesel En	382746.63	4340837.56	40	853.1	24	18497.4	29.9106
SITE2_DENG18	Site 2 - Diesel En	382752.73	4340837.56	40	853.1	24	18497.4	29.9106
SITE2_DENG19	Site 2 - Diesel En	382758.82	4340837.56	40	853.1	24	18497.4	29.9106
SITE2_DENG20	Site 2 - Diesel En	382764.92	4340837.56	40	853.1	24	18497.4	29.9106
SITE2_DENG21	Site 2 - Diesel En	382785.44	4340837.56	40	853.1	24	18497.4	29.9106
SITE2_DENG22	Site 2 - Diesel En	382791.54	4340837.56	40	853.1	24	18497.4	29.9106
SITE2_DENG23	Site 2 - Diesel En	382797.63	4340837.56	40	853.1	24	18497.4	29.9106
SITE2_DENG24	Site 2 - Diesel En	382803.73	4340837.56	40	853.1	24	18497.4	29.9106
SITE2_DENG25	Site 2 - Diesel En	382809.83	4340837.56	40	853.1	24	18497.4	29.9106
SITE2_DENG26	Site 2 - Diesel En	382815.92	4340837.56	40	853.1	24	18497.4	29.9106
SITE2_DENG27	Site 2 - Diesel En	382822.02	4340837.56	40	853.1	24	18497.4	29.9106
SITE2_DENG28	Site 2 - Diesel En	382828.11	4340837.56	40	853.1	24	18497.4	29.9106
SITE2_DENG29	Site 2 - Diesel En	382834.21	4340837.56	40	853.1	24	18497.4	29.9106
SITE2_DENG30	Site 2 - Diesel En	382840.31	4340837.56	40	853.1	24	18497.4	29.9106
SITE2_DENG31	Site 2 - Diesel En	382860.83	4340837.56	40	853.1	24	18497.4	29.9106
SITE2_DENG32	Site 2 - Diesel En	382866.92	4340837.56	40	853.1	24	18497.4	29.9106
SITE2_DENG33	Site 2 - Diesel En	382873.02	4340837.56	40	853.1	24	18497.4	29.9106
SITE2_DENG34	Site 2 - Diesel En	382879.12	4340837.56	40	853.1	24	18497.4	29.9106
SITE2_DENG35	Site 2 - Diesel En	382885.21	4340837.56	40	853.1	24	18497.4	29.9106
SITE2_DENG36	Site 2 - Diesel En	382634.67	4340693.06	40	853.1	24	18497.4	29.9106
SITE2_DENG37	Site 2 - Diesel En	382640.76	4340693.06	40	853.1	24	18497.4	29.9106
SITE2_DENG38	Site 2 - Diesel En	382646.86	4340693.06	40	853.1	24	18497.4	29.9106
SITE2_DENG39	Site 2 - Diesel En	382652.96	4340693.06	40	853.1	24	18497.4	29.9106
SITE2_DENG40	Site 2 - Diesel En	382659.05	4340693.06	40	853.1	24	18497.4	29.9106
SITE2_DENG41	Site 2 - Diesel En	382665.15	4340693.06	40	853.1	24	18497.4	29.9106
SITE2_DENG42	Site 2 - Diesel En	382671.24	4340693.06	40	853.1	24	18497.4	29.9106
SITE2_DENG43	Site 2 - Diesel En	382677.34	4340693.06	40	853.1	24	18497.4	29.9106
SITE2_DENG44	Site 2 - Diesel En	382683.44	4340693.06	40	853.1	24	18497.4	29.9106
SITE2_DENG45	Site 2 - Diesel En	382689.53	4340693.06	40	853.1	24	18497.4	29.9106
SITE2_DENG46	Site 2 - Diesel En	382710.05	4340693.06	40	853.1	24	18497.4	29.9106
SITE2_DENG47	Site 2 - Diesel En	382716.15	4340693.06	40	853.1	24	18497.4	29.9106
SITE2_DENG48	Site 2 - Diesel En	382722.25	4340693.06	40	853.1	24	18497.4	29.9106
SITE2_DENG49	Site 2 - Diesel En	382728.34	4340693.06	40	853.1	24	18497.4	29.9106
SITE2_DENG50	Site 2 - Diesel En	382734.44	4340693.06	40	853.1	24	18497.4	29.9106
SITE2_DENG51	Site 2 - Diesel En	382740.53	4340693.06	40	853.1	24	18497.4	29.9106
SITE2_DENG52	Site 2 - Diesel En	382746.63	4340693.06	40	853.1	24	18497.4	29.9106
SITE2_DENG53	Site 2 - Diesel En	382752.73	4340693.06	40	853.1	24	18497.4	29.9106
SITE2_DENG54	Site 2 - Diesel En	382758.82	4340693.06	40	853.1	24	18497.4	29.9106
SITE2_DENG55	Site 2 - Diesel En	382764.92	4340693.06	40	853.1	24	18497.4	29.9106
SITE2_DENG56	Site 2 - Diesel En	382785.44	4340693.06	40	853.1	24	18497.4	29.9106
SITE2_DENG57	Site 2 - Diesel En	382791.54	4340693.06	40	853.1	24	18497.4	29.9106
SITE2_DENG58	Site 2 - Diesel En	382797.63	4340693.06	40	853.1	24	18497.4	29.9106
SITE2_DENG59	Site 2 - Diesel En	382803.73	4340693.06	40	853.1	24	18497.4	29.9106
SITE2_DENG60	Site 2 - Diesel En	382809.83	4340693.06	40	853.1	24	18497.4	29.9106
SITE2_DENG61	Site 2 - Diesel En	382815.92	4340693.06	40	853.1	24	18497.4	29.9106
SITE2_DENG62	Site 2 - Diesel En	382822.02	4340693.06	40	853.1	24	18497.4	29.9106
SITE2_DENG63	Site 2 - Diesel En	382828.11	4340693.06	40	853.1	24	18497.4	29.9106
SITE2_DENG64	Site 2 - Diesel En	382834.21	4340693.06	40	853.1	24	18497.4	29.9106
SITE2_DENG65	Site 2 - Diesel En	382840.31	4340693.06	40	853.1	24	18497.4	29.9106
SITE2_DENG66	Site 2 - Diesel En	382860.83	4340693.06	40	853.1	24	18497.4	29.9106
SITE2_DENG67	Site 2 - Diesel En	382866.92	4340693.06	40	853.1	24	18497.4	29.9106
SITE2_DENG68	Site 2 - Diesel En	382873.02	4340693.06	40	853.1	24	18497.4	29.9106
SITE2_DENG69	Site 2 - Diesel En	382879.12	4340693.06	40	853.1	24	18497.4	29.9106

Sources		X	Y	Height	Temp	Diameter	Flow	Velocity
		(m)	(m)	(ft)	(F)	(in)	(cfm)	(m/s)
SITE2_CHL1	Site 2 - Chiller Bo	382634.67	4340833.36	50	320	24.9	155.97	0.2345
SITE2_CHL2	Site 2 - Chiller Bo	382640.76	4340833.36	50	320	24.9	155.97	0.2345
SITE2_CHL3	Site 2 - Chiller Bo	382646.86	4340833.36	50	320	24.9	155.97	0.2345
SITE2_CHL4	Site 2 - Chiller Bo	382652.96	4340833.36	50	320	24.9	155.97	0.2345
SITE2_CHL5	Site 2 - Chiller Bo	382659.05	4340833.36	50	320	24.9	155.97	0.2345
SITE2_CHL6	Site 2 - Chiller Bo	382665.15	4340833.36	50	320	24.9	155.97	0.2345
SITE2_CHL7	Site 2 - Chiller Bo	382671.24	4340833.36	50	320	24.9	155.97	0.2345
SITE2_CHL8	Site 2 - Chiller Bo	382677.34	4340833.36	50	320	24.9	155.97	0.2345
SITE2_CHL9	Site 2 - Chiller Bo	382683.44	4340833.36	50	320	24.9	155.97	0.2345
SITE2_CHL10	Site 2 - Chiller Bo	382689.53	4340833.36	50	320	24.9	155.97	0.2345
SITE2_CHL11	Site 2 - Chiller Bo	382710.05	4340833.36	50	320	24.9	155.97	0.2345
SITE2_CHL12	Site 2 - Chiller Bo	382716.15	4340833.36	50	320	24.9	155.97	0.2345
SITE2_CHL13	Site 2 - Chiller Bo	382722.25	4340833.36	50	320	24.9	155.97	0.2345
SITE2_CHL14	Site 2 - Chiller Bo	382728.34	4340833.36	50	320	24.9	155.97	0.2345
SITE2_CHL15	Site 2 - Chiller Bo	382734.44	4340833.36	50	320	24.9	155.97	0.2345
SITE2_CHL16	Site 2 - Chiller Bo	382740.53	4340833.36	50	320	24.9	155.97	0.2345
SITE2_CHL17	Site 2 - Chiller Bo	382746.63	4340833.36	50	320	24.9	155.97	0.2345
SITE2_CHL18	Site 2 - Chiller Bo	382752.73	4340833.36	50	320	24.9	155.97	0.2345
SITE2_CHL19	Site 2 - Chiller Bo	382758.82	4340833.36	50	320	24.9	155.97	0.2345
SITE2_CHL20	Site 2 - Chiller Bo	382764.92	4340833.36	50	320	24.9	155.97	0.2345
SITE2_CHL21	Site 2 - Chiller Bo	382785.44	4340833.36	50	320	24.9	155.97	0.2345
SITE2_CHL22	Site 2 - Chiller Bo	382791.54	4340833.36	50	320	24.9	155.97	0.2345
SITE2_CHL23	Site 2 - Chiller Bo	382797.63	4340833.36	50	320	24.9	155.97	0.2345
SITE2_CHL24	Site 2 - Chiller Bo	382803.73	4340833.36	50	320	24.9	155.97	0.2345
SITE2_CHL25	Site 2 - Chiller Bo	382809.83	4340833.36	50	320	24.9	155.97	0.2345
SITE2_CHL26	Site 2 - Chiller Bo	382815.92	4340833.36	50	320	24.9	155.97	0.2345
SITE2_CHL27	Site 2 - Chiller Bo	382822.02	4340833.36	50	320	24.9	155.97	0.2345
SITE2_CHL28	Site 2 - Chiller Bo	382828.11	4340833.36	50	320	24.9	155.97	0.2345
SITE2_CHL29	Site 2 - Chiller Bo	382834.21	4340833.36	50	320	24.9	155.97	0.2345
SITE2_CHL30	Site 2 - Chiller Bo	382840.31	4340833.36	50	320	24.9	155.97	0.2345
SITE2_CHL31	Site 2 - Chiller Bo	382860.83	4340833.36	50	320	24.9	155.97	0.2345
SITE2_CHL32	Site 2 - Chiller Bo	382866.92	4340833.36	50	320	24.9	155.97	0.2345
SITE2_CHL33	Site 2 - Chiller Bo	382873.02	4340833.36	50	320	24.9	155.97	0.2345
SITE2_CHL34	Site 2 - Chiller Bo	382879.12	4340833.36	50	320	24.9	155.97	0.2345
SITE2_CHL35	Site 2 - Chiller Bo	382885.21	4340833.36	50	320	24.9	155.97	0.2345
SITE2_CHL36	Site 2 - Chiller Bo	382634.67	4340697.26	50	320	24.9	155.97	0.2345
SITE2_CHL37	Site 2 - Chiller Bo	382640.76	4340697.26	50	320	24.9	155.97	0.2345
SITE2_CHL38	Site 2 - Chiller Bo	382646.86	4340697.26	50	320	24.9	155.97	0.2345
SITE2_CHL39	Site 2 - Chiller Bo	382652.96	4340697.26	50	320	24.9	155.97	0.2345
SITE2_CHL40	Site 2 - Chiller Bo	382659.05	4340697.26	50	320	24.9	155.97	0.2345
SITE2_CHL41	Site 2 - Chiller Bo	382665.15	4340697.26	50	320	24.9	155.97	0.2345
SITE2_CHL42	Site 2 - Chiller Bo	382671.24	4340697.26	50	320	24.9	155.97	0.2345
SITE2_CHL43	Site 2 - Chiller Bo	382677.34	4340697.26	50	320	24.9	155.97	0.2345
SITE2_CHL44	Site 2 - Chiller Bo	382683.44	4340697.26	50	320	24.9	155.97	0.2345
SITE2_CHL45	Site 2 - Chiller Bo	382689.53	4340697.26	50	320	24.9	155.97	0.2345
SITE2_CHL46	Site 2 - Chiller Bo	382710.05	4340697.26	50	320	24.9	155.97	0.2345
SITE2_CHL47	Site 2 - Chiller Bo	382716.15	4340697.26	50	320	24.9	155.97	0.2345
SITE2_CHL48	Site 2 - Chiller Bo	382722.25	4340697.26	50	320	24.9	155.97	0.2345
SITE2_CHL49	Site 2 - Chiller Bo	382728.34	4340697.26	50	320	24.9	155.97	0.2345
SITE2_CHL50	Site 2 - Chiller Bo	382734.44	4340697.26	50	320	24.9	155.97	0.2345
SITE2_CHL51	Site 2 - Chiller Bo	382740.53	4340697.26	50	320	24.9	155.97	0.2345
SITE2_CHL52	Site 2 - Chiller Bo	382746.63	4340697.26	50	320	24.9	155.97	0.2345
SITE2_CHL53	Site 2 - Chiller Bo	382752.73	4340697.26	50	320	24.9	155.97	0.2345
SITE2_CHL54	Site 2 - Chiller Bo	382758.82	4340697.26	50	320	24.9	155.97	0.2345
SITE2_CHL55	Site 2 - Chiller Bo	382764.92	4340697.26	50	320	24.9	155.97	0.2345
SITE2_CHL56	Site 2 - Chiller Bo	382785.44	4340697.26	50	320	24.9	155.97	0.2345
SITE2_CHL57	Site 2 - Chiller Bo	382791.54	4340697.26	50	320	24.9	155.97	0.2345
SITE2_CHL58	Site 2 - Chiller Bo	382797.63	4340697.26	50	320	24.9	155.97	0.2345
SITE2_CHL59	Site 2 - Chiller Bo	382803.73	4340697.26	50	320	24.9	155.97	0.2345
SITE2_CHL60	Site 2 - Chiller Bo	382809.83	4340697.26	50	320	24.9	155.97	0.2345
SITE2_CHL61	Site 2 - Chiller Bo	382815.92	4340697.26	50	320	24.9	155.97	0.2345
SITE2_CHL62	Site 2 - Chiller Bo	382822.02	4340697.26	50	320	24.9	155.97	0.2345
SITE2_CHL63	Site 2 - Chiller Bo	382828.11	4340697.26	50	320	24.9	155.97	0.2345
SITE2_CHL64	Site 2 - Chiller Bo	382834.21	4340697.26	50	320	24.9	155.97	0.2345
SITE2_CHL65	Site 2 - Chiller Bo	382840.31	4340697.26	50	320	24.9	155.97	0.2345
SITE2_CHL66	Site 2 - Chiller Bo	382860.83	4340697.26	50	320	24.9	155.97	0.2345
SITE2_CHL67	Site 2 - Chiller Bo	382866.92	4340697.26	50	320	24.9	155.97	0.2345
SITE2_CHL68	Site 2 - Chiller Bo	382873.02	4340697.26	50	320	24.9	155.97	0.2345
SITE2_CHL69	Site 2 - Chiller Bo	382879.12	4340697.26	50	320	24.9	155.97	0.2345

Sources	CO	NO2	NO2	PM10	PM2.5	PM2.5
	lb/hr	lb/hr	tpy	lb/hr	lb/hr	tpy
SITE2_ENG1	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG2	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG3	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG4	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG5	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG6	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG7	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG8	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG9	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG10	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG11	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG12	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG13	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG14	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG15	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG16	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG17	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG18	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG19	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG20	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG21	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG22	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG23	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG24	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG25	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG26	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG27	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG28	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG29	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG30	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG31	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG32	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG33	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG34	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG35	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG36	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG37	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG38	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG39	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG40	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG41	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG42	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG43	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG44	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG45	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG46	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG47	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG48	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG49	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG50	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG51	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG52	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG53	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG54	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG55	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG56	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG57	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG58	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG59	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG60	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG61	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG62	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG63	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG64	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG65	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG66	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG67	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG68	0.581	0.449	1.965	0.190	0.190	0.833
SITE2_ENG69	0.581	0.449	1.965	0.190	0.190	0.833

Sources	CO	NO2	NO2	PM10	PM2.5	PM2.5
	lb/hr	lb/hr	tpy	lb/hr	lb/hr	tpy
SITE2_DENG1	0.441	3.703	1.277	0.029	0.029	1.00E-02
SITE2_DENG2	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG3	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG4	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG5	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG6	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG7	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG8	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG9	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG10	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG11	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG12	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG13	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG14	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG15	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG16	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG17	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG18	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG19	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG20	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG21	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG22	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG23	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG24	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG25	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG26	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG27	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG28	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG29	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG30	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG31	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG32	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG33	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG34	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG35	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG36	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG37	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG38	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG39	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG40	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG41	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG42	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG43	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG44	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG45	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG46	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG47	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG48	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG49	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG50	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG51	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG52	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG53	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG54	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG55	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG56	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG57	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG58	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG59	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG60	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG61	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG62	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG63	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG64	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG65	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG66	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG67	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG68	0.441	3.703	1.277	0.029	0.029	0.010
SITE2_DENG69	0.441	3.703	1.277	0.029	0.029	0.010

Sources	CO	NO2	NO2	PM10	PM2.5	PM2.5
	lb/hr	lb/hr	tpy	lb/hr	lb/hr	tpy
SITE2_CHL1	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL2	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL3	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL4	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL5	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL6	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL7	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL8	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL9	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL10	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL11	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL12	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL13	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL14	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL15	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL16	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL17	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL18	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL19	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL20	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL21	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL22	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL23	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL24	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL25	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL26	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL27	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL28	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL29	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL30	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL31	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL32	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL33	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL34	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL35	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL36	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL37	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL38	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL39	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL40	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL41	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL42	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL43	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL44	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL45	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL46	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL47	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL48	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL49	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL50	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL51	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL52	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL53	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL54	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL55	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL56	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL57	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL58	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL59	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL60	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL61	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL62	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL63	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL64	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL65	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL66	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL67	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL68	0.057	0.021	0.092	0.0091	0.0091	0.04
SITE2_CHL69	0.057	0.021	0.092	0.0091	0.0091	0.04

Pollutant	Avg Period	Design Value	Modeled	Backgrnd	Total	NAAQS/SIL	%	Comply?
			ug/m3	ug/m3	ug/m3	ug/m3	Standard	
NO2	1-hr	H8H	143.86	PVMRM	143.86	188	76.52%	Yes
	Annual	Ann Mean	8.32	4.44	12.75	100	12.75%	Yes
PM2.5	24-hr	H8H	23.37	MONTH BG	23.37	35	66.77%	Yes
	Annual	Ann Mean	3.19	3.68	6.87	9	76.31%	Yes
PM10	24-hr	H6H	76.83	MONTH BG	76.83	150	51.22%	Yes
CO	1-hr	H2H	215.49	1380	1595.49	40,250	3.96%	Yes
	8-hr	H2H	61.32	920	981.32	10,350	9.48%	Yes

PM2.5 annual and CO are provided by UDAQ for 2024 (CO: Lindon site; PM2.5 Price)
PM2.5/10 24-hr are monthly values provided by UDAQ (PM2.5: Price and PM10 Ash Grove Leamington Site)
NO2 1-hr and Ozone monthly data was obtained for Price from the UDAQ website
NO2 Annual data was obtained from 2022-2024 from Price

Group		
5	143.86	143.8605
6	8.32	8.3169
5	23.37	23.36844
5	3.19	3.18777
12	76.83	76.832448
10	215.49	215.4883
10	61.32	61.32291

Engine	Max NH_3 Slip (ppm)	Natural Gas Fd (dscf/MMBtu)[1]	NH_3 lb/MMBtu	lb/hr	tpy
G3520K	8	8710	0.011	14.272	62.51
1. Method 19 Natural gas F factor; Table 19-2				**Total**	**62.51**

1.19E-07	conversion of NO2 ppm to lb/scf, table 19-1
17	MW of NH3
46.1	MW NO2
15	% O2
5611	btu/hp-hr
3392	hp
69	# of units
8760	hr/yr/unit

Routine Losses Report for TANKS 5.2

Storage Tank Emissions Calculation Application

Version 5.2

(released December 2025)

U.S. Environmental Protection Agency
Office of Clean Air Programs
Natural Resources Division
Emissions Data and Assessment Branch
Research Triangle Park, NC 27711

Report Contents

Accumulated Annual Routine Losses for All Tanks 3
Accumulated Monthly Routine Losses for All Tanks 4

For each tank and all tanks combined:

- Standing Losses
- Rim Seal Losses
- Deck Seam Losses
- Deck Fitting Losses
- Working Losses
- Total Routine Losses

For each tank:

- Tank Characteristics and Meteorological Location by Tank
- Tank Contents by Tank
- Tank Calculations by Tank
  - Fixed Roof Tanks
- Routine Losses by Tank

Accumulated Annual Routine Losses for All Tanks

Tank ID	Standing Losses	Working Losses	Total Losses
1	1.1854	1.9147	3.1002
Total	**1.1854**	**1.9147**	**3.1002**

Accumulated Monthly Routine Losses for All Tanks

Standing Losses

Tank ID	Chemical	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1	No. 2 Fuel Oil (Diesel)	0.0218	0.0282	0.0545	0.0726	0.1195	0.1687	0.2385	0.2101	0.1379	0.0772	0.0362	0.0203	1.1854

Working Losses

Tank ID	Chemical	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1	No. 2 Fuel Oil (Diesel)	0.0640	0.0756	0.1037	0.1291	0.1791	0.2392	0.3185	0.2989	0.2144	0.1387	0.0886	0.0649	1.9147

Total Losses

Tank ID	Chemical	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1	No. 2 Fuel Oil (Diesel)	0.0858	0.1038	0.1582	0.2017	0.2986	0.4079	0.5570	0.5090	0.3523	0.2159	0.1248	0.0852	3.1002

Tank Characteristics and Meteorological Location by Tank

Identification

Tank ID	1
Tank Type	Horizontal Fixed Roof Tank
Tank Description	10,000 gallon Diesel Tank
City	McCornick
State	Utah
Company	Joule
Meteorological Location	Salt Lake City, UT

Tank Characteristics

Shell Length (ft)	24
Shell Diameter (ft)	8
Maximum Liquid Height (ft)	8
Minimum Liquid Height (ft)	7.500
Vapor Space Pressure at Normal Operating Conditions (psig)	0
Is Tank Insulated or Underground?	Not Insulated and Not Underground
Liquid Bulk Temperature Calculation Method	AP-42 Calculation

Shell Characteristics

Shell Color/Shade	White
Shell Condition	New

Breather Vent Settings

Vacuum Setting (psig)	-0.030
Pressure Setting (psig)	0.030

Control Device Settings

Is Tank Equipped with a Control Device?	No Control Device

Tank Contents by Tank

Tank Contents Input Summary

Tank ID	1
Input Type	Annual
Chemical Category of Liquid	Petroleum Liquids
Sum of Increases in Liquid Level Method	AP-42 Calculation
Working Loss Turnover Factor Method	AP-42 Calculation

Annual Contents

Chemical Name	Throughput (gal/yr)
No. 2 Fuel Oil (Diesel)	98,497.500

Tank Calculations by Tank -- Fixed Roof

Tank ID: 1

Annual Calculations

Chemical: No. 2 Fuel Oil (Diesel)

Annual Vapor Space Volume (cu ft)	603.1858
Annual Avg. Vented Vapor Saturation Factor	0.9990
Vapor Space Outage (ft)	3.1416
Shell Radius (ft)	4
Annual Stock Vapor Density (lb/cu ft)	0.0001
Annual Avg. Vapor Molecular Weight (lb/lb-mole)	130
Annual Avg. Vapor Pressure at Avg. Liquid Surface Temp. (psia)	0.0063
Annual Avg. Liquid Surface Temp. (°R)	514.4204
Annual Avg. Ambient Temp. (°R)	512.7533
Annual Avg. Liquid Bulk Temp. (°R)	490.9592
Tank Paint Solar Absorptance (Shell)	0.1700
Annual Avg. Vapor Space Expansion Factor	0.0325
Annual Vapor Temp. Range (°R)	19.2414
Annual Vapor Pressure Range (psia)	0.0022
Breather Vent Pressure Setting Range (psia)	0.0600
Annual Avg. Vapor Pressure at Min Liquid Surface Temp. (psia)	0.0053
Annual Avg. Vapor Pressure at Max Liquid Surface Temp. (psia)	0.0075
Annual Avg. Min. Liquid Surface Temp. (°R)	509.6100
Annual Avg. Max. Liquid Surface Temp. (°R)	519.2307
Annual Avg. Ambient Temp. Range (°R)	20.4833
Annual Throughput (gal)	98,497.5000
Annual Turnovers	11.4287
Annual Sum of Increases in Liquid Level (ft/yr)	68.5720
Working Loss Turnover Factor	1
Working Loss Product Factor	1

Tank ID: 1

Monthly Calculations

Chemical: No. 2 Fuel Oil (Diesel)

Calculation	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Vented Vapor Saturation Factor	0.9996	0.9995	0.9993	0.9992	0.9988	0.9984	0.9978	0.9980	0.9986	0.9991	0.9994	0.9996
Stock Vapor Density (lb/cu ft)	0.0001	0.0001	0.0001	0.0001	0.0002	0.0002	0.0003	0.0003	0.0002	0.0001	0.0001	0.0001
Vapor Molecular Weight (lb/lb-mole)	130	130	130	130	130	130	130	130	130	130	130	130
Vapor Pressure at Avg. Liquid Surface Temp. (psia)	0.0024	0.0028	0.0040	0.0050	0.0071	0.0096	0.0130	0.0122	0.0086	0.0054	0.0033	0.0024
Avg. Liquid Surface Temp. (°R)	490.8590	495.6838	505.1283	511.8679	522.3141	531.9204	541.7727	539.5421	528.2225	514.0925	500.3792	491.2622
Avg. Ambient Temp. (°R)	490.1700	494.6700	503.5700	509.9200	519.9200	529.2200	539.0700	537.1700	526.2700	512.7700	499.5700	490.7200
Vapor Space Expansion Factor	0.0200	0.0242	0.0307	0.0341	0.0391	0.0427	0.0439	0.0412	0.0390	0.0326	0.0247	0.0183
Vapor Temp. Range (°R)	12.1064	14.3218	17.8832	19.7990	22.7914	25.0924	26.1492	24.6168	22.9626	19.1496	14.7000	11.3246
Vapor Pressure Range (psia)	0.0005	0.0007	0.0012	0.0017	0.0026	0.0038	0.0052	0.0046	0.0031	0.0017	0.0009	0.0005
Vapor Pressure at Min Liquid Surface Temp. (psia)	0.0021	0.0025	0.0034	0.0042	0.0059	0.0079	0.0107	0.0101	0.0071	0.0046	0.0029	0.0022
Vapor Pressure at Max Liquid Surface Temp. (psia)	0.0026	0.0032	0.0046	0.0059	0.0085	0.0117	0.0159	0.0147	0.0103	0.0063	0.0038	0.0027
Min. Liquid Surface Temp. (°R)	487.8324	492.1034	500.6575	506.9181	516.6162	525.6473	535.2354	533.3879	522.4818	509.3051	496.7042	488.4310
Max. Liquid Surface Temp. (°R)	493.8856	499.2643	509.5991	516.8176	528.0119	538.1935	548.3100	545.6963	533.9631	518.8799	504.0542	494.0933
Ambient Temp. Range (°R)	14.4000	16.2000	19	20.1000	22.5000	24.5000	26	25.2000	24.6000	21.8000	17.6000	13.9000
Throughput (gal/mo)	8,208.1250	8,208.1250	8,208.1250	8,208.1250	8,208.1250	8,208.1250	8,208.1250	8,208.1250	8,208.1250	8,208.1250	8,208.1250	8,208.1250
Sum of Increases in Liquid Level (ft/mo)	5.7143	5.7143	5.7143	5.7143	5.7143	5.7143	5.7143	5.7143	5.7143	5.7143	5.7143	5.7143
Working Loss Product Factor	1	1	1	1	1	1	1	1	1	1	1	1

Supplemental Non-Monthly Data

Vapor Space Volume (cu ft)	603.1858
Effective Diameter (ft)	15.6353
Vapor Space Outage (ft)	3.1416
Liquid Bulk Temp. (°R)	490.9592
Tank Paint Solar Absorptance (Shell)	0.1700
Breather Vent Pressure Setting Range (psia)	0.0600
Turnovers	11.4287
Working Loss Turnover Factor	1

Routine Losses by Tank

Tank ID: 1

Annual Routine Losses

Chemical	Standing Losses	Working Losses	Total Losses
No. 2 Fuel Oil (Diesel)	1.1854	1.9147	3.1002

Tank ID: 1

Monthly Routine Losses

Chemical: No. 2 Fuel Oil (Diesel)

Loss Type	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Standing Losses	0.0218	0.0282	0.0545	0.0726	0.1195	0.1687	0.2385	0.2101	0.1379	0.0772	0.0362	0.0203
Working Losses	0.0640	0.0756	0.1037	0.1291	0.1791	0.2392	0.3185	0.2989	0.2144	0.1387	0.0886	0.0649
Total Losses	0.0858	0.1038	0.1582	0.2017	0.2986	0.4079	0.5570	0.5090	0.3523	0.2159	0.1248	0.0852

3 of many

Clark, Eric
to me, Brock, Kevin, Aaron, Mark

Fri, Apr 10, 10:47 AM (10 days ago)

John,

Regarding cost estimate for a DPF system, The EPA[1] suggested in 2010 that a cost to retrofit an engine is ~$10,000 (~$15,000 today). Additionally, the 2010 EPA bulletin[1] states that DPF's control 85-90% (also referenced in Response to Comments[2]). Lastly, more recent EPA verified Technologies website states that DPFs control diesel PM by at least 90%[3].

[1] Technical Bulletin: Diesel Particulate Filter General Information. EPA-420-F-10-029, May 2010.
2 Response to Public Comments on Notice of Reconsideration of National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines and New Source Performance Standards for Stationary Internal Combustion Engines, EPA Docket EPA-HQ-OAR-2008-0708, June 16, 2014
3 Verified Technologies List for Clean Diesel | US EPA

As a result, for each emergency engine is anticipated to emit a maximum of ~0.01 tpy or 0.69 tpy in aggregate. Based on 90% control, the estimated cost per ton saved would be ~ $15,000/ (0.01-0.001) or 1.67million per engine. Therefore, that is cost prohibitive.

Yes, it is my understanding that the cooling system is a closed loop. The only exhaust release is from the combustion process of the chillers.

•••

Thanks for the info. | Thanks for the update. | Very helpful.

Reply | Reply all | Forward | Share in chat (New)

Best Available Control Technology Control Cost Analysis Worksheet

Reference No.	Site Rating (hp)	Manufacturer	Model	Control Method	Controlled or Targeted Emission	Targeted Emission without Control (TPY)	Targeted Emission with Control (TPY)'	Targeted Emission Difference (TPY)
1 Diesel Unit	3633	Caterpillar	3516C	SCR	NOx	1.28	0.090	1.190

1. Based on 93% control of NOx from the typical Safety Power Project Proposal for 3516C engines

Reference No.	Interest Rate (i)	Control System Life (n)	Capital Recovery Factor (CRF)	Capital Investment (P)	Annual Operating Cost	Capital Recovery Cost (CRC)	Realized Economic Benefit
3516C	0.05	10	0.130	$235,000	$9,600	$30,434	$0

"n" is the control system economic life, 10 for the SCR module
"i" is the considered the annual pretax marginal rate of return on private investment (i.e., what it may cost you to borrow the money).
"P" is the capital investment required to install the controls (i.e., equipment purchase cost, installation/retrofit cost, engineering, etc.).
3516C: $200,000 capital, install + SCR module expected to last full 10 years (life is 20,000 hours @ 50 hr/yr * 10 yr = 500 hrs; no replacement) + one ~$35,000 for accessories
Annual Operating Cost: maintanance $6,000 per unit, urea transport $2,000/trip ($2000/yr). Urea cost is $4/gal and the 3516C has a consumption rate of 8 gal/hr

CRC = CRF * P

CRC = Capital Recovery Cost (Annualized cost of control over the life of the control)
CRF = Capital recovery Factor
P = Capital Investment

CRF = i(1+i)n/(1+i)n-1

i = Annual Interest Rate
n = Economic life of the control

Total Annual Cost (TAC) = Annual Maintenance Cost + Capital Recovery Cost - Realized Economic Benefit

Cost to Control = TAC / (Targeted Emission Volume Without Control - Targeted Emission Volumn with Control)

Reference Number	TAC ($)	Base Control Cost ($/Ton)
3516C	$40,034	**$33,630.36**
One Engine	**$40,033.58**	**$33,630.36**
All 69 Engines	**$2,762,316.68**	**$2,320,494.53**

Engine	Max NH_3 Slip (ppm)	Natural Gas Fd (dscf/MMBtu)[1]	NH_3 lb/MMBtu	lb/hr	tpy
G3520H	8	8710	0.011	0.480	1.56
1. Method 19 Natural gas F factor; Table 19-2				**Total**	**1.56**

1.19E-07	conversion of NO2 ppm to lb/scf, table 19-1
17	MW of NH3
46.1	MW NO2
15	% O2
7000	btu/hp-hr
3154	hp
2	# of units
6500	hr/yr/unit

Pollutant	Emission	tons/trip	Tons/yr			
CO	2.10	2.72E-04	5.44E-04	117.5	miles	SLC to Ephraim
NOx	5.83	7.55E-04	1.51E-03			
Benzene	1.26E-03	1.63E-07	3.26E-07	2	trips	1 round trip
1,3-Butadiene	4.22E-04	5.47E-08	1.09E-07			
Formaldehyde	1.48E-02	1.92E-06	3.83E-06			
Acetaldehyde	7.72E-03	1.00E-06	2.00E-06			
Acrolein	6.40E-02	8.29E-06	1.66E-05			
Ammonia	2.18E-02	2.83E-06	5.65E-06			
VOC	1.98E-01	2.57E-05	5.13E-05			
PM10	1.58E-01	2.04E-05	4.09E-05			
PM2.5	1.45E-01	1.88E-05	3.76E-05			

All factors are from a 2020 semi truck on freeway from MOVES 5.0.0
Represents SLC, Utah and Sanpete Counties
Urban Unrestricted road; diesel fuel

State of Utah

SPENCER J. COX
Governor

DEIDRE HENDERSON
Lieutenant Governor

Department of
Environmental Quality

Tim Davis
Executive Director

DIVISION OF AIR QUALITY
Bryce C. Bird
Director

DAQE-MN162900001-26

M E M O R A N D U M

TO: John Persons, NSR Engineer JP

FROM: Jason Krebs, Air Quality Modeler Jason Krebs

DATE: February 4, 2026

SUBJECT: Modeling Analysis Review for the Notice of Intent for Joule Capital Partners, LLC – Site #2, Millard County, Utah

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I. OBJECTIVE

Joule Capital Partners, LLC, (Applicant) is seeking an approval order for their Site #2 Power Generation Facility located in Millard County, Utah.

This report, prepared by the Staff of the New Source Review Section (NSR), contains a review of the air quality impact analysis (AQIA) including the information, data, assumptions and modeling results used to determine if the facility will be in compliance with applicable State and Federal concentration standards.

II. APPLICABLE RULE(S)

Utah Air Quality Rules:

R307-401-6	Condition for Issuing an Approval Order
R307-410-3	Use of Dispersion Models
R307-410-4	Modeling of Criteria Pollutants in Attainment Areas

III. MODELING METHODOLOGY

A. Applicability

Emissions from the facility include PM_{10}, NO_x, CO, SO_2, and HAPs. This modeling is part of a new approval order. The emission rates for NO_x, PM_{10}, $PM_{2.5}$, and CO triggered the requirement to model under R307-410. Modeling was performed by the Applicant.

B. Assumptions

1. Topography/Terrain

The Plant is at an elevation 4810 feet with terrain features that have an affect on concentration predictions.

a. Zone: 12

b. Approximate Location:

UTM (NAD83): 382,765 meters East
4340957 meters North

2. Urban or Rural Area Designation

After a review of the appropriate 7.5 minute quadrangles, it was concluded the area is "rural" for air modeling purposes.

3. Ambient Air

It was determined the Plant boundary used in the AQIA meets the State's definition of ambient air.

4. Building Downwash

The source was modeled with the AERMOD model. All structures at the plant were used in the model to account for their influence on downwash.

5. Meteorology

Three (3) years of off-site surface and upper air data were used in the analysis consisting of the following:

Surface – Delta, UT NWS: 2012-2014
Upper Air – Salt Lake Airport, UT NWS: 2012-2014

6. Background

The background concentrations were based on concentrations measured in Price, Utah, Leamington (Ashgrove), Utah, and Linden, Utah.

7. Receptor and Terrain Elevations

The modeling domain used by the Applicant consisted of receptors including property boundary receptors. This area of the state contains mountainous terrain and the modeling domain has simple and complex terrain features in the near and far fields. Therefore, receptor points representing actual terrain elevations from the area were used in the analysis.

8. Model and Options

   The State-accepted AERMOD model was used to predict air pollutant concentrations under a simple/complex terrain/wake effect situation. In quantifying concentrations, the regulatory default option was selected.

9. Air Pollutant Emission Rates

   See Appendix A for source emission rates.

10. Source Location and Parameters

    See Appendix B for source locations and parameters.

IV. RESULTS AND CONCLUSIONS

A. National Ambient Air Quality Standards

The below table provides a comparison of the predicted total air quality concentrations with the NAAQS. The predicted total concentrations are less than the NAAQS.

Air Pollutant	**Period**	**Prediction ($\mu g/m^3$)**	**Class II Significant Impact Level ($\mu g/m^3$)**	**Background ($\mu g/m^3$)**	**Nearby Sources* ($\mu g/m^3$)**	**Total ($\mu g/m^3$)**	**NAAQS ($\mu g/m^3$)**	**Percent NAAQS**
CO	1-Hour	304.7	2000	1380.0	0.2	1684.9	40,000	4.2%
	Annual	127.4	500	920.0	0.0	1,047.4	10,300	10.2%

Air Pollutant	**Period**	**Prediction ($\mu g/m^3$)**	**Class II Significant Impact Level ($\mu g/m^3$)**	**Background ($\mu g/m^3$)**	**Nearby Sources* ($\mu g/m^3$)**	**Total ($\mu g/m^3$)**	**NAAQS ($\mu g/m^3$)**	**Percent NAAQS**
NO_2	1-Hour	113.0	7.5	24.5	0.2	137.7	188	73.2%
	Annual	0.3	1.0	2.4	7.7	10.4	100	10.4%

Air Pollutant	Period	Prediction	Class II Significant Impact Level	Background	Nearby Sources*	Total	NAAQS	Percent
		($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)	NAAQS
PM_{10}	24-Hour	0.8	5	65.7	19.2	85.7	150	57.1%

Air Pollutant	Period	Prediction	Class II Significant Impact Level	Background	Nearby Sources*	Total	NAAQS	Percent
		($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)	NAAQS
$PM_{2.5}$	24-Hour	0.1	1.2	18.3	7.7	26.1	35	74.6%
PM2.5	Annual	0.12	0.3	3.68	2.85	6.65	9	73.9%

V. PERMIT CONDITIONS

The following suggested permit language should be included under the Terms and Conditions in the AO:

- The owner/operator shall not operate the emergency-use generators before 9:00 am or after 2:00 pm.
- The owner/operator shall operate no more than five emergency generators at the same time for non-emergency purposes.

JK:jg

Appendix A

Joule Capital Partners, LLC Site #2

Source		UTM Coordinates		Modeled Emission Rates		
		Easting (m)	Northing (m)	CO (lb/hr)	CO (tons/yr)	hrs/year
2_ENG1		382635	4340829	0.58	2.54	8760
2_ENG2		382641	4340829	0.58	2.54	8760
2_ENG3		382647	4340829	0.58	2.54	8760
2_ENG4		382653	4340829	0.58	2.54	8760
2_ENG5		382659	4340829	0.58	2.54	8760
2_ENG6		382665	4340829	0.58	2.54	8760
2_ENG7		382671	4340829	0.58	2.54	8760
2_ENG8		382677	4340829	0.58	2.54	8760
2_ENG9		382683	4340829	0.58	2.54	8760
2_ENG10		382690	4340829	0.58	2.54	8760
2_ENG11		382710	4340829	0.58	2.54	8760
2_ENG12		382716	4340829	0.58	2.54	8760
2_ENG13		382722	4340829	0.58	2.54	8760
2_ENG14		382728	4340829	0.58	2.54	8760
2_ENG15		382734	4340829	0.58	2.54	8760
2_ENG16		382741	4340829	0.58	2.54	8760
2_ENG17		382747	4340829	0.58	2.54	8760
2_ENG18		382753	4340829	0.58	2.54	8760
2_ENG19		382759	4340829	0.58	2.54	8760
2_ENG20		382765	4340829	0.58	2.54	8760
2_ENG21		382785	4340829	0.58	2.54	8760
2_ENG22		382792	4340829	0.58	2.54	8760
2_ENG23		382798	4340829	0.58	2.54	8760
2_ENG24		382804	4340829	0.58	2.54	8760
2_ENG25		382810	4340829	0.58	2.54	8760
2_ENG26		382816	4340829	0.58	2.54	8760
2_ENG27		382822	4340829	0.58	2.54	8760
2_ENG28		382828	4340829	0.58	2.54	8760
2_ENG29		382834	4340829	0.58	2.54	8760
2_ENG30		382840	4340829	0.58	2.54	8760
2_ENG31		382861	4340829	0.58	2.54	8760
2_ENG32		382867	4340829	0.58	2.54	8760
2_ENG33		382873	4340829	0.58	2.54	8760

2_ENG34		382879	4340829	0.58	2.54	8760
2_ENG35		382885	4340829	0.58	2.54	8760
2_ENG36		382635	4340701	0.58	2.54	8760
2_ENG37		382641	4340701	0.58	2.54	8760
2_ENG38		382647	4340701	0.58	2.54	8760
2_ENG39		382653	4340701	0.58	2.54	8760
2_ENG40		382659	4340701	0.58	2.54	8760
2_ENG41		382665	4340701	0.58	2.54	8760
2_ENG42		382671	4340701	0.58	2.54	8760
2_ENG43		382677	4340701	0.58	2.54	8760
2_ENG44		382683	4340701	0.58	2.54	8760
2_ENG45		382690	4340701	0.58	2.54	8760
2_ENG46		382710	4340701	0.58	2.54	8760
2_ENG47		382716	4340701	0.58	2.54	8760
2_ENG48		382722	4340701	0.58	2.54	8760
2_ENG49		382728	4340701	0.58	2.54	8760
2_ENG50		382734	4340701	0.58	2.54	8760
2_ENG51		382741	4340701	0.58	2.54	8760
2_ENG52		382747	4340701	0.58	2.54	8760
2_ENG53		382753	4340701	0.58	2.54	8760
2_ENG54		382759	4340701	0.58	2.54	8760
2_ENG55		382765	4340701	0.58	2.54	8760
2_ENG56		382785	4340701	0.58	2.54	8760
2_ENG57		382792	4340701	0.58	2.54	8760
2_ENG58		382798	4340701	0.58	2.54	8760
2_ENG59		382804	4340701	0.58	2.54	8760
2_ENG60		382810	4340701	0.58	2.54	8760
2_ENG61		382816	4340701	0.58	2.54	8760
2_ENG62		382822	4340701	0.58	2.54	8760
2_ENG63		382828	4340701	0.58	2.54	8760
2_ENG64		382834	4340701	0.58	2.54	8760
2_ENG65		382840	4340701	0.58	2.54	8760
2_ENG66		382861	4340701	0.58	2.54	8760
2_ENG67		382867	4340701	0.58	2.54	8760
2_ENG68		382873	4340701	0.58	2.54	8760
2_ENG69		382879	4340701	0.58	2.54	8760
2_DENG1		382635	4340838	6.09	0.15	50
2_DENG2		382641	4340838	6.09	0.15	50
2_DENG3		382647	4340838	6.09	0.15	50
2_DENG4		382653	4340838	6.09	0.15	50

2_DENG5		382659	4340838	6.09	0.15	50
2_DENG6		382665	4340838	6.09	0.15	50
2_DENG7		382671	4340838	6.09	0.15	50
2_DENG8		382677	4340838	6.09	0.15	50
2_DENG9		382683	4340838	6.09	0.15	50
2_DENG10		382690	4340838	6.09	0.15	50
2_DENG11		382710	4340838	6.09	0.15	50
2_DENG12		382716	4340838	6.09	0.15	50
2_DENG13		382722	4340838	6.09	0.15	50
2_DENG14		382728	4340838	6.09	0.15	50
2_DENG15		382734	4340838	6.09	0.15	50
2_DENG16		382741	4340838	6.09	0.15	50
2_DENG17		382747	4340838	6.09	0.15	50
2_DENG18		382753	4340838	6.09	0.15	50
2_DENG19		382759	4340838	6.09	0.15	50
2_DENG20		382765	4340838	6.09	0.15	50
2_DENG21		382785	4340838	6.09	0.15	50
2_DENG22		382792	4340838	6.09	0.15	50
2_DENG23		382798	4340838	6.09	0.15	50
2_DENG24		382804	4340838	6.09	0.15	50
2_DENG25		382810	4340838	6.09	0.15	50
2_DENG26		382816	4340838	6.09	0.15	50
2_DENG27		382822	4340838	6.09	0.15	50
2_DENG28		382828	4340838	6.09	0.15	50
2_DENG29		382834	4340838	6.09	0.15	50
2_DENG30		382840	4340838	6.09	0.15	50
2_DENG31		382861	4340838	6.09	0.15	50
2_DENG32		382867	4340838	6.09	0.15	50
2_DENG33		382873	4340838	6.09	0.15	50
2_DENG34		382879	4340838	6.09	0.15	50
2_DENG35		382885	4340838	6.09	0.15	50
2_DENG36		382635	4340693	6.09	0.15	50
2_DENG37		382641	4340693	6.09	0.15	50
2_DENG38		382647	4340693	6.09	0.15	50
2_DENG39		382653	4340693	6.09	0.15	50
2_DENG40		382659	4340693	6.09	0.15	50
2_DENG41		382665	4340693	6.09	0.15	50
2_DENG42		382671	4340693	6.09	0.15	50
2_DENG43		382677	4340693	6.09	0.15	50
2_DENG44		382683	4340693	6.09	0.15	50

2_DENG45		382690	4340693	6.09	0.15	50
2_DENG46		382710	4340693	6.09	0.15	50
2_DENG47		382716	4340693	6.09	0.15	50
2_DENG48		382722	4340693	6.09	0.15	50
2_DENG49		382728	4340693	6.09	0.15	50
2_DENG50		382734	4340693	6.09	0.15	50
2_DENG51		382741	4340693	6.09	0.15	50
2_DENG52		382747	4340693	6.09	0.15	50
2_DENG53		382753	4340693	6.09	0.15	50
2_DENG54		382759	4340693	6.09	0.15	50
2_DENG55		382765	4340693	6.09	0.15	50
2_DENG56		382785	4340693	6.09	0.15	50
2_DENG57		382792	4340693	6.09	0.15	50
2_DENG58		382798	4340693	6.09	0.15	50
2_DENG59		382804	4340693	6.09	0.15	50
2_DENG60		382810	4340693	6.09	0.15	50
2_DENG61		382816	4340693	6.09	0.15	50
2_DENG62		382822	4340693	6.09	0.15	50
2_DENG63		382828	4340693	6.09	0.15	50
2_DENG64		382834	4340693	6.09	0.15	50
2_DENG65		382840	4340693	6.09	0.15	50
2_DENG66		382861	4340693	6.09	0.15	50
2_DENG67		382867	4340693	6.09	0.15	50
2_DENG68		382873	4340693	6.09	0.15	50
2_DENG69		382879	4340693	6.09	0.15	50
2_CHL1		382635	4340833	0.06	0.25	8760
2_CHL2		382641	4340833	0.06	0.25	8760
2_CHL3		382647	4340833	0.06	0.25	8760
2_CHL4		382653	4340833	0.06	0.25	8760
2_CHL5		382659	4340833	0.06	0.25	8760
2_CHL6		382665	4340833	0.06	0.25	8760
2_CHL7		382671	4340833	0.06	0.25	8760
2_CHL8		382677	4340833	0.06	0.25	8760
2_CHL9		382683	4340833	0.06	0.25	8760
2_CHL10		382690	4340833	0.06	0.25	8760
2_CHL11		382710	4340833	0.06	0.25	8760
2_CHL12		382716	4340833	0.06	0.25	8760
2_CHL13		382722	4340833	0.06	0.25	8760
2_CHL14		382728	4340833	0.06	0.25	8760
2_CHL15		382734	4340833	0.06	0.25	8760

2_CHL16		382741	4340833	0.06	0.25	8760
2_CHL17		382747	4340833	0.06	0.25	8760
2_CHL18		382753	4340833	0.06	0.25	8760
2_CHL19		382759	4340833	0.06	0.25	8760
2_CHL20		382765	4340833	0.06	0.25	8760
2_CHL21		382785	4340833	0.06	0.25	8760
2_CHL22		382792	4340833	0.06	0.25	8760
2_CHL23		382798	4340833	0.06	0.25	8760
2_CHL24		382804	4340833	0.06	0.25	8760
2_CHL25		382810	4340833	0.06	0.25	8760
2_CHL26		382816	4340833	0.06	0.25	8760
2_CHL27		382822	4340833	0.06	0.25	8760
2_CHL28		382828	4340833	0.06	0.25	8760
2_CHL29		382834	4340833	0.06	0.25	8760
2_CHL30		382840	4340833	0.06	0.25	8760
2_CHL31		382861	4340833	0.06	0.25	8760
2_CHL32		382867	4340833	0.06	0.25	8760
2_CHL33		382873	4340833	0.06	0.25	8760
2_CHL34		382879	4340833	0.06	0.25	8760
2_CHL35		382885	4340833	0.06	0.25	8760
2_CHL36		382635	4340697	0.06	0.25	8760
2_CHL37		382641	4340697	0.06	0.25	8760
2_CHL38		382647	4340697	0.06	0.25	8760
2_CHL39		382653	4340697	0.06	0.25	8760
2_CHL40		382659	4340697	0.06	0.25	8760
2_CHL41		382665	4340697	0.06	0.25	8760
2_CHL42		382671	4340697	0.06	0.25	8760
2_CHL43		382677	4340697	0.06	0.25	8760
2_CHL44		382683	4340697	0.06	0.25	8760
2_CHL45		382690	4340697	0.06	0.25	8760
2_CHL46		382710	4340697	0.06	0.25	8760
2_CHL47		382716	4340697	0.06	0.25	8760
2_CHL48		382722	4340697	0.06	0.25	8760
2_CHL49		382728	4340697	0.06	0.25	8760
2_CHL50		382734	4340697	0.06	0.25	8760
2_CHL51		382741	4340697	0.06	0.25	8760
2_CHL52		382747	4340697	0.06	0.25	8760
2_CHL53		382753	4340697	0.06	0.25	8760
2_CHL54		382759	4340697	0.06	0.25	8760
2_CHL55		382765	4340697	0.06	0.25	8760

2_CHL56		382785	4340697	0.06	0.25	8760
2_CHL57		382792	4340697	0.06	0.25	8760
2_CHL58		382798	4340697	0.06	0.25	8760
2_CHL59		382804	4340697	0.06	0.25	8760
2_CHL60		382810	4340697	0.06	0.25	8760
2_CHL61		382816	4340697	0.06	0.25	8760
2_CHL62		382822	4340697	0.06	0.25	8760
2_CHL63		382828	4340697	0.06	0.25	8760
2_CHL64		382834	4340697	0.06	0.25	8760
2_CHL65		382840	4340697	0.06	0.25	8760
2_CHL66		382861	4340697	0.06	0.25	8760
2_CHL67		382867	4340697	0.06	0.25	8760
2_CHL68		382873	4340697	0.06	0.25	8760
2_CHL69		382879	4340697	0.06	0.25	8760

Total 464.03 203.32

Source	UTM Coordinates		Modeled Emission Rates		
	Easting (m)	Northing (m)	NOx (lb/hr)	(tons/yr)	hrs/year
2_ENG1	382635	4340829	0.45	1.97	8760
2_ENG2	382641	4340829	0.45	1.97	8760
2_ENG3	382647	4340829	0.45	1.97	8760
2_ENG4	382653	4340829	0.45	1.97	8760
2_ENG5	382659	4340829	0.45	1.97	8760
2_ENG6	382665	4340829	0.45	1.97	8760
2_ENG7	382671	4340829	0.45	1.97	8760
2_ENG8	382677	4340829	0.45	1.97	8760
2_ENG9	382683	4340829	0.45	1.97	8760
2_ENG10	382690	4340829	0.45	1.97	8760
2_ENG11	382710	4340829	0.45	1.97	8760
2_ENG12	382716	4340829	0.45	1.97	8760
2_ENG13	382722	4340829	0.45	1.97	8760
2_ENG14	382728	4340829	0.45	1.97	8760
2_ENG15	382734	4340829	0.45	1.97	8760
2_ENG16	382741	4340829	0.45	1.97	8760
2_ENG17	382747	4340829	0.45	1.97	8760
2_ENG18	382753	4340829	0.45	1.97	8760
2_ENG19	382759	4340829	0.45	1.97	8760
2_ENG20	382765	4340829	0.45	1.97	8760

2_ENG21	382785	4340829	0.45	1.97	8760
2_ENG22	382792	4340829	0.45	1.97	8760
2_ENG23	382798	4340829	0.45	1.97	8760
2_ENG24	382804	4340829	0.45	1.97	8760
2_ENG25	382810	4340829	0.45	1.97	8760
2_ENG26	382816	4340829	0.45	1.97	8760
2_ENG27	382822	4340829	0.45	1.97	8760
2_ENG28	382828	4340829	0.45	1.97	8760
2_ENG29	382834	4340829	0.45	1.97	8760
2_ENG30	382840	4340829	0.45	1.97	8760
2_ENG31	382861	4340829	0.45	1.97	8760
2_ENG32	382867	4340829	0.45	1.97	8760
2_ENG33	382873	4340829	0.45	1.97	8760
2_ENG34	382879	4340829	0.45	1.97	8760
2_ENG35	382885	4340829	0.45	1.97	8760
2_ENG36	382635	4340701	0.45	1.97	8760
2_ENG37	382641	4340701	0.45	1.97	8760
2_ENG38	382647	4340701	0.45	1.97	8760
2_ENG39	382653	4340701	0.45	1.97	8760
2_ENG40	382659	4340701	0.45	1.97	8760
2_ENG41	382665	4340701	0.45	1.97	8760
2_ENG42	382671	4340701	0.45	1.97	8760
2_ENG43	382677	4340701	0.45	1.97	8760
2_ENG44	382683	4340701	0.45	1.97	8760
2_ENG45	382690	4340701	0.45	1.97	8760
2_ENG46	382710	4340701	0.45	1.97	8760
2_ENG47	382716	4340701	0.45	1.97	8760
2_ENG48	382722	4340701	0.45	1.97	8760
2_ENG49	382728	4340701	0.45	1.97	8760
2_ENG50	382734	4340701	0.45	1.97	8760
2_ENG51	382741	4340701	0.45	1.97	8760
2_ENG52	382747	4340701	0.45	1.97	8760
2_ENG53	382753	4340701	0.45	1.97	8760
2_ENG54	382759	4340701	0.45	1.97	8760
2_ENG55	382765	4340701	0.45	1.97	8760
2_ENG56	382785	4340701	0.45	1.97	8760
2_ENG57	382792	4340701	0.45	1.97	8760
2_ENG58	382798	4340701	0.45	1.97	8760
2_ENG59	382804	4340701	0.45	1.97	8760
2_ENG60	382810	4340701	0.45	1.97	8760

2_ENG61	382816	4340701	0.45	1.97	8760
2_ENG62	382822	4340701	0.45	1.97	8760
2_ENG63	382828	4340701	0.45	1.97	8760
2_ENG64	382834	4340701	0.45	1.97	8760
2_ENG65	382840	4340701	0.45	1.97	8760
2_ENG66	382861	4340701	0.45	1.97	8760
2_ENG67	382867	4340701	0.45	1.97	8760
2_ENG68	382873	4340701	0.45	1.97	8760
2_ENG69	382879	4340701	0.45	1.97	8760
2_DENG1	382635	4340838	51.10	1.28	50
2_DENG2	382641	4340838	51.10	1.28	50
2_DENG3	382647	4340838	51.10	1.28	50
2_DENG4	382653	4340838	51.10	1.28	50
2_DENG5	382659	4340838	51.10	1.28	50
2_DENG6	382665	4340838	51.10	1.28	50
2_DENG7	382671	4340838	51.10	1.28	50
2_DENG8	382677	4340838	51.10	1.28	50
2_DENG9	382683	4340838	51.10	1.28	50
2_DENG10	382690	4340838	51.10	1.28	50
2_DENG11	382710	4340838	51.10	1.28	50
2_DENG12	382716	4340838	51.10	1.28	50
2_DENG13	382722	4340838	51.10	1.28	50
2_DENG14	382728	4340838	51.10	1.28	50
2_DENG15	382734	4340838	51.10	1.28	50
2_DENG16	382741	4340838	51.10	1.28	50
2_DENG17	382747	4340838	51.10	1.28	50
2_DENG18	382753	4340838	51.10	1.28	50
2_DENG19	382759	4340838	51.10	1.28	50
2_DENG20	382765	4340838	51.10	1.28	50
2_DENG21	382785	4340838	51.10	1.28	50
2_DENG22	382792	4340838	51.10	1.28	50
2_DENG23	382798	4340838	51.10	1.28	50
2_DENG24	382804	4340838	51.10	1.28	50
2_DENG25	382810	4340838	51.10	1.28	50
2_DENG26	382816	4340838	51.10	1.28	50
2_DENG27	382822	4340838	51.10	1.28	50
2_DENG28	382828	4340838	51.10	1.28	50
2_DENG29	382834	4340838	51.10	1.28	50
2_DENG30	382840	4340838	51.10	1.28	50
2_DENG31	382861	4340838	51.10	1.28	50

2_DENG32	382867	4340838	51.10	1.28	50
2_DENG33	382873	4340838	51.10	1.28	50
2_DENG34	382879	4340838	51.10	1.28	50
2_DENG35	382885	4340838	51.10	1.28	50
2_DENG36	382635	4340693	51.10	1.28	50
2_DENG37	382641	4340693	51.10	1.28	50
2_DENG38	382647	4340693	51.10	1.28	50
2_DENG39	382653	4340693	51.10	1.28	50
2_DENG40	382659	4340693	51.10	1.28	50
2_DENG41	382665	4340693	51.10	1.28	50
2_DENG42	382671	4340693	51.10	1.28	50
2_DENG43	382677	4340693	51.10	1.28	50
2_DENG44	382683	4340693	51.10	1.28	50
2_DENG45	382690	4340693	51.10	1.28	50
2_DENG46	382710	4340693	51.10	1.28	50
2_DENG47	382716	4340693	51.10	1.28	50
2_DENG48	382722	4340693	51.10	1.28	50
2_DENG49	382728	4340693	51.10	1.28	50
2_DENG50	382734	4340693	51.10	1.28	50
2_DENG51	382741	4340693	51.10	1.28	50
2_DENG52	382747	4340693	51.10	1.28	50
2_DENG53	382753	4340693	51.10	1.28	50
2_DENG54	382759	4340693	51.10	1.28	50
2_DENG55	382765	4340693	51.10	1.28	50
2_DENG56	382785	4340693	51.10	1.28	50
2_DENG57	382792	4340693	51.10	1.28	50
2_DENG58	382798	4340693	51.10	1.28	50
2_DENG59	382804	4340693	51.10	1.28	50
2_DENG60	382810	4340693	51.10	1.28	50
2_DENG61	382816	4340693	51.10	1.28	50
2_DENG62	382822	4340693	51.10	1.28	50
2_DENG63	382828	4340693	51.10	1.28	50
2_DENG64	382834	4340693	51.10	1.28	50
2_DENG65	382840	4340693	51.10	1.28	50
2_DENG66	382861	4340693	51.10	1.28	50
2_DENG67	382867	4340693	51.10	1.28	50
2_DENG68	382873	4340693	51.10	1.28	50
2_DENG69	382879	4340693	51.10	1.28	50
2_CHL1	382635	4340833	0.02	0.09	8760
2_CHL2	382641	4340833	0.02	0.09	8760

2_CHL3	382647	4340833	0.02	0.09	8760
2_CHL4	382653	4340833	0.02	0.09	8760
2_CHL5	382659	4340833	0.02	0.09	8760
2_CHL6	382665	4340833	0.02	0.09	8760
2_CHL7	382671	4340833	0.02	0.09	8760
2_CHL8	382677	4340833	0.02	0.09	8760
2_CHL9	382683	4340833	0.02	0.09	8760
2_CHL10	382690	4340833	0.02	0.09	8760
2_CHL11	382710	4340833	0.02	0.09	8760
2_CHL12	382716	4340833	0.02	0.09	8760
2_CHL13	382722	4340833	0.02	0.09	8760
2_CHL14	382728	4340833	0.02	0.09	8760
2_CHL15	382734	4340833	0.02	0.09	8760
2_CHL16	382741	4340833	0.02	0.09	8760
2_CHL17	382747	4340833	0.02	0.09	8760
2_CHL18	382753	4340833	0.02	0.09	8760
2_CHL19	382759	4340833	0.02	0.09	8760
2_CHL20	382765	4340833	0.02	0.09	8760
2_CHL21	382785	4340833	0.02	0.09	8760
2_CHL22	382792	4340833	0.02	0.09	8760
2_CHL23	382798	4340833	0.02	0.09	8760
2_CHL24	382804	4340833	0.02	0.09	8760
2_CHL25	382810	4340833	0.02	0.09	8760
2_CHL26	382816	4340833	0.02	0.09	8760
2_CHL27	382822	4340833	0.02	0.09	8760
2_CHL28	382828	4340833	0.02	0.09	8760
2_CHL29	382834	4340833	0.02	0.09	8760
2_CHL30	382840	4340833	0.02	0.09	8760
2_CHL31	382861	4340833	0.02	0.09	8760
2_CHL32	382867	4340833	0.02	0.09	8760
2_CHL33	382873	4340833	0.02	0.09	8760
2_CHL34	382879	4340833	0.02	0.09	8760
2_CHL35	382885	4340833	0.02	0.09	8760
2_CHL36	382635	4340697	0.02	0.09	8760
2_CHL37	382641	4340697	0.02	0.09	8760
2_CHL38	382647	4340697	0.02	0.09	8760
2_CHL39	382653	4340697	0.02	0.09	8760
2_CHL40	382659	4340697	0.02	0.09	8760
2_CHL41	382665	4340697	0.02	0.09	8760
2_CHL42	382671	4340697	0.02	0.09	8760

2_CHL43	382677	4340697	0.02	0.09	8760
2_CHL44	382683	4340697	0.02	0.09	8760
2_CHL45	382690	4340697	0.02	0.09	8760
2_CHL46	382710	4340697	0.02	0.09	8760
2_CHL47	382716	4340697	0.02	0.09	8760
2_CHL48	382722	4340697	0.02	0.09	8760
2_CHL49	382728	4340697	0.02	0.09	8760
2_CHL50	382734	4340697	0.02	0.09	8760
2_CHL51	382741	4340697	0.02	0.09	8760
2_CHL52	382747	4340697	0.02	0.09	8760
2_CHL53	382753	4340697	0.02	0.09	8760
2_CHL54	382759	4340697	0.02	0.09	8760
2_CHL55	382765	4340697	0.02	0.09	8760
2_CHL56	382785	4340697	0.02	0.09	8760
2_CHL57	382792	4340697	0.02	0.09	8760
2_CHL58	382798	4340697	0.02	0.09	8760
2_CHL59	382804	4340697	0.02	0.09	8760
2_CHL60	382810	4340697	0.02	0.09	8760
2_CHL61	382816	4340697	0.02	0.09	8760
2_CHL62	382822	4340697	0.02	0.09	8760
2_CHL63	382828	4340697	0.02	0.09	8760
2_CHL64	382834	4340697	0.02	0.09	8760
2_CHL65	382840	4340697	0.02	0.09	8760
2_CHL66	382861	4340697	0.02	0.09	8760
2_CHL67	382867	4340697	0.02	0.09	8760
2_CHL68	382873	4340697	0.02	0.09	8760
2_CHL69	382879	4340697	0.02	0.09	8760
Total			3558.28	230.19	

Source		UTM Coordinates		Modeled Emission Rates		
		Easting (m)	Northing (m)	PM2.5 (lb/hr)	PM2.5 (tons/yr)	hrs/year
CHILL1		380900	4338078	0.01	0.04	8760
CHILL2		380906	4338078	0.01	0.04	8760
CHILL3		380912	4338078	0.01	0.04	8760
CHILL4		380918	4338078	0.01	0.04	8760

CHILL5		380924	4338078	0.01	0.04	8760
CHILL6		380930	4338078	0.01	0.04	8760
CHILL7		380936	4338078	0.01	0.04	8760
CHILL8		380942	4338078	0.01	0.04	8760
CHILL9		380948	4338078	0.01	0.04	8760
CHILL10		380955	4338078	0.01	0.04	8760
CHILL11		380975	4338078	0.01	0.04	8760
CHILL12		380981	4338078	0.01	0.04	8760
CHILL13		380987	4338078	0.01	0.04	8760
CHILL14		380993	4338078	0.01	0.04	8760
CHILL15		380999	4338078	0.01	0.04	8760
CHILL16		381006	4338078	0.01	0.04	8760
CHILL17		381012	4338078	0.01	0.04	8760
CHILL18		381018	4338078	0.01	0.04	8760
CHILL19		381024	4338078	0.01	0.04	8760
CHILL20		381030	4338078	0.01	0.04	8760
CHILL21		381050	4338078	0.01	0.04	8760
CHILL22		381057	4338078	0.01	0.04	8760
CHILL23		381063	4338078	0.01	0.04	8760
CHILL24		381069	4338078	0.01	0.04	8760
CHILL25		381075	4338078	0.01	0.04	8760
CHILL26		381081	4338078	0.01	0.04	8760
CHILL27		381087	4338078	0.01	0.04	8760
CHILL28		381093	4338078	0.01	0.04	8760
CHILL29		381099	4338078	0.01	0.04	8760
CHILL30		381105	4338078	0.01	0.04	8760
CHILL31		381126	4338078	0.01	0.04	8760
CHILL32		381132	4338078	0.01	0.04	8760
CHILL33		381138	4338078	0.01	0.04	8760
CHILL34		381144	4338078	0.01	0.04	8760
CHILL35		381150	4338078	0.01	0.04	8760
CHILL36		380900	4337942	0.01	0.04	8760
CHILL37		380906	4337942	0.01	0.04	8760
CHILL38		380912	4337942	0.01	0.04	8760
CHILL39		380918	4337942	0.01	0.04	8760
CHILL40		380924	4337942	0.01	0.04	8760
CHILL41		380930	4337942	0.01	0.04	8760
CHILL42		380936	4337942	0.01	0.04	8760
CHILL43		380942	4337942	0.01	0.04	8760
CHILL44		380948	4337942	0.01	0.04	8760

CHILL45		380955	4337942	0.01	0.04	8760
CHILL46		380975	4337942	0.01	0.04	8760
CHILL47		380981	4337942	0.01	0.04	8760
CHILL48		380987	4337942	0.01	0.04	8760
CHILL49		380993	4337942	0.01	0.04	8760
CHILL50		380999	4337942	0.01	0.04	8760
CHILL51		381006	4337942	0.01	0.04	8760
CHILL52		381012	4337942	0.01	0.04	8760
CHILL53		381018	4337942	0.01	0.04	8760
CHILL54		381024	4337942	0.01	0.04	8760
CHILL55		381030	4337942	0.01	0.04	8760
CHILL56		381050	4337942	0.01	0.04	8760
CHILL57		381057	4337942	0.01	0.04	8760
CHILL58		381063	4337942	0.01	0.04	8760
CHILL59		381069	4337942	0.01	0.04	8760
CHILL60		381075	4337942	0.01	0.04	8760
CHILL61		381081	4337942	0.01	0.04	8760
CHILL62		381087	4337942	0.01	0.04	8760
CHILL63		381093	4337942	0.01	0.04	8760
CHILL64		381099	4337942	0.01	0.04	8760
CHILL65		381105	4337942	0.01	0.04	8760
CHILL66		381126	4337942	0.01	0.04	8760
CHILL67		381132	4337942	0.01	0.04	8760
CHILL68		381138	4337942	0.01	0.04	8760
CHILL69		381144	4337942	0.01	0.04	8760
2_ENG1		382635	4340829	0.19	0.83	8760
2_ENG2		382641	4340829	0.19	0.83	8760
2_ENG3		382647	4340829	0.19	0.83	8760
2_ENG4		382653	4340829	0.19	0.83	8760
2_ENG5		382659	4340829	0.19	0.83	8760
2_ENG6		382665	4340829	0.19	0.83	8760
2_ENG7		382671	4340829	0.19	0.83	8760
2_ENG8		382677	4340829	0.19	0.83	8760
2_ENG9		382683	4340829	0.19	0.83	8760
2_ENG10		382690	4340829	0.19	0.83	8760
2_ENG11		382710	4340829	0.19	0.83	8760
2_ENG12		382716	4340829	0.19	0.83	8760
2_ENG13		382722	4340829	0.19	0.83	8760
2_ENG14		382728	4340829	0.19	0.83	8760
2_ENG15		382734	4340829	0.19	0.83	8760

2_ENG16		382741	4340829	0.19	0.83	8760
2_ENG17		382747	4340829	0.19	0.83	8760
2_ENG18		382753	4340829	0.19	0.83	8760
2_ENG19		382759	4340829	0.19	0.83	8760
2_ENG20		382765	4340829	0.19	0.83	8760
2_ENG21		382785	4340829	0.19	0.83	8760
2_ENG22		382792	4340829	0.19	0.83	8760
2_ENG23		382798	4340829	0.19	0.83	8760
2_ENG24		382804	4340829	0.19	0.83	8760
2_ENG25		382810	4340829	0.19	0.83	8760
2_ENG26		382816	4340829	0.19	0.83	8760
2_ENG27		382822	4340829	0.19	0.83	8760
2_ENG28		382828	4340829	0.19	0.83	8760
2_ENG29		382834	4340829	0.19	0.83	8760
2_ENG30		382840	4340829	0.19	0.83	8760
2_ENG31		382861	4340829	0.19	0.83	8760
2_ENG32		382867	4340829	0.19	0.83	8760
2_ENG33		382873	4340829	0.19	0.83	8760
2_ENG34		382879	4340829	0.19	0.83	8760
2_ENG35		382885	4340829	0.19	0.83	8760
2_ENG36		382635	4340701	0.19	0.83	8760
2_ENG37		382641	4340701	0.19	0.83	8760
2_ENG38		382647	4340701	0.19	0.83	8760
2_ENG39		382653	4340701	0.19	0.83	8760
2_ENG40		382659	4340701	0.19	0.83	8760
2_ENG41		382665	4340701	0.19	0.83	8760
2_ENG42		382671	4340701	0.19	0.83	8760
2_ENG43		382677	4340701	0.19	0.83	8760
2_ENG44		382683	4340701	0.19	0.83	8760
2_ENG45		382690	4340701	0.19	0.83	8760
2_ENG46		382710	4340701	0.19	0.83	8760
2_ENG47		382716	4340701	0.19	0.83	8760
2_ENG48		382722	4340701	0.19	0.83	8760
2_ENG49		382728	4340701	0.19	0.83	8760
2_ENG50		382734	4340701	0.19	0.83	8760
2_ENG51		382741	4340701	0.19	0.83	8760
2_ENG52		382747	4340701	0.19	0.83	8760
2_ENG53		382753	4340701	0.19	0.83	8760
2_ENG54		382759	4340701	0.19	0.83	8760
2_ENG55		382765	4340701	0.19	0.83	8760

2_ENG56		382785	4340701	0.19	0.83	8760
2_ENG57		382792	4340701	0.19	0.83	8760
2_ENG58		382798	4340701	0.19	0.83	8760
2_ENG59		382804	4340701	0.19	0.83	8760
2_ENG60		382810	4340701	0.19	0.83	8760
2_ENG61		382816	4340701	0.19	0.83	8760
2_ENG62		382822	4340701	0.19	0.83	8760
2_ENG63		382828	4340701	0.19	0.83	8760
2_ENG64		382834	4340701	0.19	0.83	8760
2_ENG65		382840	4340701	0.19	0.83	8760
2_ENG66		382861	4340701	0.19	0.83	8760
2_ENG67		382867	4340701	0.19	0.83	8760
2_ENG68		382873	4340701	0.19	0.83	8760
2_ENG69		382879	4340701	0.19	0.83	8760
2_DENG1		382635	4340838	0.40	0.01	50
2_DENG2		382641	4340838	0.40	0.01	50
2_DENG3		382647	4340838	0.40	0.01	50
2_DENG4		382653	4340838	0.40	0.01	50
2_DENG5		382659	4340838	0.40	0.01	50
2_DENG6		382665	4340838	0.40	0.01	50
2_DENG7		382671	4340838	0.40	0.01	50
2_DENG8		382677	4340838	0.40	0.01	50
2_DENG9		382683	4340838	0.40	0.01	50
2_DENG10		382690	4340838	0.40	0.01	50
2_DENG11		382710	4340838	0.40	0.01	50
2_DENG12		382716	4340838	0.40	0.01	50
2_DENG13		382722	4340838	0.40	0.01	50
2_DENG14		382728	4340838	0.40	0.01	50
2_DENG15		382734	4340838	0.40	0.01	50
2_DENG16		382741	4340838	0.40	0.01	50
2_DENG17		382747	4340838	0.40	0.01	50
2_DENG18		382753	4340838	0.40	0.01	50
2_DENG19		382759	4340838	0.40	0.01	50
2_DENG20		382765	4340838	0.40	0.01	50
2_DENG21		382785	4340838	0.40	0.01	50
2_DENG22		382792	4340838	0.40	0.01	50
2_DENG23		382798	4340838	0.40	0.01	50
2_DENG24		382804	4340838	0.40	0.01	50
2_DENG25		382810	4340838	0.40	0.01	50
2_DENG26		382816	4340838	0.40	0.01	50

2_DENG27		382822	4340838	0.40	0.01	50
2_DENG28		382828	4340838	0.40	0.01	50
2_DENG29		382834	4340838	0.40	0.01	50
2_DENG30		382840	4340838	0.40	0.01	50
2_DENG31		382861	4340838	0.40	0.01	50
2_DENG32		382867	4340838	0.40	0.01	50
2_DENG33		382873	4340838	0.40	0.01	50
2_DENG34		382879	4340838	0.40	0.01	50
2_DENG35		382885	4340838	0.40	0.01	50
2_DENG36		382635	4340693	0.40	0.01	50
2_DENG37		382641	4340693	0.40	0.01	50
2_DENG38		382647	4340693	0.40	0.01	50
2_DENG39		382653	4340693	0.40	0.01	50
2_DENG40		382659	4340693	0.40	0.01	50
2_DENG41		382665	4340693	0.40	0.01	50
2_DENG42		382671	4340693	0.40	0.01	50
2_DENG43		382677	4340693	0.40	0.01	50
2_DENG44		382683	4340693	0.40	0.01	50
2_DENG45		382690	4340693	0.40	0.01	50
2_DENG46		382710	4340693	0.40	0.01	50
2_DENG47		382716	4340693	0.40	0.01	50
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2_DENG50		382734	4340693	0.40	0.01	50
2_DENG51		382741	4340693	0.40	0.01	50
2_DENG52		382747	4340693	0.40	0.01	50
2_DENG53		382753	4340693	0.40	0.01	50
2_DENG54		382759	4340693	0.40	0.01	50
2_DENG55		382765	4340693	0.40	0.01	50
2_DENG56		382785	4340693	0.40	0.01	50
2_DENG57		382792	4340693	0.40	0.01	50
2_DENG58		382798	4340693	0.40	0.01	50
2_DENG59		382804	4340693	0.40	0.01	50
2_DENG60		382810	4340693	0.40	0.01	50
2_DENG61		382816	4340693	0.40	0.01	50
2_DENG62		382822	4340693	0.40	0.01	50
2_DENG63		382828	4340693	0.40	0.01	50
2_DENG64		382834	4340693	0.40	0.01	50
2_DENG65		382840	4340693	0.40	0.01	50
2_DENG66		382861	4340693	0.40	0.01	50

2_DENG67		382867	4340693	0.40	0.01	50
2_DENG68		382873	4340693	0.40	0.01	50
2_DENG69		382879	4340693	0.40	0.01	50
2_CHL1		382635	4340833	0.01	0.04	8760
2_CHL2		382641	4340833	0.01	0.04	8760
2_CHL3		382647	4340833	0.01	0.04	8760
2_CHL4		382653	4340833	0.01	0.04	8760
2_CHL5		382659	4340833	0.01	0.04	8760
2_CHL6		382665	4340833	0.01	0.04	8760
2_CHL7		382671	4340833	0.01	0.04	8760
2_CHL8		382677	4340833	0.01	0.04	8760
2_CHL9		382683	4340833	0.01	0.04	8760
2_CHL10		382690	4340833	0.01	0.04	8760
2_CHL11		382710	4340833	0.01	0.04	8760
2_CHL12		382716	4340833	0.01	0.04	8760
2_CHL13		382722	4340833	0.01	0.04	8760
2_CHL14		382728	4340833	0.01	0.04	8760
2_CHL15		382734	4340833	0.01	0.04	8760
2_CHL16		382741	4340833	0.01	0.04	8760
2_CHL17		382747	4340833	0.01	0.04	8760
2_CHL18		382753	4340833	0.01	0.04	8760
2_CHL19		382759	4340833	0.01	0.04	8760
2_CHL20		382765	4340833	0.01	0.04	8760
2_CHL21		382785	4340833	0.01	0.04	8760
2_CHL22		382792	4340833	0.01	0.04	8760
2_CHL23		382798	4340833	0.01	0.04	8760
2_CHL24		382804	4340833	0.01	0.04	8760
2_CHL25		382810	4340833	0.01	0.04	8760
2_CHL26		382816	4340833	0.01	0.04	8760
2_CHL27		382822	4340833	0.01	0.04	8760
2_CHL28		382828	4340833	0.01	0.04	8760
2_CHL29		382834	4340833	0.01	0.04	8760
2_CHL30		382840	4340833	0.01	0.04	8760
2_CHL31		382861	4340833	0.01	0.04	8760
2_CHL32		382867	4340833	0.01	0.04	8760
2_CHL33		382873	4340833	0.01	0.04	8760
2_CHL34		382879	4340833	0.01	0.04	8760
2_CHL35		382885	4340833	0.01	0.04	8760
2_CHL36		382635	4340697	0.01	0.04	8760
2_CHL37		382641	4340697	0.01	0.04	8760

2_CHL38		382647	4340697	0.01	0.04	8760
2_CHL39		382653	4340697	0.01	0.04	8760
2_CHL40		382659	4340697	0.01	0.04	8760
2_CHL41		382665	4340697	0.01	0.04	8760
2_CHL42		382671	4340697	0.01	0.04	8760
2_CHL43		382677	4340697	0.01	0.04	8760
2_CHL44		382683	4340697	0.01	0.04	8760
2_CHL45		382690	4340697	0.01	0.04	8760
2_CHL46		382710	4340697	0.01	0.04	8760
2_CHL47		382716	4340697	0.01	0.04	8760
2_CHL48		382722	4340697	0.01	0.04	8760
2_CHL49		382728	4340697	0.01	0.04	8760
2_CHL50		382734	4340697	0.01	0.04	8760
2_CHL51		382741	4340697	0.01	0.04	8760
2_CHL52		382747	4340697	0.01	0.04	8760
2_CHL53		382753	4340697	0.01	0.04	8760
2_CHL54		382759	4340697	0.01	0.04	8760
2_CHL55		382765	4340697	0.01	0.04	8760
2_CHL56		382785	4340697	0.01	0.04	8760
2_CHL57		382792	4340697	0.01	0.04	8760
2_CHL58		382798	4340697	0.01	0.04	8760
2_CHL59		382804	4340697	0.01	0.04	8760
2_CHL60		382810	4340697	0.01	0.04	8760
2_CHL61		382816	4340697	0.01	0.04	8760
2_CHL62		382822	4340697	0.01	0.04	8760
2_CHL63		382828	4340697	0.01	0.04	8760
2_CHL64		382834	4340697	0.01	0.04	8760
2_CHL65		382840	4340697	0.01	0.04	8760
2_CHL66		382861	4340697	0.01	0.04	8760
2_CHL67		382867	4340697	0.01	0.04	8760
2_CHL68		382873	4340697	0.01	0.04	8760
2_CHL69		382879	4340697	0.01	0.04	8760
Total				41.97	63.61	

Source		UTM Coordinates		Modeled Emission Rates		
		Easting (m)	Northing (m)	PM10 (lb/hr)	PM10 (tons/yr)	hrs/year
2_ENG1		382635	4340829	0.19	0.83	8760
2_ENG2		382641	4340829	0.19	0.83	8760

2_ENG3		382647	4340829	0.19	0.83	8760
2_ENG4		382653	4340829	0.19	0.83	8760
2_ENG5		382659	4340829	0.19	0.83	8760
2_ENG6		382665	4340829	0.19	0.83	8760
2_ENG7		382671	4340829	0.19	0.83	8760
2_ENG8		382677	4340829	0.19	0.83	8760
2_ENG9		382683	4340829	0.19	0.83	8760
2_ENG10		382690	4340829	0.19	0.83	8760
2_ENG11		382710	4340829	0.19	0.83	8760
2_ENG12		382716	4340829	0.19	0.83	8760
2_ENG13		382722	4340829	0.19	0.83	8760
2_ENG14		382728	4340829	0.19	0.83	8760
2_ENG15		382734	4340829	0.19	0.83	8760
2_ENG16		382741	4340829	0.19	0.83	8760
2_ENG17		382747	4340829	0.19	0.83	8760
2_ENG18		382753	4340829	0.19	0.83	8760
2_ENG19		382759	4340829	0.19	0.83	8760
2_ENG20		382765	4340829	0.19	0.83	8760
2_ENG21		382785	4340829	0.19	0.83	8760
2_ENG22		382792	4340829	0.19	0.83	8760
2_ENG23		382798	4340829	0.19	0.83	8760
2_ENG24		382804	4340829	0.19	0.83	8760
2_ENG25		382810	4340829	0.19	0.83	8760
2_ENG26		382816	4340829	0.19	0.83	8760
2_ENG27		382822	4340829	0.19	0.83	8760
2_ENG28		382828	4340829	0.19	0.83	8760
2_ENG29		382834	4340829	0.19	0.83	8760
2_ENG30		382840	4340829	0.19	0.83	8760
2_ENG31		382861	4340829	0.19	0.83	8760
2_ENG32		382867	4340829	0.19	0.83	8760
2_ENG33		382873	4340829	0.19	0.83	8760
2_ENG34		382879	4340829	0.19	0.83	8760
2_ENG35		382885	4340829	0.19	0.83	8760
2_ENG36		382635	4340701	0.19	0.83	8760
2_ENG37		382641	4340701	0.19	0.83	8760
2_ENG38		382647	4340701	0.19	0.83	8760
2_ENG39		382653	4340701	0.19	0.83	8760
2_ENG40		382659	4340701	0.19	0.83	8760
2_ENG41		382665	4340701	0.19	0.83	8760
2_ENG42		382671	4340701	0.19	0.83	8760

2_ENG43		382677	4340701	0.19	0.83	8760
2_ENG44		382683	4340701	0.19	0.83	8760
2_ENG45		382690	4340701	0.19	0.83	8760
2_ENG46		382710	4340701	0.19	0.83	8760
2_ENG47		382716	4340701	0.19	0.83	8760
2_ENG48		382722	4340701	0.19	0.83	8760
2_ENG49		382728	4340701	0.19	0.83	8760
2_ENG50		382734	4340701	0.19	0.83	8760
2_ENG51		382741	4340701	0.19	0.83	8760
2_ENG52		382747	4340701	0.19	0.83	8760
2_ENG53		382753	4340701	0.19	0.83	8760
2_ENG54		382759	4340701	0.19	0.83	8760
2_ENG55		382765	4340701	0.19	0.83	8760
2_ENG56		382785	4340701	0.19	0.83	8760
2_ENG57		382792	4340701	0.19	0.83	8760
2_ENG58		382798	4340701	0.19	0.83	8760
2_ENG59		382804	4340701	0.19	0.83	8760
2_ENG60		382810	4340701	0.19	0.83	8760
2_ENG61		382816	4340701	0.19	0.83	8760
2_ENG62		382822	4340701	0.19	0.83	8760
2_ENG63		382828	4340701	0.19	0.83	8760
2_ENG64		382834	4340701	0.19	0.83	8760
2_ENG65		382840	4340701	0.19	0.83	8760
2_ENG66		382861	4340701	0.19	0.83	8760
2_ENG67		382867	4340701	0.19	0.83	8760
2_ENG68		382873	4340701	0.19	0.83	8760
2_ENG69		382879	4340701	0.19	0.83	8760
2_DENG1		382635	4340838	0.40	0.01	50
2_DENG2		382641	4340838	0.40	0.01	50
2_DENG3		382647	4340838	0.40	0.01	50
2_DENG4		382653	4340838	0.40	0.01	50
2_DENG5		382659	4340838	0.40	0.01	50
2_DENG6		382665	4340838	0.40	0.01	50
2_DENG7		382671	4340838	0.40	0.01	50
2_DENG8		382677	4340838	0.40	0.01	50
2_DENG9		382683	4340838	0.40	0.01	50
2_DENG10		382690	4340838	0.40	0.01	50
2_DENG11		382710	4340838	0.40	0.01	50
2_DENG12		382716	4340838	0.40	0.01	50
2_DENG13		382722	4340838	0.40	0.01	50

2_DENG14		382728	4340838	0.40	0.01	50
2_DENG15		382734	4340838	0.40	0.01	50
2_DENG16		382741	4340838	0.40	0.01	50
2_DENG17		382747	4340838	0.40	0.01	50
2_DENG18		382753	4340838	0.40	0.01	50
2_DENG19		382759	4340838	0.40	0.01	50
2_DENG20		382765	4340838	0.40	0.01	50
2_DENG21		382785	4340838	0.40	0.01	50
2_DENG22		382792	4340838	0.40	0.01	50
2_DENG23		382798	4340838	0.40	0.01	50
2_DENG24		382804	4340838	0.40	0.01	50
2_DENG25		382810	4340838	0.40	0.01	50
2_DENG26		382816	4340838	0.40	0.01	50
2_DENG27		382822	4340838	0.40	0.01	50
2_DENG28		382828	4340838	0.40	0.01	50
2_DENG29		382834	4340838	0.40	0.01	50
2_DENG30		382840	4340838	0.40	0.01	50
2_DENG31		382861	4340838	0.40	0.01	50
2_DENG32		382867	4340838	0.40	0.01	50
2_DENG33		382873	4340838	0.40	0.01	50
2_DENG34		382879	4340838	0.40	0.01	50
2_DENG35		382885	4340838	0.40	0.01	50
2_DENG36		382635	4340693	0.40	0.01	50
2_DENG37		382641	4340693	0.40	0.01	50
2_DENG38		382647	4340693	0.40	0.01	50
2_DENG39		382653	4340693	0.40	0.01	50
2_DENG40		382659	4340693	0.40	0.01	50
2_DENG41		382665	4340693	0.40	0.01	50
2_DENG42		382671	4340693	0.40	0.01	50
2_DENG43		382677	4340693	0.40	0.01	50
2_DENG44		382683	4340693	0.40	0.01	50
2_DENG45		382690	4340693	0.40	0.01	50
2_DENG46		382710	4340693	0.40	0.01	50
2_DENG47		382716	4340693	0.40	0.01	50
2_DENG48		382722	4340693	0.40	0.01	50
2_DENG49		382728	4340693	0.40	0.01	50
2_DENG50		382734	4340693	0.40	0.01	50
2_DENG51		382741	4340693	0.40	0.01	50
2_DENG52		382747	4340693	0.40	0.01	50
2_DENG53		382753	4340693	0.40	0.01	50

2_DENG54		382759	4340693	0.40	0.01	50
2_DENG55		382765	4340693	0.40	0.01	50
2_DENG56		382785	4340693	0.40	0.01	50
2_DENG57		382792	4340693	0.40	0.01	50
2_DENG58		382798	4340693	0.40	0.01	50
2_DENG59		382804	4340693	0.40	0.01	50
2_DENG60		382810	4340693	0.40	0.01	50
2_DENG61		382816	4340693	0.40	0.01	50
2_DENG62		382822	4340693	0.40	0.01	50
2_DENG63		382828	4340693	0.40	0.01	50
2_DENG64		382834	4340693	0.40	0.01	50
2_DENG65		382840	4340693	0.40	0.01	50
2_DENG66		382861	4340693	0.40	0.01	50
2_DENG67		382867	4340693	0.40	0.01	50
2_DENG68		382873	4340693	0.40	0.01	50
2_DENG69		382879	4340693	0.40	0.01	50
2_CHL1		382635	4340833	0.01	0.04	8760
2_CHL2		382641	4340833	0.01	0.04	8760
2_CHL3		382647	4340833	0.01	0.04	8760
2_CHL4		382653	4340833	0.01	0.04	8760
2_CHL5		382659	4340833	0.01	0.04	8760
2_CHL6		382665	4340833	0.01	0.04	8760
2_CHL7		382671	4340833	0.01	0.04	8760
2_CHL8		382677	4340833	0.01	0.04	8760
2_CHL9		382683	4340833	0.01	0.04	8760
2_CHL10		382690	4340833	0.01	0.04	8760
2_CHL11		382710	4340833	0.01	0.04	8760
2_CHL12		382716	4340833	0.01	0.04	8760
2_CHL13		382722	4340833	0.01	0.04	8760
2_CHL14		382728	4340833	0.01	0.04	8760
2_CHL15		382734	4340833	0.01	0.04	8760
2_CHL16		382741	4340833	0.01	0.04	8760
2_CHL17		382747	4340833	0.01	0.04	8760
2_CHL18		382753	4340833	0.01	0.04	8760
2_CHL19		382759	4340833	0.01	0.04	8760
2_CHL20		382765	4340833	0.01	0.04	8760
2_CHL21		382785	4340833	0.01	0.04	8760
2_CHL22		382792	4340833	0.01	0.04	8760
2_CHL23		382798	4340833	0.01	0.04	8760
2_CHL24		382804	4340833	0.01	0.04	8760

2_CHL25		382810	4340833	0.01	0.04	8760
2_CHL26		382816	4340833	0.01	0.04	8760
2_CHL27		382822	4340833	0.01	0.04	8760
2_CHL28		382828	4340833	0.01	0.04	8760
2_CHL29		382834	4340833	0.01	0.04	8760
2_CHL30		382840	4340833	0.01	0.04	8760
2_CHL31		382861	4340833	0.01	0.04	8760
2_CHL32		382867	4340833	0.01	0.04	8760
2_CHL33		382873	4340833	0.01	0.04	8760
2_CHL34		382879	4340833	0.01	0.04	8760
2_CHL35		382885	4340833	0.01	0.04	8760
2_CHL36		382635	4340697	0.01	0.04	8760
2_CHL37		382641	4340697	0.01	0.04	8760
2_CHL38		382647	4340697	0.01	0.04	8760
2_CHL39		382653	4340697	0.01	0.04	8760
2_CHL40		382659	4340697	0.01	0.04	8760
2_CHL41		382665	4340697	0.01	0.04	8760
2_CHL42		382671	4340697	0.01	0.04	8760
2_CHL43		382677	4340697	0.01	0.04	8760
2_CHL44		382683	4340697	0.01	0.04	8760
2_CHL45		382690	4340697	0.01	0.04	8760
2_CHL46		382710	4340697	0.01	0.04	8760
2_CHL47		382716	4340697	0.01	0.04	8760
2_CHL48		382722	4340697	0.01	0.04	8760
2_CHL49		382728	4340697	0.01	0.04	8760
2_CHL50		382734	4340697	0.01	0.04	8760
2_CHL51		382741	4340697	0.01	0.04	8760
2_CHL52		382747	4340697	0.01	0.04	8760
2_CHL53		382753	4340697	0.01	0.04	8760
2_CHL54		382759	4340697	0.01	0.04	8760
2_CHL55		382765	4340697	0.01	0.04	8760
2_CHL56		382785	4340697	0.01	0.04	8760
2_CHL57		382792	4340697	0.01	0.04	8760
2_CHL58		382798	4340697	0.01	0.04	8760
2_CHL59		382804	4340697	0.01	0.04	8760
2_CHL60		382810	4340697	0.01	0.04	8760
2_CHL61		382816	4340697	0.01	0.04	8760
2_CHL62		382822	4340697	0.01	0.04	8760
2_CHL63		382828	4340697	0.01	0.04	8760
2_CHL64		382834	4340697	0.01	0.04	8760

2_CHL65		382840	4340697	0.01	0.04	8760
2_CHL66		382861	4340697	0.01	0.04	8760
2_CHL67		382867	4340697	0.01	0.04	8760
2_CHL68		382873	4340697	0.01	0.04	8760
2_CHL69		382879	4340697	0.01	0.04	8760
Total				41.34	60.86	

Nearby Sources

Joule Site #1

Source	UTM Coordinates		Modeled Emission Rates		
	Easting (m)	Northing (m)	CO (lb/hr)	CO (tons/yr)	hrs/year
ENGINE1	380900	4338073	0.58	2.54	8760
ENGINE2	380906	4338073	0.58	2.54	8760
ENGINE3	380912	4338073	0.58	2.54	8760
ENGINE4	380918	4338073	0.58	2.54	8760
ENGINE5	380924	4338073	0.58	2.54	8760
ENGINE6	380930	4338073	0.58	2.54	8760
ENGINE7	380936	4338073	0.58	2.54	8760
ENGINE8	380942	4338073	0.58	2.54	8760
ENGINE9	380948	4338073	0.58	2.54	8760
ENGINE10	380955	4338073	0.58	2.54	8760
ENGINE11	380975	4338073	0.58	2.54	8760
ENGINE12	380981	4338073	0.58	2.54	8760
ENGINE13	380987	4338073	0.58	2.54	8760
ENGINE14	380993	4338073	0.58	2.54	8760
ENGINE15	380999	4338073	0.58	2.54	8760
ENGINE16	381006	4338073	0.58	2.54	8760
ENGINE17	381012	4338073	0.58	2.54	8760
ENGINE18	381018	4338073	0.58	2.54	8760
ENGINE19	381024	4338073	0.58	2.54	8760
ENGINE20	381030	4338073	0.58	2.54	8760
ENGINE21	381050	4338073	0.58	2.54	8760
ENGINE22	381057	4338073	0.58	2.54	8760
ENGINE23	381063	4338073	0.58	2.54	8760
ENGINE24	381069	4338073	0.58	2.54	8760
ENGINE25	381075	4338073	0.58	2.54	8760

ENGINE26	381081	4338073	0.58	2.54	8760
ENGINE27	381087	4338073	0.58	2.54	8760
ENGINE28	381093	4338073	0.58	2.54	8760
ENGINE29	381099	4338073	0.58	2.54	8760
ENGINE30	381105	4338073	0.58	2.54	8760
ENGINE31	381126	4338073	0.58	2.54	8760
ENGINE32	381132	4338073	0.58	2.54	8760
ENGINE33	381138	4338073	0.58	2.54	8760
ENGINE34	381144	4338073	0.58	2.54	8760
ENGINE35	381150	4338073	0.58	2.54	8760
ENGINE36	380900	4337946	0.58	2.54	8760
ENGINE37	380906	4337946	0.58	2.54	8760
ENGINE38	380912	4337946	0.58	2.54	8760
ENGINE39	380918	4337946	0.58	2.54	8760
ENGINE40	380924	4337946	0.58	2.54	8760
ENGINE41	380930	4337946	0.58	2.54	8760
ENGINE42	380936	4337946	0.58	2.54	8760
ENGINE43	380942	4337946	0.58	2.54	8760
ENGINE44	380948	4337946	0.58	2.54	8760
ENGINE45	380955	4337946	0.58	2.54	8760
ENGINE46	380975	4337946	0.58	2.54	8760
ENGINE47	380981	4337946	0.58	2.54	8760
ENGINE48	380987	4337946	0.58	2.54	8760
ENGINE49	380993	4337946	0.58	2.54	8760
ENGINE50	380999	4337946	0.58	2.54	8760
ENGINE51	381006	4337946	0.58	2.54	8760
ENGINE52	381012	4337946	0.58	2.54	8760
ENGINE53	381018	4337946	0.58	2.54	8760
ENGINE54	381024	4337946	0.58	2.54	8760
ENGINE55	381030	4337946	0.58	2.54	8760
ENGINE56	381050	4337946	0.58	2.54	8760
ENGINE57	381057	4337946	0.58	2.54	8760
ENGINE58	381063	4337946	0.58	2.54	8760
ENGINE59	381069	4337946	0.58	2.54	8760
ENGINE60	381075	4337946	0.58	2.54	8760
ENGINE61	381081	4337946	0.58	2.54	8760
ENGINE62	381087	4337946	0.58	2.54	8760
ENGINE63	381093	4337946	0.58	2.54	8760
ENGINE64	381099	4337946	0.58	2.54	8760
ENGINE65	381105	4337946	0.58	2.54	8760

ENGINE66	381126	4337946	0.58	2.54	8760
ENGINE67	381132	4337946	0.58	2.54	8760
ENGINE68	381138	4337946	0.58	2.54	8760
ENGINE69	381144	4337946	0.58	2.54	8760
DENG1	380900	4338082	6.09	0.15	50
DENG2	380906	4338082	6.09	0.15	50
DENG3	380912	4338082	6.09	0.15	50
DENG4	380918	4338082	6.09	0.15	50
DENG5	380924	4338082	6.09	0.15	50
DENG6	380930	4338082	6.09	0.15	50
DENG7	380936	4338082	6.09	0.15	50
DENG8	380942	4338082	6.09	0.15	50
DENG9	380948	4338082	6.09	0.15	50
DENG10	380955	4338082	6.09	0.15	50
DENG11	380975	4338082	6.09	0.15	50
DENG12	380981	4338082	6.09	0.15	50
DENG13	380987	4338082	6.09	0.15	50
DENG14	380993	4338082	6.09	0.15	50
DENG15	380999	4338082	6.09	0.15	50
DENG16	381006	4338082	6.09	0.15	50
DENG17	381012	4338082	6.09	0.15	50
DENG18	381018	4338082	6.09	0.15	50
DENG19	381024	4338082	6.09	0.15	50
DENG20	381030	4338082	6.09	0.15	50
DENG21	381050	4338082	6.09	0.15	50
DENG22	381057	4338082	6.09	0.15	50
DENG23	381063	4338082	6.09	0.15	50
DENG24	381069	4338082	6.09	0.15	50
DENG25	381075	4338082	6.09	0.15	50
DENG26	381081	4338082	6.09	0.15	50
DENG27	381087	4338082	6.09	0.15	50
DENG28	381093	4338082	6.09	0.15	50
DENG29	381099	4338082	6.09	0.15	50
DENG30	381105	4338082	6.09	0.15	50
DENG31	381126	4338082	6.09	0.15	50
DENG32	381132	4338082	6.09	0.15	50
DENG33	381138	4338082	6.09	0.15	50
DENG34	381144	4338082	6.09	0.15	50
DENG35	381150	4338082	6.09	0.15	50
DENG36	380900	4337937	6.09	0.15	50

DENG37	380906	4337937	6.09	0.15	50
DENG38	380912	4337937	6.09	0.15	50
DENG39	380918	4337937	6.09	0.15	50
DENG40	380924	4337937	6.09	0.15	50
DENG41	380930	4337937	6.09	0.15	50
DENG42	380936	4337937	6.09	0.15	50
DENG43	380942	4337937	6.09	0.15	50
DENG44	380948	4337937	6.09	0.15	50
DENG45	380955	4337937	6.09	0.15	50
DENG46	380975	4337937	6.09	0.15	50
DENG47	380981	4337937	6.09	0.15	50
DENG48	380987	4337937	6.09	0.15	50
DENG49	380993	4337937	6.09	0.15	50
DENG50	380999	4337937	6.09	0.15	50
DENG51	381006	4337937	6.09	0.15	50
DENG52	381012	4337937	6.09	0.15	50
DENG53	381018	4337937	6.09	0.15	50
DENG54	381024	4337937	6.09	0.15	50
DENG55	381030	4337937	6.09	0.15	50
DENG56	381050	4337937	6.09	0.15	50
DENG57	381057	4337937	6.09	0.15	50
DENG58	381063	4337937	6.09	0.15	50
DENG59	381069	4337937	6.09	0.15	50
DENG60	381075	4337937	6.09	0.15	50
DENG61	381081	4337937	6.09	0.15	50
DENG62	381087	4337937	6.09	0.15	50
DENG63	381093	4337937	6.09	0.15	50
DENG64	381099	4337937	6.09	0.15	50
DENG65	381105	4337937	6.09	0.15	50
DENG66	381126	4337937	6.09	0.15	50
DENG67	381132	4337937	6.09	0.15	50
DENG68	381138	4337937	6.09	0.15	50
DENG69	381144	4337937	6.09	0.15	50
CHILL1	380900	4338078	0.06	0.25	8760
CHILL2	380906	4338078	0.06	0.25	8760
CHILL3	380912	4338078	0.06	0.25	8760
CHILL4	380918	4338078	0.06	0.25	8760
CHILL5	380924	4338078	0.06	0.25	8760
CHILL6	380930	4338078	0.06	0.25	8760
CHILL7	380936	4338078	0.06	0.25	8760

CHILL8	380942	4338078	0.06	0.25	8760
CHILL9	380948	4338078	0.06	0.25	8760
CHILL10	380955	4338078	0.06	0.25	8760
CHILL11	380975	4338078	0.06	0.25	8760
CHILL12	380981	4338078	0.06	0.25	8760
CHILL13	380987	4338078	0.06	0.25	8760
CHILL14	380993	4338078	0.06	0.25	8760
CHILL15	380999	4338078	0.06	0.25	8760
CHILL16	381006	4338078	0.06	0.25	8760
CHILL17	381012	4338078	0.06	0.25	8760
CHILL18	381018	4338078	0.06	0.25	8760
CHILL19	381024	4338078	0.06	0.25	8760
CHILL20	381030	4338078	0.06	0.25	8760
CHILL21	381050	4338078	0.06	0.25	8760
CHILL22	381057	4338078	0.06	0.25	8760
CHILL23	381063	4338078	0.06	0.25	8760
CHILL24	381069	4338078	0.06	0.25	8760
CHILL25	381075	4338078	0.06	0.25	8760
CHILL26	381081	4338078	0.06	0.25	8760
CHILL27	381087	4338078	0.06	0.25	8760
CHILL28	381093	4338078	0.06	0.25	8760
CHILL29	381099	4338078	0.06	0.25	8760
CHILL30	381105	4338078	0.06	0.25	8760
CHILL31	381126	4338078	0.06	0.25	8760
CHILL32	381132	4338078	0.06	0.25	8760
CHILL33	381138	4338078	0.06	0.25	8760
CHILL34	381144	4338078	0.06	0.25	8760
CHILL35	381150	4338078	0.06	0.25	8760
CHILL36	380900	4337942	0.06	0.25	8760
CHILL37	380906	4337942	0.06	0.25	8760
CHILL38	380912	4337942	0.06	0.25	8760
CHILL39	380918	4337942	0.06	0.25	8760
CHILL40	380924	4337942	0.06	0.25	8760
CHILL41	380930	4337942	0.06	0.25	8760
CHILL42	380936	4337942	0.06	0.25	8760
CHILL43	380942	4337942	0.06	0.25	8760
CHILL44	380948	4337942	0.06	0.25	8760
CHILL45	380955	4337942	0.06	0.25	8760
CHILL46	380975	4337942	0.06	0.25	8760
CHILL47	380981	4337942	0.06	0.25	8760

CHILL48	380987	4337942	0.06	0.25	8760
CHILL49	380993	4337942	0.06	0.25	8760
CHILL50	380999	4337942	0.06	0.25	8760
CHILL51	381006	4337942	0.06	0.25	8760
CHILL52	381012	4337942	0.06	0.25	8760
CHILL53	381018	4337942	0.06	0.25	8760
CHILL54	381024	4337942	0.06	0.25	8760
CHILL55	381030	4337942	0.06	0.25	8760
CHILL56	381050	4337942	0.06	0.25	8760
CHILL57	381057	4337942	0.06	0.25	8760
CHILL58	381063	4337942	0.06	0.25	8760
CHILL59	381069	4337942	0.06	0.25	8760
CHILL60	381075	4337942	0.06	0.25	8760
CHILL61	381081	4337942	0.06	0.25	8760
CHILL62	381087	4337942	0.06	0.25	8760
CHILL63	381093	4337942	0.06	0.25	8760
CHILL64	381099	4337942	0.06	0.25	8760
CHILL65	381105	4337942	0.06	0.25	8760
CHILL66	381126	4337942	0.06	0.25	8760
CHILL67	381132	4337942	0.06	0.25	8760
CHILL68	381138	4337942	0.06	0.25	8760
CHILL69	381144	4337942	0.06	0.25	8760
Total			464.03	203.32	

Source	UTM Coordinates		Modeled Emission Rates		
	Easting (m)	Northing (m)	NOx (lb/hr)	NOx (tons/yr)	hrs/year
ENGINE1	380900	4338073	0.45	1.97	8760
ENGINE2	380906	4338073	0.45	1.97	8760
ENGINE3	380912	4338073	0.45	1.97	8760
ENGINE4	380918	4338073	0.45	1.97	8760
ENGINE5	380924	4338073	0.45	1.97	8760
ENGINE6	380930	4338073	0.45	1.97	8760
ENGINE7	380936	4338073	0.45	1.97	8760
ENGINE8	380942	4338073	0.45	1.97	8760
ENGINE9	380948	4338073	0.45	1.97	8760
ENGINE10	380955	4338073	0.45	1.97	8760

ENGINE11	380975	4338073	0.45	1.97	8760
ENGINE12	380981	4338073	0.45	1.97	8760
ENGINE13	380987	4338073	0.45	1.97	8760
ENGINE14	380993	4338073	0.45	1.97	8760
ENGINE15	380999	4338073	0.45	1.97	8760
ENGINE16	381006	4338073	0.45	1.97	8760
ENGINE17	381012	4338073	0.45	1.97	8760
ENGINE18	381018	4338073	0.45	1.97	8760
ENGINE19	381024	4338073	0.45	1.97	8760
ENGINE20	381030	4338073	0.45	1.97	8760
ENGINE21	381050	4338073	0.45	1.97	8760
ENGINE22	381057	4338073	0.45	1.97	8760
ENGINE23	381063	4338073	0.45	1.97	8760
ENGINE24	381069	4338073	0.45	1.97	8760
ENGINE25	381075	4338073	0.45	1.97	8760
ENGINE26	381081	4338073	0.45	1.97	8760
ENGINE27	381087	4338073	0.45	1.97	8760
ENGINE28	381093	4338073	0.45	1.97	8760
ENGINE29	381099	4338073	0.45	1.97	8760
ENGINE30	381105	4338073	0.45	1.97	8760
ENGINE31	381126	4338073	0.45	1.97	8760
ENGINE32	381132	4338073	0.45	1.97	8760
ENGINE33	381138	4338073	0.45	1.97	8760
ENGINE34	381144	4338073	0.45	1.97	8760
ENGINE35	381150	4338073	0.45	1.97	8760
ENGINE36	380900	4337946	0.45	1.97	8760
ENGINE37	380906	4337946	0.45	1.97	8760
ENGINE38	380912	4337946	0.45	1.97	8760
ENGINE39	380918	4337946	0.45	1.97	8760
ENGINE40	380924	4337946	0.45	1.97	8760
ENGINE41	380930	4337946	0.45	1.97	8760
ENGINE42	380936	4337946	0.45	1.97	8760
ENGINE43	380942	4337946	0.45	1.97	8760
ENGINE44	380948	4337946	0.45	1.97	8760
ENGINE45	380955	4337946	0.45	1.97	8760
ENGINE46	380975	4337946	0.45	1.97	8760
ENGINE47	380981	4337946	0.45	1.97	8760
ENGINE48	380987	4337946	0.45	1.97	8760
ENGINE49	380993	4337946	0.45	1.97	8760
ENGINE50	380999	4337946	0.45	1.97	8760

ENGINE51	381006	4337946	0.45	1.97	8760
ENGINE52	381012	4337946	0.45	1.97	8760
ENGINE53	381018	4337946	0.45	1.97	8760
ENGINE54	381024	4337946	0.45	1.97	8760
ENGINE55	381030	4337946	0.45	1.97	8760
ENGINE56	381050	4337946	0.45	1.97	8760
ENGINE57	381057	4337946	0.45	1.97	8760
ENGINE58	381063	4337946	0.45	1.97	8760
ENGINE59	381069	4337946	0.45	1.97	8760
ENGINE60	381075	4337946	0.45	1.97	8760
ENGINE61	381081	4337946	0.45	1.97	8760
ENGINE62	381087	4337946	0.45	1.97	8760
ENGINE63	381093	4337946	0.45	1.97	8760
ENGINE64	381099	4337946	0.45	1.97	8760
ENGINE65	381105	4337946	0.45	1.97	8760
ENGINE66	381126	4337946	0.45	1.97	8760
ENGINE67	381132	4337946	0.45	1.97	8760
ENGINE68	381138	4337946	0.45	1.97	8760
ENGINE69	381144	4337946	0.45	1.97	8760
DENG1	380900	4338082	51.10	1.28	50
DENG2	380906	4338082	51.10	1.28	50
DENG3	380912	4338082	51.10	1.28	50
DENG4	380918	4338082	51.10	1.28	50
DENG5	380924	4338082	51.10	1.28	50
DENG6	380930	4338082	51.10	1.28	50
DENG7	380936	4338082	51.10	1.28	50
DENG8	380942	4338082	51.10	1.28	50
DENG9	380948	4338082	51.10	1.28	50
DENG10	380955	4338082	51.10	1.28	50
DENG11	380975	4338082	51.10	1.28	50
DENG12	380981	4338082	51.10	1.28	50
DENG13	380987	4338082	51.10	1.28	50
DENG14	380993	4338082	51.10	1.28	50
DENG15	380999	4338082	51.10	1.28	50
DENG16	381006	4338082	51.10	1.28	50
DENG17	381012	4338082	51.10	1.28	50
DENG18	381018	4338082	51.10	1.28	50
DENG19	381024	4338082	51.10	1.28	50
DENG20	381030	4338082	51.10	1.28	50
DENG21	381050	4338082	51.10	1.28	50

DENG22	381057	4338082	51.10	1.28	50
DENG23	381063	4338082	51.10	1.28	50
DENG24	381069	4338082	51.10	1.28	50
DENG25	381075	4338082	51.10	1.28	50
DENG26	381081	4338082	51.10	1.28	50
DENG27	381087	4338082	51.10	1.28	50
DENG28	381093	4338082	51.10	1.28	50
DENG29	381099	4338082	51.10	1.28	50
DENG30	381105	4338082	51.10	1.28	50
DENG31	381126	4338082	51.10	1.28	50
DENG32	381132	4338082	51.10	1.28	50
DENG33	381138	4338082	51.10	1.28	50
DENG34	381144	4338082	51.10	1.28	50
DENG35	381150	4338082	51.10	1.28	50
DENG36	380900	4337937	51.10	1.28	50
DENG37	380906	4337937	51.10	1.28	50
DENG38	380912	4337937	51.10	1.28	50
DENG39	380918	4337937	51.10	1.28	50
DENG40	380924	4337937	51.10	1.28	50
DENG41	380930	4337937	51.10	1.28	50
DENG42	380936	4337937	51.10	1.28	50
DENG43	380942	4337937	51.10	1.28	50
DENG44	380948	4337937	51.10	1.28	50
DENG45	380955	4337937	51.10	1.28	50
DENG46	380975	4337937	51.10	1.28	50
DENG47	380981	4337937	51.10	1.28	50
DENG48	380987	4337937	51.10	1.28	50
DENG49	380993	4337937	51.10	1.28	50
DENG50	380999	4337937	51.10	1.28	50
DENG51	381006	4337937	51.10	1.28	50
DENG52	381012	4337937	51.10	1.28	50
DENG53	381018	4337937	51.10	1.28	50
DENG54	381024	4337937	51.10	1.28	50
DENG55	381030	4337937	51.10	1.28	50
DENG56	381050	4337937	51.10	1.28	50
DENG57	381057	4337937	51.10	1.28	50
DENG58	381063	4337937	51.10	1.28	50
DENG59	381069	4337937	51.10	1.28	50
DENG60	381075	4337937	51.10	1.28	50
DENG61	381081	4337937	51.10	1.28	50

DENG62	381087	4337937	51.10	1.28	50
DENG63	381093	4337937	51.10	1.28	50
DENG64	381099	4337937	51.10	1.28	50
DENG65	381105	4337937	51.10	1.28	50
DENG66	381126	4337937	51.10	1.28	50
DENG67	381132	4337937	51.10	1.28	50
DENG68	381138	4337937	51.10	1.28	50
DENG69	381144	4337937	51.10	1.28	50
CHILL1	380900	4338078	0.02	0.09	8760
CHILL2	380906	4338078	0.02	0.09	8760
CHILL3	380912	4338078	0.02	0.09	8760
CHILL4	380918	4338078	0.02	0.09	8760
CHILL5	380924	4338078	0.02	0.09	8760
CHILL6	380930	4338078	0.02	0.09	8760
CHILL7	380936	4338078	0.02	0.09	8760
CHILL8	380942	4338078	0.02	0.09	8760
CHILL9	380948	4338078	0.02	0.09	8760
CHILL10	380955	4338078	0.02	0.09	8760
CHILL11	380975	4338078	0.02	0.09	8760
CHILL12	380981	4338078	0.02	0.09	8760
CHILL13	380987	4338078	0.02	0.09	8760
CHILL14	380993	4338078	0.02	0.09	8760
CHILL15	380999	4338078	0.02	0.09	8760
CHILL16	381006	4338078	0.02	0.09	8760
CHILL17	381012	4338078	0.02	0.09	8760
CHILL18	381018	4338078	0.02	0.09	8760
CHILL19	381024	4338078	0.02	0.09	8760
CHILL20	381030	4338078	0.02	0.09	8760
CHILL21	381050	4338078	0.02	0.09	8760
CHILL22	381057	4338078	0.02	0.09	8760
CHILL23	381063	4338078	0.02	0.09	8760
CHILL24	381069	4338078	0.02	0.09	8760
CHILL25	381075	4338078	0.02	0.09	8760
CHILL26	381081	4338078	0.02	0.09	8760
CHILL27	381087	4338078	0.02	0.09	8760
CHILL28	381093	4338078	0.02	0.09	8760
CHILL29	381099	4338078	0.02	0.09	8760
CHILL30	381105	4338078	0.02	0.09	8760
CHILL31	381126	4338078	0.02	0.09	8760
CHILL32	381132	4338078	0.02	0.09	8760

CHILL33	381138	4338078	0.02	0.09	8760
CHILL34	381144	4338078	0.02	0.09	8760
CHILL35	381150	4338078	0.02	0.09	8760
CHILL36	380900	4337942	0.02	0.09	8760
CHILL37	380906	4337942	0.02	0.09	8760
CHILL38	380912	4337942	0.02	0.09	8760
CHILL39	380918	4337942	0.02	0.09	8760
CHILL40	380924	4337942	0.02	0.09	8760
CHILL41	380930	4337942	0.02	0.09	8760
CHILL42	380936	4337942	0.02	0.09	8760
CHILL43	380942	4337942	0.02	0.09	8760
CHILL44	380948	4337942	0.02	0.09	8760
CHILL45	380955	4337942	0.02	0.09	8760
CHILL46	380975	4337942	0.02	0.09	8760
CHILL47	380981	4337942	0.02	0.09	8760
CHILL48	380987	4337942	0.02	0.09	8760
CHILL49	380993	4337942	0.02	0.09	8760
CHILL50	380999	4337942	0.02	0.09	8760
CHILL51	381006	4337942	0.02	0.09	8760
CHILL52	381012	4337942	0.02	0.09	8760
CHILL53	381018	4337942	0.02	0.09	8760
CHILL54	381024	4337942	0.02	0.09	8760
CHILL55	381030	4337942	0.02	0.09	8760
CHILL56	381050	4337942	0.02	0.09	8760
CHILL57	381057	4337942	0.02	0.09	8760
CHILL58	381063	4337942	0.02	0.09	8760
CHILL59	381069	4337942	0.02	0.09	8760
CHILL60	381075	4337942	0.02	0.09	8760
CHILL61	381081	4337942	0.02	0.09	8760
CHILL62	381087	4337942	0.02	0.09	8760
CHILL63	381093	4337942	0.02	0.09	8760
CHILL64	381099	4337942	0.02	0.09	8760
CHILL65	381105	4337942	0.02	0.09	8760
CHILL66	381126	4337942	0.02	0.09	8760
CHILL67	381132	4337942	0.02	0.09	8760
CHILL68	381138	4337942	0.02	0.09	8760
CHILL69	381144	4337942	0.02	0.09	8760
Total			3558.28	230.19	

Source		UTM Coordinates		Modeled Emission Rates		
		Easting (m)	Northing (m)	PM2.5 (lb/hr)	PM2.5 (tons/yr)	hrs/year
ENGINE1		380900	4338073	0.19	0.83	8760
ENGINE2		380906	4338073	0.19	0.83	8760
ENGINE3		380912	4338073	0.19	0.83	8760
ENGINE4		380918	4338073	0.19	0.83	8760
ENGINE5		380924	4338073	0.19	0.83	8760
ENGINE6		380930	4338073	0.19	0.83	8760
ENGINE7		380936	4338073	0.19	0.83	8760
ENGINE8		380942	4338073	0.19	0.83	8760
ENGINE9		380948	4338073	0.19	0.83	8760
ENGINE10		380955	4338073	0.19	0.83	8760
ENGINE11		380975	4338073	0.19	0.83	8760
ENGINE12		380981	4338073	0.19	0.83	8760
ENGINE13		380987	4338073	0.19	0.83	8760
ENGINE14		380993	4338073	0.19	0.83	8760
ENGINE15		380999	4338073	0.19	0.83	8760
ENGINE16		381006	4338073	0.19	0.83	8760
ENGINE17		381012	4338073	0.19	0.83	8760
ENGINE18		381018	4338073	0.19	0.83	8760
ENGINE19		381024	4338073	0.19	0.83	8760
ENGINE20		381030	4338073	0.19	0.83	8760
ENGINE21		381050	4338073	0.19	0.83	8760
ENGINE22		381057	4338073	0.19	0.83	8760
ENGINE23		381063	4338073	0.19	0.83	8760
ENGINE24		381069	4338073	0.19	0.83	8760
ENGINE25		381075	4338073	0.19	0.83	8760
ENGINE26		381081	4338073	0.19	0.83	8760
ENGINE27		381087	4338073	0.19	0.83	8760
ENGINE28		381093	4338073	0.19	0.83	8760
ENGINE29		381099	4338073	0.19	0.83	8760
ENGINE30		381105	4338073	0.19	0.83	8760
ENGINE31		381126	4338073	0.19	0.83	8760
ENGINE32		381132	4338073	0.19	0.83	8760
ENGINE33		381138	4338073	0.19	0.83	8760
ENGINE34		381144	4338073	0.19	0.83	8760
ENGINE35		381150	4338073	0.19	0.83	8760

ENGINE36		380900	4337946	0.19	0.83	8760
ENGINE37		380906	4337946	0.19	0.83	8760
ENGINE38		380912	4337946	0.19	0.83	8760
ENGINE39		380918	4337946	0.19	0.83	8760
ENGINE40		380924	4337946	0.19	0.83	8760
ENGINE41		380930	4337946	0.19	0.83	8760
ENGINE42		380936	4337946	0.19	0.83	8760
ENGINE43		380942	4337946	0.19	0.83	8760
ENGINE44		380948	4337946	0.19	0.83	8760
ENGINE45		380955	4337946	0.19	0.83	8760
ENGINE46		380975	4337946	0.19	0.83	8760
ENGINE47		380981	4337946	0.19	0.83	8760
ENGINE48		380987	4337946	0.19	0.83	8760
ENGINE49		380993	4337946	0.19	0.83	8760
ENGINE50		380999	4337946	0.19	0.83	8760
ENGINE51		381006	4337946	0.19	0.83	8760
ENGINE52		381012	4337946	0.19	0.83	8760
ENGINE53		381018	4337946	0.19	0.83	8760
ENGINE54		381024	4337946	0.19	0.83	8760
ENGINE55		381030	4337946	0.19	0.83	8760
ENGINE56		381050	4337946	0.19	0.83	8760
ENGINE57		381057	4337946	0.19	0.83	8760
ENGINE58		381063	4337946	0.19	0.83	8760
ENGINE59		381069	4337946	0.19	0.83	8760
ENGINE60		381075	4337946	0.19	0.83	8760
ENGINE61		381081	4337946	0.19	0.83	8760
ENGINE62		381087	4337946	0.19	0.83	8760
ENGINE63		381093	4337946	0.19	0.83	8760
ENGINE64		381099	4337946	0.19	0.83	8760
ENGINE65		381105	4337946	0.19	0.83	8760
ENGINE66		381126	4337946	0.19	0.83	8760
ENGINE67		381132	4337946	0.19	0.83	8760
ENGINE68		381138	4337946	0.19	0.83	8760
ENGINE69		381144	4337946	0.19	0.83	8760
DENG1		380900	4338082	0.40	0.01	50
DENG2		380906	4338082	0.40	0.01	50
DENG3		380912	4338082	0.40	0.01	50
DENG4		380918	4338082	0.40	0.01	50
DENG5		380924	4338082	0.40	0.01	50
DENG6		380930	4338082	0.40	0.01	50

DENG7		380936	4338082	0.40	0.01	50
DENG8		380942	4338082	0.40	0.01	50
DENG9		380948	4338082	0.40	0.01	50
DENG10		380955	4338082	0.40	0.01	50
DENG11		380975	4338082	0.40	0.01	50
DENG12		380981	4338082	0.40	0.01	50
DENG13		380987	4338082	0.40	0.01	50
DENG14		380993	4338082	0.40	0.01	50
DENG15		380999	4338082	0.40	0.01	50
DENG16		381006	4338082	0.40	0.01	50
DENG17		381012	4338082	0.40	0.01	50
DENG18		381018	4338082	0.40	0.01	50
DENG19		381024	4338082	0.40	0.01	50
DENG20		381030	4338082	0.40	0.01	50
DENG21		381050	4338082	0.40	0.01	50
DENG22		381057	4338082	0.40	0.01	50
DENG23		381063	4338082	0.40	0.01	50
DENG24		381069	4338082	0.40	0.01	50
DENG25		381075	4338082	0.40	0.01	50
DENG26		381081	4338082	0.40	0.01	50
DENG27		381087	4338082	0.40	0.01	50
DENG28		381093	4338082	0.40	0.01	50
DENG29		381099	4338082	0.40	0.01	50
DENG30		381105	4338082	0.40	0.01	50
DENG31		381126	4338082	0.40	0.01	50
DENG32		381132	4338082	0.40	0.01	50
DENG33		381138	4338082	0.40	0.01	50
DENG34		381144	4338082	0.40	0.01	50
DENG35		381150	4338082	0.40	0.01	50
DENG36		380900	4337937	0.40	0.01	50
DENG37		380906	4337937	0.40	0.01	50
DENG38		380912	4337937	0.40	0.01	50
DENG39		380918	4337937	0.40	0.01	50
DENG40		380924	4337937	0.40	0.01	50
DENG41		380930	4337937	0.40	0.01	50
DENG42		380936	4337937	0.40	0.01	50
DENG43		380942	4337937	0.40	0.01	50
DENG44		380948	4337937	0.40	0.01	50
DENG45		380955	4337937	0.40	0.01	50
DENG46		380975	4337937	0.40	0.01	50

DENG47		380981	4337937	0.40	0.01	50
DENG48		380987	4337937	0.40	0.01	50
DENG49		380993	4337937	0.40	0.01	50
DENG50		380999	4337937	0.40	0.01	50
DENG51		381006	4337937	0.40	0.01	50
DENG52		381012	4337937	0.40	0.01	50
DENG53		381018	4337937	0.40	0.01	50
DENG54		381024	4337937	0.40	0.01	50
DENG55		381030	4337937	0.40	0.01	50
DENG56		381050	4337937	0.40	0.01	50
DENG57		381057	4337937	0.40	0.01	50
DENG58		381063	4337937	0.40	0.01	50
DENG59		381069	4337937	0.40	0.01	50
DENG60		381075	4337937	0.40	0.01	50
DENG61		381081	4337937	0.40	0.01	50
DENG62		381087	4337937	0.40	0.01	50
DENG63		381093	4337937	0.40	0.01	50
DENG64		381099	4337937	0.40	0.01	50
DENG65		381105	4337937	0.40	0.01	50
DENG66		381126	4337937	0.40	0.01	50
DENG67		381132	4337937	0.40	0.01	50
DENG68		381138	4337937	0.40	0.01	50
DENG69		381144	4337937	0.40	0.01	50
CHILL1		380900	4338078	0.01	0.04	8760
CHILL2		380906	4338078	0.01	0.04	8760
CHILL3		380912	4338078	0.01	0.04	8760
CHILL4		380918	4338078	0.01	0.04	8760
CHILL5		380924	4338078	0.01	0.04	8760
CHILL6		380930	4338078	0.01	0.04	8760
CHILL7		380936	4338078	0.01	0.04	8760
CHILL8		380942	4338078	0.01	0.04	8760
CHILL9		380948	4338078	0.01	0.04	8760
CHILL10		380955	4338078	0.01	0.04	8760
CHILL11		380975	4338078	0.01	0.04	8760
CHILL12		380981	4338078	0.01	0.04	8760
CHILL13		380987	4338078	0.01	0.04	8760
CHILL14		380993	4338078	0.01	0.04	8760
CHILL15		380999	4338078	0.01	0.04	8760
CHILL16		381006	4338078	0.01	0.04	8760
CHILL17		381012	4338078	0.01	0.04	8760

CHILL18		381018	4338078	0.01	0.04	8760
CHILL19		381024	4338078	0.01	0.04	8760
CHILL20		381030	4338078	0.01	0.04	8760
CHILL21		381050	4338078	0.01	0.04	8760
CHILL22		381057	4338078	0.01	0.04	8760
CHILL23		381063	4338078	0.01	0.04	8760
CHILL24		381069	4338078	0.01	0.04	8760
CHILL25		381075	4338078	0.01	0.04	8760
CHILL26		381081	4338078	0.01	0.04	8760
CHILL27		381087	4338078	0.01	0.04	8760
CHILL28		381093	4338078	0.01	0.04	8760
CHILL29		381099	4338078	0.01	0.04	8760
CHILL30		381105	4338078	0.01	0.04	8760
CHILL31		381126	4338078	0.01	0.04	8760
CHILL32		381132	4338078	0.01	0.04	8760
CHILL33		381138	4338078	0.01	0.04	8760
CHILL34		381144	4338078	0.01	0.04	8760
CHILL35		381150	4338078	0.01	0.04	8760
CHILL36		380900	4337942	0.01	0.04	8760
CHILL37		380906	4337942	0.01	0.04	8760
CHILL38		380912	4337942	0.01	0.04	8760
CHILL39		380918	4337942	0.01	0.04	8760
CHILL40		380924	4337942	0.01	0.04	8760
CHILL41		380930	4337942	0.01	0.04	8760
CHILL42		380936	4337942	0.01	0.04	8760
CHILL43		380942	4337942	0.01	0.04	8760
CHILL44		380948	4337942	0.01	0.04	8760
CHILL45		380955	4337942	0.01	0.04	8760
CHILL46		380975	4337942	0.01	0.04	8760
CHILL47		380981	4337942	0.01	0.04	8760
CHILL48		380987	4337942	0.01	0.04	8760
CHILL49		380993	4337942	0.01	0.04	8760
CHILL50		380999	4337942	0.01	0.04	8760
CHILL51		381006	4337942	0.01	0.04	8760
CHILL52		381012	4337942	0.01	0.04	8760
CHILL53		381018	4337942	0.01	0.04	8760
CHILL54		381024	4337942	0.01	0.04	8760
CHILL55		381030	4337942	0.01	0.04	8760
CHILL56		381050	4337942	0.01	0.04	8760
CHILL57		381057	4337942	0.01	0.04	8760

CHILL58		381063	4337942	0.01	0.04	8760
CHILL59		381069	4337942	0.01	0.04	8760
CHILL60		381075	4337942	0.01	0.04	8760
CHILL61		381081	4337942	0.01	0.04	8760
CHILL62		381087	4337942	0.01	0.04	8760
CHILL63		381093	4337942	0.01	0.04	8760
CHILL64		381099	4337942	0.01	0.04	8760
CHILL65		381105	4337942	0.01	0.04	8760
CHILL66		381126	4337942	0.01	0.04	8760
CHILL67		381132	4337942	0.01	0.04	8760
CHILL68		381138	4337942	0.01	0.04	8760
CHILL69		381144	4337942	0.01	0.04	8760
Total				41.34	60.86	

Source		UTM Coordinates		Modeled Emission Rates		
		Easting (m)	Northing (m)	PM10 (lb/hr)	PM10 (tons/yr)	hrs/year
ENGINE1		380900	4338073	0.19	0.83	8760
ENGINE2		380906	4338073	0.19	0.83	8760
ENGINE3		380912	4338073	0.19	0.83	8760
ENGINE4		380918	4338073	0.19	0.83	8760
ENGINE5		380924	4338073	0.19	0.83	8760
ENGINE6		380930	4338073	0.19	0.83	8760
ENGINE7		380936	4338073	0.19	0.83	8760
ENGINE8		380942	4338073	0.19	0.83	8760
ENGINE9		380948	4338073	0.19	0.83	8760
ENGINE10		380955	4338073	0.19	0.83	8760
ENGINE11		380975	4338073	0.19	0.83	8760
ENGINE12		380981	4338073	0.19	0.83	8760
ENGINE13		380987	4338073	0.19	0.83	8760
ENGINE14		380993	4338073	0.19	0.83	8760
ENGINE15		380999	4338073	0.19	0.83	8760
ENGINE16		381006	4338073	0.19	0.83	8760
ENGINE17		381012	4338073	0.19	0.83	8760
ENGINE18		381018	4338073	0.19	0.83	8760
ENGINE19		381024	4338073	0.19	0.83	8760
ENGINE20		381030	4338073	0.19	0.83	8760

ENGINE21		381050	4338073	0.19	0.83	8760
ENGINE22		381057	4338073	0.19	0.83	8760
ENGINE23		381063	4338073	0.19	0.83	8760
ENGINE24		381069	4338073	0.19	0.83	8760
ENGINE25		381075	4338073	0.19	0.83	8760
ENGINE26		381081	4338073	0.19	0.83	8760
ENGINE27		381087	4338073	0.19	0.83	8760
ENGINE28		381093	4338073	0.19	0.83	8760
ENGINE29		381099	4338073	0.19	0.83	8760
ENGINE30		381105	4338073	0.19	0.83	8760
ENGINE31		381126	4338073	0.19	0.83	8760
ENGINE32		381132	4338073	0.19	0.83	8760
ENGINE33		381138	4338073	0.19	0.83	8760
ENGINE34		381144	4338073	0.19	0.83	8760
ENGINE35		381150	4338073	0.19	0.83	8760
ENGINE36		380900	4337946	0.19	0.83	8760
ENGINE37		380906	4337946	0.19	0.83	8760
ENGINE38		380912	4337946	0.19	0.83	8760
ENGINE39		380918	4337946	0.19	0.83	8760
ENGINE40		380924	4337946	0.19	0.83	8760
ENGINE41		380930	4337946	0.19	0.83	8760
ENGINE42		380936	4337946	0.19	0.83	8760
ENGINE43		380942	4337946	0.19	0.83	8760
ENGINE44		380948	4337946	0.19	0.83	8760
ENGINE45		380955	4337946	0.19	0.83	8760
ENGINE46		380975	4337946	0.19	0.83	8760
ENGINE47		380981	4337946	0.19	0.83	8760
ENGINE48		380987	4337946	0.19	0.83	8760
ENGINE49		380993	4337946	0.19	0.83	8760
ENGINE50		380999	4337946	0.19	0.83	8760
ENGINE51		381006	4337946	0.19	0.83	8760
ENGINE52		381012	4337946	0.19	0.83	8760
ENGINE53		381018	4337946	0.19	0.83	8760
ENGINE54		381024	4337946	0.19	0.83	8760
ENGINE55		381030	4337946	0.19	0.83	8760
ENGINE56		381050	4337946	0.19	0.83	8760
ENGINE57		381057	4337946	0.19	0.83	8760
ENGINE58		381063	4337946	0.19	0.83	8760
ENGINE59		381069	4337946	0.19	0.83	8760
ENGINE60		381075	4337946	0.19	0.83	8760

ENGINE61		381081	4337946	0.19	0.83	8760
ENGINE62		381087	4337946	0.19	0.83	8760
ENGINE63		381093	4337946	0.19	0.83	8760
ENGINE64		381099	4337946	0.19	0.83	8760
ENGINE65		381105	4337946	0.19	0.83	8760
ENGINE66		381126	4337946	0.19	0.83	8760
ENGINE67		381132	4337946	0.19	0.83	8760
ENGINE68		381138	4337946	0.19	0.83	8760
ENGINE69		381144	4337946	0.19	0.83	8760
DENG1		380900	4338082	0.40	0.01	50
DENG2		380906	4338082	0.40	0.01	50
DENG3		380912	4338082	0.40	0.01	50
DENG4		380918	4338082	0.40	0.01	50
DENG5		380924	4338082	0.40	0.01	50
DENG6		380930	4338082	0.40	0.01	50
DENG7		380936	4338082	0.40	0.01	50
DENG8		380942	4338082	0.40	0.01	50
DENG9		380948	4338082	0.40	0.01	50
DENG10		380955	4338082	0.40	0.01	50
DENG11		380975	4338082	0.40	0.01	50
DENG12		380981	4338082	0.40	0.01	50
DENG13		380987	4338082	0.40	0.01	50
DENG14		380993	4338082	0.40	0.01	50
DENG15		380999	4338082	0.40	0.01	50
DENG16		381006	4338082	0.40	0.01	50
DENG17		381012	4338082	0.40	0.01	50
DENG18		381018	4338082	0.40	0.01	50
DENG19		381024	4338082	0.40	0.01	50
DENG20		381030	4338082	0.40	0.01	50
DENG21		381050	4338082	0.40	0.01	50
DENG22		381057	4338082	0.40	0.01	50
DENG23		381063	4338082	0.40	0.01	50
DENG24		381069	4338082	0.40	0.01	50
DENG25		381075	4338082	0.40	0.01	50
DENG26		381081	4338082	0.40	0.01	50
DENG27		381087	4338082	0.40	0.01	50
DENG28		381093	4338082	0.40	0.01	50
DENG29		381099	4338082	0.40	0.01	50
DENG30		381105	4338082	0.40	0.01	50
DENG31		381126	4338082	0.40	0.01	50

DENG32		381132	4338082	0.40	0.01	50
DENG33		381138	4338082	0.40	0.01	50
DENG34		381144	4338082	0.40	0.01	50
DENG35		381150	4338082	0.40	0.01	50
DENG36		380900	4337937	0.40	0.01	50
DENG37		380906	4337937	0.40	0.01	50
DENG38		380912	4337937	0.40	0.01	50
DENG39		380918	4337937	0.40	0.01	50
DENG40		380924	4337937	0.40	0.01	50
DENG41		380930	4337937	0.40	0.01	50
DENG42		380936	4337937	0.40	0.01	50
DENG43		380942	4337937	0.40	0.01	50
DENG44		380948	4337937	0.40	0.01	50
DENG45		380955	4337937	0.40	0.01	50
DENG46		380975	4337937	0.40	0.01	50
DENG47		380981	4337937	0.40	0.01	50
DENG48		380987	4337937	0.40	0.01	50
DENG49		380993	4337937	0.40	0.01	50
DENG50		380999	4337937	0.40	0.01	50
DENG51		381006	4337937	0.40	0.01	50
DENG52		381012	4337937	0.40	0.01	50
DENG53		381018	4337937	0.40	0.01	50
DENG54		381024	4337937	0.40	0.01	50
DENG55		381030	4337937	0.40	0.01	50
DENG56		381050	4337937	0.40	0.01	50
DENG57		381057	4337937	0.40	0.01	50
DENG58		381063	4337937	0.40	0.01	50
DENG59		381069	4337937	0.40	0.01	50
DENG60		381075	4337937	0.40	0.01	50
DENG61		381081	4337937	0.40	0.01	50
DENG62		381087	4337937	0.40	0.01	50
DENG63		381093	4337937	0.40	0.01	50
DENG64		381099	4337937	0.40	0.01	50
DENG65		381105	4337937	0.40	0.01	50
DENG66		381126	4337937	0.40	0.01	50
DENG67		381132	4337937	0.40	0.01	50
DENG68		381138	4337937	0.40	0.01	50
DENG69		381144	4337937	0.40	0.01	50
CHILL1		380900	4338078	0.01	0.04	8760
CHILL2		380906	4338078	0.01	0.04	8760

CHILL3		380912	4338078	0.01	0.04	8760
CHILL4		380918	4338078	0.01	0.04	8760
CHILL5		380924	4338078	0.01	0.04	8760
CHILL6		380930	4338078	0.01	0.04	8760
CHILL7		380936	4338078	0.01	0.04	8760
CHILL8		380942	4338078	0.01	0.04	8760
CHILL9		380948	4338078	0.01	0.04	8760
CHILL10		380955	4338078	0.01	0.04	8760
CHILL11		380975	4338078	0.01	0.04	8760
CHILL12		380981	4338078	0.01	0.04	8760
CHILL13		380987	4338078	0.01	0.04	8760
CHILL14		380993	4338078	0.01	0.04	8760
CHILL15		380999	4338078	0.01	0.04	8760
CHILL16		381006	4338078	0.01	0.04	8760
CHILL17		381012	4338078	0.01	0.04	8760
CHILL18		381018	4338078	0.01	0.04	8760
CHILL19		381024	4338078	0.01	0.04	8760
CHILL20		381030	4338078	0.01	0.04	8760
CHILL21		381050	4338078	0.01	0.04	8760
CHILL22		381057	4338078	0.01	0.04	8760
CHILL23		381063	4338078	0.01	0.04	8760
CHILL24		381069	4338078	0.01	0.04	8760
CHILL25		381075	4338078	0.01	0.04	8760
CHILL26		381081	4338078	0.01	0.04	8760
CHILL27		381087	4338078	0.01	0.04	8760
CHILL28		381093	4338078	0.01	0.04	8760
CHILL29		381099	4338078	0.01	0.04	8760
CHILL30		381105	4338078	0.01	0.04	8760
CHILL31		381126	4338078	0.01	0.04	8760
CHILL32		381132	4338078	0.01	0.04	8760
CHILL33		381138	4338078	0.01	0.04	8760
CHILL34		381144	4338078	0.01	0.04	8760
CHILL35		381150	4338078	0.01	0.04	8760
CHILL36		380900	4337942	0.01	0.04	8760
CHILL37		380906	4337942	0.01	0.04	8760
CHILL38		380912	4337942	0.01	0.04	8760
CHILL39		380918	4337942	0.01	0.04	8760
CHILL40		380924	4337942	0.01	0.04	8760
CHILL41		380930	4337942	0.01	0.04	8760
CHILL42		380936	4337942	0.01	0.04	8760

CHILL43		380942	4337942	0.01	0.04	8760
CHILL44		380948	4337942	0.01	0.04	8760
CHILL45		380955	4337942	0.01	0.04	8760
CHILL46		380975	4337942	0.01	0.04	8760
CHILL47		380981	4337942	0.01	0.04	8760
CHILL48		380987	4337942	0.01	0.04	8760
CHILL49		380993	4337942	0.01	0.04	8760
CHILL50		380999	4337942	0.01	0.04	8760
CHILL51		381006	4337942	0.01	0.04	8760
CHILL52		381012	4337942	0.01	0.04	8760
CHILL53		381018	4337942	0.01	0.04	8760
CHILL54		381024	4337942	0.01	0.04	8760
CHILL55		381030	4337942	0.01	0.04	8760
CHILL56		381050	4337942	0.01	0.04	8760
CHILL57		381057	4337942	0.01	0.04	8760
CHILL58		381063	4337942	0.01	0.04	8760
CHILL59		381069	4337942	0.01	0.04	8760
CHILL60		381075	4337942	0.01	0.04	8760
CHILL61		381081	4337942	0.01	0.04	8760
CHILL62		381087	4337942	0.01	0.04	8760
CHILL63		381093	4337942	0.01	0.04	8760
CHILL64		381099	4337942	0.01	0.04	8760
CHILL65		381105	4337942	0.01	0.04	8760
CHILL66		381126	4337942	0.01	0.04	8760
CHILL67		381132	4337942	0.01	0.04	8760
CHILL68		381138	4337942	0.01	0.04	8760
CHILL69		381144	4337942	0.01	0.04	8760
Total				41.34	60.86	

Ashgrove Leamington

Source	UTM Coordinates		Modeled Emission Rates		
	Easting (m)	Northing (m)	NOx (lb/hr)	NOx (tons/yr)	hrs/year
317.BF3	397165	4379943	279.61	1224.71	8760
41B.BF2	397167	4380026	27.96	122.47	8760
EGEN_S	396959	4380231	7.73	33.85	8760
EGEN_K	397182	4380024	7.73	33.85	8760

2FM_HTR	396987	4380243	0.51	2.24	8760
AD_EGEN	397006	4380087	1.34	5.87	8760
CR_EGEN	397102	4380051	1.34	5.87	8760
BLST_508	397758	4379687	78.45	343.61	8760
Total			404.67	1772.47	

Intermountain Power Service Corporation

Source	UTM Coordinates		Modeled Emission Rates		
	Easting (m)	Northing (m)	NOx (lb/hr)	NOx (tons/yr)	hrs/year
3BL5010F	363814	4374396	26.10	114.32	8760
4BL5010F	363814	4374592	26.10	114.32	8760
FGHU3	363853	4374373	0.97	4.25	8760
FGHU4	363853	4374569	0.97	4.25	8760
AUXBOILR	363816	4374486	18.72	82.00	8760
DGEN1	363833	4374449	40.18	175.98	8760
DGEN2	363838	4374449	40.18	175.98	8760
DGEN3	363843	4374449	40.18	175.98	8760
FWP	363816	4374504	3.16	13.84	8760
Total			196.56	860.92	

Graymont Western US Incorporated

Source	UTM Coordinates		Modeled Emission Rates		
	Easting (m)	Northing (m)	NOx (lb/hr)	NOx (tons/yr)	hrs/year
KILN_1	342591	4311430	90.00	394.20	8760
KILN_2	342569	4311423	120.00	525.60	8760
KILN_3	342544	4311373	160.00	700.80	8760
KILN_4	342573	4311240	200.00	876.00	8760
D7122	342420	4311635	0.61	2.67	8760
KILN_5	342622	4311165	210.00	919.82	8760
SGR_STN	342445	4311790	0.28	1.22	8760
GEN_DQ	335130	4312840	5.14	22.52	8760

Total	786.04	3442.84

Appendix B

Source	Type	Source Parameters					
		Elev, (ft)	Ht (m)	Ht (ft)	Temp (K)	Flow (m/s)	Dia (ft)
ENGINE1	POINT	4800.6	16.8	55.0	433	24.06	0.61
ENGINE2	POINT	4800.7	16.8	55.0	433	24.06	0.61
ENGINE3	POINT	4800.7	16.8	55.0	433	24.06	0.61
ENGINE4	POINT	4801.0	16.8	55.0	433	24.06	0.61
ENGINE5	POINT	4801.2	16.8	55.0	433	24.06	0.61
ENGINE6	POINT	4801.3	16.8	55.0	433	24.06	0.61
ENGINE7	POINT	4801.4	16.8	55.0	433	24.06	0.61
ENGINE8	POINT	4801.6	16.8	55.0	433	24.06	0.61
ENGINE9	POINT	4801.6	16.8	55.0	433	24.06	0.61
ENGINE10	POINT	4801.7	16.8	55.0	433	24.06	0.61
ENGINE11	POINT	4802.6	16.8	55.0	433	24.06	0.61
ENGINE12	POINT	4802.8	16.8	55.0	433	24.06	0.61
ENGINE13	POINT	4803.1	16.8	55.0	433	24.06	0.61
ENGINE14	POINT	4803.3	16.8	55.0	433	24.06	0.61
ENGINE15	POINT	4803.6	16.8	55.0	433	24.06	0.61
ENGINE16	POINT	4803.8	16.8	55.0	433	24.06	0.61
ENGINE17	POINT	4804.0	16.8	55.0	433	24.06	0.61
ENGINE18	POINT	4804.2	16.8	55.0	433	24.06	0.61
ENGINE19	POINT	4804.4	16.8	55.0	433	24.06	0.61
ENGINE20	POINT	4804.5	16.8	55.0	433	24.06	0.61
ENGINE21	POINT	4805.0	16.8	55.0	433	24.06	0.61
ENGINE22	POINT	4805.2	16.8	55.0	433	24.06	0.61
ENGINE23	POINT	4805.3	16.8	55.0	433	24.06	0.61
ENGINE24	POINT	4805.5	16.8	55.0	433	24.06	0.61
ENGINE25	POINT	4805.7	16.8	55.0	433	24.06	0.61
ENGINE26	POINT	4805.9	16.8	55.0	433	24.06	0.61
ENGINE27	POINT	4806.2	16.8	55.0	433	24.06	0.61
ENGINE28	POINT	4806.5	16.8	55.0	433	24.06	0.61
ENGINE29	POINT	4806.8	16.8	55.0	433	24.06	0.61
ENGINE30	POINT	4807.0	16.8	55.0	433	24.06	0.61
ENGINE31	POINT	4807.6	16.8	55.0	433	24.06	0.61
ENGINE32	POINT	4807.9	16.8	55.0	433	24.06	0.61
ENGINE33	POINT	4808.1	16.8	55.0	433	24.06	0.61
ENGINE34	POINT	4808.4	16.8	55.0	433	24.06	0.61

ENGINE35	POINT	4808.6	16.8	55.0	433	24.06	0.61
ENGINE36	POINT	4799.7	16.8	55.0	433	24.06	0.61
ENGINE37	POINT	4800.1	16.8	55.0	433	24.06	0.61
ENGINE38	POINT	4800.3	16.8	55.0	433	24.06	0.61
ENGINE39	POINT	4800.3	16.8	55.0	433	24.06	0.61
ENGINE40	POINT	4800.3	16.8	55.0	433	24.06	0.61
ENGINE41	POINT	4800.6	16.8	55.0	433	24.06	0.61
ENGINE42	POINT	4801.0	16.8	55.0	433	24.06	0.61
ENGINE43	POINT	4801.3	16.8	55.0	433	24.06	0.61
ENGINE44	POINT	4801.3	16.8	55.0	433	24.06	0.61
ENGINE45	POINT	4801.3	16.8	55.0	433	24.06	0.61
ENGINE46	POINT	4802.0	16.8	55.0	433	24.06	0.61
ENGINE47	POINT	4802.4	16.8	55.0	433	24.06	0.61
ENGINE48	POINT	4802.4	16.8	55.0	433	24.06	0.61
ENGINE49	POINT	4802.3	16.8	55.0	433	24.06	0.61
ENGINE50	POINT	4802.3	16.8	55.0	433	24.06	0.61
ENGINE51	POINT	4802.4	16.8	55.0	433	24.06	0.61
ENGINE52	POINT	4802.5	16.8	55.0	433	24.06	0.61
ENGINE53	POINT	4802.8	16.8	55.0	433	24.06	0.61
ENGINE54	POINT	4803.1	16.8	55.0	433	24.06	0.61
ENGINE55	POINT	4803.5	16.8	55.0	433	24.06	0.61
ENGINE56	POINT	4804.4	16.8	55.0	433	24.06	0.61
ENGINE57	POINT	4804.5	16.8	55.0	433	24.06	0.61
ENGINE58	POINT	4804.6	16.8	55.0	433	24.06	0.61
ENGINE59	POINT	4804.8	16.8	55.0	433	24.06	0.61
ENGINE60	POINT	4804.9	16.8	55.0	433	24.06	0.61
ENGINE61	POINT	4805.1	16.8	55.0	433	24.06	0.61
ENGINE62	POINT	4805.3	16.8	55.0	433	24.06	0.61
ENGINE63	POINT	4805.5	16.8	55.0	433	24.06	0.61
ENGINE64	POINT	4805.7	16.8	55.0	433	24.06	0.61
ENGINE65	POINT	4805.9	16.8	55.0	433	24.06	0.61
ENGINE66	POINT	4806.3	16.8	55.0	433	24.06	0.61
ENGINE67	POINT	4806.7	16.8	55.0	433	24.06	0.61
ENGINE68	POINT	4807.0	16.8	55.0	433	24.06	0.61
ENGINE69	POINT	4807.3	16.8	55.0	433	24.06	0.61
DENG1	POINT	4800.6	12.2	40.0	729	29.91	0.61
DENG2	POINT	4800.6	12.2	40.0	729	29.91	0.61
DENG3	POINT	4800.7	12.2	40.0	729	29.91	0.61
DENG4	POINT	4801.1	12.2	40.0	729	29.91	0.61
DENG5	POINT	4801.2	12.2	40.0	729	29.91	0.61

DENG6	POINT	4801.2	12.2	40.0	729	29.91	0.61
DENG7	POINT	4801.3	12.2	40.0	729	29.91	0.61
DENG8	POINT	4801.5	12.2	40.0	729	29.91	0.61
DENG9	POINT	4801.5	12.2	40.0	729	29.91	0.61
DENG10	POINT	4801.8	12.2	40.0	729	29.91	0.61
DENG11	POINT	4802.8	12.2	40.0	729	29.91	0.61
DENG12	POINT	4803.1	12.2	40.0	729	29.91	0.61
DENG13	POINT	4803.2	12.2	40.0	729	29.91	0.61
DENG14	POINT	4803.4	12.2	40.0	729	29.91	0.61
DENG15	POINT	4803.6	12.2	40.0	729	29.91	0.61
DENG16	POINT	4803.8	12.2	40.0	729	29.91	0.61
DENG17	POINT	4804.0	12.2	40.0	729	29.91	0.61
DENG18	POINT	4804.2	12.2	40.0	729	29.91	0.61
DENG19	POINT	4804.3	12.2	40.0	729	29.91	0.61
DENG20	POINT	4804.5	12.2	40.0	729	29.91	0.61
DENG21	POINT	4804.9	12.2	40.0	729	29.91	0.61
DENG22	POINT	4805.0	12.2	40.0	729	29.91	0.61
DENG23	POINT	4805.2	12.2	40.0	729	29.91	0.61
DENG24	POINT	4805.3	12.2	40.0	729	29.91	0.61
DENG25	POINT	4805.5	12.2	40.0	729	29.91	0.61
DENG26	POINT	4805.8	12.2	40.0	729	29.91	0.61
DENG27	POINT	4806.1	12.2	40.0	729	29.91	0.61
DENG28	POINT	4806.4	12.2	40.0	729	29.91	0.61
DENG29	POINT	4806.7	12.2	40.0	729	29.91	0.61
DENG30	POINT	4807.0	12.2	40.0	729	29.91	0.61
DENG31	POINT	4807.9	12.2	40.0	729	29.91	0.61
DENG32	POINT	4808.2	12.2	40.0	729	29.91	0.61
DENG33	POINT	4808.5	12.2	40.0	729	29.91	0.61
DENG34	POINT	4808.8	12.2	40.0	729	29.91	0.61
DENG35	POINT	4809.0	12.2	40.0	729	29.91	0.61
DENG36	POINT	4799.5	12.2	40.0	729	29.91	0.61
DENG37	POINT	4799.8	12.2	40.0	729	29.91	0.61
DENG38	POINT	4800.1	12.2	40.0	729	29.91	0.61
DENG39	POINT	4800.2	12.2	40.0	729	29.91	0.61
DENG40	POINT	4800.2	12.2	40.0	729	29.91	0.61
DENG41	POINT	4800.4	12.2	40.0	729	29.91	0.61
DENG42	POINT	4800.9	12.2	40.0	729	29.91	0.61
DENG43	POINT	4801.3	12.2	40.0	729	29.91	0.61
DENG44	POINT	4801.5	12.2	40.0	729	29.91	0.61
DENG45	POINT	4801.5	12.2	40.0	729	29.91	0.61

DENG46	POINT	4802.3	12.2	40.0	729	29.91	0.61
DENG47	POINT	4802.5	12.2	40.0	729	29.91	0.61
DENG48	POINT	4802.3	12.2	40.0	729	29.91	0.61
DENG49	POINT	4802.3	12.2	40.0	729	29.91	0.61
DENG50	POINT	4802.4	12.2	40.0	729	29.91	0.61
DENG51	POINT	4802.5	12.2	40.0	729	29.91	0.61
DENG52	POINT	4802.6	12.2	40.0	729	29.91	0.61
DENG53	POINT	4802.9	12.2	40.0	729	29.91	0.61
DENG54	POINT	4803.3	12.2	40.0	729	29.91	0.61
DENG55	POINT	4803.6	12.2	40.0	729	29.91	0.61
DENG56	POINT	4804.4	12.2	40.0	729	29.91	0.61
DENG57	POINT	4804.5	12.2	40.0	729	29.91	0.61
DENG58	POINT	4804.6	12.2	40.0	729	29.91	0.61
DENG59	POINT	4804.7	12.2	40.0	729	29.91	0.61
DENG60	POINT	4804.9	12.2	40.0	729	29.91	0.61
DENG61	POINT	4805.1	12.2	40.0	729	29.91	0.61
DENG62	POINT	4805.2	12.2	40.0	729	29.91	0.61
DENG63	POINT	4805.4	12.2	40.0	729	29.91	0.61
DENG64	POINT	4805.6	12.2	40.0	729	29.91	0.61
DENG65	POINT	4805.8	12.2	40.0	729	29.91	0.61
DENG66	POINT	4806.4	12.2	40.0	729	29.91	0.61
DENG67	POINT	4806.7	12.2	40.0	729	29.91	0.61
DENG68	POINT	4807.0	12.2	40.0	729	29.91	0.61
DENG69	POINT	4807.2	12.2	40.0	729	29.91	0.61
3BL5010F	POINT	4678.1	57.9	190.0	356	24.16	6.40
4BL5010F	POINT	4677.4	57.9	190.0	356	24.16	6.40
FGHU3	POINT	4672.5	18.3	60.0	314	5.61	0.48
FGHU4	POINT	4676.9	18.3	60.0	314	5.61	0.48
AUXBOILR	POINT	4678.2	36.6	120.0	422	13.76	1.75
DGEN1	POINT	4677.7	7.6	25.0	676	75.90	0.31
DGEN2	POINT	4677.6	7.6	25.0	676	75.90	0.31
DGEN3	POINT	4677.6	7.6	25.0	676	75.90	0.31
FWP	POINT	4678.2	7.6	25.0	709	48.59	0.15
317.BF3	POINT	4902.8	89.9	294.9	488	2.07	9.02
41B.BF2	POINT	4893.4	24.7	81.0	343	17.83	0.74
EGEN_S	POINT	4828.3	9.1	30.0	659	14.49	0.15
EGEN_K	POINT	4894.3	9.1	30.0	804	11.09	0.20
2FM_HTR	POINT	4835.6	49.7	163.0	363	6.92	1.00
AD_EGEN	POINT	4860.9	12.2	40.0	399	14.49	0.15
CR_EGEN	POINT	4882.1	12.2	40.0	471	14.49	0.15

BLST_508	VOLUME	5279.9	7.6	25.0			
KILN_1	POINT	4805.7	30.5	100.0	475	17.27	1.91
KILN_2	POINT	4806.5	30.5	100.0	475	16.67	1.52
KILN_3	POINT	4808.4	30.5	100.0	475	15.49	2.13
KILN_4	POINT	4814.3	65.0	213.2	475	15.49	2.13
D7122	POINT	4807.9	15.9	52.0	352	20.51	0.44
KILN_5	POINT	4813.0	45.7	149.9	475	19.34	2.44
SGR_STN	VOLUME	4805.4	4.7	15.3			
GEN_DQ	VOLUME	5171.9	1.8	5.8			
CHILL1	POINT	4800.6	16.8	55.0	433	0.23	0.63
CHILL2	POINT	4800.7	16.8	55.0	433	0.23	0.63
CHILL3	POINT	4800.7	16.8	55.0	433	0.23	0.63
CHILL4	POINT	4801.0	16.8	55.0	433	0.23	0.63
CHILL5	POINT	4801.2	16.8	55.0	433	0.23	0.63
CHILL6	POINT	4801.3	16.8	55.0	433	0.23	0.63
CHILL7	POINT	4801.3	16.8	55.0	433	0.23	0.63
CHILL8	POINT	4801.5	16.8	55.0	433	0.23	0.63
CHILL9	POINT	4801.6	16.8	55.0	433	0.23	0.63
CHILL10	POINT	4801.8	16.8	55.0	433	0.23	0.63
CHILL11	POINT	4802.7	16.8	55.0	433	0.23	0.63
CHILL12	POINT	4802.9	16.8	55.0	433	0.23	0.63
CHILL13	POINT	4803.1	16.8	55.0	433	0.23	0.63
CHILL14	POINT	4803.4	16.8	55.0	433	0.23	0.63
CHILL15	POINT	4803.6	16.8	55.0	433	0.23	0.63
CHILL16	POINT	4803.8	16.8	55.0	433	0.23	0.63
CHILL17	POINT	4804.0	16.8	55.0	433	0.23	0.63
CHILL18	POINT	4804.2	16.8	55.0	433	0.23	0.63
CHILL19	POINT	4804.4	16.8	55.0	433	0.23	0.63
CHILL20	POINT	4804.5	16.8	55.0	433	0.23	0.63
CHILL21	POINT	4805.0	16.8	55.0	433	0.23	0.63
CHILL22	POINT	4805.1	16.8	55.0	433	0.23	0.63
CHILL23	POINT	4805.2	16.8	55.0	433	0.23	0.63
CHILL24	POINT	4805.4	16.8	55.0	433	0.23	0.63
CHILL25	POINT	4805.6	16.8	55.0	433	0.23	0.63
CHILL26	POINT	4805.8	16.8	55.0	433	0.23	0.63
CHILL27	POINT	4806.1	16.8	55.0	433	0.23	0.63
CHILL28	POINT	4806.5	16.8	55.0	433	0.23	0.63
CHILL29	POINT	4806.7	16.8	55.0	433	0.23	0.63
CHILL30	POINT	4807.0	16.8	55.0	433	0.23	0.63
CHILL31	POINT	4807.7	16.8	55.0	433	0.23	0.63

CHILL32	POINT	4808.0	16.8	55.0	433	0.23	0.63
CHILL33	POINT	4808.3	16.8	55.0	433	0.23	0.63
CHILL34	POINT	4808.6	16.8	55.0	433	0.23	0.63
CHILL35	POINT	4808.8	16.8	55.0	433	0.23	0.63
CHILL36	POINT	4799.6	16.8	55.0	433	0.23	0.63
CHILL37	POINT	4799.9	16.8	55.0	433	0.23	0.63
CHILL38	POINT	4800.2	16.8	55.0	433	0.23	0.63
CHILL39	POINT	4800.3	16.8	55.0	433	0.23	0.63
CHILL40	POINT	4800.2	16.8	55.0	433	0.23	0.63
CHILL41	POINT	4800.5	16.8	55.0	433	0.23	0.63
CHILL42	POINT	4800.9	16.8	55.0	433	0.23	0.63
CHILL43	POINT	4801.3	16.8	55.0	433	0.23	0.63
CHILL44	POINT	4801.4	16.8	55.0	433	0.23	0.63
CHILL45	POINT	4801.4	16.8	55.0	433	0.23	0.63
CHILL46	POINT	4802.2	16.8	55.0	433	0.23	0.63
CHILL47	POINT	4802.4	16.8	55.0	433	0.23	0.63
CHILL48	POINT	4802.4	16.8	55.0	433	0.23	0.63
CHILL49	POINT	4802.3	16.8	55.0	433	0.23	0.63
CHILL50	POINT	4802.3	16.8	55.0	433	0.23	0.63
CHILL51	POINT	4802.4	16.8	55.0	433	0.23	0.63
CHILL52	POINT	4802.5	16.8	55.0	433	0.23	0.63
CHILL53	POINT	4802.9	16.8	55.0	433	0.23	0.63
CHILL54	POINT	4803.2	16.8	55.0	433	0.23	0.63
CHILL55	POINT	4803.5	16.8	55.0	433	0.23	0.63
CHILL56	POINT	4804.4	16.8	55.0	433	0.23	0.63
CHILL57	POINT	4804.5	16.8	55.0	433	0.23	0.63
CHILL58	POINT	4804.6	16.8	55.0	433	0.23	0.63
CHILL59	POINT	4804.7	16.8	55.0	433	0.23	0.63
CHILL60	POINT	4804.9	16.8	55.0	433	0.23	0.63
CHILL61	POINT	4805.1	16.8	55.0	433	0.23	0.63
CHILL62	POINT	4805.3	16.8	55.0	433	0.23	0.63
CHILL63	POINT	4805.5	16.8	55.0	433	0.23	0.63
CHILL64	POINT	4805.7	16.8	55.0	433	0.23	0.63
CHILL65	POINT	4805.8	16.8	55.0	433	0.23	0.63
CHILL66	POINT	4806.4	16.8	55.0	433	0.23	0.63
CHILL67	POINT	4806.7	16.8	55.0	433	0.23	0.63
CHILL68	POINT	4807.0	16.8	55.0	433	0.23	0.63
CHILL69	POINT	4807.2	16.8	55.0	433	0.23	0.63
2_ENG1	POINT	4912.5	16.8	55.0	433	24.06	0.61
2_ENG2	POINT	4912.9	16.8	55.0	433	24.06	0.61

2_ENG3	POINT	4913.3	16.8	55.0	433	24.06	0.61
2_ENG4	POINT	4913.8	16.8	55.0	433	24.06	0.61
2_ENG5	POINT	4914.4	16.8	55.0	433	24.06	0.61
2_ENG6	POINT	4915.0	16.8	55.0	433	24.06	0.61
2_ENG7	POINT	4915.7	16.8	55.0	433	24.06	0.61
2_ENG8	POINT	4916.3	16.8	55.0	433	24.06	0.61
2_ENG9	POINT	4916.9	16.8	55.0	433	24.06	0.61
2_ENG10	POINT	4917.5	16.8	55.0	433	24.06	0.61
2_ENG11	POINT	4919.3	16.8	55.0	433	24.06	0.61
2_ENG12	POINT	4919.4	16.8	55.0	433	24.06	0.61
2_ENG13	POINT	4919.5	16.8	55.0	433	24.06	0.61
2_ENG14	POINT	4919.5	16.8	55.0	433	24.06	0.61
2_ENG15	POINT	4919.8	16.8	55.0	433	24.06	0.61
2_ENG16	POINT	4920.3	16.8	55.0	433	24.06	0.61
2_ENG17	POINT	4921.0	16.8	55.0	433	24.06	0.61
2_ENG18	POINT	4921.7	16.8	55.0	433	24.06	0.61
2_ENG19	POINT	4922.3	16.8	55.0	433	24.06	0.61
2_ENG20	POINT	4923.0	16.8	55.0	433	24.06	0.61
2_ENG21	POINT	4925.0	16.8	55.0	433	24.06	0.61
2_ENG22	POINT	4925.7	16.8	55.0	433	24.06	0.61
2_ENG23	POINT	4926.2	16.8	55.0	433	24.06	0.61
2_ENG24	POINT	4926.5	16.8	55.0	433	24.06	0.61
2_ENG25	POINT	4926.8	16.8	55.0	433	24.06	0.61
2_ENG26	POINT	4927.0	16.8	55.0	433	24.06	0.61
2_ENG27	POINT	4927.4	16.8	55.0	433	24.06	0.61
2_ENG28	POINT	4927.8	16.8	55.0	433	24.06	0.61
2_ENG29	POINT	4928.2	16.8	55.0	433	24.06	0.61
2_ENG30	POINT	4928.6	16.8	55.0	433	24.06	0.61
2_ENG31	POINT	4929.4	16.8	55.0	433	24.06	0.61
2_ENG32	POINT	4929.6	16.8	55.0	433	24.06	0.61
2_ENG33	POINT	4929.9	16.8	55.0	433	24.06	0.61
2_ENG34	POINT	4930.2	16.8	55.0	433	24.06	0.61
2_ENG35	POINT	4930.5	16.8	55.0	433	24.06	0.61
2_ENG36	POINT	4910.8	16.8	55.0	433	24.06	0.61
2_ENG37	POINT	4911.1	16.8	55.0	433	24.06	0.61
2_ENG38	POINT	4911.5	16.8	55.0	433	24.06	0.61
2_ENG39	POINT	4911.9	16.8	55.0	433	24.06	0.61
2_ENG40	POINT	4912.3	16.8	55.0	433	24.06	0.61
2_ENG41	POINT	4912.7	16.8	55.0	433	24.06	0.61
2_ENG42	POINT	4913.1	16.8	55.0	433	24.06	0.61

2_ENG43	POINT	4913.5	16.8	55.0	433	24.06	0.61
2_ENG44	POINT	4913.9	16.8	55.0	433	24.06	0.61
2_ENG45	POINT	4914.2	16.8	55.0	433	24.06	0.61
2_ENG46	POINT	4914.7	16.8	55.0	433	24.06	0.61
2_ENG47	POINT	4914.8	16.8	55.0	433	24.06	0.61
2_ENG48	POINT	4914.9	16.8	55.0	433	24.06	0.61
2_ENG49	POINT	4915.0	16.8	55.0	433	24.06	0.61
2_ENG50	POINT	4915.1	16.8	55.0	433	24.06	0.61
2_ENG51	POINT	4915.4	16.8	55.0	433	24.06	0.61
2_ENG52	POINT	4915.8	16.8	55.0	433	24.06	0.61
2_ENG53	POINT	4916.3	16.8	55.0	433	24.06	0.61
2_ENG54	POINT	4916.8	16.8	55.0	433	24.06	0.61
2_ENG55	POINT	4917.3	16.8	55.0	433	24.06	0.61
2_ENG56	POINT	4918.1	16.8	55.0	433	24.06	0.61
2_ENG57	POINT	4918.1	16.8	55.0	433	24.06	0.61
2_ENG58	POINT	4918.1	16.8	55.0	433	24.06	0.61
2_ENG59	POINT	4918.1	16.8	55.0	433	24.06	0.61
2_ENG60	POINT	4918.1	16.8	55.0	433	24.06	0.61
2_ENG61	POINT	4918.1	16.8	55.0	433	24.06	0.61
2_ENG62	POINT	4918.2	16.8	55.0	433	24.06	0.61
2_ENG63	POINT	4918.3	16.8	55.0	433	24.06	0.61
2_ENG64	POINT	4918.4	16.8	55.0	433	24.06	0.61
2_ENG65	POINT	4918.7	16.8	55.0	433	24.06	0.61
2_ENG66	POINT	4920.2	16.8	55.0	433	24.06	0.61
2_ENG67	POINT	4920.7	16.8	55.0	433	24.06	0.61
2_ENG68	POINT	4921.3	16.8	55.0	433	24.06	0.61
2_ENG69	POINT	4921.9	16.8	55.0	433	24.06	0.61
2_DENG1	POINT	4912.9	15.2	50.0	729	29.91	0.61
2_DENG2	POINT	4913.3	15.2	50.0	729	29.91	0.61
2_DENG3	POINT	4913.6	15.2	50.0	729	29.91	0.61
2_DENG4	POINT	4914.2	15.2	50.0	729	29.91	0.61
2_DENG5	POINT	4914.8	15.2	50.0	729	29.91	0.61
2_DENG6	POINT	4915.5	15.2	50.0	729	29.91	0.61
2_DENG7	POINT	4916.1	15.2	50.0	729	29.91	0.61
2_DENG8	POINT	4916.8	15.2	50.0	729	29.91	0.61
2_DENG9	POINT	4917.4	15.2	50.0	729	29.91	0.61
2_DENG10	POINT	4918.0	15.2	50.0	729	29.91	0.61
2_DENG11	POINT	4919.8	15.2	50.0	729	29.91	0.61
2_DENG12	POINT	4919.9	15.2	50.0	729	29.91	0.61
2_DENG13	POINT	4920.0	15.2	50.0	729	29.91	0.61

2_DENG14	POINT	4919.9	15.2	50.0	729	29.91	0.61
2_DENG15	POINT	4920.1	15.2	50.0	729	29.91	0.61
2_DENG16	POINT	4920.5	15.2	50.0	729	29.91	0.61
2_DENG17	POINT	4921.1	15.2	50.0	729	29.91	0.61
2_DENG18	POINT	4921.7	15.2	50.0	729	29.91	0.61
2_DENG19	POINT	4922.3	15.2	50.0	729	29.91	0.61
2_DENG20	POINT	4922.9	15.2	50.0	729	29.91	0.61
2_DENG21	POINT	4924.9	15.2	50.0	729	29.91	0.61
2_DENG22	POINT	4925.6	15.2	50.0	729	29.91	0.61
2_DENG23	POINT	4926.1	15.2	50.0	729	29.91	0.61
2_DENG24	POINT	4926.4	15.2	50.0	729	29.91	0.61
2_DENG25	POINT	4926.7	15.2	50.0	729	29.91	0.61
2_DENG26	POINT	4927.0	15.2	50.0	729	29.91	0.61
2_DENG27	POINT	4927.4	15.2	50.0	729	29.91	0.61
2_DENG28	POINT	4927.8	15.2	50.0	729	29.91	0.61
2_DENG29	POINT	4928.3	15.2	50.0	729	29.91	0.61
2_DENG30	POINT	4928.8	15.2	50.0	729	29.91	0.61
2_DENG31	POINT	4930.0	15.2	50.0	729	29.91	0.61
2_DENG32	POINT	4930.3	15.2	50.0	729	29.91	0.61
2_DENG33	POINT	4930.7	15.2	50.0	729	29.91	0.61
2_DENG34	POINT	4931.0	15.2	50.0	729	29.91	0.61
2_DENG35	POINT	4931.3	15.2	50.0	729	29.91	0.61
2_DENG36	POINT	4910.1	15.2	50.0	729	29.91	0.61
2_DENG37	POINT	4910.5	15.2	50.0	729	29.91	0.61
2_DENG38	POINT	4910.9	15.2	50.0	729	29.91	0.61
2_DENG39	POINT	4911.4	15.2	50.0	729	29.91	0.61
2_DENG40	POINT	4911.8	15.2	50.0	729	29.91	0.61
2_DENG41	POINT	4912.3	15.2	50.0	729	29.91	0.61
2_DENG42	POINT	4912.9	15.2	50.0	729	29.91	0.61
2_DENG43	POINT	4913.4	15.2	50.0	729	29.91	0.61
2_DENG44	POINT	4913.8	15.2	50.0	729	29.91	0.61
2_DENG45	POINT	4914.1	15.2	50.0	729	29.91	0.61
2_DENG46	POINT	4914.6	15.2	50.0	729	29.91	0.61
2_DENG47	POINT	4914.7	15.2	50.0	729	29.91	0.61
2_DENG48	POINT	4914.7	15.2	50.0	729	29.91	0.61
2_DENG49	POINT	4914.8	15.2	50.0	729	29.91	0.61
2_DENG50	POINT	4914.9	15.2	50.0	729	29.91	0.61
2_DENG51	POINT	4915.1	15.2	50.0	729	29.91	0.61
2_DENG52	POINT	4915.5	15.2	50.0	729	29.91	0.61
2_DENG53	POINT	4915.9	15.2	50.0	729	29.91	0.61

2_DENG54	POINT	4916.3	15.2	50.0	729	29.91	0.61
2_DENG55	POINT	4916.8	15.2	50.0	729	29.91	0.61
2_DENG56	POINT	4917.3	15.2	50.0	729	29.91	0.61
2_DENG57	POINT	4917.3	15.2	50.0	729	29.91	0.61
2_DENG58	POINT	4917.3	15.2	50.0	729	29.91	0.61
2_DENG59	POINT	4917.4	15.2	50.0	729	29.91	0.61
2_DENG60	POINT	4917.5	15.2	50.0	729	29.91	0.61
2_DENG61	POINT	4917.6	15.2	50.0	729	29.91	0.61
2_DENG62	POINT	4917.7	15.2	50.0	729	29.91	0.61
2_DENG63	POINT	4917.9	15.2	50.0	729	29.91	0.61
2_DENG64	POINT	4918.0	15.2	50.0	729	29.91	0.61
2_DENG65	POINT	4918.3	15.2	50.0	729	29.91	0.61
2_DENG66	POINT	4919.6	15.2	50.0	729	29.91	0.61
2_DENG67	POINT	4920.0	15.2	50.0	729	29.91	0.61
2_DENG68	POINT	4920.6	15.2	50.0	729	29.91	0.61
2_DENG69	POINT	4921.2	15.2	50.0	729	29.91	0.61
2_CHL1	POINT	4912.7	16.8	55.0	433	0.23	0.63
2_CHL2	POINT	4913.1	16.8	55.0	433	0.23	0.63
2_CHL3	POINT	4913.5	16.8	55.0	433	0.23	0.63
2_CHL4	POINT	4914.0	16.8	55.0	433	0.23	0.63
2_CHL5	POINT	4914.6	16.8	55.0	433	0.23	0.63
2_CHL6	POINT	4915.3	16.8	55.0	433	0.23	0.63
2_CHL7	POINT	4915.9	16.8	55.0	433	0.23	0.63
2_CHL8	POINT	4916.5	16.8	55.0	433	0.23	0.63
2_CHL9	POINT	4917.1	16.8	55.0	433	0.23	0.63
2_CHL10	POINT	4917.7	16.8	55.0	433	0.23	0.63
2_CHL11	POINT	4919.5	16.8	55.0	433	0.23	0.63
2_CHL12	POINT	4919.7	16.8	55.0	433	0.23	0.63
2_CHL13	POINT	4919.8	16.8	55.0	433	0.23	0.63
2_CHL14	POINT	4919.7	16.8	55.0	433	0.23	0.63
2_CHL15	POINT	4919.9	16.8	55.0	433	0.23	0.63
2_CHL16	POINT	4920.4	16.8	55.0	433	0.23	0.63
2_CHL17	POINT	4921.1	16.8	55.0	433	0.23	0.63
2_CHL18	POINT	4921.7	16.8	55.0	433	0.23	0.63
2_CHL19	POINT	4922.4	16.8	55.0	433	0.23	0.63
2_CHL20	POINT	4923.0	16.8	55.0	433	0.23	0.63
2_CHL21	POINT	4925.0	16.8	55.0	433	0.23	0.63
2_CHL22	POINT	4925.7	16.8	55.0	433	0.23	0.63
2_CHL23	POINT	4926.2	16.8	55.0	433	0.23	0.63
2_CHL24	POINT	4926.5	16.8	55.0	433	0.23	0.63

2_CHL25	POINT	4926.8	16.8	55.0	433	0.23	0.63
2_CHL26	POINT	4927.0	16.8	55.0	433	0.23	0.63
2_CHL27	POINT	4927.4	16.8	55.0	433	0.23	0.63
2_CHL28	POINT	4927.8	16.8	55.0	433	0.23	0.63
2_CHL29	POINT	4928.2	16.8	55.0	433	0.23	0.63
2_CHL30	POINT	4928.7	16.8	55.0	433	0.23	0.63
2_CHL31	POINT	4929.7	16.8	55.0	433	0.23	0.63
2_CHL32	POINT	4930.0	16.8	55.0	433	0.23	0.63
2_CHL33	POINT	4930.3	16.8	55.0	433	0.23	0.63
2_CHL34	POINT	4930.6	16.8	55.0	433	0.23	0.63
2_CHL35	POINT	4930.9	16.8	55.0	433	0.23	0.63
2_CHL36	POINT	4910.5	16.8	55.0	433	0.23	0.63
2_CHL37	POINT	4910.9	16.8	55.0	433	0.23	0.63
2_CHL38	POINT	4911.2	16.8	55.0	433	0.23	0.63
2_CHL39	POINT	4911.6	16.8	55.0	433	0.23	0.63
2_CHL40	POINT	4912.1	16.8	55.0	433	0.23	0.63
2_CHL41	POINT	4912.5	16.8	55.0	433	0.23	0.63
2_CHL42	POINT	4913.0	16.8	55.0	433	0.23	0.63
2_CHL43	POINT	4913.4	16.8	55.0	433	0.23	0.63
2_CHL44	POINT	4913.8	16.8	55.0	433	0.23	0.63
2_CHL45	POINT	4914.1	16.8	55.0	433	0.23	0.63
2_CHL46	POINT	4914.7	16.8	55.0	433	0.23	0.63
2_CHL47	POINT	4914.7	16.8	55.0	433	0.23	0.63
2_CHL48	POINT	4914.8	16.8	55.0	433	0.23	0.63
2_CHL49	POINT	4914.8	16.8	55.0	433	0.23	0.63
2_CHL50	POINT	4914.9	16.8	55.0	433	0.23	0.63
2_CHL51	POINT	4915.2	16.8	55.0	433	0.23	0.63
2_CHL52	POINT	4915.6	16.8	55.0	433	0.23	0.63
2_CHL53	POINT	4916.1	16.8	55.0	433	0.23	0.63
2_CHL54	POINT	4916.6	16.8	55.0	433	0.23	0.63
2_CHL55	POINT	4917.1	16.8	55.0	433	0.23	0.63
2_CHL56	POINT	4917.7	16.8	55.0	433	0.23	0.63
2_CHL57	POINT	4917.7	16.8	55.0	433	0.23	0.63
2_CHL58	POINT	4917.7	16.8	55.0	433	0.23	0.63
2_CHL59	POINT	4917.7	16.8	55.0	433	0.23	0.63
2_CHL60	POINT	4917.7	16.8	55.0	433	0.23	0.63
2_CHL61	POINT	4917.8	16.8	55.0	433	0.23	0.63
2_CHL62	POINT	4917.9	16.8	55.0	433	0.23	0.63
2_CHL63	POINT	4918.1	16.8	55.0	433	0.23	0.63
2_CHL64	POINT	4918.2	16.8	55.0	433	0.23	0.63

2_CHL65	POINT	4918.5	16.8	55.0	433	0.23	0.63
2_CHL66	POINT	4919.9	16.8	55.0	433	0.23	0.63
2_CHL67	POINT	4920.4	16.8	55.0	433	0.23	0.63
2_CHL68	POINT	4920.9	16.8	55.0	433	0.23	0.63
2_CHL69	POINT	4921.6	16.8	55.0	433	0.23	0.63

Exhibit B

WR No.	Dom.	Irrig. Ac.	Stock	Period of Use	Quan cfs	Quan ac-ft
67-133	0	240.0	0	03/01 - 11/01	6.0	960.0
67-135	0	320.0	0	04/01 - 10/31	5.4915	1280.0
67-308	0	1152.0	0	04/01 - 11/01	12.0	4608.0
67-665	0	120.0	0	04/01 - 10/31	2.0	480.0
67-686	0	120.0	0	03/15 - 10/15	1.5	480.0
67-1134	0	94.18	0	04/01 - 10/31	1.57	376.72
67-1161	0	163.19	0	04/01 - 10/31	1.57	652.76
67-1631	0	62.18	0	04/01 - 10/31	1.335	248.72
67-1632	0	101.84	0	04/01 - 10/31	2.075	407.36
67-1757	0	120.0	0	04/01 - 10/31	1.4625	480.0
		2493.39	0		35.000	9,973.56

3. QUANTITY AND USES OF WATER:

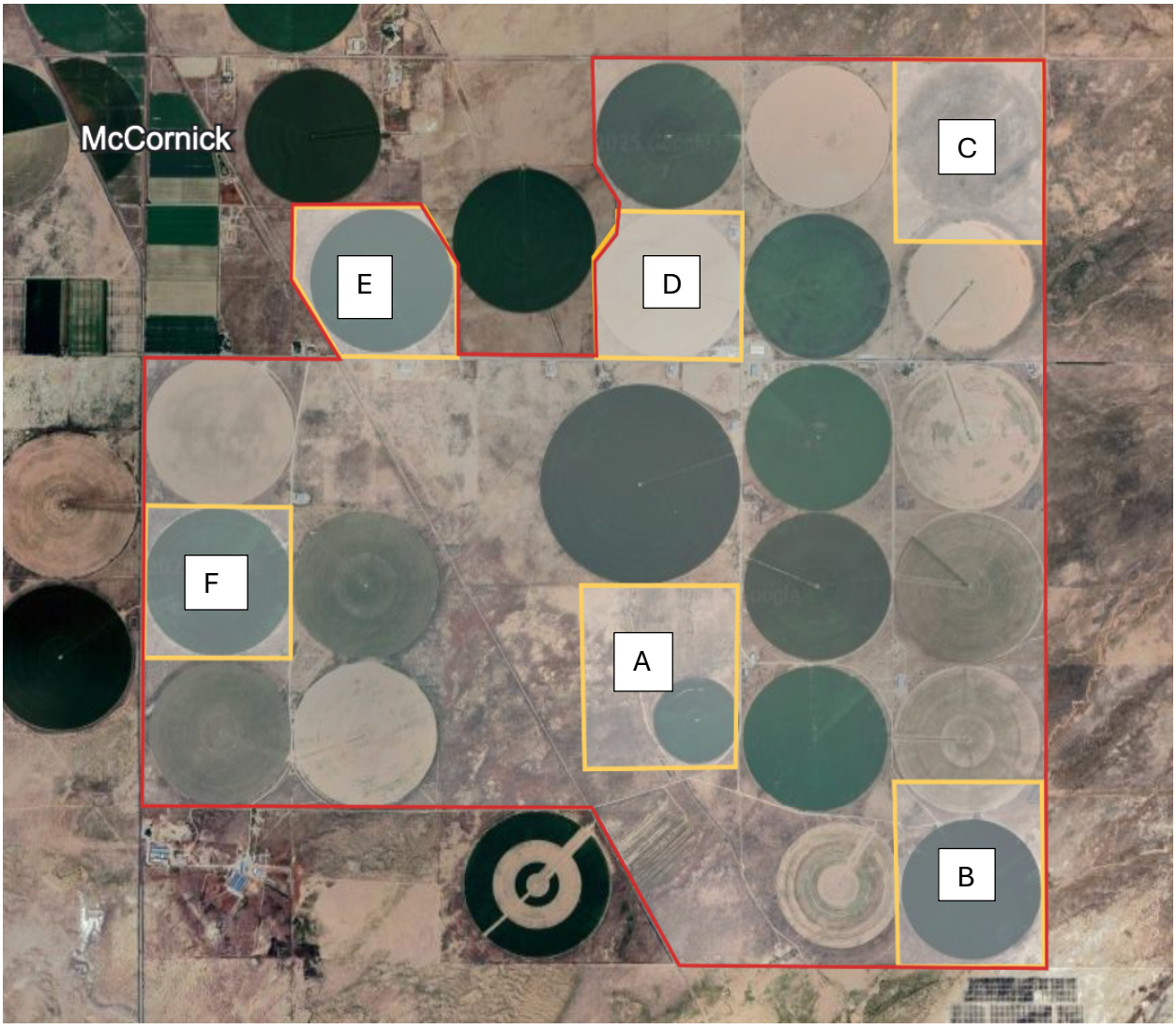
	Currently in 67-1632	Amount To Be Segregated
FLOW and/or QUANTITY:	**2.475 cfs OR 485.88 acft**	*0.40 cfs OR 78.52 acft*
WATER USES/ Group #:	**Water Rights in Group:**	
432336	67-133,135,308,665,686,1134,1161,1631,1632,1633	
IRRIGATION:	**121.47 acre(s)**	*19.63 acres*

4. POINT OF DIVERSION (Must be based on a competent land survey; all ties must be given by rectangular coordinates with reference to a regularly established U.S. land corner.)

Location	cfs	gpm
(1) Well 18 S 3631 ft W 38 ft from N4 Cor, Sec 34, T18S, R5W, SLBM. 16 in dia well 380 ft deep.	2.340	1050
(2) Kevin's Well N 30 ft E 364 ft from S4 Cor, Sec 35, T18S, R5W, SLBM. 16 in dia well 607 ft deep.	3.922	1760
(3) P2 Well N 1236 ft E 18 ft from SW Cor, Sec 36, T18S, R5W, SLBM. 16 in dia well 405 ft deep.	2.629	1180
(4) Norm's Well S 538 ft E 37 ft from W4 Cor, Sec 36, T18S, R5W, SLBM. 16 in dia well 550 ft deep.	1.783	800
(5) CC Well N 540 ft W 23 ft from S4 Cor, Sec 36, T18S, R5W, SLBM. 16 in dia well 550 ft deep.	0	0
(6) P1 Well N 953 ft E 31 ft from W4 Cor, Sec 36, T18S, R5W, SLBM. 16 in dia well 380 ft deep.	0	0
(7) P10 Well N 923 ft E 73 ft from SW Cor, Sec 1, T19S, R5W, SLBM. 16 in dia well 335 ft deep.	2.362	1060
(8) YoYo Well N 1253 ft E 2687 ft from SW Cor, Sec 1, T19S, R5W, SLBM. 16 in dia well 165 ft deep.	1.225	550
(9) P3 Well S 1202 ft E 0 ft from N4 Cor, Sec 1, T19S, R5W, SLBM. 16 in dia well 385 ft deep.	0	0
(10) North YoYo N 1507 ft E 2687 ft from SW Cor, Sec 1, T19S, R5W, SLBM. 16 in dia well 335 ft deep.	0	0
(11) Little 15 Well N 927 ft W 2127 ft from SE Cor, Sec 2, T19S, R5W, SLBM. 12 in dia well 420 ft deep.	0.379	170
(12) Well 15b N 927 ft W 2127 ft from SE Cor, Sec 2, T19S, R5W, SLBM. 16 in dia well 460 ft deep.	1.493	670
(13) RR Track Well N 2035 ft E 416 ft from SW Cor, Sec 2, T19S, R5W, SLBM. 16 in dia well 495 ft deep.	4.701	2110
(14) Pine Tree Well S 890 ft W 102 ft from NE Cor, Sec 2, T19S, R5W, SLBM. 16 in dia well 655 ft deep.	2.828	1269
(15) Graveyard Well S 2638 ft W 1577 ft from NE Cor, Sec 3, T19S, R5W, SLBM. 16 in dia well 504 ft deep.	2.629	1180
(16) Stop Sign Well S 155 ft E 567 ft from NW Cor, Sec 3, T19S, R5W, SLBM. 16 in dia well 1300 ft deep.	4.144	1860
(17) Well 22 N 2605 ft E 1903 ft from SW Cor, Sec 3, T19S, R5W, SLBM. 16 in dia well 460 ft deep.	4.791	2150
(18) Lenny's Well S 341 ft W 84 ft from NE Cor, Sec 3, T19S, R5W, SLBM. 16 in dia well 550 ft deep.	4.791	2150
(19) Little 5 Well S 1336 ft W 38 ft from NE Cor, Sec 11, T19S, R5W, SLBM. 16 in dia well 335 ft deep.	0.824	370
(20) P6 Well N 2047 ft W 2395 ft from SE Cor, Sec 12, T19S, R5W, SLBM. 16 in dia well 390 ft deep.	2.500	1122
(21) P5 Well S 1291 ft W 2505 ft from NE Cor, Sec 12, T19S, R5W, SLBM. 16 in dia well 350 ft deep.	1.136	510
(22) New Well N 92 ft E 1317 ft from SW Cor, Sec 12, T19S, R5W, SLBM. 16 in dia well 400 ft deep.	5.481	2460
	49.958	22,421

Exhibit A

The property included in this lease, between Joule Land Holdings and Triple C Farms, LLC, and referred to in the lease as illustrated in Exhibit A, is all land within the perimeter boarder of this map as outlined in Red, excluding the six parcels (A,B,C,D,E,F) as outlined in yellow.



FARM LEASE AGREEMENT
Triple C Farms

THIS FARM LEASE AGREEMENT **("Lease")** is entered into on October 1, 2025, to be effective as of October 1, 2025 (the **"Effective Date")** by and between JOULE LAND HOLDINGS, LLC, a Utah limited liability company, which is a wholly owned subsidiary of Joule Capital Partners, LLC, a Utah limited liability company, **("Landlord"),** and TRIPLE C FARMS, L.L.C., a Utah limited liability company **("Tenant").** In consideration of the mutual promises, covenants, conditions, and agreements hereinafter set forth, Landlord and Tenant, intending to be legally bound hereby, agree as follows:

1. SCOPE OF LEASE.

1.1 Parties. The parties to this lease are JOULE LAND HOLDINGS, LLC, a Utah Limited Liability Company ("Landlord") (SIC 4931/Power Generation and 7374/Data Center) and TRIPLE C FARMS, LLC, a Utah Limited Liability Company, (SIC 0191/Farming and 0291/Ranching).

1.2 LEASED PREMISES. Subject to Section 1.4 below, Landlord leases to Tenant, and Tenant leases from Landlord, certain real property in Millard County, Utah legally described on **Exhibit A** attached hereto and incorporated herein by this reference (the **"Real Property"),** the right to use water held by Landlord as listed in **Exhibit C** hereto (the **"Water Rights")** for irrigation of crops grown on the Real Property and certain personal property owned by Landlord and located on the Real Property (the **"Personal Property")** and the right to use the farm repair shop, the truck scales, and the seven (7) hay storage barns located on the Real Property (collectively the **"Leased Premises").** The lease also extends to and includes the farmhand bunkhouse, the farm employee houses, and the fuel tank area and containment. This Lease excludes any interest in oil, gas, or other minerals, geothermal, and solar and wind energy rights, all of which are reserved for Landlord.

1.3 Land for data centers excluded. This lease eventually specifically excludes six (6) approximately 200 acre sites, referenced on **Exhibit B** as Data Center and Power Production sites. Tenant is to farm and or ranch all of the remaining land illustrated on Exhibit B as set forth herein. Except that, Tenant shall continue to farm and ranch all of the land illustrated on Exhibit B until specifically instructed, upon 60 day written notice, by landlord to cease said farming and ranching activities, on each Data Center and Power Production site, as landlord withdraws said sites from the leased area. The purpose of this clause is to allow Tenant to farm and ranch, and thus maintain the greenbelt status of, all land not being withdrawn from the lease, until landlord is ready to build a data center and power production site. If and when landlord withdraws land from the lease, (ie, the six (6) Data Center and Power Production sites), tenant shall farm and ranch around each site to maintain a buffer around each Data Center and Power Production site.

1.4 PURPOSE. This Lease is for the express purpose of growing and harvesting crops, (SIC 0191), and for such uses as are reasonably incident thereto, including ranching and grazing, (SIC 0291). Tenant shall not use the Leased Premises for any other purpose without Landlord's prior written consent. Tenant is specifically limited to all actions included in and allowed by its certain SIC code, but including all farming and ranching and incidental activities, and specifically excluding power generation and data center buildings and operations. Tenant is prohibited from the use and installation of generators, and data centers, except as used directly in the agriculture operations of farming and grazing the real property subject to this lease.

1.5 NO PARTNERSHIP. No partnership or joint venture is created or intended to be created between Landlord and Tenant in connection with this Lease, and Landlord will have no obligation with respect to Tenant's debts or other liabilities and no interest in Tenant's profits.

1.6 DEVELOPMENT OF PROJECT PREMISES. Landlord reserves the right, upon not less than sixty (60) days' prior written notice to Tenant, to withdraw, from time to time, from the Leased Premises any portion of the farm land reasonably necessary for the purpose of developing such portion

for the operation of data centers and energy campuses for data centers (the "Project"). Upon such withdrawal, the Leased Premises shall be deemed reduced accordingly. The Rent shall not be adjusted. Tenant shall not be entitled to any additional damages, offsets, or claims by reason of such withdrawal.

1.7 INTERFERENCE WITH FARM OPERATIONS. Landlord shall endeavor, but shall not be obligated, to minimize material interference with Tenant's operations during development activities. Any temporary disruption to Tenant's use of the Leased Premises caused by such activities shall not constitute a breach of this Lease.

1.8 REPAIR OF INFRASTRUCTURE. Landlord shall, at its sole cost and expense, promptly repair, restore, or replace any electrical power lines, water lines, irrigation systems, access roads, drainage improvements, or other infrastructure serving the remaining Leased Premises that is damaged, interrupted, or impaired as a direct result of Landlord's development activities. Such repairs shall be completed in a manner that restores the affected infrastructure to substantially the same condition and capacity as existed immediately prior to the damage, or, as agreed upon by the parties, to an acceptable alternate state. Landlord shall have no liability for consequential or incidental damages, loss of crops, or business interruption arising from such activities.

1.9 ACCESS AND EASEMENTS. Landlord shall not withdraw any portion of the Leased Premises in a manner that unreasonably restricts Tenant's access to or use of the remaining Leased Premises and shall grant such temporary or permanent easements as may be reasonably necessary to allow Tenant to continue farming operations. Landlord shall provide Tenant with reasonable alternate access to the remaining Leased Premises if existing access is permanently eliminated as a result of Landlord's development.

1.10 Greenbelt. The parties both agree that maintaining the greenbelt status of the leased property is critical. Tenant is required to farm or ranch at lease fifty percent (50%) of the leasehold property at least half of the years in each five-year period of this lease in a manner adequate to maintain the greenbelt status of the property. Within 60 days of the close of each calendar year, tenant shall provide landlord a statement of farming or ranching activities. The statement shall contain at the minimum, acres farmed, acres ranched, and fallow acres.

1.11 FINALITY OF WITHDRAWAL. Any portion of the Leased Premises withdrawn pursuant to this Section 1 shall thereafter be permanently excluded from the Lease, and Tenant shall have no rights with respect thereto. Once withdrawn, any such acres shall no longer be the obligation of the tenant, as to any and all terms of this lease.

2. TERM. The term of this Lease shall commence on the Effective Date and, unless terminated earlier pursuant to the terms and conditions of this Lease, shall terminate on December 31, 2046. The term is thereafter subject to extension terms as set forth in paragraph 3, below.

3. Extension. Tenant may, if in compliance with all other terms of this lease, extend this lease for up to four (4) terms of 21 years. In the case of extension, the lease rate shall increase by ten percent (10%) of total lease rate for each successive extension term, (21 year period).

4. RENT.

4.1 BASE RENT. In consideration of this Lease, Tenant agrees to pay cash rent **("Base Rent")** annually for the term of this Lease in the amount of One Hundred Thousand Dollars ($100,000.00). Fifty Thousand Dollars ($50,000.00) of the Base Rent shall be due and payable on January 30th of each year during the Term and Fifty Thousand Dollars ($50,000) of the Base Rent shall be due and payable on July 30th of each year during the Term of this lease.

4.2 LATE PAYMENT FEE. If any Base Rent under this Lease is not paid in full within five

(5) days after the date when due, there shall be added thereto an additional sum equal to five percent (5%) of the delinquent Base Rent. In addition, delinquent Base Rent will accrue interest at the rate of eighteen percent (18%) per annum until paid in full.

5. TAXES AND ASSESSMENTS. Landlord shall pay all special assessments and real property taxes levied upon and attributable to the Leased Premises for any period of time during which this Lease is in force.

6. USE AND FARMING and Ranching PRACTICES. Tenant shall use the Leased Premises only for agricultural purposes incident to farm and ranch operations customarily conducted in the community in which the Leased Premises are located. Tenant shall make no unlawful use of the Leased Premises and agrees to comply with all valid and applicable local, state, and federal regulations and laws, including those governing the use of fertilizers, the use of herbicides, the use of pesticides, the use and distribution of the Water Rights, and other farming practices. Tenant shall cultivate the Leased Premises in accordance with past practice. Tenant shall adhere to those tillage, husbandry, and land use practices that will maintain or enhance the fertility of the soil on the Leased Premises. Tenant may, in its reasonable discretion, replant portion(s) of the Leased Premises with different crops than presently planted on the Leased Premises.

7. HARVESTING OF CROPS. Tenant shall harvest all crops in proper season and failing to do so within a reasonable time after written notice from Landlord, Landlord may enter upon the Leased Premises and properly care for and harvest said crops and charge the reasonable cost to Tenant as Additional Rent hereunder.

8. Irrigation and Irrigation equipment. Tenant shall use reasonable care in the operation and maintenance of the irrigation equipment, such as sprinklers, wells, and underground pipelines, as is generally accepted in the region. The expense of repairs and maintenance of the irrigation equipment shall be the responsibility of the tenant. The replacement, upgrades, and additions of irrigation equipment shall be the responsibility of the landlord. In the event that Landlord elects to upgrade, alter, or improve any part of the irrigation system, landlord shall plan with and schedule with tenant so as to cause the least amount of interruption as is reasonably possible. In the event that landlord elects to change the status of any of its water rights from agriculture to commercial, tenant shall cooperate with landlord.

9. TENANT DUTIES. Tenant shall furnish, at Tenant's expense, the essential machinery needed to farm the Leased Premises; control weeds in fields, fence rows, road ditches, building lots, and all areas of the farm; protect all desirable vegetation such as grass, shrubs, and trees and not plow or otherwise disturb permanent vegetation without the consent of Landlord; maintain and preserve existing grassed waterways that would otherwise be subject to soil erosion; keep the Leased Premises in as good condition as reasonable use will permit; perform labor necessary in making minor repairs and improvements; perform labor necessary to build and repair fences, where appropriate; and incur no expense for Landlord without first obtaining Landlord's consent, which consent shall not be unreasonably withheld, conditioned or delayed.

10. POSSESSION. So long as Tenant timely pays the Rent and performs and observes all other terms and conditions of this Lease, Tenant shall at all times during the term of this Lease peaceably and quietly have the possession, use, and enjoyment of the Leased Premises without any disturbance from Landlord or from any other person claiming through Landlord except as set forth in Section 1 of this Lease.

11. UTILITIES. Tenant shall pay all charges of public or private utility companies for utility services used by Tenant. If Tenant fails to timely pay such utility charges, Landlord may, at Landlord's election, pay same and in such event, Tenant shall repay to Landlord, upon demand, such amount as Additional Rent.

12. CAPITAL IMPROVEMENTS. All buildings, fences, and improvements of every kind and nature that may be erected on the Leased Premises during the term of this Lease by Tenant shall inure to the Leased Premises and become the property of Landlord unless permission to erect and remove same shall first be obtained in writing.

13. WATER SUPPLY. Tenant shall comply with the terms and conditions of the Water Rights and maintain the Water Rights in good standing in accordance with applicable law. Tenant agrees to maintain the irrigation system on the Leased Premises in good condition and repair. Landlord reserves the right to withdraw certain water rights for use in the power production and data center project.

14. YIELDING POSSESSION. Tenant agrees that on termination of this Lease, Tenant will yield possession to Landlord without further demand or notice. The Leased Premises shall be in as good order and condition as when same were entered by Tenant except for the effects of ordinary wear and depreciation and acts of nature beyond Tenant's control such as fire, tornado, windstorm, and hail. If Tenant wrongfully withholds possession of the Leased Premises after the date of termination, Tenant shall pay to Landlord the sum of one thousand dollars ($1,000.00) for each day Tenant remains in possession thereafter as liquidated damages.

15. REMOVAL OF PORTABLE BUILDINGS. Tenant shall have the right to remove from the Leased Premises any portable buildings that Tenant has placed upon the Leased Premises at Tenant's own expense. Such moving must be done at termination of this Lease unless additional time is granted in writing by Landlord. Landlord shall in no way be responsible for property owned by Tenant. If such property is not removed, it shall be considered abandoned, and Tenant shall claim no further interest in it except by written agreement between Landlord and Tenant.

16. RIGHT OF ENTRY. Landlord reserves the right to enter the Leased Premises at any reasonable time to inspect the property and make improvements as Landlord shall deem necessary.

17. INDEMNIFICATION. Tenant agrees to defend, indemnify, and hold harmless Landlord and its affiliates, and all of its respective officers, directors, agents, and employees(each an **"Indemnified Party"),** for and against any and all claims, demands, liabilities, losses, damages, actions, judgments, costs, expenses, fines, and reasonable attorneys' fees (collectively, **"Claims")** (i) incurred by any Indemnified Party as a result of a breach of this Lease by Tenant; or (ii) asserted by a third party against any Indemnified Party arising out of, related to, or in connection with: (A) any breach of this Lease by Tenant; (B) Tenant's negligent acts, omissions, and/or willful misconduct in performing under this Lease; (C) the death or bodily injury of any agent, employee, subcontractor, customer, business invitee, or business visitor of Tenant; or (D) any violation by Tenant of any federal, state, or local laws, regulations, ordinances, or orders. The Indemnified Party shall give prompt written notice to Tenant of any event giving rise to any alleged right of indemnification hereunder, but the failure to give such notice shall not bar an indemnification claim hereunder unless such failure materially prejudices Tenant in defending the Claim. Notwithstanding anything to the contrary in this Lease, and to the extent permitted by law, the indemnification provisions hereof shall not be deemed to waive or limit any other rights or remedies available to an Indemnified Party at law or in equity.

18. INSURANCE. Tenant, at its sole cost and expense, shall maintain adequate insurance coverage to protect Landlord from any losses that arise out of Tenant's obligations under this Lease. Such insurance shall include, at a minimum, commercial general liability in an amount not less than $1,000,000 per occurrence and $1,000,000 in the aggregate; statutory workers' compensation insurance or equivalent as prescribed by applicable law; statutory disability benefits insurance or equivalent as prescribed by applicable law; employer's liability insurance covering bodily injury each occurrence (in an amount not less than $500,000), occupational disease each occurrence (in an amount not less than $500,000), and occupational disease aggregate (in an amount not less than $500,000); comprehensive automobile liability covering all vehicles that Tenant owns, hires, or leases in an amount not less than $1,000,000 (combined single limit for bodily injury and property damage), or in such greater amount as may be required by the laws applicable to Tenant; and umbrella coverage in the amount of $5,000,000 per occurrence in excess of the insurance coverage described above. All insurance required to be maintained under this Lease shall be provided by U.S.-domiciled companies rated A+ or better in the most current issue of the A.M. Best's Rating Guide. Upon request, each Tenant shall furnish Landlord with certificates of insurance showing that the required insurance

is in force and satisfies all requirements stated in this Lease.

19. TENANT DEFAULT AND REMEDIES

19.1 DEFAULT BY TENANT. Each of the following shall be deemed an **"Event of Default"** by Tenant under this Lease:

(a) Failure to pay the Rent, or any part thereof, within five (5) days after the date when due.

(b) Failure to do, observe, keep, and perform any of Tenant's non-monetary obligations under this Lease if not cured within ten (10) days after notice from Landlord; provided, however, that if such default is curable but cannot reasonably be cured within such ten (10) day period, no default on the part of Tenant shall be deemed to exist Tenant promptly commences to cure such default and such cure is prosecuted to completion with diligence and continuity.

(c) Abandonment of the Leased Premises by Tenant, assignment of this Lease by Tenant or subletting all or any portion of the Leased Premises without Landlord's prior written approval, adjudication of Tenant as a bankrupt, making by Tenant of a general assignment for benefit of creditors, taking by Tenant of the benefit of any insolvency law, the appointment of a permanent receiver, or trustee in bankruptcy for Tenant's property, and appointment of a temporary receiver or trustee for Tenant's property which is not vacated or set aside within sixty (60) days after such appointment.

19.2 REMEDIES. Upon the occurrence of an Event of Default, in addition to all other rights or remedies it may have, Landlord may, at its option, exercise any of the following rights without further notice or demand of any kind to Tenant or any other person, except as required by applicable law. All rights and remedies of Landlord in this Lease shall be cumulative, and none shall exclude any other right or remedy allowed by law. In addition to the other remedies provided in this Lease, Landlord shall be entitled to restrain by injunction (without bond) the violation or attempted violation of any of the covenants, agreements or conditions of Tenant under this Lease.

(a) The right to terminate this Lease and Tenant's right to possess the Leased Premises and to reenter the Leased Premises, take possession thereof and remove all person from the Leased Premises, following which Tenant shall have no further claim thereon or hereunder.

(b) The right, without terminating this Lease and Tenant's right to possess the Leased Premises, to reenter the Leased Premises and occupy the whole or any part of the Leased Premises for and on account of Tenant and to collect any unpaid rent which has become payable, or which may thereafter become payable.

(c) The right of Landlord, even though it may have reentered the Leased Premises, to elect thereafter to terminate this Lease and Tenant's right to possess the Leased Premises. Should Landlord reenter the Leased Premises, Landlord shall not be deemed to have terminated this Lease or to have accepted a surrender thereof by any such reentry, unless Landlord shall have notified Tenant in writing that it has so elected to terminate this Lease and Tenant's right of possession. Tenant further covenants that Landlord's service of any notice pursuant to the unlawful detainer statutes of the State of Utah and Tenant's surrender of possession pursuant to such notice shall not (unless Landlord elects to the contrary at the time of, or at any time subsequent to, the serving of such notice and such election is evidenced by a notice to Tenant) be deemed to be a termination of this Lease. In the event of any reentry or taking of possession of the Leased Premises as provided above, Landlord shall have the right, but not the obligation, to remove from the Leased Premises all or any part of Tenant's property located in the Leased Premises and to place such property in storage at a public warehouse at the expense and risk of Tenant.

(d) The right to exercise any and all remedies of a secured party with respect to the security interest granted Landlord under Section 4 above. Without limiting the generality of the foregoing,

upon an Event of Default and a termination of this Lease by Landlord, Landlord may seize the crops and any other property located on the Leased Premises. If the crops are not fully grown or matured, Landlord may cause the same to be properly cultivated and harvested or gathered, and may sell and dispose of thereof, and apply the proceeds, so far as may be necessary, to compensate for Landlord's labor and expenses, and to pay Tenant's obligations to Landlord. Notwithstanding anything to the contrary expressed or implied herein, in the event of the failure by Tenant to meet its obligations hereunder to faithfully care for the crops, Landlord or its agents shall have the right after written notice and Tenant's failure to cure to enter upon the Leased Premises and to properly care for or harvest said crops and charge the cost thereof to Tenant.

19.3 RIGHT TO RELET. If this Lease is terminated by reason of an Event of Default by Tenant, Landlord may relet the whole or any portion of the Leased Premises for any period of time, for any rent which Landlord may deem reasonable, to any tenant which Landlord may deem suitable, and for any use and purpose which Landlord may deem appropriate. Landlord shall in no event be required to pay Tenant any surplus of rent received by Landlord upon reletting the Leased Premises in excess of the Rent provided in this Lease. Landlord's reletting of the Leased Premises shall not be deemed Landlord's acceptance of the condition of the Leased Premises as required under this Lease.

19.4 MEASURE OF DAMAGE. If this Lease is terminated by reason of an Event of Default by Tenant, Tenant will pay to Landlord the following:

(a) Any unpaid Rent earned at the time of such termination;

(b) The worth at the time of award of the amount by which the unpaid Rent for the balance of the term of this Lease exceeds the amount of such rent loss Tenant proves could be reasonably avoided;

(c) Any other amount necessary to compensate Landlord for all the detriment proximately caused by Tenant's failure to perform its obligations under this Lease or which in the ordinary course of things would be likely to result therefrom, including, without limitation, any cost or expense incurred by Landlord in (i) retaking possession of the Leased Premises, including reasonable attorneys' fees therefor, (ii) maintaining or preserving the Leased Premises after such default, (iii) preparing the Leased Premises for reletting to a new tenant, including repairs necessary to the Leased Premises for such reletting, (iv) leasing commissions, limited to those years remaining in the term, and (v) any other costs necessary or appropriate to relet the Leased Premises; and

(d) At Landlord's election, such other amounts in addition to or in lieu of the foregoing in this Section as may be permitted from time to time by the laws of the State of Utah.

As used herein, the "worth at the time of award" is to be computed by allowing interest at a rate equal to the yield on ten-year United States Treasury notes as of the close of business on the day preceding the date of calculation, as announced on Bloomberg.com or another reliable source selected by Landlord.

19.5 WAIVER OF REDEMPTION RIGHTS. Tenant, for itself, and on behalf of any and all persons claiming through or under it, including creditors of all kinds, does hereby waive and surrender all right and privilege which they or any of them might have under or by reason of any present or future law, to redeem the Leased Premises or to have a continuance of this Lease for the term hereof, as it may have been extended, after having been dispossessed or ejected therefrom by process of law or under the terms of this Lease or after the termination of this Lease as herein provided.

20. GOVERNMENT PROGRAMS. The participation of the Leased Premises in any program offered by the United States Department of Agriculture for crop production or soil conservation shall be at Landlord's option, so long as the participation does not decrease the production capacity of the Leased Premises. To the extent permitted by the government programs, Landlord shall have the right to all payments under these programs.

21. ENTIRE AGREEMENT. This Lease sets forth the entire and exclusive understanding and statement of the relationship between the parties and supersedes, and hereby renders null and void, all previous or contemporaneous oral or written proposals, negotiations, arrangements, understandings, agreements, guidelines, representations, warranties, terms, conditions, covenants, and any other communication between the parties, including their respective officers, employees, agents, or affiliates, relating to the subject matter of this Lease.

22. WAIVER BY LANDLORD. The failure of Landlord to enforce any term, covenant, condition, or agreement hereof by reason of its breach by Tenant after notice thereof is given shall not be deemed to avoid or affect the right of Landlord to enforce the same term, covenant, condition, or agreement on the occasion of a subsequent default or breach.

23. ASSIGNMENT. Tenant shall not have the right to assign this Lease or sublet the whole or any part of the Leased Premises unless Landlord's prior written consent therefor is first obtained. Assignment of this Lease shall not operate to release Tenant from liability thereunder. Notwithstanding the aforementioned, Landlord consents to Tenant continuing to sublease that portion of the Real Property currently occupied by Mark McDougal to him. This consent does not relieve Tenant of any obligations under this Lease with respect to the subleased property, and Tenant shall be fully liable for any acts or omissions of Mark McDougal as if they were the acts or omissions of Tenant.

24. NOTICES. All statements, invoices, payments, notices, demands, requests, and payments from one party to another shall, unless otherwise specified herein, be delivered personally or sent by mail, postage prepaid, to the addresses stated below:

Landlord: Joule Land Holdings, LLC
1850 W. Ashton Blvd
Lehi, Utah

Tenant: Triple C Farms LLC
PO Box 360128
Holden, Utah 84636

25. **SUCCESSORS BOUND.** Each and every covenant and agreement herein shall extend to and be binding upon the respective successors, heirs, and assigns of the parties hereto.

26. **CONSTRUCTION.** Words and phrases used in this Lease shall be construed as in the single or plural number, and as masculine, feminine, or neuter gender, according to the context. This Lease shall be governed exclusively by and construed in accordance with the laws of the State of Utah. The paragraph headings in this Lease are for convenience only and in no way define or limit the scope or intent of any provisions of this Lease.

27. **SEVERABILITY.** If any part of this Lease shall be adjudged invalid or unenforceable, such adjudication shall not affect the validity or enforceability of this Lease as a whole or any part thereof not adjudged invalid or unenforceable.

28. **ATTORNEYS' FEES.** If there is any litigation or other action taken by any party to enforce or interpret any provisions of or rights arising under this Agreement, the defaulting party shall pay to the other party all costs and expenses, including but not limited to reasonable attorneys' fees and costs, which the other party may incur in enforcing this Agreement or in pursuing any remedy allowed by law, whether such is incurred by the filing of suit or otherwise.

29. **COUNTERPARTS.** This Lease may be executed in any number of counterparts, each of which shall be regarded as an original and all of which shall constitute but one and the same instrument.

30. **UTAH SCHOOL TRUST LANDS LEASE.** Tenant agrees that with respect to that portion of the Real Property which is subject to the Special Use Lease Agreement No. 1273 (Agricultural) dated July 11, 2000, between the State of Utah, School and Institutional Trust Lands Administration as "Lessor" and Landlord (as assignee through mesne assignments) as "Lessee," other than the payment of rental due thereunder which is the obligation of Landlord, Tenant is solely responsible for compliance with all of the terms and conditions of that lease and Tenant agrees to hold harmless, protect, indemnify and defend Landlord from and against any loss, liability, cost or expense incurred by Landlord as a result of any default by Tenant thereunder.

31. WAIVER OF JURY TRIAL. EACH OF THE PARTIES HERETO IRREVOCABLY WAIVES ALL RIGHT TO TRIAL BY JURY IN ANY ACTION, PROCEEDING, OR COUNTERCLAIM (WHETHER BASED ON CONTRACT, TORT, OR OTHERWISE) ARISING OUT OF OR RELATING TO THIS LEASE OR THE ACTIONS OF THE PARTIES IN THE PERFORMANCE OR ENFORCEMENT HEREOF.

Remainder of page intentionally left blank.

IN WITNESS WHEREOF, Landlord and Tenant have executed this Lease as of the date first written above.

LANDLORD:

JOULE LAND HOLDINGS, LLC,
a Utah limited liability company

By:
Name: DAVID J. GRAY
Title: co-CEO

TENANT:

TRIPLE C FARMS, L.L.C.,
a Utah limited liability

By:
Name: Mark R. McDougal
Title: President

Joule Capital Partners Notice of Intent

New Approval Order



Prepared for:
Joule Capital Partners
Utah Dept. of Environmental Quality
Division of Air Quality
PO Box 144820
Salt Lake City, Utah 84114-482
Phone: 801-536-4000

Prepared by:
Stantec Consulting Services, Inc
727 East Riverpark Lane Suite 150
Boise ID 83706-4089
Contact: Eric Clark
208-388-4324

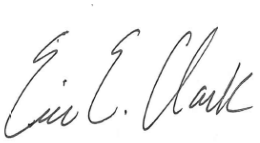
July 21, 2025

Sign-off Sheet

The conclusions in the Report titled Joule Capital Partners – Notice of Intent are Stantec's professional opinion, as of the time of the Report, and concerning the scope described in the Report. The opinions in the document are based on conditions and information existing at the time the scope of work was conducted and do not take into account any subsequent changes. The Report relates solely to the specific project for which Stantec was retained and the stated purpose for which the Report was prepared. The Report is not to be used or relied on for any variation or extension of the project, or for any other project or purpose, and any unauthorized use or reliance is at the recipient's own risk.

Stantec has assumed all information received from Joule Capital Partners (the "Client") and third parties in the preparation of the Report to be correct. While Stantec has exercised a customary level of judgment or due diligence in the use of such information, Stantec assumes no responsibility for the consequences of any error or omission contained therein.

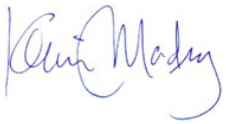
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Prepared by_____
(signature)
Eric Clark, PE, Senior Engineer



Reviewed by _____
(signature)
Colin Hall, Air Quality Specialist



Reviewed by _____
(signature)
Kevin Madry, P.E., Senior Principal

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Executive Summary

Joule Capital Partners (JCP) is filing this Notice of Intent (NOI) with the Utah Department of Environmental Quality, Division of Air Quality (UDAQ) for a new natural gas power facility for a new Approval Order (AO) to operate a datacenter in Millard County. The facility will consist of sixty-nine (69) Caterpillar (CAT) Model G3520K 4-stroke, natural gas-fired engines equipped with Selective Catalytic Reduction (SCR) and oxidation catalyst (OC). In conjunction with the G3520K engines, 69, natural gas boiler/chillers are expected to operate at 20% capacity. The facility will also include 69 Tier 2 Caterpillar 3516C engines which will be used solely for emergency situations but will produce some emissions. JCP owns approximately 195 acres south of West 11700 North Street (West Church Farm Road) and east of North County Road 4866.

All natural gas engines are subject to the applicable requirements of 40 CFR Part 60, Subpart JJJJ (Standards of Performance for Stationary Spark Ignition Internal Combustion Engines) and 40 CFR 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). The emergency engines are subject to 40 CFR 63, Subpart ZZZZ and 40 CFR Part 60, Subpart IIII (Standards of Performance for Stationary Compression Ignition Internal Combustion Engines).

The chiller/boilers are used for supplemental consumption which is less than 10 million British Thermal units per hour (MMBtu/hr), which is typically operating at 1.901 MMBtu/hr. Therefore, there are no New Source Performance Standard applicable to that sized unit. However, the Boiler MACT, 40 CFR Part 63, Subpart DDDDD (National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters) is applicable.

JCP will be classified as a Title V facility (major source) regarding criteria pollutant hazardous air pollutant (HAP) thresholds of 100 tons per year (tpy) for any criteria pollutant, 10 tpy of a single HAP and 25 tpy for all aggregated HAP emissions.

1.0 INTRODUCTION

1.1 SEPARATION OF FACILITIES

This NOI concerns the proposed construction and operation of two distinct facilities owned by JCP. The initial NOI was submitted on July 16, 2025. It is asserted that these constitute separate "major sources" for the operating permit program under Title V of the CAA as well as separate "stationary sources" for the New Source Review (NSR) preconstruction permit programs under Title I of the CAA.

Under both Title V and NSR permitting programs, a "major source" or "stationary source" is defined by three criteria:[1]:

- Belong to the same industrial grouping (2-digit "Major Group" Standard Industrial Classification (SIC) code).
- Are located on one or more contiguous or adjacent properties.
- Are under the control of the same person (or persons under common control).

Both facilities are under the common control of JCP, but each will be constructed and operated as an independent facility, with no shared infrastructure or operational interdependence. Each site has a distinct property boundary established with a fence line and secure entry.

Although both facilities operate under the common control of JCP and share the same 2-digit "Major Group" SIC code (49, Electric, Gas and Sanitary Services), they are not located on "contiguous or adjacent properties" as described below.

When interpreting the term "contiguous," EPA uses the common dictionary definition of 'touching" properties. The two proposed JCP facilities are separated by open farmland at an approximate distance of 1.28 miles. Because they do not share a common boundary or border, or are otherwise not physically touching each other, they are not considered "contiguous."

The Environmental Protection Agency (EPA) recently re-addressed the interpretation of "adjacent" in its November 26, 2019, guidance[2]. This guidance clarifies that adjacency is determined solely by physical proximity, rejecting the consideration of "functional interrelatedness" as addressed in the previous EPA guidance. The recent guidance further emphasizes that no "bright-line test or a fixed distance" defines adjacency, instead referencing

[1] PSD Definition of Source. EPA Memorandum. June 30, 1981. https://www.epa.gov/sites/default/files/2015-08/documents/defsrce2.pdf
[2] Interpreting "Adjacent" for New Source Review and Title V Source Determinations in All Industries Other Than Oil and Gas. EPA memorandum. November 26,2019. https://www.epa.gov/sites/default/files/2019-11/documents/adjacent_guidance.pdf

the D.C. Circuit Court of Appeals' "common-sense notion of a plant". As the EPA states in its guidance, determinations are made on a case-by-case basis.

As stated in the 2019 EPA guidance: "EPA will consider properties that do not share a common boundary or border, or are otherwise not physically touching each other, to be 'adjacent' only if the properties are nevertheless nearby, side-by-side, or neighboring (with allowance being made for some limited separation by, for example, a right of way)."

In this case, the two JCP facilities are each separated by open farmland, with distinct fence lines and secure access, and are not side-by-side or neighboring in a manner that would meet the EPA's proximity threshold.

The substantial physical separation of the two JCP proposed facilities (1.28 miles apart, each with a distinct fence line and separated by open farmland), along with their 100% independent operation and lack of reliance on each other, aligns with the "common-sense notion of a plant," [3] dictating two distinct stationary sources. The prior NOI, submitted on June 16, 2025, reflected one proposed Title V facility, whereas this NOI accounts for a second facility. The two will operate separately and function independently. Moreover, distinct arms of JCP will operate each facility, further underscoring their separate and independent operations.

In accordance with these distinct facility boundaries, the dispersion modeling presented in Section 5.0 of this NOI and Appendix G establishes each fence line as the ambient air boundary. Potential impacts were evaluated for all areas within approximately 35 kilometers outside of these independently established property boundary, reflecting a comprehensive analysis of each property's unique environmental impact.

This interpretation is consistent with EPA Region 8 decisions. For example, in the River Bend Dehydrator Site determination (2017), EPA Region 8 concluded that even facilities within 0.25 miles were not considered adjacent unless they shared a surface site and equipment. In that case, only a co-located wellsite was aggregated with the dehydrator; other nearby well sites and a compressor station were not considered adjacent due to physical separation and lack of shared infrastructure[4].

Similarly, in the Jacques Compressor Station determination (2019), EPA Region 8 found a single source based on common ownership and physical proximity but emphasized that the entities lacked sufficient operational and managerial separation. In contrast, the JCP facilities are physically separated, have distinct fence lines, and are independently operated factors that support a finding of non-adjacency[5].

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[3] 45 FR 52676, 52695 (August 7, 1980). https://www.govinfo.gov/content/pkg/FR-1980-08-07/pdf/FR-1980-08-07.pdf

[4] Source Determination Analysis for River Bend Dehydrator Site. EPA Memorandum. August 9, 2017. https://www.epa.gov/sites/default/files/2017-10/documents/xtoriverbenddehydratorsite.pdf

[5] EPA Letter to Danny Powers, Air Quality Program Manager Southern Ute Indian Tribe from Carl Daly. July 23, 2019. https://www.epa.gov/sites/default/files/2019-10/documents/jaques2019.pdf

This interpretation is also consistent with EPA Region 8's 1998 guidance to the Utah Division of Air Quality regarding Utility Trailer Manufacturing Company. In that case, EPA emphasized that 'adjacent' must be evaluated on a case-by-case basis, with no fixed distance threshold. The agency reaffirmed the use of the 'common sense notion of a plant' and recommended considering whether the distance between facilities is 'sufficiently small that it enables them to operate as a single source.' In the JCP case, the two facilities are separated by 1.28 miles, have no shared infrastructure, and operate independently—factors that strongly support a finding of non-adjacency under both historical and current EPA interpretations[6].

By adhering to the current EPA guidance emphasizing physical proximity, and recognizing the discretion afforded to UDAQ in applying this guidance on a case-by-case basis[7], the two proposed facilities, due to their significant physical separation, secure barriers (fence line) and independent operations, are not physically adjacent and represent separate stationary sources for Title V and PSD permitting purposes.

1.2 EMISSION SOURCES

JCP plans to operate each G3520K engine with a maximum annual usage of continuous operations (8,760 hours per engine). The 3516C engines will operate a maximum of 50 hours per year per engine. These maximum annual usages were used to establish the estimated potential to emit emissions. Engine emission factors listed in Table 1 are based manufacturer emissions data for nitrogen oxides (NO_x), carbon monoxide (CO), volatile organic compounds (VOC), and U.S. EPA AP-42 factors for sulfur dioxide (SO_2) and particulate matter of 2.5/10 microns in diameter ($PM_{10/2.5}$). The G3520K emission factor for NO_x accounts for SCR control, and the CO and VOC factors account for OC control. The brake horsepower (hp) rating for each engine was provided by Caterpillar and were derived based on the understanding that no gear boxes are used for the engines, along with a site-specific rating.

The CAT G3520K engine units are rated at 3,392 hp each. According to manufacturer provided site-specific data, each engine has uncontrolled and controlled emission rates of 1.0 and 0.06 gram per horsepower-hour (g/hp-hr) NO_x. Carbon monoxide (CO), with an uncontrolled rate of 1.11 g/hp-hr, is controlled by 93% from the OC to 0.08 g/hp-hr. VOC emissions and all other organic hazardous trace pollutants are controlled at 50% by the OC. Controlled VOC emission factors are 0.07 g/hp-hr. The lone exception is formaldehyde, which is controlled by 82% (0.0306 g/hp-hr controlled). Please refer to Appendix F outlining the Safety Power OC information. Lastly, AP-42 Section 3.2 factors are applied for $PM_{2.5/10}$ and SO_2. The values are 9.99E-03 and 5.88E-04 lb/MMBtu, respectively. Total Hazardous Air Pollutants were also calculated using AP-42, Section 3.2, Table 2. All HAPs are controlled at 50% per the OC.

[6] Response to Request for Guidance in Defining Adjacent with Respect to Source Aggregation. EPA Letter. May 21, 1998. https://www.epa.gov/sites/default/files/2015-07/documents/util-trl.pdf
[7] Utah Operating Permit Program Approval History. Full Final Approval 60 FR 30192. July 10, 1995.

The emergency CAT 3516C engines are Tier 2 certified each with a maximum rating of 3,633 hp. Potential Site Variation emissions provided by the manufacturer was applied to estimate annual totals except for SO_2.

The indirect-fired absorption Chiller is manufactured by Broad USA and will operate to cool exhaust gas from the G3520K engines. There will be chiller for each engine or 69 in total. The NOx and CO emissions will be 9 parts per million (ppm) and 40 ppm corrected to 3% oxygen, respectively to comply with UDAQ Rule R307-315. Broad USA also provided emissions factors for PM and VOCs. AP-42, Section 1.4 was utilized for SO_2 and all HAPs. All values were provided in lb/MMBtu.

Table 1 Emission Factors – CAT G3520K, 3516C & Chiller/Boiler

Engine Number	Engine Model	NO_x	CO	$PM_{2.5/10}$	VOC	SO_2
		lb/MMBTU or g/bhp-hr[1,2,3]				
1 - 69	CAT G3520K	0.06	0.08	9.99E-03	0.04	5.88E-04
1 - 69	CAT 3516C	6.38	0.76	0.05	0.14	5.49E-03
1-69	CHILLER	1.11E-02	3.00E-02	4.80E-03	2.50E-02	5.88E-04

1. G3520K $PM_{2.5/10}$ and SO_2 emission factors are in units of lb/MMBtu.
2. G3520K NOx, CO EFs assumes 94% and 93% control from the SCR/OC, 50% control EF for VOC.
3. All 3516C emission factors are in g/bhp-hr.

Table 2 presents the annual emission rates, calculated from the emission factors above, horsepower rating and maximum annual hours of operation of 8,760 hours per year (G3520K & Chiller), and 50 hour per year (3516C) . The values represent the Potential to Emit. Table 3 presents maximum hourly emissions rates. Note that the proposed maximum number of 3516C engines that would operate during any given hour would be five. This was determined for 1-hr NO_2 National Ambient Air Quality Standards (NAAQS) compliance. Refer to Section 5 and Appendix G for further details.

Table 2 Annual Emission Rates

Engine Number	Engine Model	Annual Hours	NO_x	CO	$PM_{2.5/10}$	VOC	SO_2	Total HAPs
			tons/year					
1-69	CAT G3520K	8,760	135.60	175.60	57.45	90.40	3.38	124.94
1-69	CAT 3516C	50	88.15	10.50	0.69	1.93	0.08	0.07
1-69	CHILLER	8,760	6.37	17.24	2.76	14.36	0.34	1.06
Total[1]			**230.12**	**203.34**	**60.89**	**106.70**	**3.80**	**126.07**

1. The overall total may be slightly different than individual engine/Chiller totals due to rounding.

Table 3 Hourly Emission Rates

Engine Number	Engine Model	NO_X	CO	$PM_{2.5/10}$	VOC	SO_2	Total HAPs
		lb/hr					
1-69	CAT G3520K	30.96	40.09	13.12	20.64	0.77	28.52
1-5	CAT 3516C	255.50	30.44	2.00	5.61	0.22	0.20
1-69	CHILLER	1.45	3.94	0.63	3.28	0.08	0.24
Total[1]		**287.91**	**74.46**	**15.75**	**29.52**	**1.07**	**28.97**

1. The overall total may be slightly different than individual engine totals due to rounding.

2.0 REGULATORY APPLICABILTY

A review of federal and state and local air quality regulations is provided in Table 4. Each regulation is described in the following sections.

Table 4 Regulatory Applicability Summary

Program Description		Regulatory Citation	Applicable
2.1	National Ambient Air Quality Standards (NAAQS)- (dispersion modeling)	40 CFR Part 50	Yes
2.2	Title V Operating Permit	40 CFR Part 70	Yes
2.3	Air Pollutants (NESHAPs)	40 CFR Parts 61, 63	Yes
2.4	New Source Review (NSR)	40 CFR Part 52	No
2.5	New Source Performance Standards (NSPS)	40 CFR Part 60	Yes
2.6	Acid Rain Requirements	40 CFR Parts 72–78	No
2.7	Risk Management Programs for Chemical Accidental Release Prevention	40 CFR Part 68	No
2.8	State Rules		
2.8.1	General Requirements	UAC [R307-101]	Yes
2.8.2	General Requirements - Breakdowns	UAC [R307-107]	Yes
2.8.3	Emission Inventories	UAC [307-150]	Yes
2.8.4	Permit Requirements for New and Modified Sources	UAC [307-401]	Yes

2.1 NATIONAL AMBIENT AIR QUALITY STANDARDS (NAAQS)

Primary National Ambient Air Quality Standards (NAAQS) are identified in 40 CFR Part 50 and define levels of air quality, which the United States Environmental Protection Agency (USEPA) deems necessary to protect the public health. Secondary NAAQS define levels of air quality, which the USEPA judges necessary to protect public welfare from any known or anticipated adverse effects of a pollutant. Examples of public welfare include protecting wildlife, buildings, national monuments, vegetation, visibility, and property values from degradation due to excessive emissions of criteria pollutants.

Specific standards for the following pollutants have been promulgated by USEPA: PM_{10}, SO_2, NO_2, CO, ozone, lead, and $PM_{2.5}$. McCormick emits PM_{10}, $PM_{2.5}$, SO_2, NO_2, CO, and VOCs, a precursor to ozone. In accordance with the UDAQ Emissions Impact Assessment Guideline and State Rule R307-410-4 there are several criteria pollutants modeling thresholds that are exceeded. NO_2, $PM_{2.5/10}$ and CO averaging periods were modeled. Only SO_2 is not exceeded and not modeled. Refer to Appendix G for the full modeling results report associated with this Notice of Intent application.

2.2 TITLE V (PART 70) OPERATING PERMIT

Title V of the Clean Air Act (CAA) created the federal operating permit program. These permitting requirements are codified in 40 CFR Part 70. These permits are required for major sources with a PTE (considering federally enforceable limitations) greater than 100 tpy for any criteria pollutant (70 tons in Salt Lake County), 25 tpy for all hazardous air pollutants (HAPs) in aggregate, or 10 tpy of any single HAP. As illustrated in Table 2 above, JCP is a major Title V source. All criteria pollutants except for SO_2 and $PM_{2.5/10}$ exceed 100 tons per year, and the HAPs thresholds were exceeded. This was confirmed with UDAQ Flowchart 2 for Sources outside $PM_{2.5}$ Serious Non-attainment Areas[8]. JCP will submit a Title V application within one year of operations reaching the 10/25/100 ton/yr thresholds.

2.3 NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHAPS)

There are two sets of National Emissions Standards for Hazardous Air Pollutants (NESHAPs). The first NESHAP regulations were developed under the auspices of the original CAA. These standards are codified in 40 CFR Part 61 and address a limited number of pollutants and industries. 40 CFR Part 61 regulations do not apply to the JCP facility.

Newer regulations are codified in 40 CFR Part 63 under the authority of the 1990 Clean Air Act Amendments (CAAA). These standards regulate HAP emissions from specific source categories and typically affect only major sources of HAPs, however, some affect minor sources of HAPs. Part 63 regulations are frequently called Maximum Achievable Control Technology (MACT)

[8] https://lf-public.deq.utah.gov/WebLink/ElectronicFile.aspx?docid=394737&eqdocs=DAQ-2021-004327

standards. Major HAP sources have the PTE 10 tpy or more of any single HAP or 25 tpy or more of all combined HAP emissions. A review of all potential NESHAPS concluded that 40 CFR Part 63 Subpart ZZZZ - National Emissions for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines are applicable to the engines at the JCP facility.

The 3516C emergency engines must comply with 40 CFR 63.6640(f)(1-4) as applicable. Section f(2) states that the maximum number of hours of operation is 100. Section f(3) states that at Major sources may operate up to 50 hours in non-emergency situations that contribute to the overall 100 hours. The 3516C engines will not exceed 50 hr/yr as outlined in Section 1.1 above.

The G3520K engines are required to meet emission and operating limits 40 CFR 63.6600(b), Table 2a and 2b. These requirements are met by adding the OC (controls CO by 93%) and the SCR (reduced formaldehyde). An Initial performance test is required outlined in 63.6610. However, 63.6610.d states that the initial testing is not required if a previous is conducted that meets stated criteria. The G3520K engines are also subject to 40 CFR Part 60, Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines, which also requires initial testing. JCP will conduct the appropriate initial tests in accordance with Subpart JJJJ. Subsequent testing is required semiannually per Table 3 of Subpart ZZZZ and will be conducted as necessary until two tests have been completed. Following that, subsequent testing will occur annually, which is also consistent with Subpart JJJJ, 60.4243(b)(2)(ii) for engines that run continuously.

Subpart ZZZZ also requires the implementation of a continuous parameter monitoring system (CPMS) for the G3520K engines. All units will be installed by Wheeler Machinery, a Caterpillar dealer based in Salt Lake City. All equipment will be monitored continuously and operators notified of any potential issues in the system immediately. This may include temperature or pressure drop fluctuation.

Initial start-up notification to UDAQ will be made within 120 days of the facility starting up as outlined in 63.6645(c). Additionally, JCP will maintain records of notifications, compliance demonstrations, performance tests, maintenance, and instances of malfunction where appropriate in accordance with 63.6655(a). Reporting requirements for the G3520K as outlined in Subpart ZZZZ will comply with requirements outlined in Table 7 of the Subpart. The Compliance Report will be submitted to UDAQ semiannually.

The Chiller will have a typical operating rating of 1.901 MMBtu/hr per Broad USA when the CAT G3520K engines are in use. While the chiller should not reach the maximum supplemental natural gas consumption, the value of 6.338 MMBtu/hr were applied to assess applicability to 40 CFR Part 63, Subpart DDDDD. A natural gas unit of greater than 5 MMBtu/hr but less than 10 are subject to work practice standards outlined in 63.7540. Subsection a(11) states that biennial tune-ups are required.

2.4 NEW SOURCE REVIEW (NSR) REQUIREMENTS

Millard County, where JCP is located, is designated as an attainment area for all criteria pollutants. The prevention of significant deterioration (PSD) regulations codified in 40 CFR Part 52 could apply to: (1) a new major source that has the potential to emit 100 tons per year or more for any criteria pollutant for a facility that is one of the 28 industrial source categories listed in 40 CFR § 52.21(b)(1)(i)(a); or (2) a new major source that has the potential to emit 250 tons per year or more if the facility is not on the list of industrial source categories; or (3) a modification to an existing major source that results in a net emission increase greater than a PSD significant emission rate as specified in 40 CFR § 52.21 (b)(23)(i); or (4) a modification to an existing minor source that is major in itself. The proposed permitting action does not trigger any PSD actions as the maximum projected annual NO_x emissions is less than 250 tons.

2.5 NEW SOURCES PERFORMANCE STANDARDS (NSPS)

New Source Performance Standards (NSPS) in 40 CFR Part 60 are applicable to new, modified, or reconstructed stationary sources that meet or exceed specified applicability thresholds. 40 CFR Part 60, Subpart JJJJ is applicable to JCP due to the Caterpillar G3520K engines. The emission standards are 1.0 g/hp-hr for NOx, 2.0 g/hp-hr for CO, and 0.7 g/hp-hr for VOC. JCP will comply with all applicable requirements of the subpart. This includes conducting performance tests outlined above in Section 2.3.

The 3516C engines are applicable to 40 CFR Part 60, Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. The nominal emission rate from the engines meets the standards outlined in 60.4205(d). Ultra-low sulfur diesel will be used to comply with 60.4207(a); requirements outlined in 40 CFR 80.510(c). JCP will comply with any other requirement for the emergency engines outlined in the Subpart.

2.6 ACID RAIN REQUIREMENTS

The acid rain requirements, codified in 40 CFR Parts 72-78, apply only to utilities and other facilities that combust fossil fuel and generate electricity for wholesale or retail sale. The Title IV Acid Rain Program is for sources of combustion and sources that produce over 25 MW of power. 40 CFR Part 72, Subpart 7, of the Acid Rain Program outlines exemption criteria for new sources, including units with a name plate of 25 MW or less that do not burn any coal or coal-derived fuels and burns gaseous fuel with a sulfur content less than 0.05 percent. The largest unit at the JCP facility is 3.39 or 3.63 MW for the G3520K and 3516C, respectively. All units burn exclusively low-sulfur natural gas or diesel. Consequently, the acid rain requirements do not apply to the facility.

2.7 RISK MANAGEMENT PROGRAMS FOR CHEMICAL ACCIDENTAL RELEASE PREVENTION

The facility is not subject to the Chemical Accidental Release Prevention Program and will not be required to develop a Risk Management Plan (RMP). Facilities that produce, process, store, or use any regulated toxic or flammable substance in excess of the thresholds listed in 40 CFR Part 68 must develop an RMP. The facility does not store any regulated toxic or flammable substances in excess of the applicable thresholds. A RMP is not necessary for this facility.

2.8 STATE RULES

The Utah Division of Administrative Rules (DAR) promulgates several emissions regulations that apply to JCP in addition to those listed above.

2.8.1 General Requirements

Utah Administrative Code (UAC) R307-101 provides general definitions, terms, abbreviations and references applicable to the upcoming Approval Order. JCP will comply with this requirement and refer to the rules where necessary.

2.8.2 General Requirements – Breakdowns

UAC R307-107 indicates the applicable general requirements for breakdown events. Breakdowns will be reported within 24 hours of an incident with a written description of the event. JCP will comply with the procedures and requirements outlined in R307-107 and submit the necessary information and reports to UDAQ related to excess emissions due to startup, shutdown, scheduled maintenance, safety measures, upsets, and breakdowns.

2.8.3 Emission Inventories

UAC R307-150 establishes requirements for emission inventory submittals. JCP will comply with this rule where appropriate.

2.8.4 Permit: New and Modified Sources

UAC R307-401 establishes the permitting requirements for any new and modified sources. JCP will comply with any permitting requirements as defined in the rule and that applies to the approval order.

3.0 EMISSIONS SUMMARY

3.1 EMISSION CALCULATIONS

Table 5 outlines the hourly and annual emissions expected from the 69 JCP CAT G3520K, indirect-fired absorption chillers and 3516C engines with a maximum operating time of 8,760 and 50 hr/yr per engine, respectively. The chillers will also operate continuously.

Table 5 Total Emissions

Source	Total Facility Proposed Emission Rate (lb/hr)	Total Facility Proposed Emission Rate (tpy)
NO_x	287.91	230.12
CO	74.46	203.34
$PM_{2.5}$	15.75	60.89
PM_{10}	15.75	60.89
VOC	29.52	106.70
SO_2	1.07	3.80
HAPs	28.97	126.07

3.2 EMISSION OFFSET CREDITS

Emission offset credits were evaluated based on the UDAQ Minor Source Offset Determination Flow Chart[9]. The project is not located in Davis or Salt Lake County and does not impact either. Stantec evaluated an approximate 50 km radius from the center of the JCP facility. That radius goes into Juab, Sanpete and Sevier counties, all of which are also in attainment for all criteria pollutants. Therefore, ozone offsets are not required. PM_{10} offsets are also not required as Salt Lake County, Utah County and Ogden City are not impacted.

[9] https://lf-public.deq.utah.gov/WebLink/DocView.aspx?id=385846&eqdocs=DAQ-2017-006551&cr=1

4.0 AIR POLLUTION CONTROL EQUIPMENT INFORMATION

The following outlines the proposed Best Available Control Technology for both the G3520K and 3516C engines.

4.1 BEST AVAILABLE CONTROL TECHNOLOGY - NATURAL GAS ENGINES

The UDAQ currently has established the general Best Available Control Technology (BACT) guidelines for NO_x emissions from internal combustions engines to be ≤1.0 g/hp-hr or compliant with 40 CFR Part 60 Subpart JJJJ Table 1 standards for non-emergency spark ignition (SI) units. The engines covered in this NOI application are below this emissions level per manufacturer specifications. These engines will meet the BACT requirement for NOx with SCR and OC pollution control devices being installed. Additionally, the EPA BACT Clearinghouse was evaluated. Several determinations were evaluated for Process Code 17.130 or natural gas internal combustion engines greater than 600 hp.

The State of Michigan issued the most recent determination for a non-emergency unit on May 22, 2019, to Michigan State University. The NO_x BACT was set to 0.5 g/hp-hr. Another determination in 2015 for the Delaware Basin Midstream LLC Rasmey Gas Plant issued a NO_x limit of 0.5 g/hp-hr. Lastly, the Cameron Interstate Pipeline, Holbrook Compressor Station in Louisiana set a BACT NOx limit of 4.96 lb/hr. The corresponding lb/hr rate from JCP per engine will be 0.54 as outlined in Appendix C. Lastly, the Lansing Board of Water and Light (6/27/2024) also has a NOx BACT limit of 0.5 g/hp-hr. Therefore, the proposed limit meets or exceeds BACT for NO_x.

Subpart JJJJ limits CO and VOC to 2.0 and 0.7 g/hp-hr, respectively. The determinations above also limited CO and VOC to the following:

- Michigan State: CO 0.3 g/hp-hr; VOC 11 lb/hr
- Lansing Water & Light: CO 0.3 g/hp-hr; 20 lb/hr
- Cameron Interstate Pipeline: CO unknown; VOC 1.25 lb/hr
- Ramsey Gas Plant: CO unknown; VOC 0.091 g/hp-hr

The 69 new G3520K engines will meet or exceed nearly all the emission rates from previous BACT determinations and all current Subpart JJJJ standards. The proposed emission limit amongst the 69 engines is 0.08 g/hp-hr for CO and 0.07 g/hp-hr (0.52 lb/hr) for VOC. These are all well below those reviewed within the Clearinghouse and will remain well within the Subpart JJJJ standard. In

addition to good combustion techniques OCs will also be installed. The OC will reduce the CO emissions by 93%. VOCs will be reduced by 50% and formaldehyde with be reduced by 75% (SCR control). Manufacturer specifications regarding the SCR/OC control are available in Appendix F.

4.2 BEST AVAILABLE CONTROL TECHNOLOGY – DIESEL EMERGENCY ENGINES

Diesel emission estimates are associated with the CAT 3516C engines. These generators meet the EPA's Tier 2 Nonroad Compression-Ignition Engines: Exhaust Emission Standards. Ultra-low sulfur diesel (ULSD) fuel will be used to fuel the engines, which is based on a fuel sulfur content of 0.0015% as defined under 40 CFR 80, Subpart I, Section 80.510(c)(1). The following outlines a top-down, 5-step BACT review.

Identification of Potential Control Technologies

Available control technologies for diesel-fired non-emergency engines include the following:

- Limited Hours of Operation
- Good Combustion Practices
- Use of Tier-Certified Engines
- Diesel Particulate Filter (DPF)
- Ultra-Low Sulfur Fuel
- Diesel Oxidation Catalyst (DOC)
- Selective Catalyst Reduction (SCR)

The following step evaluates the cost and/or technical feasibility of each of these options.

Elimination of Cost/Technically Infeasible Options

Limited Hours of Operation

Reduced hours of operation limits overall annual emissions for the engines. As discussed in Section 1.1, the emergency units are proposed to be reduced from the typical 100 hr/yr to 50 hr/yr.

Good Combustion Practices

Good combustion practices refer to the operation of engines at high combustion efficiency, which reduces the products of incomplete combustion. The engine proposed is designed to achieve maximum combustion efficiency based on the manufactured year which is 2024/2025. These engines will also be maintained and tested regularly by a CAT-certified dealer on recommended intervals to maintain maximum efficiency.

Diesel Particulate Filters

This technology is placed in the exhaust pathway to prevent the release of particulate and may be coated with a catalyst to further capture hydrocarbon emissions. According to EPA's Response to Public Comments on Notice of Reconsideration of NESHAP for RICE and NSPS for Stationary ICE, "Diesel particulate filters (DPFs) are also proven commercially available technology for retrofit applications to stationary engines…and are capable of reducing diesel PM by 90 percent or more."[10] However, PM emissions derived from the generators are expected to be less than 1 ton/yr in aggregate. Therefore, the cost per ton of savings is likely to be significant. For example, EPA[11] suggest that a retrofit could be $10,000 per unit. The expected emissions on a per engine basis is 0.01 tons/yr or 0.69 ton/yr in aggregate. The potential $cost/ton would be $1million per engine. Due to the low number of particulate emissions, it is not feasible to add a DPF to the emergency engines on a cost basis.

Ultra-low Sulfur Diesel

ULSD fuel contains less than 0.0015% sulfur by weight. The reduced sulfur content reduces the potential for SO_2 emissions. Additionally, the low sulfur content results in a lower potential for aggregation of sulfur containing compounds and thus reduces $PM_{2.5}$ emissions. JCP will use ULSD fuel for its 3516C engines.

Diesel Oxidation Catalyst

A Diesel Oxidation Catalyst (DOC) utilizes a catalyst such as platinum or palladium to further oxidize the engine's exhaust, which includes hydrocarbons (i.e., VOC), to carbon dioxide (CO_2) and water. Use of a DOC can result in approximately 90 percent reduction in HC/VOC emissions.[12] In addition to controlling HC/VOC, a DOC also has the potential to reduce PM emissions by 30 percent and CO emissions by 50 percent if low sulfur diesel fuel is used. [10]

The use of a DOC reduces the effective power output of RICE and results in a solid waste stream, resulting in more complex environmental treatment than an engine without it. Since the power output of the proposed engine is required as discussed in the DPF section above, it is critical not to reduce it. As such, a DOC is considered technically infeasible.

[10] Response to Public Comments on Notice of Reconsideration of National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines and New Source Performance Standards for Stationary Internal Combustion Engines, EPA Docket EPA-HQ-OAR-2008-0708, June 16, 2014
[11] Technical Bulletin: Diesel Particulate Filter General Information. EPA-420-F-10-029, May 2010.
[12] U.S. EPA, Alternative Control Techniques Document: Stationary Diesel Engines, March 5, 2010, p. 41. https://www.epa.gov/sites/production/files/2014-02/documents/3_2010_diesel_eng_alternativecontrol.pdf

Selective Catalytic Reduction

SCR systems introduce a liquid reducing agent such as ammonia or urea into the flue gas stream prior to a catalyst. The catalyst reduces the temperature needed to initiate the reaction between the reducing agent and NO_X to form nitrogen and water.

Wheeler Machinery (CAT dealer) has indicated a capital investment cost for a SCR is approximately $200,000 plus another $35,000 for accessories. With an assumed interest rate of 5% and a system life of 10 years translates to a Capital Recovery Factor (CFR) of 0.130. Appropriate Capital Recovery Cost (CRC) is calculated by multiplying the CFR by Capital Investment. CRC is expected to be $30,434 per 3516C.

Annual operating cost is $9,600 which is comprised of $6,000 of maintenance, $2,000 in urea transport and a urea cost of $1,600/yr ($4/gal, a consumption rate of 8 gal/hr and 50 hr/yr operation). Overall total annual cost (TAC) per engine is the CRC + maintenance cost – the realized economic benefit. There is no economic benefit. Therefore, the TAC per engine is $40,034. The SCR is expected to control NOx emissions by 93%. The expected NOx tpy reduced per engine is 1.19. The Cost to Control is $33,630.36 $/ton/engine. With 69 3516C units, the total annual cost is $2.3205 million/ton. As a result, adding SCR control to the emergency engines is cost prohibitive and these units will operate extremely sparingly throughout the year; likely less than the proposed 50 hours.

Ranking of Remaining Technologies by Control Effectiveness

All remaining technologies are being proposed. These include: limitation of hours (50 hr/yr/engine), good combustion practices, use of an EPA Tier-certified engine (Tier 2), and ultra-low sulfur diesel fuel.

5.0 AMBIENT AIR QUALITY ANALYSIS

JCP conducted dispersion modeling for all applicable criteria pollutants and averaging periods that exceeded the thresholds outlined in rule R307-410-4. This included NO_2 (1-hr and annual), $PM_{2.5}$ (24-hr and annual), PM_{10} (24-hr) and CO (1-hr and 8-hr). Additionally, JCP evaluated potential impacts outlined in R307-403-3 (Review of Major Sources of Air Quality Impact). The intent was to ensure that the project did not contribute an impact greater than maximum allowable outlined in that rule at or near the county line. Note that none of the adjacent counties (Juab, Sevier and Sanpete) are part of a non-attainment area for any pollutants. This was performed solely as a check. While SO_2 limits are referenced in the rule, SO_2 was not performed as the expected tpy do not exceed modeling thresholds. Therefore, it is assumed that the impacts from the JCP project would not exceed the allowable concentrations.

AERMOD modeling analysis was conducted out to 35 km beyond the facility boundary. That exceeds the county line in all locations except for directly north of the facility. However, the southwest border of Juab County is exceeded. Therefore, Stantec and JCP believe this assessment is satisfactory to ensure compliance is met at or within the neighboring counties.

Standards are 0.3 and 1.2 µg/m³ for $PM_{2.5}$ annual and 24-hr averaging periods, respectively. The 24-hr PM_{10} standard is 3.0 µg/m³, annual NO_2 is 1.0 µg/m³ and CO 1-hr and 8-hr are 2000 and 500 µg/m³. As discussed in further detail within the Modeling Report, Appendix G, a series of 14 operating scenarios, were evaluated for the emergency diesel engines. Through those runs it was determined that Scenario 5, 6, 10 and 12 produced the worst potential impacts when five emergency engines operated concurrently. The table below illustrates the scenario evaluated for each pollutant, averaging period, the highest impact near/within the neighboring counties and its comparison to the maximum impacts per Rule R307-403-3.

Table 6 Surrounding County Impacts

Scenario	Source	Averaging Period	R307-430-3 (µg/m³)	Modeled Impact (µg/m³) ~35km from PAB	Compliant?
6	NO_2	Annual	1.0	2.60	Yes[a]
5	$PM_{2.5}$	Annual	0.3	0.026	Yes
10	CO	1-hr	2,000	11.21	Yes
		8-hr	500	2.21	Yes
12	PM_{10}	24-hr	3.0	0.209	Yes
5	$PM_{2.5}$	24-hr	1.2	0.124	Yes

a. There is a theoretical exceedance near the Juab County line. However, NOx nearby sources were added to the model at the request of UDAQ modeling personnel. The maximum recptor extending into Juab County is very near the IPP site. IPP contributes 2.27394 µg/m³, while JCP is only 0.01462 µg/m³.

Refer to Appendix G for the full modeling and results report. Hazardous pollutants were not modeled because all engines/boilers are subject to NESHAP federal regulations. Per Utah Division of Air Quality correspondence with Dave Prey, HAP modeling is exempted when subject to any 40 CFR Part 63 Subpart (June 2, 2021, email from D. Prey).

APPENDICES

Appendix A NOI APPLICATION FORMS

Form 1
Notice of Intent (NOI) Application Checklist

Date 7/17/25

Company JCP

Utah Division of Air Quality
New Source Review Section

Source Identification Information [R307-401-5]

1. Company name, mailing address, physical address and telephone number ☑
2. Company contact (Name, mailing address, and telephone number) ☐
3. Name and contact of person submitting NOI application (if different than 2) ☑
4. Source Universal Transverse Mercator (UTM) coordinates ☑
5. Source Standard Industrial Classification (SIC) code ☑
6. Area designation (attainment, maintenance, or nonattainment) ☑
7. Federal/State requirement applicability (NAAQS, NSPS, MACT, SIP, etc.) ☑
8. Source size determination (Major, Minor, PSD) ☑
9. Current Approval Order(s) and/or Title V Permit numbers ☑

NOI Application Information: [R307-401]

1. Detailed description of the project and source process ☑
2. Discussion of fuels, raw materials, and products consumed/produced ☑
3. Description of equipment used in the process and operating schedule ☑
4. Description of changes to the process, production rates, etc. ☑
5. Site plan of source with building dimensions, stack parameters, etc. ☑

6. Best Available Control Technology (BACT) Analysis [R307-401-8]
   A. BACT analysis for all new and modified equipment ☑

7. Emissions Related Information: [R307-401-2(b)]
   A. Emission calculations for each new/modified unit and site-wide (Include PM_{10}, $PM_{2.5}$, NO_x, SO_2, CO, VOCs, HAPs, and GHGs) ☑
   B. References/assumptions, SDS, for each calculation and pollutant ☑
   C. All speciated HAP emissions (list in lbs/hr) ☑

8. Emissions Impact Analysis – Approved Modeling Protocol [R307-410]
   A. Composition and physical characteristics of effluent (emission rates, temperature, volume, pollutant types and concentrations) ☐

9. Nonattainment/Maintenance Areas – Major NSR/Minor (offsetting only) [R307-403]
   A. NAAQS demonstration, Lowest Achievable Emission Rate, Offset requirements ☑ N/A ☐
   B. Alternative site analysis, Major source ownership compliance certification ☐ N/A ■

10. Major Sources in Attainment or Unclassified Areas (PSD) [R307-405, R307-406]
    A. Air quality analysis (air model, met data, background data, source impact analysis) ☑ N/A ☐
    B. Visibility impact analysis, Class I area impact ☐ N/A ■
11. Signature on Application ☑

Note: The Division of Air Quality will not accept documents containing confidential information or data. Documents containing confidential information will be returned to the Source submitting the application.

Form 2
Company Information/Notice of Intent (NOI)

Date 7/17/25

Utah Division of Air Quality
New Source Review Section

Application for: ☑ **Initial Approval Order** ☑ **Approval Order Modification**

General Owner and Source Information

1.Company name and mailing address:
McCornick Energy
2352 West Old Rosebud La
South Jordan, Utah 84095
Phone No.: ((801) 413-8707
Fax No.: ( )

2. Company** contact for environmental matters:
Aaron McDougal
Phone no.: ((801) 413-8707
Email: aaron@joulecapitalpartners
** Company contact only; consultant or independent contractor contact information can be provided in a cover letter*

3. Source name and physical address (if different from above):
Joule Capital Partners, LLC
W 11700 N St;
~2675' E of N Cty Rd 4866
Phone no.: ( )
Fax no.: ( )

4. Source Property Universal Transverse Mercator coordinates (UTM), including System and Datum:
UTM: 12
X: 381071.57 m E
Y: 4338012.96 m N

5. The Source is located in: Millard County

6. Standard Industrial Classification Code (SIC)
4911

7. If request for modification, AO# to be modified: DAQE #_____ DATED: ____/____/____

8. Brief (50 words or less) description of process.
A new data center consisting of 69 CAT G3520K engines and 69 CAT G3516C diesel backup units. There is also 69 boiler chillers.

Electronic NOI

9. A complete and accurate electronic NOI submitted to DAQ Permitting Mangers Jon Black (*jlblack@utah.gov*) or Alan Humpherys (ahumpherys@utah.gov) can expedite review process. Please mark application type.

Hard Copy Submittal ☐ Electronic Copy Submittal ☑ Both ☐

Authorization/Signature

I hereby certify that the information and data submitted in and with this application is completely true, accurate and complete, based on reasonable inquiry made by me and to the best of my knowledge and belief.

Signature: Title:

Aaron McDougal Name (Type or print)	Telephone Number: ((801) 413-8707 Email: aaron@joulecapitalpartners	Date: 6/16/25

Form 5
Emissions Information
Criteria/GHGs/ HAP's
Utah Division of Air Quality
New Source Review Section

Company JCP

Site Data center

Potential to Emit* Criteria Pollutants & GHGs			
Criteria Pollutants	**Permitted Emissions (tons/yr)**	**Emissions Increases (tons/yr)**	**Proposed Emissions (tons/yr)**
PM_{10} Total	0.00	60.89	60.89
PM_{10} Fugitive	0.00	0.00	0.00
$PM_{2.5}$	0.00	60.89	60.89
NO_x	0.00	230.12	230.12
SO_2	0.00	3.80	3.80
CO	0.00	203.34	203.34
VOC	0.00	106.70	106.70
VOC Fugitive	0.00	0.00	0.00
NH_3	0.00	62.51	62.51
Greenhouse Gases	**CO_2e**	**CO_2e**	**CO_2e**
CO_2			
CH_4			
N_2O			
HFCs			
PFCs			
SF_6			
Total CO2e	0.00	799,471.00	799,471.00

**Potential to emit to include pollution control equipment as defined by R307-401-2.*

Hazardous Air Pollutants** *(**Defined in Section 112(b) of the Clean Air Act)*				
Hazardous Air Pollutant***	**Permitted Emissions (tons/yr)**	**Emission Increase (tons/yr)**	**Proposed Emission (tons/yr)**	**Emission Increase (lbs/hr)**
See Appendix C				
Total HAP	0.00	126.07	126.07	28.97

**** Use additional sheets for pollutants if needed*

Form 11 - Natural Gas Boiler and Liquid Heater (Continued)

Modifications for Emissions Reduction

20. Type of modification: ■ Low NO_X Burner ☐ Flue Gas Recirculation (FGR)
☐ Oxygen Trim ☐ Other (specify) _____

For Low-NO_X Burners

21. Burner Type: ■ Staged air ☐ Staged fuel ☐ Internal flue gas recirculation
☐ Ceramic ☐ Other (specify): _____

22. Manufacturer and Model Number: Broad USA

23. Rating: _____ 10^6 BTU/HR

24. Combustion air blower horsepower: _____

For Flue Gas Recirculation (FGR)

25. Type: ☐ Induced ☐ Forced Recirculation fan horsepower: _____

26. FGR capacity at full load: _____ scfm _____%FGR

27. FGR gas temperature or load at which FGR commences: _____ ^{O}F _____% load

28. Where is recirculation flue gas reintroduced? _____

For Oxygen Trim Systems

29. Manufacturer and Model Number: _____

30. Recorder: ☐ yes ☐ no Describe: _____

Stack or Vent Data

31. Inside stack diameter or dimensions 24.9'
Stack height above the ground 55'
Stack height above the building 30'

32. Gas exit temperature: 320 ^{O}F

33. Stack serves: ■ this equipment only, ☐ other equipment (submit type and rating of all other equipment exhausted through this stack or vent)

34. Stack flow rate: 9358 acfm Vertically restricted? ☐ Yes ■ No

Emissions Calculations (PTE)

35. Calculated emissions for this device Per Chiller

PM_{10} 0.0091 Lbs/hr	0.04 Tons/yr	$PM_{2.5}$ 0.0091 Lbs/hr	0.04 Tons/yr
NO_x 0.0211 Lbs/hr	0.0923 Tons/yr	SO_x 0.0011 Lbs/hr	0.0049 Tons/yr
CO 0.0570 Lbs/hr	0.2499 Tons/yr	VOC 0.0475 Lbs/hr	0.2082 Tons/yr
CO_2 971.96 Tons/yr		CH_4 1.83E-02 Tons/yr	
N_2O 1.83E-03 Tons/yr			

HAPs 3.52E-03 Lbs/hr (speciate) 1.52E-02 Tons/yr (speciate)

Submit calculations as an appendix. If other pollutants are emitted, include the emissions in the appendix.

Utah Division of Air Quality
New Source Review Section

Form 11
Internal Combustion Engines

Company JCP
Site/Source Datacenter
Date 7/17/25

Equipment Information

1. Manufacturer: Caterpillar (69units)
Model no.: 3516C
The date the engine was constructed or reconstructed June 1, 2025

2. Operating time of Emission Source:

	average	maximum
Hours/day	<1	<1
Days/week	<1	<1
Weeks/year	1	1

3. Manufacturer's rated output at baseload, ISO 3633 hp or ____ Kw
Proposed site operating range 3633 hp or ____ Kw

Gas Firing

4. Are you operating site equipment on pipeline quality natural gas: ☐ Yes ☐ No

5. Are you on an interruptible gas supply:
☐ Yes ■ No
If "yes", specify alternate fuel:
_____

6. Annual consumption of fuel:
_____ MMSCF/Year

7. Maximum firing rate:
_____ MMBTU/hr

8. Average firing rate:
_____ MMBTU/hr

Oil Firing

9. Type of oil:
Grade number ☐ 1 ■ 2 ☐ 4 ☐ 5 ☐ 6 Other specify _____

10. Annual consumption: 8,400 per engine gallons

11. Heat content: _____ BTU/lb or 137,000 BTU/gal

12. Sulfur content: 0.0015 % by weight

13. Ash content: _____ % by weight

14. Average firing rate: 168 gal/hr

15. Maximum firing rate: 168 gal/hr

16. Direction of firing: ☐ horizontal ☐ tangential ☐ other: (specify)

Internal Combustion Engine
Form 11 (Continued)

Operation

17. Application:
- ☐ Electric generation
  _____ Base load _____ Peaking
- ■ Emergency Generator
- ☐ Driving pump/compressor
- ☐ Exhaust heat recovery
- ☐ Other (specify) _____

18. Cycle
- ■ Simple cycle
- ☐ Regenerative cycle
- ☐ Cogeneration
- ☐ Combined cycle

Emissions Data

19. Manufacturer's Emissions in grams per hour (gr/hp-hr): 6.38 NO_X 0.76 CO 0.14 VOC
2.51E-04 Formaldehyde Mfr specs/AP-42 for HCOH

20. Attach manufacturer's information showing emissions of NO_x, CO, VOC, SO_x, CH_2O, PM_{10}, $PM_{2.5}$, CO_2, CH_4 and N_2O for each proposed fuel at engine loads and site ambient temperatures representative of the range of proposed operation. The information must be sufficient to determine maximum hourly and annual emission rates. Annual emissions may be based on a conservatively low approximation of site annual average temperature. Provide emissions in pounds per hour and except for PM_{10} and $PM_{2.5}$ parts per million by volume (ppmv) at actual conditions and corrected to dry, 15% oxygen conditions.

Method of Emission Control:

☐ Lean premix combustors ☐ Oxidation catalyst ☐ Water injection ■ Other (specify) turbocharger

☐ Other low-NO_x combustor ☐ SCR catalyst ☐ Steam injection

Additional Information

21. On separate sheets provide the following:

A. Details regarding principle of operation of emission controls. If add-on equipment is used, provide make and model and manufacturer's information. Example details include: controller input variables and operational algorithms for water or ammonia injection systems, combustion mode versus engine load for variable mode combustors, etc.

B. Exhaust parameter information on attached form.

C. All calculations used for the annual emission estimates must be submitted with this form to be deemed complete.

D. All formaldehyde emissions must be modeled as per Utah Administrative Code R307-410-5 using SCREEN3.

E. If this form is filled out for a new source, forms 1 and 2 must be submitted also.

INTERNAL COMBUSTION ENGINE
FORM 11 (continued)
EMISSION SOURCES

Review of applications and issuance of permits will be expedited by supplying all necessary information requested on this form.

AIR CONTAMINANT DATA							EMISSION POINT DISCHARGE PARAMETERS							
EMISSION POINT (1)		CHEMICAL COMPOSITION OF TOTAL STREAM			AIR CONTAMINANT EMISSION RATE		UTM COORDINATES OF EMISSION PT. (6)			STACK SOURCES (7)				
										HEIGHT ABOVE GROUND (FT)	HEIGHT ABOVE STRUCT. (FT)	EXIT DATA		
NUMBER	NAME	COMPONENT OR AIR CONTAMINANT NAME (2)		CONC. (%V) (3)	LB/HR (4)	TONS/YR (5)	ZONE	EAST (METERS)	NORTH (METERS)			DIA. (FT)	VELO. (FPS)	TEMP. (^{O}F)
See Appendix C&G														

GROUND ELEVATION OF FACILITY ABOVE MEAN SEA LEVEL _____ feet.
UTAH AIR CONSERVATION BOARD STANDARD CONDITIONS ARE 68^{O} F AND 14.7 PSIA.

General Instructions for this form.

1. Identify each emission; point with a unique number for this plant site on plot plan, previous permits and emission inventory questionnaire. Limit emission point number to 8 character spaces. For each emission point use as many lines as necessary to list air contaminant data. Typical emission point names are: heater, vent, boiler, tank, reactor, separator, baghouse, fugitive, etc. Abbreviations are OK.
2. Typical component names are: air, H_2O, nitrogen, oxygen, CO_2, CO, NO_x, SO_x, hexane, particulate matter (PM_{10} and $PM_{2.5}$), etc. Abbreviations are OK.
3. Concentration data is required for all gaseous components. Show concentration in volume percent of total gas stream.
4. Pounds per hour. (#/hr) is maximum emission rate expected by applicant.
5. Tons per year (T/Y) is annual maximum emission rate expected by applicant, which takes into account process operating schedule.
6. As a minimum applicant must furnish a facility plot plan drawn to scale showing a plant benchmark, latitude and longitude correct to the nearest second for the benchmark, and all emission points dimensioned with respect to the benchmark. Please show emission point UTM coordinates if known.
7. Supply additional information as follows if appropriate:
   (a) Stack exit configuration other than a round vertical stack. Show length and width for a rectangular stack. Indicate if horizontal discharge with a note.
   (b) Stack's height above supporting or adjacent structures if structure is within three "stack heights above ground" of stack.

Utah Division of Air Quality
New Source Review Section

Company: Joule Capital Partners
Site/Source: Datacenter
Date: 7/17/25

Form 11
Internal Combustion Engines

Equipment Information

1. Manufacturer: Caterpillar (69units)
   Model no.: G3520K
   The date the engine was constructed or reconstructed: June 1, 2025

2. Operating time of Emission Source:

average		maximum	
24	Hours/day	24	Hours/day
7	Days/week	7	Days/week
52	Weeks/year	52	Weeks/year

3. Manufacturer's rated output at baseload, ISO: 3392 hp or ____ Kw
   Proposed site operating range: 3392 hp or ____ Kw

Gas Firing

4. Are you operating site equipment on pipeline quality natural gas: ■ Yes ☐ No

5. Are you on an interruptible gas supply:
   ☐ Yes ■ No
   If "yes", specify alternate fuel: _____

6. Annual consumption of fuel: 163.46 per engine (11,278.44 total) MMSCF/Year

7. Maximum firing rate: 19.03 per engine MMBTU/hr

8. Average firing rate: 19.03 per engine MMBTU/hr

Oil Firing

9. Type of oil:
   Grade number ☐ 1 ☐ 2 ☐ 4 ☐ 5 ☐ 6 Other specify _____

10. Annual consumption: _____ gallons

11. Heat content: _____ BTU/lb or _____ BTU/gal

12. Sulfur content: _____% by weight

13. Ash content: _____% by weight

14. Average firing rate: _____ gal/hr

15. Maximum firing rate: _____ gal/hr

16. Direction of firing: ☐ horizontal ☐ tangential ☐ other: (specify)

Internal Combustion Engine
Form 11 (Continued)

Operation

17. Application:
- ■ Electric generation
  _____ Base load X Peaking
- ☐ Emergency Generator
- ☐ Driving pump/compressor
- ☐ Exhaust heat recovery
- ☐ Other (specify) _____

18. Cycle
- ■ Simple cycle
- ☐ Regenerative cycle
- ☐ Cogeneration
- ☐ Combined cycle

Emissions Data

19. Manufacturer's Emissions in grams per hour (gr/hp-hr): 0.06 NO_X 0.08 CO 0.04 VOC
0.17 Formaldehyde Based on SCR/OC control

20. Attach manufacturer's information showing emissions of NO_x, CO, VOC, SO_x, CH_2O, PM_{10}, $PM_{2.5}$, CO_2, CH_4 and N_2O for each proposed fuel at engine loads and site ambient temperatures representative of the range of proposed operation. The information must be sufficient to determine maximum hourly and annual emission rates. Annual emissions may be based on a conservatively low approximation of site annual average temperature. Provide emissions in pounds per hour and except for PM_{10} and $PM_{2.5}$ parts per million by volume (ppmv) at actual conditions and corrected to dry, 15% oxygen conditions.

Method of Emission Control:

☐ Lean premix combustors ■ Oxidation catalyst ☐ Water injection ☐ Other (specify)_____

☐ Other low-NO_x combustor ■ SCR catalyst ☐ Steam injection

Additional Information

21. On separate sheets provide the following:

A. Details regarding principle of operation of emission controls. If add-on equipment is used, provide make and model and manufacturer's information. Example details include: controller input variables and operational algorithms for water or ammonia injection systems, combustion mode versus engine load for variable mode combustors, etc.

B. Exhaust parameter information on attached form.

C. All calculations used for the annual emission estimates must be submitted with this form to be deemed complete.

D. All formaldehyde emissions must be modeled as per Utah Administrative Code R307-410-5 using SCREEN3.

E. If this form is filled out for a new source, forms 1 and 2 must be submitted also.

INTERNAL COMBUSTION ENGINE
FORM 11 (continued)
EMISSION SOURCES

Review of applications and issuance of permits will be expedited by supplying all necessary information requested on this form.

AIR CONTAMINANT DATA							EMISSION POINT DISCHARGE PARAMETERS							
EMISSION POINT (1)		CHEMICAL COMPOSITION OF TOTAL STREAM			AIR CONTAMINANT EMISSION RATE		UTM COORDINATES OF EMISSION PT. (6)			STACK SOURCES (7)				
										HEIGHT ABOVE GROUND (FT)	HEIGHT ABOVE STRUCT. (FT)	EXIT DATA		
NUMBER	NAME	COMPONENT OR AIR CONTAMINANT NAME (2)		CONC. (%V) (3)	LB/HR (4)	TONS/YR (5)	ZONE	EAST (METERS)	NORTH (METERS)			DIA. (FT)	VELO. (FPS)	TEMP. (^{O}F)
See Appendix C&G														

GROUND ELEVATION OF FACILITY ABOVE MEAN SEA LEVEL _____ feet.
UTAH AIR CONSERVATION BOARD STANDARD CONDITIONS ARE 68^{O} F AND 14.7 PSIA.

General Instructions for this form.

1. Identify each emission; point with a unique number for this plant site on plot plan, previous permits and emission inventory questionnaire. Limit emission point number to 8 character spaces. For each emission point use as many lines as necessary to list air contaminant data. Typical emission point names are: heater, vent, boiler, tank, reactor, separator, baghouse, fugitive, etc. Abbreviations are OK.
2. Typical component names are: air, H_2O, nitrogen, oxygen, CO_2, CO, NO_x, SO_x, hexane, particulate matter (PM_{10} and $PM_{2.5}$), etc. Abbreviations are OK.
3. Concentration data is required for all gaseous components. Show concentration in volume percent of total gas stream.
4. Pounds per hour. (#/hr) is maximum emission rate expected by applicant.
5. Tons per year (T/Y) is annual maximum emission rate expected by applicant, which takes into account process operating schedule.
6. As a minimum applicant must furnish a facility plot plan drawn to scale showing a plant benchmark, latitude and longitude correct to the nearest second for the benchmark, and all emission points dimensioned with respect to the benchmark. Please show emission point UTM coordinates if known.
7. Supply additional information as follows if appropriate:
   (a) Stack exit configuration other than a round vertical stack. Show length and width for a rectangular stack. Indicate if horizontal discharge with a note.
   (b) Stack's height above supporting or adjacent structures if structure is within three "stack heights above ground" of stack.

Utah Division of Air Quality
New Source Review Section

Company: Joule Capital Partners
Site/Source: Datacenter
Date: 7/17/25

Form 19
Natural Gas Boilers and Liquid Heaters

Boiler Information

1. Boiler Manufacturer: Broad USA
2. Model Number: BZHE300-d
3. Serial Number: _____
4. Boiler Rating: _____ (10^6 Btu per Hour)
5. Operating Schedule: 24 hours per day 7 days per week 52 weeks per year
6. Use: ☐ steam: psig _____ ☐ hot water ☐ other hot liquid: _____
7. Fuels:
   - ■ Natural Gas ☐ LPG ☐ Butane ☐ Methanol
   - ☐ Process Gas - H_2S content in process gas _____ grain/100cu.ft.
   - ☐ Fuel Oil - specify grade: _____ ☐ Other, specify: _____
   - Sulfur content _____ % by weight Days per year during which unit is oil fired: _____
   - Backup Fuel: ☐ Diesel ☐ Natural Gas ☐ LPG ☐ Butane ☐ Methanol ☐ Other _____
8. Is unit used to incinerate waste gas liquid stream? ☐ yes ■ no
   (Submit drawing of method of waste stream introduction to burners)

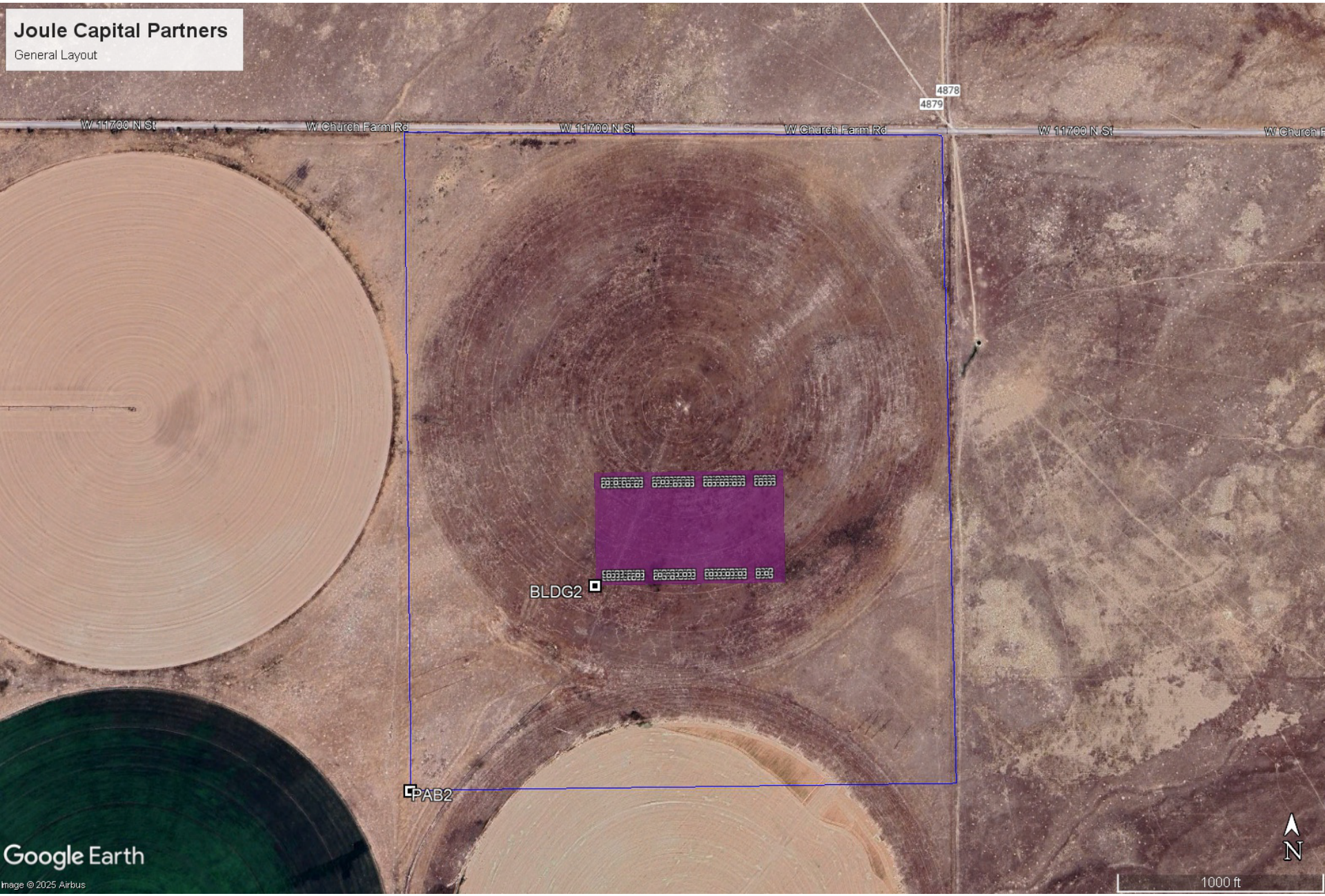
Gas Burner Information

9. Gas Burner Manufacturer: Broad USA
10. No. of Burners: 1
11. Minimum rating per burner: 9358 cu. ft/hr
12. Average Load: 20 %
13. Maximum rating per burner: _____ cu. ft/hr
14. Performance Guarantee (ppm dry corrected to 3% Oxygen):
    NO_x: 9 CO: 0.04 Hydrocarbons: 0.025 lb/MMBtu
15. Gas burner mode of control: ☐ Manual ■ Automatic on-off ☐ Automatic hi-low ☐ Automatic full modulation

Oil Burner Information

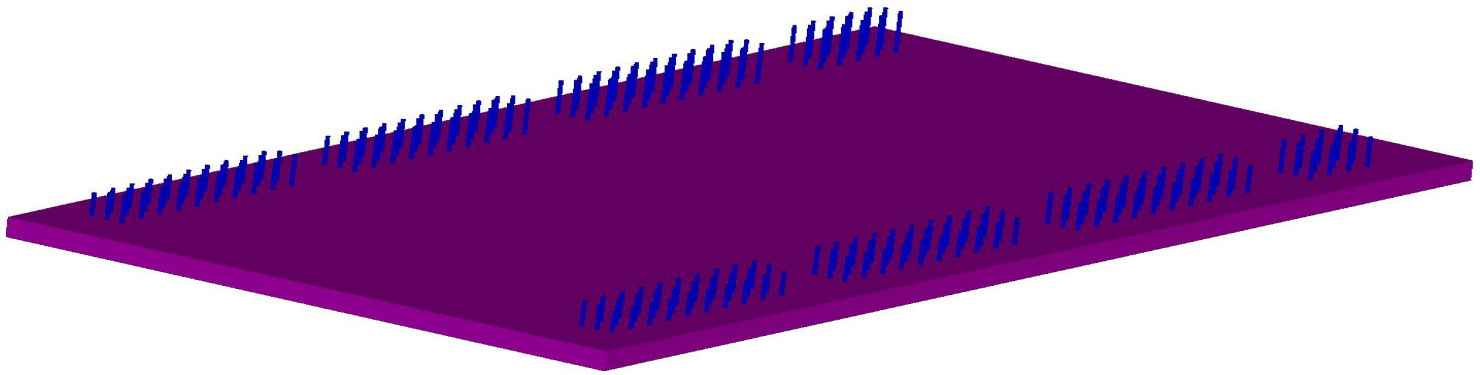
16. Oil burner manufacturer:
17. Model: _____ number of burners: _____ Size number: _____
18. Minimum rating per burner: _____ gal/hr
19. Maximum rating per burner: _____ gal/hr

Appendix B LAYOUT MAP


Joule Capital Partners
General Layout
W 11700 N St
W Church Farm Rd
W 11700 N St
W Church Farm Rd
W 11700 N St
W Church F
4878
4879
BLDG2
PAB2
Google Earth
Image © 2025 Airbus
N
1000 ft

JCP Modeling Layouts of Sources and Buildings

All G3520K Engine Stacks:
Heights: 55'
Diameter: 24"



All Chiller/Boiler Stacks:
Heights: 55'
Diameter: 24.9"

Generation Building:
Engines 1 through 69

All G3516C Engine Stacks:
Heights: 50'
Diameter: 24"

Appendix C EMISSIONS INVENTORY

Project Summary Emissions Estimates

Configuration	NOx	CO	PM10	PM2.5	VOC	SO2	HAP
	Pounds Per Hour						
Natural Gas Engines	30.96	40.09	13.12	13.12	20.64	0.77	28.52
Diesel Backup Engines	255.50	30.44	2.00	2.00	5.61	0.22	0.20
Chiller Boiler	1.45	3.94	0.63	0.63	3.28	0.08	0.24
Total	**287.91**	**74.46**	**15.75**	**15.75**	**29.52**	**1.07**	**28.97**

Configuration	NOx	CO	PM10	PM2.5	VOC	SO2	HAP	GHG
	Tons Per Year							
Natural Gas Engines	135.60	175.60	57.45	57.45	90.40	3.38	124.94	744,227
Diesel Backup Engines	88.15	10.50	0.69	0.69	1.93	0.08	0.07	54,272
Chiller Boiler	6.37	17.24	2.76	2.76	14.36	0.34	1.06	67133.78
Total	**230.12**	**203.34**	**60.89**	**60.89**	**106.70**	**3.80**	**126.07**	**865,632**

Natural Gas Engines

Rating (hp)	**3392**	hp
Operational Hours	**8760**	hr/yr
Engine Type	4-Stroke lean burn	
Number of Units	**69**	
Engine Fuel Consumption	**5611**	Btu/bhp-hr

2531.34 kW

Criteria Pollutants	g/hp-hr	lb/MMBtu	lb/hr	Tons/yr	Reference
NOx	0.06		30.96	135.60	Manufacturer Data or AP-42 Table 3.2-2
CO	0.08		40.09	175.60	
PM10		9.99E-03	13.12	57.45	
PM2.5		9.99E-03	13.12	57.45	
VOC	0.04		20.64	90.40	
SO2		5.88E-04	0.77	3.38	
HAP			28.52	124.94	See Below

The g/hp-hr rates are based on site specific 100% loading.

NOx is controlled by SCR at 94%

CO and VOCs are controlled by Oxidation Catalyst at 93 and 50%, respectively.

Hazard Pollutant	lb/MMBtu	lb/hr	Tons/yr	Reference
1,1,2,2-Tetrachloroethane	4.00E-05	2.63E-02	1.15E-01	Manufacturer Data or AP-42 Table 3.2-2
1,1,2-Trichloroethane	3.18E-05	2.09E-02	9.15E-02	
1,3-Butadiene	2.67E-04	1.75E-01	7.68E-01	
1,3-Dichloropropane	2.64E-05	1.73E-02	7.59E-02	
2,2,4-Trimethylpentane	2.50E-04	1.64E-01	7.19E-01	
2-Methylnaphthalene	3.32E-05	2.18E-02	9.55E-02	
Acenaphthene	1.25E-06	8.21E-04	3.60E-03	
Acenaphthylene	5.53E-06	3.63E-03	1.59E-02	
Acetaldehyde	8.36E-03	5.49E+00	2.40E+01	
Acrolein	5.14E-03	3.38E+00	1.48E+01	
Benzene	4.40E-04	2.89E-01	1.27E+00	
Benzo(b)fluoranthene	1.66E-07	1.09E-04	4.77E-04	
Benzo(e)pyrene	4.15E-07	2.72E-04	1.19E-03	
Benzo(g,h,i)perylene	4.14E-07	2.72E-04	1.19E-03	
Biphenyl	2.12E-04	1.39E-01	6.10E-01	
Carbon Tetrachloride	3.67E-05	2.41E-02	1.06E-01	
Chlorobenzene	3.04E-05	2.00E-02	8.74E-02	
Chloroform	2.85E-05	1.87E-02	8.20E-02	
Chrysene	6.93E-07	4.55E-04	1.99E-03	
Ethylbenzene	3.97E-05	2.61E-02	1.14E-01	
Ethylene Dibromide	4.43E-05	2.91E-02	1.27E-01	
Fluoranthene	1.11E-06	7.29E-04	3.19E-03	
Fluorene	5.67E-06	3.72E-03	1.63E-02	
Formaldehyde*	1.70E-01	1.58E+01	6.92E+01	
Methanol	2.50E-03	1.64E+00	7.19E+00	
Methylene Chloride	2.00E-05	1.31E-02	5.75E-02	
n-Hexane	1.11E-03	7.29E-01	3.19E+00	
Naphthalene	7.44E-05	4.89E-02	2.14E-01	
PAH	2.69E-05	1.77E-02	7.74E-02	
Phenanthrene	1.04E-05	6.83E-03	2.99E-02	
Phenol	2.40E-05	1.58E-02	6.90E-02	
Pyrene	1.36E-06	8.93E-04	3.91E-03	
Styrene	2.36E-05	1.55E-02	6.79E-02	
Tetrachloroethane	2.48E-06	1.63E-03	7.13E-03	
Toluene	4.08E-04	2.68E-01	1.17E+00	
Vinyl Chloride	1.49E-05	9.78E-03	4.29E-02	
Xylene	1.84E-04	1.21E-01	5.29E-01	

* Formaldehyde is in g/hp-hr and controlled by 82% per SCR

GHG Pollutant	g/hp-hr	lb/hr	Tons/yr	GWP	Reference*
CO2	329	169,757	743,536	1	EPA GHG Emission Factors * CAT data
CH4**	1	2.90	12.68	28	
N2O**	0.1	0.29	1.27	265	
CO2e		169,915	744,227		

*https://www.epa.gov/system/files/documents/2025-01/ghg-emission-factors-hub-2025.pdf; CO2 is 329 g/hp-hr

Emergency Diesel Engines

Rating (hp)	**3633**	hp
Operational Hours	**50**	hr/yr
Engine Type	Diesel	
Tier Certification	**2**	
Number of Units	**69**	
Max Number per hr	**5**	
Engine Fuel Consumption	**7000**	Btu/bhp-hr

2711.19 kW

Criteria Pollutants	g/hp-hr	lb/hp-hr	lb/hr	Tons/yr	Reference
NOx	6.38		255.50	88.15	Manufacturer Data or AP-42 Table 3.4-1
CO	0.76		30.44	10.50	
PM10	0.05		2.00	0.69	
PM2.5	0.05		2.00	0.69	
VOC	0.14		5.61	1.93	
SO2		1.21E-05	0.22	0.08	
HAP			0.20	0.07	See Below

Hazard Pollutant	g/hp-hr	lb/MMBtu	lb/hr	Tons/yr	Reference
Benzene		7.76E-04	9.87E-02	3.40E-02	AP-42 Table 3.4-3 & 3.4-4
Toluene		2.81E-04	3.57E-02	1.23E-02	
Xylene		1.93E-04	2.45E-02	8.47E-03	
Formaldehyde		7.89E-05	1.00E-02	3.46E-03	
Acetaldehyde		2.52E-05	3.20E-03	1.11E-03	
Acrolein		7.88E-06	1.00E-03	3.46E-04	
Naphthalene		1.30E-04	1.65E-02	5.70E-03	
Acenaphthylene		9.23E-06	1.17E-03	4.05E-04	
Acenaphthene		4.68E-06	5.95E-04	2.05E-04	
Fluorene		1.28E-05	1.63E-03	5.62E-04	
Phenanthrene		4.08E-05	5.19E-03	1.79E-03	
Anthracene		1.23E-06	1.56E-04	5.40E-05	
Fluoranthene		4.03E-06	5.12E-04	1.77E-04	
Pyrene		3.71E-06	4.72E-04	1.63E-04	
Benzo(a)anthracene		6.22E-07	7.91E-05	2.73E-05	
Chrysene		1.53E-06	1.95E-04	6.71E-05	
Benzo(b)fluoranthene		1.11E-06	1.41E-04	4.87E-05	
Benzo(k)fluoranthene		2.18E-07	2.77E-05	9.56E-06	
Benzo(a)pyrene		2.57E-07	3.27E-05	1.13E-05	
Indeno(1,2,3-cd)pyrene		4.14E-07	5.26E-05	1.82E-05	
Dibenz(a,h)anthracene		3.46E-07	4.40E-05	1.52E-05	
Benzo(g,h,i)perylene		5.56E-07	7.07E-05	2.44E-05	

GHG Pollutant	lb/hp-hr	lb/hr	Tons/yr	GWP	Reference
CO2	1.16	21,071	7,270	1	AP-42 Table 3.4-1
CH4**	3	0.84	580	28	
N2O**	0.6	0.17	116.05	265	
CO2e		21,140	54,272		

GWP values are derived from 40 CFR Part 98 Table A-1

** Emission factors are in g/MMBtu

NOx MW	46.01	g/mol	
CO MW	28.01	g/mol	
NG MV	379.7	scf/lb-mol	Molar Volume NG
NG MW	20	lb/lb-mol	Molecular weight NG
NG Fd	8710	scf/MMBtu	EPA Method 19
NG HHV	1020	btu/scf	
Gas flow Rate	4094.3	scfm	
O2% correction	3		
NOx PPM	9	R307-315	
CO PPM	40	R307-315	
NOx lb/MMBtu	1.11E-02		
CO lb/MMBtu	3.00E-02		
20% Chiller/100% Eng Fuel Consumption	1.901	MMBtu/hr	

$$\frac{lb}{MMBtu} = ppm * 10^{-6} * \frac{1}{molar\ volume} * Molar\ Weight * F_d * \frac{20.9}{(20.9 - \%O_2)}$$

https://www.ourair.org/wp-content/uploads/PPMV-to-lb-per-MMBTU.xlsx

				69 Units	
NOx	0.0211		0.0923		6.371928	
CO	0.0570		0.2499		17.24048	
PM2.5/10	0.0091	lb/hr	0.0400	tpy	2.757697	tpy
VOC	0.0475		0.2082		14.36301	
SO2	0.0011		0.0049		0.337953	

PM2.5/10, and VOC from Broad USA

SO2 from AP-42 1.4-2

Engine % load	Engine Waste Heat recovery (approx. tons)	Chiller Installed capacity / Burner Capacity	load on Burner	capacity (tons) by Burner	Nat. Gas supplemental consump. kBtu/hr (MBH)	Flue gas Outlet temp	Flue Gas Flow rate ft3/hr	Nox PPM
97%	**600**		20%	150	1901	320 F	9358	9
61%	**375**		50%	375	3169	320 F	15607	9
		750 tons						
30%	**188**		75%	563	4753	320 F	23402	9
0 / Shut down status			100%	750	6338	320 F	31206	9

Provided by Broad USA

HAPS	lb/scf	lb/hr	TPY	69 TPY
Benzene	2.10E-03	3.91E-06	1.71E-05	1.18E-03
Dichlorobenzene	1.20E-03	2.24E-06	9.80E-06	6.76E-04
Formaldehyde	7.50E-02	1.40E-04	6.12E-04	4.22E-02
Hexane	1.8	3.35E-03	1.47E-02	1.01E+00
Naphthalene	6.10E-04	1.14E-06	4.98E-06	3.44E-04
Toluene	3.40E-03	6.34E-06	2.78E-05	1.92E-03
Arsenic	2.00E-04	3.73E-07	1.63E-06	1.13E-04
Beryllium	1.20E-05	2.24E-08	9.80E-08	6.76E-06
Cadmium	1.10E-03	2.05E-06	8.98E-06	6.20E-04
Chromium	1.40E-03	2.61E-06	1.14E-05	7.89E-04
Cobalt	8.40E-05	1.57E-07	6.86E-07	4.73E-05
Manganese	3.80E-04	7.08E-07	3.10E-06	2.14E-04
Mercury	2.60E-04	4.85E-07	2.12E-06	1.46E-04
Nickel	2.10E-03	3.91E-06	1.71E-05	1.18E-03
Selenium	2.40E-05	4.47E-08	1.96E-07	1.35E-05
Total POM		1.64E-07	7.20E-07	4.97E-05
Total HAPs		**3.52E-03**	**1.54E-02**	**1.06E+00**

All factors from AP-42 1.4-3 and 1.4-4

POM HAPs	lb/scf	lb/hr	TPY	69 TPY
2-Methylnaphthalene	2.40E-05	4.47E-08	1.96E-07	1.35E-05
3-Methylcholantrene	1.80E-06	3.35E-09	1.47E-08	1.01E-06
7,12-Dimethylbenz(a)anthracene	1.60E-05	2.98E-08	1.31E-07	9.01E-06
Acenaphthlene	1.80E-06	3.35E-09	1.47E-08	1.01E-06
Acenaphthylene	1.80E-06	3.35E-09	1.47E-08	1.01E-06
Anthracene	2.40E-06	4.47E-09	1.96E-08	1.35E-06
Benzo(a)anthracene	1.80E-06	3.35E-09	1.47E-08	1.01E-06
Benzo(a)pyrene	1.20E-06	2.24E-09	9.80E-09	6.76E-07
Benzo(b)fluoranthene	1.80E-06	3.35E-09	1.47E-08	1.01E-06
Benzo(g,h,i)perylene	1.20E-06	2.24E-09	9.80E-09	6.76E-07
Benzo(k)fluoranthene	1.80E-06	3.35E-09	1.47E-08	1.01E-06
Chrysene	1.80E-06	3.35E-09	1.47E-08	1.01E-06
Dibenzo(a,h)anthracene	1.20E-06	2.24E-09	9.80E-09	6.76E-07
Fluoranthene	3.00E-06	5.59E-09	2.45E-08	1.69E-06
Fluorene	2.80E-06	5.22E-09	2.29E-08	1.58E-06
Indeno(1,2,3-cd)pyrene	1.80E-06	3.35E-09	1.47E-08	1.01E-06
Phenanathrene	1.70E-05	3.17E-08	1.39E-07	9.58E-06
Pyrene	5.00E-06	9.32E-09	4.08E-08	2.82E-06

GHG Emissions	kg/MMBtu	lb/hr	TPY	GWP
CO2	53.06	221.91	971.9549902	1
CH4	1.00E-03	4.18E-03	1.83E-02	28
N2O	1.00E-04	4.18E-04	1.83E-03	265
CO2e		15327.35	67133.78	

https://www.epa.gov/system/files/documents/2025-01/ghg-emission-factors-hub-2025.pdf

Gen Bldg	
X	Y
382620.24	4340682.19
382900.86	4340682.19
382900.86	4340848.43
382620.24	4340848.43

Boundary	
X	Y
380595.00	4338539.00
381448.44	4338539.00
381448.44	4337624.60
380595.00	4337624.60

Grid Info	Spacing (m)	Distance (m)
PAB	25	N/A
Grid1	25	100
Grid2	50	350
Grid3	100	850
Grid4	250	1850
Grid5	500	4350
Grid6	1000	10350
Grid7	5000	35350

Domain Anchors (AERMAP)		
	X	Y
NE	423064.26	4385970.13
SW	329692.97	4299144.45

380881.41	4337998.68

180

Building			PAB				
	545.42 ft	width	3000 ft	width			
	920.67 ft	length	2800 ft	length			
G3520K							
from NW	47.33 ft			Chiller diar	16 in		
	63.25 ft				33.5 in		
Space each 10	67.33 ft		869.33		24.9 in		
Spacing	20 ft						
Diesel to NG	27.58 ft						
Diesel to Chill	13.79 ft						

9.231968

Sources		X	Y	Height	Temp	Diameter	Flow	Velocity
		(m)	(m)	(ft)	(F)	(in)	(cfm)	(m/s)
ENGINE1	Engine#1	382634.67	4340829.15	50	320	24	14882	24.0644
ENGINE2	Engine#2	382640.76	4340829.15	50	320	24	14882	24.0644
ENGINE3	Engine#3	382646.86	4340829.15	50	320	24	14882	24.0644
ENGINE4	Engine#4	382652.96	4340829.15	50	320	24	14882	24.0644
ENGINE5	Engine#5	382659.05	4340829.15	50	320	24	14882	24.0644
ENGINE6	Engine#6	382665.15	4340829.15	50	320	24	14882	24.0644
ENGINE7	Engine#7	382671.24	4340829.15	50	320	24	14882	24.0644
ENGINE8	Engine#8	382677.34	4340829.15	50	320	24	14882	24.0644
ENGINE9	Engine#9	382683.44	4340829.15	50	320	24	14882	24.0644
ENGINE10	Engine#10	382689.53	4340829.15	50	320	24	14882	24.0644
ENGINE11	Engine#11	382710.05	4340829.15	50	320	24	14882	24.0644
ENGINE12	Engine#12	382716.15	4340829.15	50	320	24	14882	24.0644
ENGINE13	Engine#13	382722.25	4340829.15	50	320	24	14882	24.0644
ENGINE14	Engine#14	382728.34	4340829.15	50	320	24	14882	24.0644
ENGINE15	Engine#15	382734.44	4340829.15	50	320	24	14882	24.0644
ENGINE16	Engine#16	382740.53	4340829.15	50	320	24	14882	24.0644
ENGINE17	Engine#17	382746.63	4340829.15	50	320	24	14882	24.0644
ENGINE18	Engine#18	382752.73	4340829.15	50	320	24	14882	24.0644
ENGINE19	Engine#19	382758.82	4340829.15	50	320	24	14882	24.0644
ENGINE20	Engine#20	382764.92	4340829.15	50	320	24	14882	24.0644
ENGINE21	Engine#21	382785.44	4340829.15	50	320	24	14882	24.0644
ENGINE22	Engine#22	382791.54	4340829.15	50	320	24	14882	24.0644
ENGINE23	Engine#23	382797.63	4340829.15	50	320	24	14882	24.0644
ENGINE24	Engine#24	382803.73	4340829.15	50	320	24	14882	24.0644
ENGINE25	Engine#25	382809.83	4340829.15	50	320	24	14882	24.0644
ENGINE26	Engine#26	382815.92	4340829.15	50	320	24	14882	24.0644
ENGINE27	Engine#27	382822.02	4340829.15	50	320	24	14882	24.0644
ENGINE28	Engine#28	382828.11	4340829.15	50	320	24	14882	24.0644
ENGINE29	Engine#29	382834.21	4340829.15	50	320	24	14882	24.0644
ENGINE30	Engine#30	382840.31	4340829.15	50	320	24	14882	24.0644
ENGINE31	Engine#31	382860.83	4340829.15	50	320	24	14882	24.0644
ENGINE32	Engine#32	382866.92	4340829.15	50	320	24	14882	24.0644
ENGINE33	Engine#33	382873.02	4340829.15	50	320	24	14882	24.0644
ENGINE34	Engine#34	382879.12	4340829.15	50	320	24	14882	24.0644
ENGINE35	Engine#35	382885.21	4340829.15	50	320	24	14882	24.0644
ENGINE36	Engine#36	382634.67	4340701.47	50	320	24	14882	24.0644
ENGINE37	Engine#37	382640.76	4340701.47	50	320	24	14882	24.0644
ENGINE38	Engine#38	382646.86	4340701.47	50	320	24	14882	24.0644
ENGINE39	Engine#39	382652.96	4340701.47	50	320	24	14882	24.0644
ENGINE40	Engine#40	382659.05	4340701.47	50	320	24	14882	24.0644
ENGINE41	Engine#41	382665.15	4340701.47	50	320	24	14882	24.0644
ENGINE42	Engine#42	382671.24	4340701.47	50	320	24	14882	24.0644
ENGINE43	Engine#43	382677.34	4340701.47	50	320	24	14882	24.0644
ENGINE44	Engine#44	382683.44	4340701.47	50	320	24	14882	24.0644
ENGINE45	Engine#45	382689.53	4340701.47	50	320	24	14882	24.0644
ENGINE46	Engine#46	382710.05	4340701.47	50	320	24	14882	24.0644
ENGINE47	Engine#47	382716.15	4340701.47	50	320	24	14882	24.0644
ENGINE48	Engine#48	382722.25	4340701.47	50	320	24	14882	24.0644
ENGINE49	Engine#49	382728.34	4340701.47	50	320	24	14882	24.0644
ENGINE50	Engine#50	382734.44	4340701.47	50	320	24	14882	24.0644
ENGINE51	Engine#51	382740.53	4340701.47	50	320	24	14882	24.0644
ENGINE52	Engine#52	382746.63	4340701.47	50	320	24	14882	24.0644
ENGINE53	Engine#53	382752.73	4340701.47	50	320	24	14882	24.0644
ENGINE54	Engine#54	382758.82	4340701.47	50	320	24	14882	24.0644
ENGINE55	Engine#55	382764.92	4340701.47	50	320	24	14882	24.0644
ENGINE56	Engine#56	382785.44	4340701.47	50	320	24	14882	24.0644
ENGINE57	Engine#57	382791.54	4340701.47	50	320	24	14882	24.0644
ENGINE58	Engine#58	382797.63	4340701.47	50	320	24	14882	24.0644
ENGINE59	Engine#59	382803.73	4340701.47	50	320	24	14882	24.0644
ENGINE60	Engine#60	382809.83	4340701.47	50	320	24	14882	24.0644
ENGINE61	Engine#61	382815.92	4340701.47	50	320	24	14882	24.0644
ENGINE62	Engine#62	382822.02	4340701.47	50	320	24	14882	24.0644
ENGINE63	Engine#63	382828.11	4340701.47	50	320	24	14882	24.0644
ENGINE64	Engine#64	382834.21	4340701.47	50	320	24	14882	24.0644
ENGINE65	Engine#65	382840.31	4340701.47	50	320	24	14882	24.0644
ENGINE66	Engine#66	382860.83	4340701.47	50	320	24	14882	24.0644
ENGINE67	Engine#67	382866.92	4340701.47	50	320	24	14882	24.0644
ENGINE68	Engine#68	382873.02	4340701.47	50	320	24	14882	24.0644
ENGINE69	Engine#69	382879.12	4340701.47	50	320	24	14882	24.0644

Engine temp and flow rate directly from spec sheet.

Sources		X	Y	Height	Temp	Diameter	Flow	Velocity
		(m)	(m)	(ft)	(F)	(in)	(cfm)	(m/s)
DENG1	Diesel Eng #1	382634.67	4340837.56	40	853.1	24	18497.4	29.9106
DENG2	Diesel Eng #2	382640.76	4340837.56	40	853.1	24	18497.4	29.9106
DENG3	Diesel Eng #3	382646.86	4340837.56	40	853.1	24	18497.4	29.9106
DENG4	Diesel Eng #4	382652.96	4340837.56	40	853.1	24	18497.4	29.9106
DENG5	Diesel Eng #5	382659.05	4340837.56	40	853.1	24	18497.4	29.9106
DENG6	Diesel Eng #6	382665.15	4340837.56	40	853.1	24	18497.4	29.9106
DENG7	Diesel Eng #7	382671.24	4340837.56	40	853.1	24	18497.4	29.9106
DENG8	Diesel Eng #8	382677.34	4340837.56	40	853.1	24	18497.4	29.9106
DENG9	Diesel Eng #9	382683.44	4340837.56	40	853.1	24	18497.4	29.9106
DENG10	Diesel Eng #10	382689.53	4340837.56	40	853.1	24	18497.4	29.9106
DENG11	Diesel Eng #11	382710.05	4340837.56	40	853.1	24	18497.4	29.9106
DENG12	Diesel Eng #12	382716.15	4340837.56	40	853.1	24	18497.4	29.9106
DENG13	Diesel Eng #13	382722.25	4340837.56	40	853.1	24	18497.4	29.9106
DENG14	Diesel Eng #14	382728.34	4340837.56	40	853.1	24	18497.4	29.9106
DENG15	Diesel Eng #15	382734.44	4340837.56	40	853.1	24	18497.4	29.9106
DENG16	Diesel Eng #16	382740.53	4340837.56	40	853.1	24	18497.4	29.9106
DENG17	Diesel Eng #17	382746.63	4340837.56	40	853.1	24	18497.4	29.9106
DENG18	Diesel Eng #18	382752.73	4340837.56	40	853.1	24	18497.4	29.9106
DENG19	Diesel Eng #19	382758.82	4340837.56	40	853.1	24	18497.4	29.9106
DENG20	Diesel Eng #20	382764.92	4340837.56	40	853.1	24	18497.4	29.9106
DENG21	Diesel Eng #21	382785.44	4340837.56	40	853.1	24	18497.4	29.9106
DENG22	Diesel Eng #22	382791.54	4340837.56	40	853.1	24	18497.4	29.9106
DENG23	Diesel Eng #23	382797.63	4340837.56	40	853.1	24	18497.4	29.9106
DENG24	Diesel Eng #24	382803.73	4340837.56	40	853.1	24	18497.4	29.9106
DENG25	Diesel Eng #25	382809.83	4340837.56	40	853.1	24	18497.4	29.9106
DENG26	Diesel Eng #26	382815.92	4340837.56	40	853.1	24	18497.4	29.9106
DENG27	Diesel Eng #27	382822.02	4340837.56	40	853.1	24	18497.4	29.9106
DENG28	Diesel Eng #28	382828.11	4340837.56	40	853.1	24	18497.4	29.9106
DENG29	Diesel Eng #29	382834.21	4340837.56	40	853.1	24	18497.4	29.9106
DENG30	Diesel Eng #30	382840.31	4340837.56	40	853.1	24	18497.4	29.9106
DENG31	Diesel Eng #31	382860.83	4340837.56	40	853.1	24	18497.4	29.9106
DENG32	Diesel Eng #32	382866.92	4340837.56	40	853.1	24	18497.4	29.9106
DENG33	Diesel Eng #33	382873.02	4340837.56	40	853.1	24	18497.4	29.9106
DENG34	Diesel Eng #34	382879.12	4340837.56	40	853.1	24	18497.4	29.9106
DENG35	Diesel Eng #35	382885.21	4340837.56	40	853.1	24	18497.4	29.9106
DENG36	Diesel Eng #36	382634.67	4340693.06	40	853.1	24	18497.4	29.9106
DENG37	Diesel Eng #37	382640.76	4340693.06	40	853.1	24	18497.4	29.9106
DENG38	Diesel Eng #38	382646.86	4340693.06	40	853.1	24	18497.4	29.9106
DENG39	Diesel Eng #39	382652.96	4340693.06	40	853.1	24	18497.4	29.9106
DENG40	Diesel Eng #40	382659.05	4340693.06	40	853.1	24	18497.4	29.9106
DENG41	Diesel Eng #41	382665.15	4340693.06	40	853.1	24	18497.4	29.9106
DENG42	Diesel Eng #42	382671.24	4340693.06	40	853.1	24	18497.4	29.9106
DENG43	Diesel Eng #43	382677.34	4340693.06	40	853.1	24	18497.4	29.9106
DENG44	Diesel Eng #44	382683.44	4340693.06	40	853.1	24	18497.4	29.9106
DENG45	Diesel Eng #45	382689.53	4340693.06	40	853.1	24	18497.4	29.9106
DENG46	Diesel Eng #46	382710.05	4340693.06	40	853.1	24	18497.4	29.9106
DENG47	Diesel Eng #47	382716.15	4340693.06	40	853.1	24	18497.4	29.9106
DENG48	Diesel Eng #48	382722.25	4340693.06	40	853.1	24	18497.4	29.9106
DENG49	Diesel Eng #49	382728.34	4340693.06	40	853.1	24	18497.4	29.9106
DENG50	Diesel Eng #50	382734.44	4340693.06	40	853.1	24	18497.4	29.9106
DENG51	Diesel Eng #51	382740.53	4340693.06	40	853.1	24	18497.4	29.9106
DENG52	Diesel Eng #52	382746.63	4340693.06	40	853.1	24	18497.4	29.9106
DENG53	Diesel Eng #53	382752.73	4340693.06	40	853.1	24	18497.4	29.9106
DENG54	Diesel Eng #54	382758.82	4340693.06	40	853.1	24	18497.4	29.9106
DENG55	Diesel Eng #55	382764.92	4340693.06	40	853.1	24	18497.4	29.9106
DENG56	Diesel Eng #56	382785.44	4340693.06	40	853.1	24	18497.4	29.9106
DENG57	Diesel Eng #57	382791.54	4340693.06	40	853.1	24	18497.4	29.9106
DENG58	Diesel Eng #58	382797.63	4340693.06	40	853.1	24	18497.4	29.9106
DENG59	Diesel Eng #59	382803.73	4340693.06	40	853.1	24	18497.4	29.9106
DENG60	Diesel Eng #60	382809.83	4340693.06	40	853.1	24	18497.4	29.9106
DENG61	Diesel Eng #61	382815.92	4340693.06	40	853.1	24	18497.4	29.9106
DENG62	Diesel Eng #62	382822.02	4340693.06	40	853.1	24	18497.4	29.9106
DENG63	Diesel Eng #63	382828.11	4340693.06	40	853.1	24	18497.4	29.9106
DENG64	Diesel Eng #64	382834.21	4340693.06	40	853.1	24	18497.4	29.9106
DENG65	Diesel Eng #65	382840.31	4340693.06	40	853.1	24	18497.4	29.9106
DENG66	Diesel Eng #66	382860.83	4340693.06	40	853.1	24	18497.4	29.9106
DENG67	Diesel Eng #67	382866.92	4340693.06	40	853.1	24	18497.4	29.9106
DENG68	Diesel Eng #68	382873.02	4340693.06	40	853.1	24	18497.4	29.9106
DENG69	Diesel Eng #69	382879.12	4340693.06	40	853.1	24	18497.4	29.9106

Sources		X	Y	Height	Temp	Diameter	Flow	Velocity
		(m)	(m)	(ft)	(F)	(in)	(cfm)	(m/s)
CHILL1	Chiller Boiler #1	382634.67	4340833.36	50	320	24.9	155.97	0.2345
CHILL2	Chiller Boiler #2	382640.76	4340833.36	50	320	24.9	155.97	0.2345
CHILL3	Chiller Boiler #3	382646.86	4340833.36	50	320	24.9	155.97	0.2345
CHILL4	Chiller Boiler #4	382652.96	4340833.36	50	320	24.9	155.97	0.2345
CHILL5	Chiller Boiler #5	382659.05	4340833.36	50	320	24.9	155.97	0.2345
CHILL6	Chiller Boiler #6	382665.15	4340833.36	50	320	24.9	155.97	0.2345
CHILL7	Chiller Boiler #7	382671.24	4340833.36	50	320	24.9	155.97	0.2345
CHILL8	Chiller Boiler #8	382677.34	4340833.36	50	320	24.9	155.97	0.2345
CHILL9	Chiller Boiler #9	382683.44	4340833.36	50	320	24.9	155.97	0.2345
CHILL10	Chiller Boiler #10	382689.53	4340833.36	50	320	24.9	155.97	0.2345
CHILL11	Chiller Boiler #11	382710.05	4340833.36	50	320	24.9	155.97	0.2345
CHILL12	Chiller Boiler #12	382716.15	4340833.36	50	320	24.9	155.97	0.2345
CHILL13	Chiller Boiler #13	382722.25	4340833.36	50	320	24.9	155.97	0.2345
CHILL14	Chiller Boiler #14	382728.34	4340833.36	50	320	24.9	155.97	0.2345
CHILL15	Chiller Boiler #15	382734.44	4340833.36	50	320	24.9	155.97	0.2345
CHILL16	Chiller Boiler #16	382740.53	4340833.36	50	320	24.9	155.97	0.2345
CHILL17	Chiller Boiler #17	382746.63	4340833.36	50	320	24.9	155.97	0.2345
CHILL18	Chiller Boiler #18	382752.73	4340833.36	50	320	24.9	155.97	0.2345
CHILL19	Chiller Boiler #19	382758.82	4340833.36	50	320	24.9	155.97	0.2345
CHILL20	Chiller Boiler #20	382764.92	4340833.36	50	320	24.9	155.97	0.2345
CHILL21	Chiller Boiler #21	382785.44	4340833.36	50	320	24.9	155.97	0.2345
CHILL22	Chiller Boiler #22	382791.54	4340833.36	50	320	24.9	155.97	0.2345
CHILL23	Chiller Boiler #23	382797.63	4340833.36	50	320	24.9	155.97	0.2345
CHILL24	Chiller Boiler #24	382803.73	4340833.36	50	320	24.9	155.97	0.2345
CHILL25	Chiller Boiler #25	382809.83	4340833.36	50	320	24.9	155.97	0.2345
CHILL26	Chiller Boiler #26	382815.92	4340833.36	50	320	24.9	155.97	0.2345
CHILL27	Chiller Boiler #27	382822.02	4340833.36	50	320	24.9	155.97	0.2345
CHILL28	Chiller Boiler #28	382828.11	4340833.36	50	320	24.9	155.97	0.2345
CHILL29	Chiller Boiler #29	382834.21	4340833.36	50	320	24.9	155.97	0.2345
CHILL30	Chiller Boiler #30	382840.31	4340833.36	50	320	24.9	155.97	0.2345
CHILL31	Chiller Boiler #31	382860.83	4340833.36	50	320	24.9	155.97	0.2345
CHILL32	Chiller Boiler #32	382866.92	4340833.36	50	320	24.9	155.97	0.2345
CHILL33	Chiller Boiler #33	382873.02	4340833.36	50	320	24.9	155.97	0.2345
CHILL34	Chiller Boiler #34	382879.12	4340833.36	50	320	24.9	155.97	0.2345
CHILL35	Chiller Boiler #35	382885.21	4340833.36	50	320	24.9	155.97	0.2345
CHILL36	Chiller Boiler #36	382634.67	4340697.26	50	320	24.9	155.97	0.2345
CHILL37	Chiller Boiler #37	382640.76	4340697.26	50	320	24.9	155.97	0.2345
CHILL38	Chiller Boiler #38	382646.86	4340697.26	50	320	24.9	155.97	0.2345
CHILL39	Chiller Boiler #39	382652.96	4340697.26	50	320	24.9	155.97	0.2345
CHILL40	Chiller Boiler #40	382659.05	4340697.26	50	320	24.9	155.97	0.2345
CHILL41	Chiller Boiler #41	382665.15	4340697.26	50	320	24.9	155.97	0.2345
CHILL42	Chiller Boiler #42	382671.24	4340697.26	50	320	24.9	155.97	0.2345
CHILL43	Chiller Boiler #43	382677.34	4340697.26	50	320	24.9	155.97	0.2345
CHILL44	Chiller Boiler #44	382683.44	4340697.26	50	320	24.9	155.97	0.2345
CHILL45	Chiller Boiler #45	382689.53	4340697.26	50	320	24.9	155.97	0.2345
CHILL46	Chiller Boiler #46	382710.05	4340697.26	50	320	24.9	155.97	0.2345
CHILL47	Chiller Boiler #47	382716.15	4340697.26	50	320	24.9	155.97	0.2345
CHILL48	Chiller Boiler #48	382722.25	4340697.26	50	320	24.9	155.97	0.2345
CHILL49	Chiller Boiler #49	382728.34	4340697.26	50	320	24.9	155.97	0.2345
CHILL50	Chiller Boiler #50	382734.44	4340697.26	50	320	24.9	155.97	0.2345
CHILL51	Chiller Boiler #51	382740.53	4340697.26	50	320	24.9	155.97	0.2345
CHILL52	Chiller Boiler #52	382746.63	4340697.26	50	320	24.9	155.97	0.2345
CHILL53	Chiller Boiler #53	382752.73	4340697.26	50	320	24.9	155.97	0.2345
CHILL54	Chiller Boiler #54	382758.82	4340697.26	50	320	24.9	155.97	0.2345
CHILL55	Chiller Boiler #55	382764.92	4340697.26	50	320	24.9	155.97	0.2345
CHILL56	Chiller Boiler #56	382785.44	4340697.26	50	320	24.9	155.97	0.2345
CHILL57	Chiller Boiler #57	382791.54	4340697.26	50	320	24.9	155.97	0.2345
CHILL58	Chiller Boiler #58	382797.63	4340697.26	50	320	24.9	155.97	0.2345
CHILL59	Chiller Boiler #59	382803.73	4340697.26	50	320	24.9	155.97	0.2345
CHILL60	Chiller Boiler #60	382809.83	4340697.26	50	320	24.9	155.97	0.2345
CHILL61	Chiller Boiler #61	382815.92	4340697.26	50	320	24.9	155.97	0.2345
CHILL62	Chiller Boiler #62	382822.02	4340697.26	50	320	24.9	155.97	0.2345
CHILL63	Chiller Boiler #63	382828.11	4340697.26	50	320	24.9	155.97	0.2345
CHILL64	Chiller Boiler #64	382834.21	4340697.26	50	320	24.9	155.97	0.2345
CHILL65	Chiller Boiler #65	382840.31	4340697.26	50	320	24.9	155.97	0.2345
CHILL66	Chiller Boiler #66	382860.83	4340697.26	50	320	24.9	155.97	0.2345
CHILL67	Chiller Boiler #67	382866.92	4340697.26	50	320	24.9	155.97	0.2345
CHILL68	Chiller Boiler #68	382873.02	4340697.26	50	320	24.9	155.97	0.2345
CHILL69	Chiller Boiler #69	382879.12	4340697.26	50	320	24.9	155.97	0.2345

Sources	CO	NO2	NO2	PM10	PM2.5	PM2.5
	lb/hr	lb/hr	tpy	lb/hr	lb/hr	tpy
ENGINE1	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE2	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE3	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE4	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE5	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE6	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE7	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE8	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE9	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE10	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE11	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE12	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE13	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE14	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE15	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE16	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE17	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE18	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE19	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE20	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE21	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE22	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE23	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE24	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE25	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE26	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE27	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE28	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE29	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE30	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE31	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE32	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE33	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE34	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE35	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE36	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE37	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE38	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE39	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE40	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE41	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE42	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE43	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE44	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE45	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE46	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE47	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE48	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE49	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE50	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE51	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE52	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE53	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE54	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE55	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE56	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE57	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE58	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE59	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE60	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE61	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE62	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE63	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE64	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE65	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE66	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE67	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE68	0.581	0.449	1.965	0.190	0.190	0.833
ENGINE69	0.581	0.449	1.965	0.190	0.190	0.833

Sources	CO	NO2	NO2	PM10	PM2.5	PM2.5
	lb/hr	lb/hr	tpy	lb/hr	lb/hr	tpy
DENG1	0.441	3.703	1.277	0.029	0.029	1.00E-02
DENG2	0.441	3.703	1.277	0.029	0.029	0.010
DENG3	0.441	3.703	1.277	0.029	0.029	0.010
DENG4	0.441	3.703	1.277	0.029	0.029	0.010
DENG5	0.441	3.703	1.277	0.029	0.029	0.010
DENG6	0.441	3.703	1.277	0.029	0.029	0.010
DENG7	0.441	3.703	1.277	0.029	0.029	0.010
DENG8	0.441	3.703	1.277	0.029	0.029	0.010
DENG9	0.441	3.703	1.277	0.029	0.029	0.010
DENG10	0.441	3.703	1.277	0.029	0.029	0.010
DENG11	0.441	3.703	1.277	0.029	0.029	0.010
DENG12	0.441	3.703	1.277	0.029	0.029	0.010
DENG13	0.441	3.703	1.277	0.029	0.029	0.010
DENG14	0.441	3.703	1.277	0.029	0.029	0.010
DENG15	0.441	3.703	1.277	0.029	0.029	0.010
DENG16	0.441	3.703	1.277	0.029	0.029	0.010
DENG17	0.441	3.703	1.277	0.029	0.029	0.010
DENG18	0.441	3.703	1.277	0.029	0.029	0.010
DENG19	0.441	3.703	1.277	0.029	0.029	0.010
DENG20	0.441	3.703	1.277	0.029	0.029	0.010
DENG21	0.441	3.703	1.277	0.029	0.029	0.010
DENG22	0.441	3.703	1.277	0.029	0.029	0.010
DENG23	0.441	3.703	1.277	0.029	0.029	0.010
DENG24	0.441	3.703	1.277	0.029	0.029	0.010
DENG25	0.441	3.703	1.277	0.029	0.029	0.010
DENG26	0.441	3.703	1.277	0.029	0.029	0.010
DENG27	0.441	3.703	1.277	0.029	0.029	0.010
DENG28	0.441	3.703	1.277	0.029	0.029	0.010
DENG29	0.441	3.703	1.277	0.029	0.029	0.010
DENG30	0.441	3.703	1.277	0.029	0.029	0.010
DENG31	0.441	3.703	1.277	0.029	0.029	0.010
DENG32	0.441	3.703	1.277	0.029	0.029	0.010
DENG33	0.441	3.703	1.277	0.029	0.029	0.010
DENG34	0.441	3.703	1.277	0.029	0.029	0.010
DENG35	0.441	3.703	1.277	0.029	0.029	0.010
DENG36	0.441	3.703	1.277	0.029	0.029	0.010
DENG37	0.441	3.703	1.277	0.029	0.029	0.010
DENG38	0.441	3.703	1.277	0.029	0.029	0.010
DENG39	0.441	3.703	1.277	0.029	0.029	0.010
DENG40	0.441	3.703	1.277	0.029	0.029	0.010
DENG41	0.441	3.703	1.277	0.029	0.029	0.010
DENG42	0.441	3.703	1.277	0.029	0.029	0.010
DENG43	0.441	3.703	1.277	0.029	0.029	0.010
DENG44	0.441	3.703	1.277	0.029	0.029	0.010
DENG45	0.441	3.703	1.277	0.029	0.029	0.010
DENG46	0.441	3.703	1.277	0.029	0.029	0.010
DENG47	0.441	3.703	1.277	0.029	0.029	0.010
DENG48	0.441	3.703	1.277	0.029	0.029	0.010
DENG49	0.441	3.703	1.277	0.029	0.029	0.010
DENG50	0.441	3.703	1.277	0.029	0.029	0.010
DENG51	0.441	3.703	1.277	0.029	0.029	0.010
DENG52	0.441	3.703	1.277	0.029	0.029	0.010
DENG53	0.441	3.703	1.277	0.029	0.029	0.010
DENG54	0.441	3.703	1.277	0.029	0.029	0.010
DENG55	0.441	3.703	1.277	0.029	0.029	0.010
DENG56	0.441	3.703	1.277	0.029	0.029	0.010
DENG57	0.441	3.703	1.277	0.029	0.029	0.010
DENG58	0.441	3.703	1.277	0.029	0.029	0.010
DENG59	0.441	3.703	1.277	0.029	0.029	0.010
DENG60	0.441	3.703	1.277	0.029	0.029	0.010
DENG61	0.441	3.703	1.277	0.029	0.029	0.010
DENG62	0.441	3.703	1.277	0.029	0.029	0.010
DENG63	0.441	3.703	1.277	0.029	0.029	0.010
DENG64	0.441	3.703	1.277	0.029	0.029	0.010
DENG65	0.441	3.703	1.277	0.029	0.029	0.010
DENG66	0.441	3.703	1.277	0.029	0.029	0.010
DENG67	0.441	3.703	1.277	0.029	0.029	0.010
DENG68	0.441	3.703	1.277	0.029	0.029	0.010
DENG69	0.441	3.703	1.277	0.029	0.029	0.010

Sources	CO	NO2	NO2	PM10	PM2.5	PM2.5
	lb/hr	lb/hr	tpy	lb/hr	lb/hr	tpy
CHILL1	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL2	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL3	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL4	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL5	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL6	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL7	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL8	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL9	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL10	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL11	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL12	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL13	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL14	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL15	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL16	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL17	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL18	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL19	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL20	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL21	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL22	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL23	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL24	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL25	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL26	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL27	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL28	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL29	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL30	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL31	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL32	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL33	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL34	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL35	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL36	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL37	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL38	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL39	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL40	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL41	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL42	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL43	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL44	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL45	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL46	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL47	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL48	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL49	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL50	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL51	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL52	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL53	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL54	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL55	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL56	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL57	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL58	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL59	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL60	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL61	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL62	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL63	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL64	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL65	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL66	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL67	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL68	0.057	0.021	0.092	0.0091	0.0091	0.04
CHILL69	0.057	0.021	0.092	0.0091	0.0091	0.04

Pollutant	Avg Period	Design Value	Modeled	Backgrnd	Total	NAAQS/SIL	%	Comply?
			ug/m3	ug/m3	ug/m3	ug/m3	Standard	
NO2	1-hr	H8H	143.86	PVMRM	143.86	188	76.52%	Yes
	Annual	Ann Mean	8.32	4.44	12.75	100	12.75%	Yes
PM2.5	24-hr	H8H	23.37	MONTH BG	23.37	35	66.77%	Yes
	Annual	Ann Mean	3.19	3.68	6.87	9	76.31%	Yes
PM10	24-hr	H6H	76.83	MONTH BG	76.83	150	51.22%	Yes
CO	1-hr	H2H	215.49	1380	1595.49	40,250	3.96%	Yes
	8-hr	H2H	61.32	920	981.32	10,350	9.48%	Yes

PM2.5 annual and CO are provided by UDAQ for 2024 (CO: Lindon site; PM2.5 Price)
PM2.5/10 24-hr are monthly values provided by UDAQ (PM2.5: Price and PM10 Ash Grove Leamington Site)
NO2 1-hr and Ozone monthly data was obtained for Price from the UDAQ website
NO2 Annual data was obtained from 2022-2024 from Price

Group		
5	143.86	143.8605
6	8.32	8.3169
5	23.37	23.36844
5	3.19	3.18777
12	76.83	76.832448
10	215.49	215.4883
10	61.32	61.32291

Engine	Max NH_3 Slip (ppm)	Natural Gas Fd (dscf/MMBtu)[1]	NH_3 lb/MMBtu	lb/hr	tpy
G3520K	8	8710	0.011	14.272	62.51
1. Method 19 Natural gas F factor; Table 19-2				**Total**	**62.51**

1.19E-07	conversion of NO2 ppm to lb/scf, table 19-1
17	MW of NH3
46.1	MW NO2
15	% O2
5611	btu/hp-hr
3392	hp
69	# of units
8760	hr/yr/unit

Best Available Control Technology Control Cost Analysis Worksheet

Reference No.	Site Rating (hp)	Manufacturer	Model	Control Method	Controlled or Targeted Emission	Targeted Emission without Control (TPY)	Targeted Emission with Control (TPY)[1]	Difference (TPY)
1 Diesel Unit	3633	Caterpillar	3516C	SCR	NOx	1.28	0.090	1.190

1. Based on 93% control of NOx from the typical Safety Power Project Proposal for 3516C engines

Reference No.	Interest Rate (i)	Control System Life (n)	Capital Recovery Factor (CRF)	Capital Investment (P)	Annual Operating Cost	Capital Recovery Cost (CRC)	Realized Economic Benefit
3516C	0.05	10	0.130	$235,000	$9,600	$30,434	$0

"n" is the control system economic life, 10 for the SCR module
"i" is the considered the annual pretax marginal rate of return on private investment (i.e., what it may cost you to borrow the money).
"P" is the capital investment required to install the controls (i.e., equipment purchase cost, installation/retrofit cost, engineering, etc.).
3516C: $200,000 capital, install + SCR module expected to last full 10 years (life is 20,000 hours @ 50 hr/yr * 10 yr = 500 hrs; no replacement) + one ~$35,000 for accessories
Annual Operating Cost: maintanance $6,000 per unit, urea transport $2,000/trip ($2000/yr). Urea cost is $4/gal and the 3516C has a consumption rate of 8 gal/hr

CRC = CRF * P

CRC = Capital Recovery Cost (Annualized cost of control over the life of the control)
CRF = Capital recovery Factor
P = Capital Investment

CRF = i(1+i)n/(1+i)n-1

i = Annual Interest Rate
n = Economic life of the control

Total Annual Cost (TAC) = Annual Maintenance Cost + Capital Recovery Cost - Realized Economic Benefit

Cost to Control = TAC / (Targeted Emission Volume Without Control - Targeted Emission Volumn with Control)

Reference Number	TAC ($)	Base Control Cost ($/Ton)
3516C	$40,034	**$33,630.36**
One Engine	**$40,033.58**	**$33,630.36**
All 69 Engines	**$2,762,316.68**	**$2,320,494.53**

Appendix D SOURCE SIZE DETERMINATION

The project site location is within Millard County. JCP is within attainment for all criteria pollutants. UDAQ updated their Site Type Determination Flowcharts in 2021. Flowchart 2 was reviewed. JCP emits more than 100 tpy of most criteria pollutant and is a major source of HAPs (greater than 25 tpy in aggregate and 10 tpy of any one HAP). Therefore, JCP is considered a major Title V source.

Appendix E OFFSET REQUIREMENTS

Offset requirements are not necessary. Please see Sections 2.4 and 3.2 of the application for details.

Appendix F MANUFACTURER SPECIFICATIONS

G3520K

GAS ENGINE SITE SPECIFIC TECHNICAL DATA
McCornick G3520K

CATERPILLAR®

GENSET - WITHOUT RADIATOR

ENGINE SPEED (rpm):	1500	RATING STRATEGY:	HIGH RESPONSE
COMPRESSION RATIO:	10.5	FUEL SYSTEM:	CAT LOW PRESSURE
AFTERCOOLER TYPE:	SCAC		WITH AIR FUEL RATIO CONTROL
AFTERCOOLER - STAGE 1/STAGE 2 INLET (°F):	187 / 134	**SITE CONDITIONS:**	
JACKET WATER OUTLET (°F):	210	FUEL:	Nat Gas
ASPIRATION:	TA	FUEL PRESSURE RANGE(psig): (See note 1)	0.5-5.0
COOLING SYSTEM:	JW+OC+1AC, 2AC+GB	FUEL METHANE NUMBER:	84.7
CONTROL SYSTEM:	ADEM6	FUEL LHV (Btu/scf):	905
EXHAUST MANIFOLD:	DRY	ALTITUDE(ft):	4840
COMBUSTION:	LOW EMISSION	STANDARD RATED POWER:	3513 bhp@1500rpm
NOx EMISSION LEVEL (g/bhp-hr NOx):	1.0	GENERATOR / VOLTAGE / POWER FACTOR:	6506357 / 480V / 0.8

				MAX RATING	SITE RATING AT MAX INLET AIR TEMP		
RATING	**NOTES**	**LOAD**	**100%**	**100%**	**75%**	**51%**
GENSET POWER (WITH GEARBOX, WITHOUT FAN)	(2)(3)	ekW	2505	2418	1814	1227
GENSET POWER (WITH GEARBOX, WITHOUT FAN)	(2)(3)	kVA	3131	3023	2268	1534
ENGINE POWER (WITHOUT GEARBOX, WITHOUT FAN)	(3)	bhp	3513	3392	2551	1746
INLET AIR TEMPERATURE		°F	68	85	85	85
GENERATOR EFFICIENCY	(2)	%	96.3	96.3	96.0	94.9
GENSET EFFICIENCY (ISO 3046/1)	(4)(5)	%	45.0	44.8	43.8	41.2
THERMAL EFFICIENCY	(4)(6)	%	43.0	43.1	43.9	46.4
TOTAL EFFICIENCY	(4)(7)	%	88.0	87.9	87.7	87.6
ENGINE DATA						
GENSET FUEL CONSUMPTION (ISO 3046/1)	(8)	Btu/ekW-hr	7588	7608	7787	8283
GENSET FUEL CONSUMPTION (NOMINAL)	(8)	Btu/ekW-hr	7850	7871	8056	8569
ENGINE FUEL CONSUMPTION (NOMINAL)	(8)	Btu/bhp-hr	5598	5611	5726	6021
AIR FLOW (@inlet air temp, 14.7 psia) (WET)	(9)	ft3/min	6235	6216	4707	3209
AIR FLOW (WET)	(9)	lb/hr	28104	27159	20563	14021
FUEL FLOW (60°F, 14.7 psia)		scfm	362	351	269	194
INLET MANIFOLD PRESSURE	(10)	psi(abs)	69.1	66.8	50.6	35.1
EXHAUST TEMPERATURE - ENGINE OUTLET	(11)	°F	746	753	801	880
EXHAUST GAS FLOW (@engine outlet temp, 14.5 psia) (WET)	(12)	ft3/min	15315	14882	11732	8522
EXHAUST GAS MASS FLOW (WET)	(12)	lb/hr	29093	28116	21298	14549
MAX INLET RESTRICTION	(13)	in H2O	14.45	13.35	6.07	2.41
MAX EXHAUST RESTRICTION	(13)	in H2O	20.07	18.81	10.30	4.82
EMISSIONS DATA - EXHAUST OUT						
NOx (as NO2) (NOMINAL)	(14)(15)	g/bhp-hr	1.00	1.00	1.00	1.00
CO	(14)(15)	g/bhp-hr	1.10	1.11	1.12	1.10
NMHC (mol. wt. of 15.84)	(14)(15)	g/bhp-hr	0.13	0.14	0.15	0.14
NMNEHC (VOCs) (mol. wt. of 15.84)	(14)(15)(16)	g/bhp-hr	0.08	0.08	0.10	0.09
HCHO (Formaldehyde)	(14)(15)	g/bhp-hr	0.17	0.17	0.18	0.18
CH4 (mol. wt. of 16.04) (NOMINAL)	(14)(17)	g/bhp-hr	1.28	1.31	1.48	1.37
CO2 (NOMINAL)	(14)(17)	g/bhp-hr	328	329	337	349
EXHAUST OXYGEN (NOMINAL)	(14)(18)	% DRY	9.8	9.7	9.5	9.0
HEAT REJECTION						
LHV INPUT	(19)	Btu/min	327742	317221	243511	175209
HEAT REJ. TO JACKET WATER (JW)	(20)	Btu/min	31932	31459	26597	23568
HEAT REJ. TO ATMOSPHERE (INCLUDES GENERATOR)	(20)	Btu/min	9648	9375	7898	6497
HEAT REJ. TO LUBE OIL (OC)	(20)	Btu/min	12834	12666	11376	9856
HEAT REJECTION TO EXHAUST (LHV TO 248°F)	(20)	Btu/min	64138	62830	52404	41167
HEAT REJ. TO A/C - STAGE 1 (1AC)	(20)(22)	Btu/min	33317	31021	17265	7365
HEAT REJ. TO A/C - STAGE 2 (2AC)	(20)(22)	Btu/min	6791	6525	4742	3104
HEAT REJECTION FROM GEARBOX (GB)	(20)	Btu/min	1043	1007	757	518
PUMP POWER	(21)	Btu/min	910	910	910	910

COOLING SYSTEM SIZING CRITERIA				
TOTAL JACKET WATER CIRCUIT (JW+OC+1AC)	(23)	Btu/min	88983	92069
TOTAL STAGE 2 AFTERCOOLER CIRCUIT (2AC+GB)	(23)	Btu/min	8328	8404
HEAT REJECTION TO EXHAUST (LHV TO 248°F)	(23)	Btu/min	70552	69113
A cooling system safety factor of 0% has been added to the cooling system sizing criteria.				

MINIMUM HEAT RECOVERY				
TOTAL JACKET WATER CIRCUIT (JW+OC+1AC)	(24)	Btu/min	70657	67916
TOTAL STAGE 2 AFTERCOOLER CIRCUIT (2AC+GB)	(24)	Btu/min	7442	7156
HEAT REJECTION TO EXHAUST (LHV TO 248°F)	(24)	Btu/min	54518	50274

CONDITIONS AND DEFINITIONS

Engine rating obtained and presented in accordance with ISO 3046/1, adjusted for fuel, site altitude and site inlet air temperature. 100% rating at maximum inlet air temperature is the maximum engine capability for the specified fuel at site altitude and maximum site inlet air temperature. Maximum rating is the maximum capability at the specified aftercooler inlet temperature for the specified fuel at site altitude and reduced inlet air temperature. Refer to product O&M manual for details on additional lower load capability. No overload permitted at rating shown.

For notes information consult page three.

Perf No: EM1894 **Change Level:** 05

General Heat Rejection Sound Emissions Regulatory Altitude Derate Cross Reference Supplementary Data Perf Param Ref

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SALES MODEL:	3516C	**COMBUSTION:**	DIRECT INJECTION
BRAND:	CAT	**ENGINE SPEED (RPM):**	1,800
MACHINE SALES MODEL:		**HERTZ:**	60
ENGINE POWER (BHP):	3,634	**FAN POWER (HP):**	130.1
GEN POWER WITH FAN (EKW):	2,500.0	**ASPIRATION:**	TA
COMPRESSION RATIO:	14.7	**AFTERCOOLER TYPE:**	ATAAC
RATING LEVEL:	STANDBY	**AFTERCOOLER CIRCUIT TYPE:**	JW+OC, ATAAC
PUMP QUANTITY:	1	**INLET MANIFOLD AIR TEMP (F):**	122
FUEL TYPE:	DIESEL	**JACKET WATER TEMP (F):**	219.2
MANIFOLD TYPE:	DRY	**TURBO CONFIGURATION:**	PARALLEL
GOVERNOR TYPE:	ADEM3	**TURBO QUANTITY:**	4
ELECTRONICS TYPE:	ADEM3	**TURBOCHARGER MODEL:**	GT6041BN-48T-1.10
CAMSHAFT TYPE:	STANDARD	**CERTIFICATION YEAR:**	2006
IGNITION TYPE:	CI	**CRANKCASE BLOWBY RATE (FT3/HR):**	3,619.4
INJECTOR TYPE:	EUI	**FUEL RATE (RATED RPM) NO LOAD (GAL/HR):**	16.0
FUEL INJECTOR:	3920221	**PISTON SPD @ RATED ENG SPD (FT/MIN):**	2,539.4
UNIT INJECTOR TIMING (IN):	64.34		
REF EXH STACK DIAMETER (IN):	12		
MAX OPERATING ALTITUDE (FT):	2,953		

INDUSTRY	SUB INDUSTRY	APPLICATION
ELECTRIC POWER	STANDARD	PACKAGED GENSET
OIL AND GAS	LAND PRODUCTION	PACKAGED GENSET

General Performance Data Top

Note(s)

THIS STANDBY RATING IS FOR A STANDBY ONLY ENGINE ARRANGEMENT. RERATING THE ENGINE TO A PRIME OR CONTINUOUS RATING IS NOT PERMITTED.

THE INLET MANIFOLD AIR TEMP LISTED IN THE HEADER, AND IN THE GENERAL PERFORMANCE DATA, IS THE AVERAGE INLET MANIFOLD TEMP FRONT TO REAR ON THE ENGINE.

GENSET POWER WITH FAN		**EKW**	**2,500.0**	**1,875.0**	**1,250.0**	**625.0**	**250.0**
ENGINE POWER		**BHP**	**3,633**	**2,760**	**1,889**	**1,029**	**497**
PERCENT LOAD		**%**	**100**	**75**	**50**	**25**	**10**
TOTAL NOX (AS NO2)		G/HR	19,123	11,751	5,837	2,974	2,654
TOTAL CO		G/HR	1,515	725	607	831	1,165
TOTAL HC		G/HR	376	375	408	307	329
TOTAL CO2		KG/HR	1,740	1,340	966	559	296
PART MATTER		G/HR	132.5	88.4	94.3	99.6	100.7
TOTAL NOX (AS NO2)	(CORR 5% O2)	MG/NM3	2,349.1	1,857.9	1,286.9	1,127.3	1,858.5
TOTAL CO	(CORR 5% O2)	MG/NM3	195.4	118.8	140.1	330.3	862.6
TOTAL HC	(CORR 5% O2)	MG/NM3	42.1	54.8	81.8	105.8	212.3
PART MATTER	(CORR 5% O2)	MG/NM3	14.1	11.8	18.4	34.7	63.0
TOTAL NOX (AS NO2)	(CORR 15% O2)	MG/NM3	871.7	689.4	477.5	418.3	689.6
TOTAL CO	(CORR 15% O2)	MG/NM3	72.5	44.1	52.0	122.6	320.1
TOTAL HC	(CORR 15% O2)	MG/NM3	15.6	20.3	30.4	39.3	78.8
PART MATTER	(CORR 15% O2)	MG/NM3	5.2	4.4	6.8	12.9	23.4
TOTAL NOX (AS NO2)	(CORR 5% O2)	PPM	1,144	905	627	549	905
TOTAL CO	(CORR 5% O2)	PPM	156	95	112	264	690
TOTAL HC	(CORR 5% O2)	PPM	79	102	153	197	396
TOTAL NOX (AS NO2)	(CORR 15% O2)	PPM	425	336	233	204	336
TOTAL CO	(CORR 15% O2)	PPM	58	35	42	98	256
TOTAL HC	(CORR 15% O2)	PPM	29	38	57	73	147
TOTAL NOX (AS NO2)		G/HP-HR	5.32	4.30	3.12	2.92	5.39
TOTAL CO		G/HP-HR	0.42	0.26	0.32	0.82	2.37
TOTAL HC		G/HP-HR	0.10	0.14	0.22	0.30	0.67
PART MATTER		G/HP-HR	0.04	0.03	0.05	0.10	0.20
TOTAL NOX (AS NO2)		G/KW-HR	7.23	5.84	4.24	3.96	7.33
TOTAL CO		G/KW-HR	0.57	0.36	0.44	1.11	3.22
TOTAL HC		G/KW-HR	0.14	0.19	0.30	0.41	0.91
PART MATTER		G/KW-HR	0.05	0.04	0.07	0.13	0.28
TOTAL NOX (AS NO2)		LB/HR	42.16	25.91	12.87	6.56	5.85
TOTAL CO		LB/HR	3.34	1.60	1.34	1.83	2.57
TOTAL HC		LB/HR	0.83	0.83	0.90	0.68	0.72
TOTAL CO2		LB/HR	3,836	2,955	2,130	1,233	654
PART MATTER		LB/HR	0.29	0.19	0.21	0.22	0.22
OXYGEN IN EXH		%	9.4	10.4	11.3	12.2	14.4
DRY SMOKE OPACITY		%	1.7	1.4	1.9	2.6	4.0
BOSCH SMOKE NUMBER			0.83	0.80	0.85	0.97	1.13

RATED SPEED POTENTIAL SITE VARIATION: 1800 RPM

GENSET POWER WITH FAN		**EKW**	**2,500.0**	**1,875.0**	**1,250.0**	**625.0**	**250.0**
ENGINE POWER		**BHP**	**3,633**	**2,760**	**1,889**	**1,029**	**497**
PERCENT LOAD		**%**	**100**	**75**	**50**	**25**	**10**
TOTAL NOX (AS NO2)		G/HR	22,948	14,101	7,004	3,568	3,185
TOTAL CO		G/HR	2,726	1,304	1,092	1,496	2,098
TOTAL HC		G/HR	500	499	543	408	437
PART MATTER		G/HR	185.5	123.7	132.1	139.5	141.0
TOTAL NOX (AS NO2)	(CORR 5% O2)	MG/NM3	2,818.9	2,229.5	1,544.3	1,352.7	2,230.2
TOTAL CO	(CORR 5% O2)	MG/NM3	351.8	213.9	252.3	594.6	1,552.7
TOTAL HC	(CORR 5% O2)	MG/NM3	55.9	72.8	108.8	140.7	282.4
PART MATTER	(CORR 5% O2)	MG/NM3	19.7	16.5	25.8	48.5	88.2
TOTAL NOX (AS NO2)	(CORR 15% O2)	MG/NM3	1,046.0	827.3	573.0	502.0	827.6
TOTAL CO	(CORR 15% O2)	MG/NM3	130.5	79.4	93.6	220.6	576.2
TOTAL HC	(CORR 15% O2)	MG/NM3	20.8	27.0	40.4	52.2	104.8
PART MATTER	(CORR 15% O2)	MG/NM3	7.3	6.1	9.6	18.0	32.7
TOTAL NOX (AS NO2)	(CORR 5% O2)	PPM	1,373	1,086	752	659	1,086
TOTAL CO	(CORR 5% O2)	PPM	281	171	202	476	1,242
TOTAL HC	(CORR 5% O2)	PPM	104	136	203	263	527
TOTAL NOX (AS NO2)	(CORR 15% O2)	PPM	510	403	279	244	403
TOTAL CO	(CORR 15% O2)	PPM	104	63	75	177	461
TOTAL HC	(CORR 15% O2)	PPM	39	50	75	97	196
TOTAL NOX (AS NO2)		G/HP-HR	6.38	5.15	3.74	3.50	6.47
TOTAL CO		G/HP-HR	0.76	0.48	0.58	1.47	4.26

GENSET POWER WITH FAN **ENGINE POWER**	**EKW** **BHP**	**2,500.0** **3,633**	**1,875.0** **2,760**	**1,250.0** **1,889**	**625.0** **1,029**	**250.0** **497**
PERCENT LOAD	**%**	**100**	**75**	**50**	**25**	**10**
TOTAL HC	G/HP-HR	0.14	0.18	0.29	0.40	0.89
PART MATTER	G/HP-HR	0.05	0.05	0.07	0.14	0.29
TOTAL NOX (AS NO2)	G/KW-HR	8.67	7.01	5.09	4.76	8.79
TOTAL CO	G/KW-HR	1.03	0.65	0.79	2.00	5.79
TOTAL HC	G/KW-HR	0.19	0.25	0.39	0.54	1.21
PART MATTER	G/KW-HR	0.07	0.06	0.10	0.19	0.39
TOTAL NOX (AS NO2)	LB/HR	50.59	31.09	15.44	7.87	7.02
TOTAL CO	LB/HR	6.01	2.88	2.41	3.30	4.62
TOTAL HC	LB/HR	1.10	1.10	1.20	0.90	0.96
PART MATTER	LB/HR	0.41	0.27	0.29	0.31	0.31

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Cat® 3516C
Diesel Generator Sets



Image shown may not reflect actual configuration

Bore – mm (in)	170 (6.69)
Stroke – mm (in)	215 (8.46)
Displacement – L (in^3)	78.1 (4766)
Compression Ratio	14.7:1
Aspiration	TA
Fuel System	EUI
Governor Type	ADEM™ A3

Standby 60 Hz ekW (kVA)	Mission Critical 60 Hz ekW (kVA)	Prime 60 Hz ekW (kVA)	Continuous 60 Hz ekW (kVA)	Emissions Performance
2500 (3125)	2500 (3125)	2250 (2812)	2050 (2562)	U.S. EPA Stationary Emergency Use Only (Tier 2)

Features

Cat® Diesel Engine
- Meets U.S. EPA Stationary Emergency Use Only (Tier 2) emission standards
- Reliable performance proven in thousands of applications worldwide
- Certified alternative fuels including Hydrotreated Vegetable Oil (HVO), Renewable Diesel (RD) and Hydrotreated Renewable Diesel (HRD) which meet EN 15940 or ASTM D975 can be used or blended with EN 590 diesel

Generator Set Package
- Accepts 100% block load in one step
- Meets NFPA 110 loading requirements
- Conforms to ISO 8528-5 G3 load acceptance requirements
- Reliability verified through torsional vibration, fuel consumption, oil consumption, transient performance, and endurance testing

Alternators
- Superior motor starting capability minimizes need for oversizing generator
- Designed to match performance and output characteristics of Cat diesel engines

Cooling System
- Cooling systems available to operate in ambient temperatures up to 50°C (122°F)
- Tested to ensure proper generator set cooling

Cat Energy Control System (ECS)
- User-friendly interface and navigation
- Scalable system to meet a wide range of installation requirements
- Expansion modules and site specific programming for specific customer requirements
- Graphical touchscreen display
- Easily upgradeable

Warranty
- 24 months/1000-hour warranty for standby and mission critical ratings
- 12 months/unlimited hour warranty for prime and continuous ratings
- Extended service protection is available to provide extended coverage options

Worldwide Product Support
- Cat dealers have over 1,800 dealer branch stores operating in 200 countries
- Your local Cat dealer provides extensive post-sale support, including maintenance and repair agreements

Financing
- Caterpillar offers an array of financial products to help you succeed through financial service excellence
- Options include loans, finance lease, operating lease, working capital, and revolving line of credit
- Contact your local Cat dealer for availability in your region

Standard and Optional Equipment

Engine

Air Cleaner
- ◙ Single element
- ❑ Dual element

Muffler
- ❑ Industrial grade (15 dB)

Starting
- ❑ Standard batteries
- ❑ Oversized batteries
- ❑ Standard electric starter(s)
- ❑ Heavy duty electric starter(s)
- ❑ Air starter(s)
- ❑ Jacket water heater

Alternator

Output voltage
- ❑ 380V ❑ 6300V
- ❑ 440V ❑ 6600V
- ❑ 480V ❑ 6900V
- ❑ 600V ❑ 12470V
- ❑ 2400V ❑ 13200V
- ❑ 4160V ❑ 13800V

Temperature Rise (over 40°C ambient)
- ❑ 150°C
- ❑ 125°C/130°C
- ❑ 105°C
- ❑ 80°C

Winding type
- ❑ Random wound
- ❑ Form wound

Excitation
- ❑ Internal excitation (IE)
- ❑ Permanent magnet (PM)

Attachments
- ❑ Anti-condensation heater
- ❑ Stator and bearing temperature monitoring and protection

Power Termination

Type
- ❑ Bus bar
- ❑ Circuit breaker
- ❑ 1600A ❑ 2000A
- ❑ 2500A ❑ 3000A
- ❑ 3200A ❑ 4000A
- ❑ 5000A
- ❑ IEC ❑ UL
- ❑ 3-pole ❑ 4-pole
- ❑ Manually operated
- ❑ Electrically operated

Trip Unit
- ❑ LSI ❑ LSI-G
- ❑ LSIG-P

Control System

Controller
- ❑ Cat ECS 100
- ❑ Cat ECS 200
- ❑ EMCP 4.4

Attachments
- ❑ Local annunciator module
- ❑ Remote annunciator module
- ❑ Expansion I/O module
- ❑ Remote monitoring software

Charging

- ❑ Battery charger – 10A
- ❑ Battery charger – 20A
- ❑ Battery charger – 35A

Vibration Isolators

- ❑ Rubber
- ❑ Spring
- ❑ Seismic rated

Cat Connect

Connectivity
- ❑ Ethernet
- ❑ Cellular

Extended Service Options

Terms
- ❑ 2 year (prime)
- ❑ 3 year
- ❑ 5 year
- ❑ 10 year

Coverage
- ❑ Silver
- ❑ Gold
- ❑ Platinum
- ❑ Platinum Plus

Ancillary Equipment

- ❑ Automatic transfer switch (ATS)
- ❑ Paralleling switchgear
- ❑ Paralleling controls

Certifications

- ❑ ULC 2200 Listed
- ❑ IBC seismic certification
- ❑ OSHPD pre-approval

Note: *Some options may not be available on all models. Certifications may not be available with all model configurations. Consult factory for availability.*

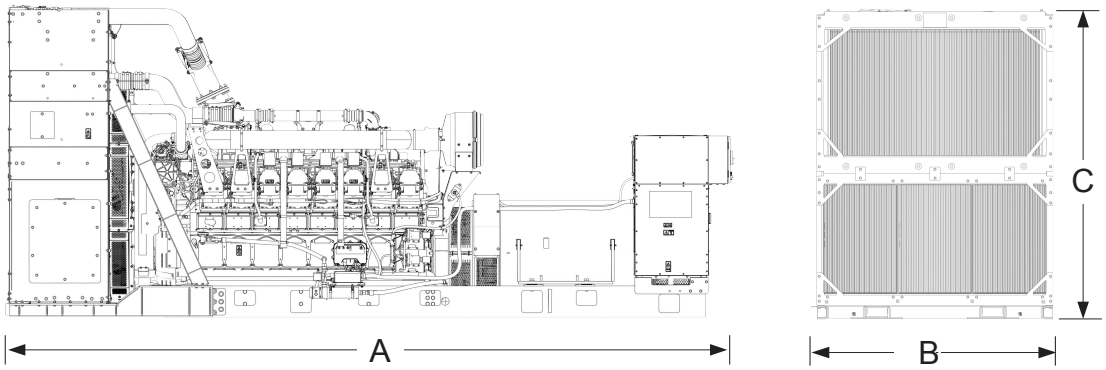
Package Performance

Performance	Standby		Mission Critical		Prime		Continuous	
Frequency	60 Hz		60 Hz		60 Hz		60 Hz	
Gen set power rating with fan	2500 ekW		2500 ekW		2250 ekW		2050 ekW	
Gen set power rating with fan @ 0.8 power factor	3125 kVA		3125 kVA		2812 kVA		2562 kVA	
Emissions	EPA ESE (TIER 2)		EPA ESE (TIER 2)		EPA ESE (TIER 2)		EPA ESE (TIER 2)	
Performance number	EM1894-05		EM1895-06		DM8447-05		DM8268-04	
Fuel Consumption								
100% load with fan – L/hr (gal/hr)	636.0	(168.0)	636.0	(168.0)	574.1	(151.7)	531.9	(140.5)
75% load with fan – L/hr (gal/hr)	494.6	(130.7)	494.6	(130.7)	453.0	(119.7)	421.7	(111.4)
50% load with fan – L/hr (gal/hr)	360.5	(95.2)	360.5	(95.2)	331.0	(87.5)	306.7	(81.0)
25% load with fan – L/hr (gal/hr)	212.3	(56.1)	212.3	(56.1)	196.6	(51.9)	182.9	(48.3)
Cooling System								
Radiator air flow restriction (system) – kPa (in. water)	0.12	(0.48)	0.12	(0.48)	0.12	(0.48)	0.12	(0.48)
Radiator air flow – m^3/min (cfm)	2356	(83201)	2356	(83201)	2356	(83201)	2356	(83201)
Engine coolant capacity – L (gal)	233.0	(61.6)	233.0	(61.6)	233.0	(61.6)	233.0	(61.6)
Radiator coolant capacity – L (gal)	180.0	(47.6)	180.0	(47.6)	180.0	(47.6)	180.0	(47.6)
Total coolant capacity – L (gal)	413.0	(109.2)	413.0	(109.2)	413.0	(109.2)	413.0	(109.2)
Inlet Air								
Combustion air inlet flow rate – m^3/min (cfm)	202.0	(7133.1)	202.0	(7133.1	191.0	(6745.1)	182.2	(6433.4)
Exhaust System								
Exhaust stack gas temperature – °C (°F)	456.2	(853.1)	456.2	(853.1)	439.9	(823.8)	433.9	(813.0)
Exhaust gas flow rate – m^3/min (cfm)	523.8	(18497.4)	523.8	(18497.4)	481.3	(16994.8)	452.7	(15984.0)
Exhaust system backpressure (maximum allowable) – kPa (in. water)	6.7	(27.0)	6.7	(27.0)	6.7	(27.0)	6.7	(27.0)
Heat Rejection								
Heat rejection to jacket water – kW (Btu/min)	826	(46992)	826	(46992)	777	(44160)	739	(42021)
Heat rejection to exhaust (total) – kW (Btu/min)	2502	(142265)	2502	(142265)	2243	(127532)	2092	(118949)
Heat rejection to aftercooler – kW (Btu/min)	786	(44723)	786	(44723)	690	(39224)	619	(35176)
Heat rejection to atmosphere from engine – kW (Btu/min)	161	(9146)	161	(9146)	150	(8542)	145	(8229)
Heat rejection from alternator – kW (Btu/min)	121	(6853)	121	(6853)	99	(5607)	94	(5368)
Emissions* (Nominal)								
NOx mg/Nm^3 (g/hp-h)	2349.1	(5.32)	2349.1	(5.32)	2206.7	(4.95)	2038.1	(4.62)
CO mg/Nm^3 (g/hp-h)	195.4	(0.42)	195.4	(0.42)	141.2	(0.30)	124.8	(0.27)
HC mg/Nm^3 (g/hp-h)	42.1	(0.10)	42.1	(0.10)	44.4	(0.11)	49.2	(0.12)
PM mg/Nm^3 (g/hp-h)	14.1	(0.04)	14.1	(0.04)	10.9	(0.03)	11.0	(0.03)
Emissions* (Potential Site Variation)								
NOx mg/Nm^3 (g/hp-h)	2818.9	(6.38)	2818.9	(6.38)	2648.0	(5.94)	2445.8	(5.55)
CO mg/Nm^3 (g/hp-h)	351.8	(0.76)	351.8	(0.76)	254.2	(0.55)	224.6	(0.49)
HC mg/Nm^3 (g/hp-h)	55.9	(0.14)	55.9	(0.14)	59.1	(0.15)	65.5	(0.16)
PM mg/Nm^3 (g/hp-h)	19.7	(0.05)	19.7	(0.05)	15.2	(0.04)	15.3	(0.04)

**mg/Nm^3 levels are corrected to 5% O_2. Contact your local Cat dealer for further information.*

3516C Diesel Generator Sets
Electric Power

Weights and Dimensions



Dim "A" mm (in)	Dim "B" mm (in)	Dim "C" mm (in)	Dry Weight kg (lb)
7019 (276.3)	2339 (92.1)	2997 (118.0)	17 590 (38,780)

Note: *For reference only. Do not use for installation design. Contact your local Cat dealer for precise weights and dimensions.*

Ratings Definitions

Standby
Output available with varying load for the duration of the interruption of the normal source power. Average power output is 70% of the standby rated ekW. Typical operation is 200 hours per year, with maximum expected usage of 500 hours per year.

Mission Critical
Output available with varying load for the duration of the interruption of the normal source power. Average power output is 85% of the mission critical rated ekW. Typical peak demand up to 100% of rated ekW for up to 5% of the operating time. Typical operation is 200 hours per year, with maximum expected usage of 500 hours per year.

Prime
Output available with varying load for an unlimited time. Average power output is 70% of the prime rated ekW. Typical peak demand is 100% of prime rated ekW with 10% overload capability for emergency use for a maximum of 1 hour in 12. Overload operation cannot exceed 25 hours per year.

Continuous
Output available with non-varying load for an unlimited time. Average power output is 70-100% of the continuous rated ekW. Typical peak demand is 100% of continuous rated ekW for 100% of the operating hours.

Applicable Codes and Standards
AS 1359, ULC 2200 3rd edition, UL 489, UL 869A, IBC, IEC 60034-1, ISO 3046, ISO 8528, NEMA MG1-22, NEMA MG1-33, 2014/35/EU, 2006/42/EC, 2014/30/EU and facilitates compliance to NFPA 37, NFPA 70, NFPA 99, NFPA 110.

Note: Codes may not be available in all model configurations. Please consult your local Cat dealer for availability.

Data Center Applications
- All ratings Tier III/Tier IV compliant per Uptime Institute requirements.
- All ratings ANSI/TIA-942 compliant for Rated-1 through Rated-4 data centers.

Fuel Rates
Fuel consumption reported in accordance with ISO 3046-1, based on fuel oil of 35º API [16°C (60ºF)] gravity having an LHV of 42,780 kJ/kg (18,390 Btu/lb) when used at 15ºC (59ºF) and weighing 850 g/liter (7.0936 lbs/U.S. gal.) All fuel consumption values refer to rated engine power.

www.cat.com/electricpower
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Materials and specifications are subject to change without notice.
The International System of Units (SI) is used in this publication.

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3516 PGJL
LEHE1377-06 (05/23)

clean essential energy

DESIGN PARAMETERS

The design of the Safety Power America emissions reduction system is based on the following conditions.
Note: NOx is calculated as NO_2.

Table 1 – Engine Data

Engine Type:	CAT G3520K
Application	Prime
Engine Power	2,418 ekW
Exhaust Temperature	753 °F
Design Exhaust Flow Rate	15,315 (CFM)
Fuel Type	Pipe Line NG

Table 2 – Emissions Data at Full Engine Load

Engine Option	Emissions	Catalyst Inlet	Emissions Requirement	Catalyst Outlet
CAT G3520K	NOx	1.00 (g/bhp-h)	94 (% reduction)	94 (% reduction)
	CO	1.11 (g/bhp-h)	93 (% reduction)	93 (% reduction)
	VOC	0.14 (g/bhp-h)	50 (% reduction)	50 (% reduction)
	HCHO*	0.17 (g/bhp-h)	90 (% reduction) **	90 (% reduction) **

Notes: (1) The EPA does not treat methane and ethane as VOC's. Safety Power America can achieve a stated reduction of VOC's based on the EPA definition assuming that the VOC's manifest themselves as propene. (2) all emissions reductions are based on an average at steady state using SCAQMD method 100.1 for NOx and SCAQMD/EPA methods 25.1/25.3 for CO and VOC's or mutually agreed test method approved in writing. (3) if NMHC/VOC data isn't provided 0.6 g/hp-hr is to be assumed (unless otherwise stated). (4) If any % reductions are given above, this must be based off of engine "Not to exceed"/ "Site Variation Data" for any emissions values used for air permits.

*** The outlet of the HCHO will be near typical HCHO non-detect levels for emission testing technology. Our guarantee is based on the engine inlet data provided as stated in Table 2; however, note that we cannot provide any guarantees below the non-detect level if the onsite emission inlet value is lower.**

**** HCHO reduction relies on an exhaust temperature of 400C or more at a steady state**

Table 3 – SCR System Data

Engine Option	CAT G3520K
Max. Ammonia Slip @ 15% O2	8 ppm
Urea Consumption - 32.5% solution (+/- 15%)	1.6 USG/hr
System Pressure Loss	12.5" WC
System Inlet/Outlet ANSI Flange Inches	24/24

BROAD MULTI-ENERGY CHILLER PERFORMANCE DATA

Project Name	McKornik Data Center		**REP Name**	N/A	
Location	UT		**Engineer**	Resolute, SLC	
Contact Info.	Dave/Steve G./Mach		**Date**	5/12/25	
Model.No.	BZHE300-d		**Quantity**	**1**	
Detailed Model	BZHE227XIID-160/383.9-86.1/98.9-37.2/29.4-7.2/12.8-d-Fa-Ma-B3-300				
Cooling Capacity	RT	**750**			
Chilled Water					
Entering Temperature	°F	**55.0**	**Max Working Pressure**	**psig**	**150**
Leaving Temperature	°F	**45.0**	Glycol	N/A	N/A
Flow Rate	gpm	1,801	Pressure Drop (est.)	ftH_2O	**16.5**
Fouling Factor	hr ft^2 °F/Btu	0.0001	Input Heat	MBH	9,000
Cooling Water					
Entering Temperature	°F	**85.0**	**Max Working Pressure**	**psig**	**150**
Leaving Temperature	°F	**99.0**	**Glycol**	**PG**	**30%**
Flow Rate	gpm	**2,704**	Pressure Drop (est.)	ftH_2O	**26.4**
Flow Rate(NG Backup)	gpm	2,330	Pressure Drop (NG Backup)	ftH_2O	20.0
Fouling Factor	hr ft^2 °F/Btu	0.00025	**Rejected Heat**	**MBH**	**17,798**
Hot Water					
Entering Temperature	°F	**210.0**	**Max Working Pressure**	**psig**	**150**
Leaving Temperature	°F	**187.0**	Glycol (mass%)	N/A	N/A
Flow Rate	gpm	**392**	Pressure Drop (est.)	ftH_2O	**30.0**
Cooling Capacity	RT	274	Input Heat	MBH	4,508
Cooling COP	0.73				
Exhaust					
Entering Temperature	°F	**723**	Outlet Temperature	°F	320
Input Heat(Cooling)	MBH	**3,166**	Wet Mass Flow Rate, Cooling	lbs/hr	**29,093**
Cooling COP	**1.3**				
Natural Gas					
Cooling Capacity (Suppl.)	**RT**	**133**	**Cooling Consumption (Suppl.)**	**MBH**	**1,124**
Cooling Capacity(Backup)	RT	750	Cooling Consumption (Backup)	MBH	6,338
NG LHV	Btu/ft^3	970	Gas Inlet Pressure	inch wc	64-140
NOx Level	Standard	60ppm	Rated Exhaust Temperature	°F	320
Cooling COP	1.42				
Electrical Data					
Voltage	460V/3P		Frequency	Hz	60
Power	kW	22.4	FLA	A	30.1
Physical Data					
Unit Ship Weight(1pc)	klbs	/	Operating Weight	klbs	113.1
Main Shell Weight	klbs	39.2	Solution Weight	klbs	31.3
Tube Material					
High Temperature Generator	20G Boiler Quality Steel		Low Temperature Generator	**Titanium**	
Evaporator	Oxygen Free Copper		Condenser	**Titanium**	
Absorber	**Titanium**		Solution Heat Exchanger	**SS316L**	

Appendix G DISPERSION MODELING REPORT

Air Quality Modeling Report – Joule Capital Partners – Notice of Intent

Joule Capital Partners
Dispersion Modeling

Prepared for:
Utah Dept. of Environmental Quality
Division of Air Quality
PO Box 144820
Salt Lake City, Utah 84114-482
Phone: 801-536-4000

Prepared by:
Stantec Consulting Services
727 East Riverpark Lane, Suite 150
Boise, ID 83706
Contact: Eric Clark
Ph: 208-388-4324

July 21, 2025

Sign-off Sheet

The conclusions in the Report titled **Air Quality Modeling Report – Joule Capital Partners – Notice of Intent** are Stantec's professional opinion, as of the time of the Report, and concerning the scope described in the Report. The opinions in the document are based on conditions and information existing at the time the scope of work was conducted and do not take into account any subsequent changes. The Report relates solely to the specific project for which Stantec was retained and the stated purpose for which the Report was prepared. The Report is not to be used or relied on for any variation or extension of the project, or for any other project or purpose, and any unauthorized use or reliance is at the recipient's own risk.

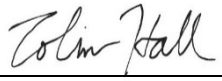
Stantec has assumed all information received from **Joule Capital Partners** (the "Client") and third parties in the preparation of the Report to be correct. While Stantec has exercised a customary level of judgment or due diligence in the use of such information, Stantec assumes no responsibility for the consequences of any error or omission contained therein.

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Prepared by 

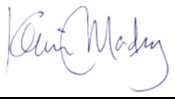
(signature)

Eric Clark, Senior Engineer, PE

Reviewed by 

(signature)

Colin Hall, Air Quality Specialist

Reviewed by 

(signature)

Kevin Madry, P.E., Senior Principal

Purpose
July 21, 2025

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1.0 PURPOSE

This air quality modeling report documents a request for a new Approval Order. The proposed facility will be for Joule Capital Partners (JCP) which would comprise 69 Caterpillar natural gas engines, each of which will be a site-specific maximum rating of 3,392 horsepower (hp). Additionally, 69 Tier 2 diesel Caterpillar 3516C engines will be used for emergency backup purposes. Utah Division of Air Quality (UDAQ) modeling personnel (Jason Krebs and Dave Prey) determined that there are three nitrogen dioxide (NO_2) nearby facilities. These include Ash Grove Leamington (Ash Grove), Greymont Western (GW) and Intermountain Power Project (IPP). UDAQ also provided monthly particulate matter ($PM_{2.5}$ and PM_{10}), NO_2 and carbon monoxide (CO). These were all used without modification and are discussed in greater detail in Section 6.0 below.

JCP also submitted a previous NOI on June 16, 2025, for an identical independent facilty. As part of a full cumulative assessment, all JCP sources outlined in that submittal were incorporated into this analysis as a Nearby source.

JCP sources are to be added as outlined in the Notice of Intent (NOI) and in the section below which prompted a modeling assessment. All natural gas engines to be installed by JCP are Caterpillar (CAT) 3520K units with an uncontrolled NO_2 emission rate of 1.0 grams per horsepower-hour (g/hp-hr). The units are equipped with Selective Catalytic Reduction (SCR), so the controlled NO_2 emission rate is 0.07 g/hp-hr. The emergency engines are Caterpillar 3516C and will operate sparingly, a maximum of 50 hours per year (hr/yr).

All pertinent, updated modeling-related files are provided in electronic format. This includes AERMAP terrain information, BPIP downwash files, NED data and meteorological/background data.

1.1 PROCESS DESCRIPTION

The emission points associated with JCP include 69 CAT G3520K engines that have the following stack parameters: exhaust temperature of 320 °F and flow rate of 14,882 cubic feet per minute (cfm). The flow rate was obtained from the CAT specifications sheet. The temperature was reduced because of the Broad USA chiller. Note that the Broad USA specification sheet assumed the maximum Caterpillar mass flow rate, but not from the site-specific data column. The site-specific mass flow rate is 28,116 lb/hr, which correlates to the volumetric rate of 14,882 cfm. The stack height above ground level was set to 55' with an exhaust internal diameter of 24 inches (both provided by Wheeler Machinery).

There is also a natural gas boiler that operates at 20% capacity (chiller) when each G3520K is running.

The emission points associated with the 69 CAT 3516C engines have the following stack parameters: exhaust temperature of 853.1 °F and flow rate of 18,497.4 cfm (both obtained from

the CAT specifications sheet for standby conditions). The stack height above ground level was set to 50' with an exhaust internal diameter of 24 inches (both provided by Wheeler Machinery). Table 3.2 provides the point source stack parameters.

The JCP site property boundary incorporates approximately 195 acres south of West 11700 North Street (West Church Farm Road) and east of North County Road 4866. The boundary is essentially a rectangle shape with the generation building centrally located within the property. The property will be fully fenced to preclude access by unauthorized personnel or members of the public.

The stacks are oriented along the north and south portion of the building in blocks of ten from west to east. The remaining engines (61-69) are placed in identical spacing within the blocks of 10, but only five are placed along the north with four to the south. The diesel engines are spaced approximately 27.5 feet closer to the end of the building than the natural gas units (both north and south). The initial G3520K engine exhaust stack is approximately 47.33' east and 63.25' south of the building's northwest corner. Similarly, the initial southern G3520K unit is placed 47.33' east and 63.25'; north of the southwest corner. Spacing amongst each in a block of 10 is 20' with approximately 67.33' between each block.

2.0 MODEL DESCRIPTION/JUSTIFICATION

AERMOD is one of the most frequently used regulatory dispersion models in the United States since it replaced ISCST3. Based on EPA guidance, AERMOD (version 24142) is the most appropriate of the EPA-approved models, given the site's physical characteristics and the facility emission sources. AERMOD was applied as recommended in EPA's Guideline on Air Quality Models and consistent with guidance in UDAQ's Modeling Guidelines. The BPIP Prime building downwash algorithm was applied for the facility.

Terrain data were processed consistent with the approved model protocol and EPA guidance for AERMAP. The United States Geological Survey (USGS) National Viewer was used to obtain appropriate National Elevation Dataset (NED) data to establish proper elevations. Five years of meteorological data from the Milford Municipal Airport (2008-2012) was obtained via the UDAQ website for this analysis. This was confirmed as appropriate via email by UDAQ on April 30, 2025.

3.0 EMISSION AND SOURCE DATA

All G3520K engines are expected to operate continuously and are assumed to operate with the SCR and OC fully functional at all times. Start-up situations for the SCR will occur during commencement of operations and following periodic maintenance. Ultimately, the modeling of the G3520K assumed all 69 engines operating concurrently for all hours of the year at the SCR-controlled at 0.07 grams per horsepower-hour (g/hp-hr) or 0.449 pounds per hour (lb/hr), which is based on the 3,392 hp. While it is probable that a small number of engines may have a brief few minutes of NO_2 emissions not being fully controlled, this will rarely happen and when it occurs, those engines will have been previously off. Therefore, not all engines will be contributing to that hour. The assumption that all 69 engines are running continuously represents the typical operating condition of the facility and will occur the overwhelming majority of the year. All other pollutants were modeled for the G3520K engines in an identical manner.

The indirect-fired absorption Chiller is manufactured by Broad USA and will operate to cool exhaust gas from the G3520K engines. There will be chiller for each engine or 69 in total. The NOx and CO emissions will be 9 parts per million (ppm) and 40 ppm corrected to 3% oxygen, respectively to comply with UDAQ Rule R307-315. Broad USA also provided emissions factors for PM and VOCs. AP-42, Section 1.4 was utilized for SO_2 and all HAPs. All values were provided in lb/MMBtu.

All emissions associated with the emergency 3516C engines were estimated by the CAT Potential Site Variation information.

Table 3-1 presents the emission rates for all emission sources. All engine emission rates listed in Table 3-1 are based on manufacturer information for the Caterpillar engines.

3.1 EMISSION SOURCES

Emissions sources from the JCP facility, including modeled emission rates that were included in the model are listed in Table 3-1 below.

Table 3-1 Emissions Sources

Source	Type	PM_{10} lb/hr Rate	$PM_{2.5}$ lb/hr Rate	$PM_{2.5}$ tpy Rate	NO_2 lb/hr Rate	NO_2 tpy Rate	CO lb/hr Rate
ENGINE1-69	CAT 3520K	0.190	0.190	0.833	0.449	1.965	0.581
DENG1-69	CAT 3516C	0.029	0.029	0.01	3.703	1.277	0.441
CHILL1-69	Chiller	0.0091	0.0091	0.04	0.021	0.092	0.057

UDAQ modeling personnel also provided a series of NOx emission sources for IPP, GW and Ash Grove. All emissions, stack parameters, buildings and source locations were applied without

modification. The other JCP plant currently under review was also modeled as a nearby source, the initial emission rates were applied.

3.2 SOURCE CHARACTERIZATION

All emission sources are characterized as point sources. The following sections outline the rationale and basis for all parameters.

3.2.1 Point Sources

There are 207 point sources within JCP, representing each engine. All CAT engine stack parameters for the JCP engines are from manufacturer specification sheets as mentioned in Section 1.1. Table 3-2 shows these parameters. The Chiller parameters are based on information provided by Broad USA.

Table 3-2 Emission Source Stack Parameters

Point Source	Stack Height (ft)	Temperature (°F)	Stack Diameter (inches)	Flow Rate (acfm)	Velocity (m/s)
ENGINE1-69	55	320.0	24	14,882.0	24.0644
DENG1-69	50	853.1		18,497.4	29.9106
CHIL1-69	55	320.0	24.9	155.97	0.2345

The first JCP site has identical stack parameters with the exception of the diesel generator stacks only being 40' tall.

3.2.2 Operation Limitations

Operations for the emergency engines were evaluated by assessing 14 separate scenarios. Each scenario assessed five CAT 3516C engines operating at any given hour throughout the 5-yr meteorological dataset. The scenarios are outlined in Table 3.3. The maximum group of five engines were applied for a particular pollutant and averaging period. All pollutants and averaging periods were evaluated. The maximum scenario is highlighted in the table and was evaluated on its own to represent the final results in Section 9 of this report. All scenarios either produced near identical or not significantly different results. Therefore, JCP is proposing to limit diesel emergency engines to a maximum of five per hour. Additionally, the emergency engines were modeled only from 9:00 AM to 2:00 PM by implementing the hour of day factor. Note it was assumed that the previous JCP site diesel engines operated in an identical manner with a maximum of five operating at a given hour from 9:00 AM to 2:00 PM.

Table 3-3 Modeled Maximum Impacts (µg/m³)

Scenario #	Point Source	24-hr PM_{10}[1]	24-hr $PM_{2.5}$	Annual $PM_{2.5}$[2]	1-hr NO_2[3]	Annual NO_2[3]	1-hr CO[4]	8-hr CO[4]
1	DENG1-5	76.59	23.30	3.18	83.25	7.51	215.49	51.93
2	DENG6-10	76.61	23.32	3.18	83.25	7.52	215.49	52.01
3	DENG11-15	76.65	23.34	3.18	83.25	7.53	215.49	53.36
4	DENG16-20	76.67	23.36	3.18	83.25	7.53	215.49	54.40
5	DENG21-25	76.69	23.37	3.18	83.25	7.54	215.49	54.40
6	DENG26-30	76.70	23.36	3.18	83.25	7.54	215.49	52.12
7	DENG31-35	7670	23.34	3.18	83.25	7.54	215.49	51.93
8	DENG36-40	76.61	23.28	3.18	83.25	7.51	215.49	55.57
9	DENG41-45	76.65	23.29	3.18	83.25	7.51	215.49	58.81
10	DENG46-50	76.73	23.30	3.18	83.25	7.52	215.49	61.32
11	DENG51-55	76.79	23.30	3.18	83.25	7.52	215.49	60.94
12	DENG56-60	76.83	23.30	3.18	83.25	7.52	215.49	57.56
13	DENG61-65	76.83	23.29	3.18	83.25	7.52	215.49	55.35
14	DENG66-69	76.71	23.27	3.18	83.25	7.51	213.42	51.93

1. 24-hr PM_{10} Scenarios 12 and 13 results are nearly identical, but 12 is slightly higher at 76.83248 vs 76.83164 µg/m³.
2. All annual $PM_{2.5}$ results have essentially the same impact. Scenario 5 is slightly higher at 3.18374 µg/m³.
3. All 1-hr NO_2 results return the same value. All annual NO_2 results have essentially the same impact. Scenario 6 is slightly higher at 7.53963 µg/m³.
4. All 1-hr CO results have essentially the same impact. 1-hr and 8-hr CO was set to Scenario 5 for minimizing the total number of scenarios run.

3.2.3 Cumulative Review

The initial results shown in Table 3.3 outlines only the impacts of JCP sources (G3520K, Chillers) and from each emergency engine scenario. For each pollutant and averaging period subsequent BEEST files were developed. For example, "Scenario5.BST" was run for 1-hr NO_2 for all worst case JCP sources (only DENG 21-25 amongst emergency engines) and all provided Nearby sources. Each scenario includes the initial JCP and those are modeled identically. This was done for all short term standards, but ALL JCP sources were modeled for annual $PM_{2.5}$ and NO_2.

4.0 RECEPTOR NETWORK

The facility is located in an agricultural area in Millard County, Utah near the town of McCornick. Consistent with UDAQ Air Dispersion Modeling Guidance, the ambient air boundary used in this analysis is the owned property boundary, which also serves as the Public Access Boundary (PAB). JCP owns a large swath of farmland. The PAB will be fully fenced to control access. Receptors along the PAB were spaced at 25-meter increments. The PAB represents the limit of access by the public to the project site. The receptor grid was established as follows:

- Receptors are spaced at 25 meters along the PAB;
- Receptors are spaced at 25 meters for the first 100 meters past the PAB;
- Receptors are spaced at a density of one per 50 meters from 100 meters out to 350 meters past the PAB;
- Receptors are spaced at a density of one per 100 meters from 350 meters out to 850 meters past the PAB;
- Receptors are spaced at 250 meters from 850 out to 1,850 meters (1.85 kilometers) past the PAB;
- Receptors are spaced at 500 meters from 1.85 kilometers out to 4.35 kilometers past the PAB; and
- Receptors are spaced at 1 kilometer from 4.35 kilometers out to 10.35 kilometers past the PAB.
- Receptors are spaced at 5 kilometers from 10.35 kilometers out to 35,350 kilometers past the PAB.

The receptor grid was also applied to the initial JCP site. Any duplicate receptors were removed. This translated to 6,658 total receptors. See Figure 4-1.

Receptor network
July 21, 2025

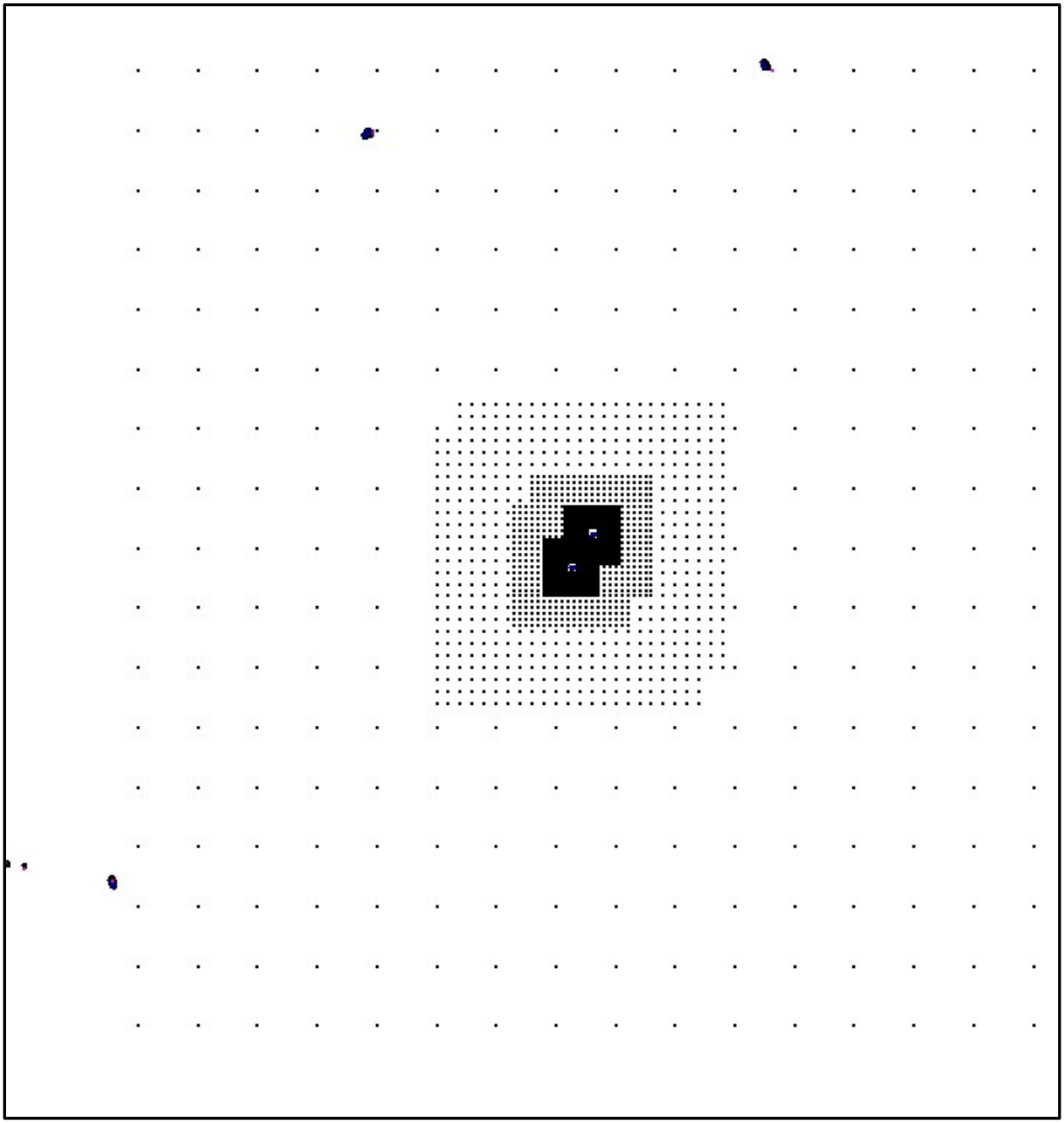


Figure 4-1 JCP Receptor Grid

Elevation Data
July 21, 2025

5.0 ELEVATION DATA

All source base and receptor elevations were calculated from USGS NED data obtained via the National Map Viewer website using the Bee-Line BEEST preprocessing system. A 1/3 arc second NED file was used in the analysis input and output files from AERMAP will be submitted with the report. All elevation values were established using AERMAP, version 24142.

6.0 METEOROLOGICAL DATA

Preprocessed AERMOD-ready meteorological files were obtained via the UDAQ Guideline website[1]. The data files cover the years 2008 through 2012 from the Milford Municipal Airport. The hourly average data is from the National Weather Service (NWS) Automated Surface Observing System (ASOS). The data presented by UDAQ is model-ready and was used without alteration or processing. Although these data originated from UDAQ, it will be included as part of this submittal.

[1] https://deq.utah.gov/air-quality/emissions-impact-assessment-guideline-preface

7.0 LAND USE CLASSIFICATION

AERMOD includes rural and urban algorithm options. These options affect the wind speed profile, dispersion rates, and mixing-height formula used in calculating ground-level pollutant concentrations. A protocol was developed by USEPA to classify an area as either rural or urban for dispersion modeling purposes. The classification is based on average heat flux, land use, or population density within a three-km radius from the plant site. Of these techniques, the USEPA has specified that land use is the most definitive criterion (USEPA, 1987). The urban/rural classification scheme based on land use is as follows:

> *The land use within the total area, A_0, circumscribed by a 3-km circle about the source, is classified using the meteorological land use typing scheme proposed by Auer (1978). The classification scheme requires that more than 50% of the area, A0, be from the following land use types in order to be considered urban for dispersion modeling purposes: heavy industrial (I1); light-moderate industrial (I2); commercial (C1); single-family compact residential (R2); and multi-family compact residential (R3). Otherwise, the use of rural dispersion coefficients is appropriate.*

The JCP facility is located in an agricultural area, within Millard County, Utah. Site and map reconnaissance showed that the area A_0 within a 3-km radius of the source is below the 50% urban land use criteria necessary for use of urban dispersion coefficients. Therefore, the urban coefficient was not applied.

8.0 BACKGROUND CONCENTRATIONS

$PM_{2.5}$

UDAQ provided monthly maximum 24-hr background concentrations from the Price monitor from 2022-2024. A monthly average value was applied directly into the modeling evaluation. Table 8.1 provides background concentrations implemented. Annual background from Price was also recommended at 3.68 µg/m³. These data were provided to Stantec via email on May 6, 2025.

Table 8-1 Background Concentrations (24-hr $PM_{2.5}$ µg/m³)

Month	2022	2023	2024	3-yr Avg
January	--	6.0	5.1	5.55
February	--	5.1	2.5	3.80
March	--	5.7	--	5.70
April	--	17.9	--	17.90
May	--	19.1	--	19.10
June	15.1	5.4	--	10.25
July	8.0	7.9	--	7.95
August	8.8	7.2	--	8.00
September	17.7	5.8	--	11.75
October	5.0	4.9	--	4.95
November	3.3	7.3	--	5.30
December	4.7	5.6	--	5.15

PM_{10}

UDAQ also provided monthly maximum 24-hr PM10 background concentrations from the Ash Grove Leamington onsite monitor from 2021-2022. A monthly average value was applied directly into the modeling evaluation. Table 8.2 provides background concentrations implemented. These data were provided to Stantec via email on May 6, 2025.

Table 8-2 Background Concentrations (24-hr PM_{10} µg/m³)

Month	2021	2022	2-yr Avg
January	--	28	28
February	--	65	65
March	--	55	55
April	--	68	68
May	--	64	64
June	--	60	60
July	--	65	65
August	--	65	65
September	--	61	61
October	27	--	27
November	45	--	45
December	68	--	68

CO

UDAQ suggested use of the Lindon monitoring site (AQS Site ID 49-049-4001) from 2024 are 1.2 ppm (1380 µg/m³) for the 1-hr standard and 0.8 ppm (920 µg/m³) for the 8-hr standard were applied as well. These data were provided to Stantec via email on May 6, 2025.

NO_2

UDAQ provided NO_2 and ozone background data from Price (AQS Site ID 49-007-1003) from 2020-2022 via the modeling website. Monthly values are provided in Tables 8.3 and 8.4. To complete the modeling analysis, the plume molar volume ratio method (PMVRM) was implemented. Therefore, monthly ozone background concentration data was also applied.

NO_2 In-Stack Ratio

Three Caterpillar G3520 engines were referenced in the EPA In-stack Ratio (ISR) database, and an average of these ratios was applied for the G3520K engines modeled for this project. The average ratio is 0.1625 from previously tested units by the Oklahoma DEQ in the EPA database, which has been accepted by UDAQ modeling personnel for similar previous projects.

Annual background was determined from the Price monitor from 2022-2024, which the average three-year value being 2.36 µg/m³.

CAT 3516 engines were also referenced in the EPA ISR database. The average ratio amongst 13 3516 units tested by the Alaska Department of Environmental Conservation was 0.0748. To add a level of conservatism, 0.1 was applied within the modeling evaluation. Lastly, all nearby sources did not have an ISR value from UDAQ. All boiler chillers were set as 0.1, consistent with other UDAQ modeling. Stantec applied 0.1 universally for all Non-JCP nearby sources. All JCP Nearby sources have the same ISR values as referenced above.

Table 8-3 Background Concentrations (Ozone ppm)

Monthly	2020	2021	2022	3-yr Avg
January	0.048	0.049	0.049	0.049
February	0.054	0.050	0.055	0.053
March	0.054	0.057	0.054	0.055
April	0.057	0.060	0.065	0.061
May	0.059	0.065	0.064	0.063
June	0.066	0.078	0.068	0.071
July	0.074	0.075	0.063	0.071
August	0.072	0.086	0.063	0.074
September	0.064	0.074	0.063	0.067
October	0.063	0.066	0.055	0.061
November	0.047	0.049	0.045	0.047
December	0.045	0.050	0.047	0.047

Table 8-4 Background Concentrations (NO_2 ppb)

Monthly	2020	2021	2022	3-yr Avg
January	17.5	16.9	15.6	16.7
February	8.0	12.5	14.9	11.8
March	11.4	8.4	14.4	11.4
April	8.8	16.9	10.7	12.1
May	5.7	9.3	15.6	10.2
June	7.1	10.9	15.6	11.2
July	9.2	16.9	7.7	11.3
August	8.6	6.9	8.4	8.0
September	12.9	11.7	15.6	13.4
October	9.6	10.7	13.1	11.1
November	10.5	16.9	13.3	13.6
December	17.5	16.9	15.6	16.7

9.0 RESULTS

The following sections outline the limits and results of the ambient air impact analysis for the proposed JCP project.

9.1 APPLICABLE LIMITS

The air quality impact limits applicable to this analysis are the National Ambient Air Quality Standards (NAAQS). The 24-hr $PM_{2.5}$ and 1-hr NO_2 uses the design value that is the 98th percentile averaged over three years. That equates to a design value that is the 8th high over a five-year period. CO NAAQS is not to exceed more than once per year (high second high). PM_{10} NAAQS is the not to exceed more than once per year on average over three years. This translates to a design value of 1+ the number of meteorological data years. Because of 5 years, the design value is set to the high 6th high (H6H). Lastly, all annual design values are the annual mean concentration.

9.2 IMPACT

Table 9-1 shown below demonstrates that there is no exceedance of all NAAQS due to the proposed operation of the facility.

9.2.1 Modeling Results

Table 9-1 Modeling Results

Pollutant	Scenario	Averaging Period	Design Value	Background Concentration (µg/m³)[1]	Modeled Impact (µg/m³)[2]	Total Concentration (µg/m³)	NAAQS (µg/m³)	% of Standard
NO_2	5	1-hr	H8H	PVMRM	143.86	143.86	188	76.5%
		Annual	Ann Mean	4.44	8.32	12.76	100	12.8%
$PM_{2.5}$	13	24-hr	H8H	Monthly	23.37	23.37	35	66.8%
	5	Annual	Ann Mean	3.68	3.19	6.87	9	76.3%
PM_{10}	11	24-hr	H6H	Monthly	76.83	76.83	150	51.2%
CO	5	1-hr	H2H	1380	215.49	1595.49	40,250	4.0%
		8-hr	H2H	920	61.32	981.32	10,350	9.5%

1. MONTH AERMOD keyword ozone, 1-hr NO_2 24-hr $PM_{2.5}$ and PM_{10} backgrounds.
2. 2008-2012 Milford Met data

Form 2
Company Information/Notice of Intent (NOI)

Date 7/17/25

Utah Division of Air Quality
New Source Review Section

Application for: ☑ **Initial Approval Order** ☑ **Approval Order Modification**

General Owner and Source Information

1. Company name and mailing address:
McCornick Energy
2352 West Old Rosebud La
South Jordan, Utah 84095
Phone No.: (801) 413-8707
Fax No.: ( )

2. Company** contact for environmental matters:
Aaron McDougal
Phone no.: (801) 413-8707
Email: aaron@joulecapitalpartners
*** Company contact only; consultant or independent contractor contact information can be provided in a cover letter*

3. Source name and physical address (if different from above):
Joule Capital Partners, LLC
W 11700 N St;
~2675' E of N Cty Rd 4866
Phone no.: ( )
Fax no.: ( )

4. Source Property Universal Transverse Mercator coordinates (UTM), including System and Datum:
UTM: 12
X: 381071.57 m E
Y: 4338012.96 m N

5. The Source is located in: Millard County

6. Standard Industrial Classification Code (SIC)
4911

7. If request for modification, AO# to be modified: DAQE #_____ DATED: ____/____/____

8. Brief (50 words or less) description of process.
A new data center consisting of 69 CAT G3520K engines and 69 CAT G3516C diesel backup units. There is also 69 boiler chillers.

Electronic NOI

9. A complete and accurate electronic NOI submitted to DAQ Permitting Mangers Jon Black (*jlblack@utah.gov*) or Alan Humpherys (ahumpherys@utah.gov) can expedite review process. Please mark application type.

Hard Copy Submittal ☐ Electronic Copy Submittal ☑ Both ☐

Authorization/Signature

I hereby certify that the information and data submitted in and with this application is completely true, accurate and complete, based on reasonable inquiry made by me and to the best of my knowledge and belief.

Signature: Aaron McDougal Title:

Aaron McDougal Name (Type or print)	Telephone Number: (801) 413-8707 Email: aaron@joulecapitalpartners	Date: 6/16/25