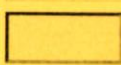
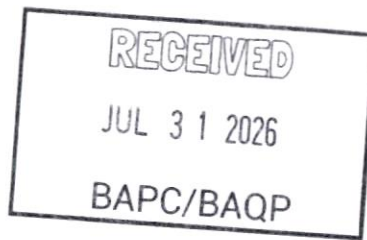


Air Case ID: 13134 Permit Id: 4502

FIN No.:	A2569
Company Name:	NOVVA RENO, LLC
HA Basin No: 083	Increment Tracked ☒
Permit No:	AP73744667 * <i>Select a Permit No</i> ▼
Date App. Received:	07/31/2026  *
Permit Writer:	Not Assigned (NA) ▼ *
Case Type:	Class 2 Revision w/o Public Notice ▼ *
Default ODS Date:	08/14/2026  *
Actual ODS Date:	
Date App. to be Closed:	10/13/2026  *
Stop Days:	 Actual Date App. to be Closed: 10/13/2026
App. Incomplete?	☐
Date App. Closed:	
Fee Paid (\$):	5000 *
Case Description:	
Comments:	
Flag (For Class 4) :	None ▼

Update

Cancel



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JUL 31 2026

ENVIRONMENTAL PROTECTION

July 22, 2026

Nevada Division of Environmental Protection
Bureau of Air Pollution Control, Class II Permitting Branch
901 South Stewart Street, Suite 4001
Carson City, NV 89701

RE: Application for a Class II Permit to Construct – Novva Reno, LLC

Dear Sir or Madam,

Novva Reno, LLC (Novva) is proposing to construct an additional generator (house generator) at its existing data center facility (the Facility) located in McCarran, Nevada. The Facility is located within Storey County, within the jurisdiction of the Nevada Department of Environmental Protection (NDEP).

Enclosed is the permit application for a Class II Permit Revision (the Permit). Based on the control equipment and type of operations, the Facility is classified as a minor source of emissions, as all pollutants retain a potential to emit below Class I thresholds.

Per NAC 445B.287, an owner or operator of a new Class II stationary source should apply for and obtain a permit to construct according to NAC 445B.3611 to 445B.3689 requirements. This Class II revision application includes a detailed air quality and regulatory analysis associated with the proposed project and satisfies the requirements stipulated in NAC 445B.295, 445B.3453, and 445B.346. This application package includes all the information necessary for a Class II permit to construct application.

If you have any questions or comments about the information presented in this application, please do not hesitate to call me at (801) 473-6537 or Sean Keane (Trinity Consultants) at (847) 445-0557.

Sincerely,

Steven Boyce
Vice President, Infrastructure Research and Design
Novva Reno, LLC

Enclosure

cc: Sean Keane, Trinity Consultants, Inc.

CLASS II REVISION APPLICATION

Novva Reno, LLC / Storey County, NV

Nevada Division of Environmental Protection

Prepared By:

TRINITY CONSULTANTS

5401 Longley Lane, Suite 5
Reno, NV 89511
(775) 242-3200

July 22, 2026



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1. EXECUTIVE SUMMARY

Novva Reno, LLC (Novva) is proposing to construct a house generator at the existing data center (the Facility) located in McCarran, NV (site map and vicinity map provided in Appendix A). The Facility is located within Storey County, within the jurisdiction of the Nevada Department of Environmental Protection (NDEP). Novva is proposing to modify the existing Class II source (the Project) at the Facility, consisting of 1 new house generator rated at 1,250 kW.

With this application package, Novva is seeking a revised Class II air quality permit for the Facility. Based on the control equipment and type of operations, the Facility will continue to be classified as a minor source of emissions, as all pollutants retain a potential to emit below Class I thresholds. This application package includes all the information necessary for a Class II air quality permit application, pursuant to the requirements of NDEP.

The Facility is located in Hydrographic Area (HA) 83, also referred to as Basin HA83 or Tracy Segment in the Truckee River Basin. The Tracy Segment located in Storey County is currently designated as unclassifiable and/or attainment for all regulated air pollutants.¹ The proposed Facility will be a minor source under the Prevention of Significant Deterioration (PSD) program. The baseline date for HA83 was triggered on March 11, 1994, for particulate matter less than ten microns (PM₁₀), oxides of nitrogen (NO_x), and sulfur dioxide (SO₂).² For particulate matter less than 2.5 microns (PM_{2.5}), the minor source baseline date for the increment has not yet been triggered.

The Facility's emission profile consists of combustion emissions from diesel-fired engines. The emissions of the house generator were calculated on the basis of 100 hours of operation per year and is not considered an insignificant activity. As shown in the potential to emit in Section 3.1 of this permit application, the proposed facility-wide Potential-to-Emit (PTE) is below the PSD major source threshold of 250 tons per year (tpy) for all criteria pollutants, as well as under the Class I thresholds of 100 tons per year for all criteria pollutants. Proposed emissions of any single Hazardous Air Pollutant (HAP) or cumulative HAP are also below the major source thresholds of 10 and 25 tpy, respectively.

Per NAC 445B.3465, an owner or operator of a Class II stationary source looking to revise their permit should apply for and obtain a permit pursuant to requirements. This Class II revision application includes a detailed analysis of pertinent air quality and regulatory analysis associated with the proposed project and satisfies the requirements stipulated in NAC 445B.295, 445B.3453, and 445B.3465. Applicable NDEP permitting forms are included in Appendix C. Additionally, per NAC 445B.327.1(e), the fee of \$2,500 has been submitted electronically with this application.

¹ EPA Green Book, accessed January 2024. [Nevada Nonattainment/Maintenance Status for Each County by Year for All Criteria Pollutants | Green Book | US EPA](#)

² Nevada PSD Triggered 107(d) Planning Areas, [westar_psd_trigger_areas.pdf \(nv.gov\)](#)

2. FACILITY DESCRIPTION

The Facility is located at 3399 Peru Drive, McCarran, NV (Storey County) and the site & vicinity maps are included in Appendix A. As discussed in Section 1, operations are located in Hydrographic Area 83, also referred to as Basin HA83 or Tracy Segment. This area is currently designated as unclassifiable and/or attainment for all criteria pollutants.³ The Standard Industrial Classification (SIC) code for the facility is 7374 (Computer Processing and Data Preparation and Processing Services).

The Facility consists of a data center that will house servers to store, manage, and disseminate data. The servers require backup power contingencies to preserve services for customers in the case that local power is interrupted. Along the northern side of the building, the emergency generators will be housed in pairs in smaller enclosures, along with the diesel storage tanks.

The Facility proposed in this application will have the following emission units:

- One (1) diesel-fired house generator (Kohler model: KD36V16, rating: 1,250 kW, EPA Tier 2, model year: 2023) with a subbase 2,200-gallon diesel storage tank.

Further equipment specifications can be found in Appendix D and detailed emissions calculations can be found in Section 3 and Appendix B.

³ EPA Green Book, accessed June 2015. http://www.epa.gov/airquality/greenbook/phistory_nv.html

3. EMISSIONS INFORMATION

3.1 Facility Emissions Summary

The diesel-fired engine powering the house generator at the Facility is a source of air pollutant emissions; however, the emergency engine is used sparingly for non-emergency activities, which can include monthly testing and maintenance events. The Facility is a source of nitrogen dioxide (NO_2), carbon monoxide (CO), particulate matter (PM), particulate matter with an aerodynamic diameter of less than 10 microns (PM_{10}), particulate matter with an aerodynamic diameter of less than 2.5 microns ($\text{PM}_{2.5}$), sulfur dioxide (SO_2), volatile organic compounds (VOC), hazardous air pollutant (HAP), and greenhouse gas (GHG) emissions. The equipment specifications are included in Appendix D. Potential emissions are calculated using the methodologies described in the following sections and detailed calculations are provided in Appendix B of this report.

Table 3-1 below provides the facility's proposed potential-to-emit (PTE). This table demonstrates that the Facility does not require a Class I operating permit and meets the requirements for a Class II source permit pursuant to NDEP NAC 445B.3453. Detailed emission calculations are included in Appendix B.

Table 3-1. Proposed Facility-Wide PTE Summary

	PM₁₀	PM_{2.5}	NO_x	CO	SO₂	VOC	HAP	GHG
Pre-Project Facility-Wide PTE (tpy)	0.85	0.85	23.29	9.98	0.11	5.13	0.09	8,988.43
Project PTE ¹ (tpy)	0.02	0.02	0.88	0.10	1.13E-03	0.01	9.17E-04	95.38
Post-Project PTE (tpy)	0.88	0.88	24.16	10.08	0.11	5.13	0.09	9,130.75
NDEP Class II Thresholds ² (tpy)	5.00	5.00	5.00	50.00	5.00	20.00	-	-
NDEP Class I Thresholds ³ (tpy)	100.00	100.00	100.00	100.00	100.00	100.00	25/10	--
Prevention of Significant Deterioration (PSD) Thresholds (tpy) ⁴	250.00	250.00	250.00	250.00	250.00	250.00	--	--
Does Post-Project PTE Exceed 25 tpy? ⁵	No	No	No	No	No	No	No	--
Does Post-Project PTE Exceed Class I Thresholds?	No	No	No	No	No	No	No	--

1. Project PTE includes the addition of 1 house generator that operates up to 100 hr/yr.

2. The Class II thresholds are defined in NAC 445B.037. Emissions less than these thresholds may not require a permit.

3. The Class I thresholds are defined in NAC 445B.036 [40CFR 52.21] as 100 tpy of any air contaminant and 10 tpy of any individual HAP or 25 tpy of combined HAP.

4. PSD threshold per 40 CFR 52.21(b)(1)(i).

5. Per NAC 445B.310, the 25 tpy threshold determines the applicability of an environmental evaluation.

3.2 Diesel-Fired Engine Powering House Generator

Emissions are calculated for the 1,250 kW diesel-fired engine powering a house generator. Calculations for the criteria pollutants are based on the annual hours of operation and manufacturer provided emission rates. PM, PM₁₀, PM_{2.5}, NO_x, VOC, and CO emissions are calculated by converting the emission factors (grams/kWh) provided by the manufacturer, guaranteed engine emission factors (see Appendix D) using appropriate power output and conversion factors. Emission factors for PM₁₀ and PM_{2.5} are conservatively assumed equivalent to the emission factor for PM.

Per 40 CFR Part 60.4207, the engine associated with the emergency generator at the Facility has a displacement less than 30 liters per cylinder and therefore must use ultra-low sulfur diesel fuel that meets a maximum sulfur content of 15 ppm. The SO₂ emission factor from AP-42 Section 3.4, Table 3.4-1 (10/96) is used in the emission calculations and accounts for the required ULSD fuel sulfur content.

HAP emissions are based on the maximum heat input and annual hours of operation of the emergency generators. Emission factors for HAPs are obtained from AP-42, Section 3.4, Tables 3.4-3 and 3.4-4. To be conservative, HAP emissions are calculated for all speciated organic compounds and polycyclic organic matter (POM), provided in AP-42, Section 3.4, Tables 3.4-3 and 3.4-4.

GHG pollutants expected to be emitted from the engine include carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O). Standard emission factors for CO₂, N₂O and CH₄ are provided in 40 CFR Part 98, Subpart C, Table C-1 and Table C-2. The global warming potential (GWP) for each relevant pollutant is obtained from 40 CFR Part 98, Subpart A, Table A-1. Calculations for GHG pollutants are based on the emission factor for each GHG pollutant, relevant global warming potential, annual hours of operation, and the maximum heat input of the engine.

Potential emissions for the emergency generators are based on 100 hours per year. This time accounts for 100 hours per year for non-emergency use such as maintenance and testing, as stated in 40 CFR Part 60 Subpart III 60.4211(f).

4. REGULATORY REVIEW

Novva is subject to federal, state, and local air regulations. This section summarizes the air permitting requirements and the key air quality regulations that apply to the proposed installations at the Facility. Specifically addressed are Federal New Source Review (NSR), Prevention of Significant Deterioration (PSD), New Source Performance Standards (NSPS), National Emission Standards for Hazardous Air Pollutants (NESHAP), and state and local-specific requirements. Applicability to certain general provisions is not detailed in this narrative summary.

4.1 Federal Regulations

4.1.1 NSR Applicability

The NSR permitting program generally requires a stationary source to obtain a permit and undertake other obligations prior to construction of any project at an industrial facility if the proposed project results in emission increases in excess of certain threshold levels. The NSR program is comprised of two elements: Non-Attainment NSR (NNSR) and Prevention of Significant Deterioration (PSD). The NNSR program potentially applies to new construction or modifications that result in emission increases of a particular pollutant for which the area in which the facility is located is classified as "nonattainment" for that pollutant. The PSD program applies to project increases of those pollutants for which the area the facility is located in is classified as "attainment" or "unclassifiable".

4.1.2 Non-Attainment New Source Review

The Facility will be located in Hydrographic Area 83, also referred to as Basin HA83 or Tracy Segment. Tracy Segment is currently designated as unclassifiable and/or attainment for all criteria air pollutants. Therefore, NNSR is not applicable.

4.1.3 Prevention of Significant Deterioration

The Facility is located in Storey County, which is classified as attainment or unclassifiable for all criteria pollutants. As such, the Facility is potentially subject to PSD requirements. Per NAC 445B.0945 [which references 40 CFR 52.21(b)(1)], a stationary source is considered "major" for PSD if it has the potential to emit either (1) 100 tons per year or more of a regulated pollutant if the source is classified as one of 28 designated industrial source categories, or (2) 250 tons per year or more of any regulated pollutant for unlisted sources. Given that data centers are not on the list of 28 industrial source categories and that the site-wide PTE for all regulated pollutants (NO_x, SO₂, PM₁₀/PM_{2.5} and CO) are under the 250 tons per year threshold for PSD, the Facility is not subject to PSD major source requirements.

4.1.4 New Source Performance Standards

NSPS require new, modified, or reconstructed sources to control emissions to the level achievable by the best-demonstrated technology as specified in the applicable provisions. Moreover, any source subject to an NSPS is also subject to the general provisions of NSPS Subpart A, unless specifically excluded.

4.1.4.1 NSPS Subpart A – General Provisions

All affected sources are subject to the general provisions of NSPS Subpart A unless specifically excluded by the source specific NSPS. Subpart A requires initial notification and performance testing, recordkeeping,

monitoring, provides reference methods, and mandates general control device requirements for all other subparts as applicable.

4.1.4.2 NSPS Subpart IIII- Standards of Performance for Stationary Compressions Ignition Internal Combustion Engines

NSPS Subpart IIII, *Standards of Performance for Stationary Compressions Ignition Internal Combustion Engines*, applies to any owner or operator of a stationary compression ignition (CI) internal combustion engine (ICE) for which construction has commenced after July 11, 2005, and is manufactured after April 1, 2006 (non-fire pump engines) or July 1, 2016 (fire pump engines). The one (1) diesel-fired engine to be installed at the Facility meet the above criteria and are therefore subject to the requirements under NSPS Subpart IIII.

In accordance with 40 CFR 60.4205(b), the diesel-fired engine will comply with applicable emission standards as specified in 40 CFR 60.4202. The diesel-fired engine must then comply with Tier 2 emission standards in Table 2 of Appendix I to Part 1039, as well as 40 CFR 1039.105 regarding smoke opacity. Novva will use diesel fuel that meets the requirements set forth in 40 CFR 60.4207 for the engine. Novva will also comply with all applicable requirements of 40 CFR 60.4211.

The manufacturer's specification shows a nominal NO_x emission value of 5.72 g/kWh, meeting the 6.4 g/kWh requirements for Tier 2 emissions standards listed in Table 2 of Appendix I to Part 1039.

The manufacturer's specifications for CO and PM of 0.3 and 0.03 g/kWh are lower than the emissions standards of 3.5 g/kWh and 0.2 g/kWh, respectively. Therefore, Novva will meet the emissions requirements under Subpart IIII.

In addition, since the engine is considered an emergency stationary units, an initial notification is not required per 40 CFR Part 60.4214(b). Novva will keep records of the operation of the engine in emergency and non-emergency service through the use of non-resettable hour meters. These records will include the duration of operation of the engine and the reason the engine was in operation during that time.

4.1.4.3 NSPS Subpart JJJJ- Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

NSPS Subpart JJJJ, *Standards of Performance for Stationary Spark Ignition Internal Combustion Engines*, applies to any owner or operator of a spark ignition (SI) ICE emergency engine with a maximum engine power greater than 25 hp, on or after January 1, 2009. SI ICE are fired with gasoline, liquid petroleum gas (LPG), methanol, ethanol, bioethanol, compressed natural gas, hydrogen, and nitromethane but not diesel. Therefore, the engine included in this application is not considered an SI ICE and is not subject to NSPS Subpart JJJJ.

4.1.5 National Emission Standards for Hazardous Air Pollutants (NESHAP)

NESHAPs are established in 40 CFR Part 63 to control the emissions of HAPs. The Facility is an area source of HAPs (i.e., the Facility will not emit more than 25 tons of total HAPs or more than 10 tons of any single HAP). The potentially applicable NESHAP subparts are discussed in the following section.

4.1.5.1 NESHAP Subpart A – General Provisions

Any source subject to a NESHAP is also subject to the general provisions of NESHAP Subpart A, unless specifically excluded. NESHAP Subpart A requires initial notification and performance testing, recordkeeping,

monitoring, provides reference methods, and mandates general control device requirements for all other subparts as applicable.

4.1.5.2 NESHAP Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

NESHAP Subpart ZZZZ, *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*, applies to any new or existing stationary reciprocating internal combustion engine (RICE) operated at a major or area source. The emergency engine proposed to be operated at the Facility is considered RICE. Per 40 CFR 63.6590(c)(1), a new or reconstructed stationary RICE located at an area source of HAPs does not have any further requirements under NESHAP Subpart ZZZZ if the RICE meets the requirements of NSPS Subpart IIII. As described under Section 4.1.4.2 of this report, Novva will comply with all requirements under NSPS Subpart IIII. As such, Novva will comply with NESHAP Subpart ZZZZ by meeting the requirements of NSPS Subpart IIII.

4.2 NDEP Source Specific Requirements

All applicable NAC requirements have been identified and addressed in the NDEP forms provided in Appendix C of the Application.

4.3 NDEP Application Requirements and Regulations

As stated previously in this Application, Novva is submitting this application pursuant to the requirements of NDEP. The following is a summary of the NDEP requirements in *italic, bold* text as well as Novva's action to meet each requirement in standard text.

NAC 445B.295 and NAC 445B.3363 outline requirements for content on applications for an operating permit/permit to construct. The regulatory text from NAC 445B.295, NAC 445B.3453 and NAC 445B.346 is included in *italic, bold* text. This section also includes Novva's action to meet each requirement in plain text.

NAC 445B.295 Application: General requirements. (NRS 445B.210, 445B.300)

Except as otherwise provided in NAC 445B.33637, an application for an operating permit must include:

1. Information to identify the applicant, including the name and address of the company or the name and address of the plant if different from that of the company, the name of the owner of the company and the owner's agent, and the name and telephone number of the manager of the plant or another appropriate person to contact;

Please refer to the Class II Operating Permit Revision form in Appendix C for identifying information.

2. A description of the stationary source's processes and products by Standard Industrial Classification Code, including any processes and products associated with an alternative operating scenario identified by the owner or operator;

Please refer to Section 2 of the application and Class II Operating Permit Revision form for this information.

3. A description of the fuels, fuel use and raw materials to be used and the rates of production and operating schedules for each emission unit which is a part of the stationary source;

Please refer to Sections 2 and 3 of the application for this information.

4. An identification and a description of any equipment for the control of air pollution and any devices or activities for monitoring compliance with emission limitations;

No add-on control equipment is included with the house generator.

5. Limitations on the operation of the stationary source or any standards for work practices which affect emissions for all regulated air pollutants at the stationary source;

Information on the limitations of operation can be found in Section 2.

6. An explanation of any proposed exemption from any applicable requirement;

As noted in Section 4.1.4.3, the emergency generator is exempt from the initial notification requirements per 40 CFR Part 60.4214(b).

7. The location of any records that the applicant must keep pursuant to the requirements of the operating permit, if the records are kept at a location other than the emitting facility; and

All compliance related records will be retained on-site.

8. Other specific information that the Director determines is necessary to carry out, enforce and determine the applicability of all legal requirements.

Novva will provide, as requested, any additional information requested by the NDEP to meet this requirement.

NAC 445B.346 Required contents of permit. (NRS 445B.210, 445B.300)

In addition to the conditions set forth in NAC 445B.315, Class II operating permits must contain, as applicable:

1. Emission limitations and standards, including those operational requirements and limitations that ensure compliance with the conditions of the operating permit.

Novva will comply with limitations and standards that ensure compliance with the conditions of the permit.

2. All requirements for monitoring, testing and reporting that apply to the stationary source.

Novva will follow all requirements for monitoring, testing and reporting that apply to the stationary source.

3. A requirement that the owner or operator of the stationary source promptly report any deviations from any requirements of the operating permit.

Novva will promptly report any deviations from any requirements of the operating permit.

4. The terms and conditions for any reasonably anticipated alternative operating scenarios identified by the owner or operator of the stationary source in his or her application and approved by the Director. Such terms and conditions must require the owner or operator to keep a contemporaneous log of changes from one alternative operating scenario to another.

This is not applicable for Novva.

5. A schedule of compliance for stationary sources that are not in compliance with any applicable requirement or NAC 445B.001 to 445B.390, inclusive, at the time the operating permit is issued, including:

- (a) Semiannual progress reports and a schedule of dates for achieving milestones;**
- (b) Prior notice of and explanations for missed deadlines; and**
- (c) Any preventive or corrective measures taken.**

Novva will create a schedule of compliance if any applicable requirement is not met at the time the operating permit is issued.

APPENDIX A. SITE AND VICINITY MAPS





FIRE PUMP x 2

EMG-GEN

APPENDIX B. DETAILED EMISSION CALCULATIONS

Table 1. Facility Wide Potential to Emit (PTE) Summary

	PM₁₀	PM_{2.5}	NO_x	CO	SO₂	VOC	HAP	GHG
Pre-Project Facility-Wide PTE (tpy)	0.85	0.85	23.29	9.98	0.11	5.13	0.09	8,988.43
Project PTE ¹ (tpy)	0.02	0.02	0.88	0.10	1.13E-03	0.01	1.37E-03	142.31
NDEP Class II Thresholds ² (tpy)	5.00	5.00	5.00	50.00	5.00	20.00	-	-
NDEP Class I Thresholds ³ (tpy)	100.00	100.00	100.00	100.00	100.00	100.00	25/10	--
Prevention of Significant Deterioration (PSD) Thresholds (tpy) ⁴	250.00	250.00	250.00	250.00	250.00	250.00	--	--
Does Post-Project PTE Exceed 25 tpy ⁵	No	No	No	No	No	No	No	--
Does Post-Project PTE Exceed Class I Thresholds?	No	No	No	No	No	No	No	--

1. Project PTE includes the addition of 1 house generator that operates up to 100 hr/yr.

2. The Class II thresholds are defined in NAC 445B.037. Emissions less than these thresholds may not require a permit.

3. The Class I thresholds are defined in NAC 445B.036 [40CFR 52.21] as 100 tpy of any air contaminant and 10 tpy of any individual HAP or 25 tpy of combined HAP.

4. PSD threshold per 40 CFR 52.21(b)(1)(i).

5. Per NAC 445B.310, the 25 tpy threshold determines the applicability of an environmental evaluation.

Table 2. Key Parameters/Constants for Proposed Generator

Parameter	Value	Unit
Engine Power (@1800 rpm) ¹	1,865.00	hp
Engine Power (@1800 rpm) ¹	1,391.00	kW
Standby Fuel Consumption Rate ¹	127.00	gal/hr
Maximum Heat Input ²	17.40	MMBtu/hr
Annual Hours	100.00	hrs/yr/engine
Heating Value of Diesel ³	137,000.00	btu/gal
Number of New Engines	1.00	Engine

1. Based on manufacturer guarantee.

2. Maximum Heat Input (MMBtu/hr) = Maximum Fuel Consumption Rate (gal/hr) * Heating Value of Diesel (Btu/gal) / 10⁶ (Btu/MMBtu).

3. Heating value of diesel provided in AP-42, Appendix A (09/85).

Table 3. Emission Factors

Pollutant	Value	Unit
VOC ¹	0.05	g/kWh
NO _x ¹	5.72	g/kWh
CO ¹	0.66	g/kWh
PM ¹	0.14	g/kWh
PM ₁₀ ²	0.14	g/kWh
PM _{2.5} ²	0.14	g/kWh
SO ₂ ³	7.38E-03	g/kWh

1. NO_x, CO, PM, and VOC emission factors per manufacturer specifications.

2. It is conservatively assumed that emission factors for PM₁₀ and PM_{2.5} are equivalent to the emission factor for PM.

3. The emission factor for SO₂ is based on values listed in AP-42 Ch. 3.4, Table 3.4-1 based on diesel with a sulfur content of 0.0015%. The value given in lb/hp-hr is converted to g/kWh by multiplying by 608. This value is assumed for all % ESP.

Table 4. Potential Emissions for Generator

Pollutant	Hourly PTE	Annual PTE	
	(lb/hr) ¹	(lb/yr) ²	(tpy) ³
VOC	0.15	15.33	7.67E-03
NO _x	17.54	1,754.11	0.88
CO	2.02	202.40	0.10
PM	0.43	42.93	0.02
PM ₁₀	0.43	42.93	0.02
PM _{2.5}	0.43	42.93	0.02
SO ₂	0.02	2.26	1.13E-03

1. Hourly PTE (lb/hr) = Emission Factor (g/kWh) * Engine Power (kW) / 453.592 (grams/lb).

2. Annual PTE (lb/yr) = Hourly PTE (lb/hr) * maximum operating hours per year * number of engines.

3. Annual PTE (tons/yr) = Annual PTE (lb/yr) / 2000 (lb/ton).

Table 5. HAP Emissions for Generator

Pollutant	Emission Factor	Hourly PTE	Annual PTE	
	(lb/MMBtu) ¹	(lb/hr) ²	(lb/yr) ³	(tpy) ⁴
Benzene	7.76E-04	1.35E-02	1.35	6.75E-04
Toluene	2.81E-04	4.89E-03	0.49	2.44E-04
Xylenes	1.93E-04	3.36E-03	0.34	1.68E-04
Formaldehyde	7.89E-05	1.37E-03	0.14	6.86E-05
Acetaldehyde	2.52E-05	4.38E-04	0.04	2.19E-05
Acrolein	7.88E-06	1.37E-04	1.37E-02	6.86E-06
Naphthalene	1.30E-04	2.26E-03	0.23	1.13E-04
Acenaphthylene	9.23E-06	1.61E-04	0.02	8.03E-06
Acenaphthene	4.68E-06	8.14E-05	8.14E-03	4.07E-06
Fluorene	1.28E-05	2.23E-04	0.02	1.11E-05
Phenanthrene	4.08E-05	7.10E-04	0.07	3.55E-05
Anthracene	1.23E-06	2.14E-05	2.14E-03	1.07E-06
Fluoranthene	4.03E-06	7.01E-05	7.01E-03	3.51E-06
Pyrene	3.71E-06	6.46E-05	6.46E-03	3.23E-06
Benzo(a)anthracene	6.22E-07	1.08E-05	1.08E-03	5.41E-07
Chrysene	1.53E-06	2.66E-05	2.66E-03	1.33E-06
Benzo(b)fluoranthene	1.11E-06	1.93E-05	1.93E-03	9.66E-07
Benzo(k)fluoranthene	2.18E-07	3.79E-06	3.79E-04	1.90E-07
Benzo(a)pyrene	2.57E-07	4.47E-06	4.47E-04	2.24E-07
Indeno(1,2,3-cd)pyrene	4.14E-07	7.20E-06	7.20E-04	3.60E-07
Dibenz(a,h)anthracene	3.46E-07	6.02E-06	6.02E-04	3.01E-07
Benzo(g,h,i)perylene	5.56E-07	9.67E-06	9.67E-04	4.84E-07
Total HAPs:		2.74E-02	2.74	1.37E-03

1. HAP Emission Factors per AP-42 Chapter 3.4, Table 3.4-3 and Table 3.4-4 (10/96).

2. Hourly PTE (lb/hr) = Emission Factor (lb/MMBtu) * Engine maximum heat input (MMBtu/hr).

3. Annual PTE (lb/yr) = Hourly PTE (lb/hr) * Annual Hours (hrs/yr) * number of engines.

4. Annual PTE (tons/yr) = Annual PTE (lb/yr) / 2000 (lb/ton).

Table 6. Greenhouse Gas Potential to Emit

Pollutant	Global Warming Potential ¹	Emission Factor (kg/MMBtu) ²	CO ₂ e emissions	
			(lb/yr) ³	(tpy) ⁴
CO ₂	1.00	73.96	283,697.46	141.85
CH ₄	28.00	3.00E-03	322.21	0.16
N ₂ O	265.00	6.00E-04	609.90	0.30
Total CO₂e Emissions (tpy):			284,629.57	142.31

1. Global Warming Potentials are obtained from Subpart A of 40 CFR 98, Table A-1 "Global Warming Potentials."

2. Emission factor for carbon dioxide is obtained from 40 CFR 98, Table C-1 to Subpart C for Distillate Fuel Oil No. 2. Emission factors for methane and nitrous oxide are obtained from 40 CFR 98, Table C-2 to Subpart C.

3. CO₂e Emissions (lb/year) = GWP * Emission Factor (kg/MMBtu) * 1000 (g/kg) * Maximum heat input (MMBtu/hr) * Annual Hours (hr/year) / 453.592 (grams/lb) * number of engines.

4. CO₂e Emissions (tons/yr) = CO₂e Emissions for engine (lb/year) / 2000 (lb/ton) * number of engines.

APPENDIX C. NDEP FORMS

Class II Air Quality Operating Permit Application Form

Facility Name: NOVVA Reno, LLC

Existing Facility ID: A2569

Existing Class II AQOP: AP7374-4667

Type of Facility: Data Center

Number of Units (including IA's) in Facility: 41

If a Revision, Number of Units (including IA's) Affected in Action: 1

Application Type:

- ☐ New AQOP
☒ Revision of Existing AQOP
☐ Renewal of Existing AQOP



Please Submit Application to:

Nevada Division of Environmental Protection
Bureau of Air Pollution Control, Class II Permitting Branch
901 South Stewart Street, Suite 4001
Carson City, Nevada 89701-5249
Phone (775) 687-9349

September 2024
(Ver. 6)

IMPORTANT INFORMATION

- The Application packet contains:
 - General Company Information Form
 - Industrial Process Form
 - Combustion Equipment Form
 - Storage Silo Form
 - Liquid Storage Tanks Form
 - Insignificant Activities Form
 - Facility-Wide Potential to Emit Table
 - Surface Area Disturbance Form
 - Plant Boundary Coordinates Form
 - Plant Building Parameters Form
 - Application Certification Document with Required Attachments
- Please see the Guidance Document for additional instructions on how to complete the application.
- A printed copy of the application must be submitted (mailed or hand delivered), along with an electronic version.
- The application filing fee required by Nevada Administrative Code (NAC) 445B.327 must be submitted with the completed application. Checks must be made payable to the "Nevada State Treasurer, Environmental Protection" with "BAPC" noted in the memo line. Fees may also be submitted electronically at <https://epayments.ndep.nv.gov/>.
- This application shall be used for new Class II sources, revisions to existing Class II Air Quality Operating Permits, and the renewal of Class II Air Quality Operating Permits. This application packet is not for use for an Administrative Renewal, Administrative Amendment, a general permit, a stand-alone Surface Area Disturbance (SAD) permit, nor for a Request for Change of Location Approval permit for a temporary source.
- An application for a Class II Air Quality Operating Permit must be signed by the Responsible Official, as defined in NAC 445B.156. The certification/signature page is the last page of the application and the original "wet" signature must be provided.
- All items in the application must be addressed. If an item does not apply "N/A" or similar notation must be entered in the appropriate blank. All other information must be provided. Incomplete applications will be returned to the Responsible Official within 10 working days of receipt of the application.
- For the renewal of a Class II Operating Permit, a complete application and corresponding processing fee must be submitted in accordance with NAC 445B.3473, prior to the expiration date of the current permit. The BAPC suggests that the application be submitted well in advance of the timeline outlined in NAC 445B.3473 to ensure the application is deemed complete.
- If the facility applies for a permit that has not previously held a Class I or Class II operating permit, is located within 1,000 feet of a school, hospital, or residential area, or the Director determines that the change to the stationary source results in an increase in allowable emissions that exceeds the thresholds in NAC 445B.3457, the BAPC shall establish a 30-day period for public participation.

GENERAL COMPANY INFORMATION FORM

1. Briefly describe the permitted facility's process and include the Standard Industrial Classification (SIC) number and North American Industry Classification System (NAICS). Add details in the attached Process Narrative.

The Facility consists of a data center that will house servers to store, manage, and disseminate data. The SIC code is 7374 (Information Access Services).

2. Company Name and Address that are to appear on the operating permit [NAC 445B.295(1)]:

Name: NOVVA Reno, LLC
Address: 3399 Peru Drive
City: McCarran
State: Nevada Zip Code: 89437

3. Owner's Name and Address [NAC 445B.295(1)]:

Name: NOVVA Reno, LLC
Address: 6477 West Wells Park Road
City: West Jordan
State: Utah Zip Code: 84081

4. Facility Name and Address, if different from #2 [NAC 445B.295(1)]:

Name: NOVVA Reno, LLC
Address: 3399 Peru Drive
City: McCarran
State: Nevada Zip Code: 89437

5. If records are required under the operating permit will be kept at a location other than the facility, specify that location [NAC 445B.295(7)]:

Name: N/A
Address: N/A
City: N/A
State: N/A Zip Code: N/A

GENERAL COMPANY INFORMATION FORM (continued)

6. Responsible Official Name, Title and Mailing Address [NAC 445B.295(1)]:

Name: Steven Boyce
Title: Vice President, Infrastructure Research and Design
Address: 6477 West Wells Park Road
City: West Jordan
State: Utah Zip Code: 84081
Phone Number: (801) 473-6537
Fax Number: N/A
E-mail Address: s.boyce@novva.com

Is this a new Responsible Official? ☐ Yes ☒ No

If yes, and the Responsible Official (RO) does not meet the definition under NAC 445B.156 then please fill out the "Responsible Official Identification/Designation/Change Request Form" and mail it in.

(<https://ndep.nv.gov/air/permitting/download-permit-forms>)

7. Plant Manager or other appropriate Contact Name, Title and Address [NAC 445B.295(1)]:

Name: Sophia Gump
Title: Environmental Strategy & Compliance Manager
Address: 6477 West Wells Park Road
City: West Jordan
State: Utah Zip Code: 84081
Phone Number: (210) 591-5485
Fax Number: N/A
E-mail Address: s.gump@novva.com

8. Location and Driving Directions to the Facility (For Example: From Elko, Nevada, 4 miles south of I-80 at xx Interchange) [NAC 445B.295(8)]:

Hydrographic Basin (HA) Number: 83
HA Basin Name: Tracy Segment

Township(s): T19 N; Range(s): 22 E; Section(s): 11

UTM Coordinates for the Front Gate of the Facility (NAD 83, Zone 11):

4378158.5 m North; 286222.3 m East;

Nearest City: McCarran

County: Storey

Driving Directions from nearest city to the Facility: From McCarran, Drive East on I-80.

Take Exit 32 to NV-439. Turn right onto Denmark Dr. Turn Left on Peru Dr. Follow Peru Dr.
until the destination is reached on the left.

GENERAL COMPANY INFORMATION FORM (continued)

9. **Emission Cap Requested [NAC 445B.070 and NAC 445B.296(2)]:**
- ☐ Yes ☒ No (If yes, provide details in the attached Process Narrative)
10. **Important note** for completing the Industrial Process, Combustion Equipment, Storage Silo, and Liquid Storage Tank Application forms: forms need to be included for permitted emission units and insignificant activities. Provide additional forms as needed. All items in the application must be addressed. If an item does not apply then "N/A" or similar notation must be entered in the appropriate blank (TBD, unknown, etc.).
11. **Is the Facility located within 1,000 feet of a school, hospital, or residential area?**
- ☐ Yes ☒ No
12. **Does the Facility require controls or other limit restrictions to remain a Class II source?**
- ☒ Yes ☐ No
13. **Has the facility provided modeling for each non-combustion baghouse individually? (See Testing Determination System for Baghouses Guidance Document)**
- ☐ Yes ☒ No

COMBUSTION EQUIPMENT APPLICATION FORM CLASS II OPERATING PERMIT

System Number and Name: **TBD**

Emission Unit Description: **One (1) Diesel-fired Engine Powering House Generator**

Alternative Operating Scenario: ☐ Yes ☒ No

Insignificant Activity: ☐ Yes ☒ No If yes, identify exemption regulation: _____

Subject to a Federal Regulation (40 CFR Part 60, 61, or 63): ☒ Yes ☐ No If yes, identify in process narrative. _____

Description			Data
Equipment Description	BAPC Emission Unit ID Applicable for Renewal or Revision	eg. Unit ID: S2.001	TBD
	Source Classification Code (SCC)	eg. 3-03-024-04 for Conveyors	20100102
	Manufacturer		Kohler
	Date Manufactured		Model Year 2023
	Model and Serial Number		KD36V16 / TBD
	Emissions Released Inside building?	yes/no	No
For Reciprocating Internal Combustion Engines (RICE) Only	Type of Engine Code (See Notes*)		ECI
	Date Constructed	month/day/yr	2023
	Cylinder Displacement	liter/cylinder	2.25
	EPA Tier #		2
Location of Emission Source	UTM Northing (NAD 83, Zone 11)	m	4,377,433.51
	UTM Easting (NAD 83, Zone 11)	m	
Operating Parameters /Fuel Usage	Fuel Type		ULSD
	Fuel Flow Meter Installed?	yes/no/NA	Yes
	Sulfur Content	%	0.0015
	Heat Content	Btu/unit	137,000
	Start Time if operating less than 24 hours day	hour:minute	N/A
	End Time if operating less than 24 hours day	hour:minute	N/A
Control Equipment	Manufacturer		N/A
	Manufacturer's Guarantee Included? If "yes", attach manufacturer's sheets immediately after these forms.	yes/N/A	N/A
Stack Parameters	Stack Height	feet	25
	Stack Inside Diameter	feet	2.33
	Stack Temperature	°F	968
	Stack Exit Velocity	feet/second	92.9
	Actual Gas Volume Flow Rate	acfm	8,840
	Dry Gas Volume Flow Rate If not included in detailed calculations.	dscfm	
	Stack Release Type	☒ vertical ☐ capped ☐ horizontal	

Notes*

Code	Description	Code	Description
LU	Limited Use	E-SI	Emergency Spark Ignition
LDG	Landfill/Digester Gas	SI4SRB	Spark Ignition 4-Stroke Rich Burn
NECI	Non-Emergency Compression Ignition	SI4SLB	Spark Ignition 4-Stroke Lean Burn
ECI	Emergency Compression Ignition	SI2SLB	Spark Ignition 2-Stroke Lean Burn

COMBUSTION EQUIPMENT APPLICATION FORM CLASS II OPERATING PERMIT (continued)

Emission Unit Description:

1. How will fuel consumption be monitored for this emission unit? (e.g. maximum fuel consumption rate supplied by manufacturer, fuel flow meter).

Flow Meter / Hours of Operation x Max Fuel Consumption

2. Does this unit have the capability to bypass air pollution controls in an emergency situation as defined under NAC 445B.056?:

☐ Yes ☒ No

COMBUSTION EQUIPMENT DETAILED CALCULATIONS

Unit No.	Unit Description	Operating Hours		Heat Input (MMBtu)		Fuel Usage			Power Output		Controls		Emissions					References
		Daily	Annual	Hourly	Annual	Hourly	Annual	Units	Amount	Units	Type	Efficiency or Dry Volume Flow Rate	Pollutant	Factor	Unit	Hourly Rate (lbs/hr)	Yearly Rate (tons/yr)	
System No. & Name:																		
TBD	One (1) House Generator	24	100	17.40	1,739.9	127	12,700	Gal	1,250	kW	No	8,840	PM	0.14	g/kWh	0.43	0.02	
													PM ₁₀	0.14	g/kWh	0.43	0.02	
													PM _{2.5}	0.14	g/kWh	0.43	0.02	
													SO ₂	7.38E-3	g/kWh	0.02	1.13E-3	
													NO _x	5.72	g/kWh	17.54	0.88	
													CO	0.66	g/kWh	2.02	0.10	
													VOC	0.05	g/kWh	0.15	7.67E-3	
													Pb	0.14	g/kWh	0.43	0.02	
													Hg	0.14	g/kWh	0.43	0.02	
System No. & Name:																		
													PM					
													PM ₁₀					
													PM _{2.5}					
													SO ₂					
													NO _x					
													CO					
													VOC					
													Pb					
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System No. & Name:																		
													PM					
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													NO _x					
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													VOC					
													Pb					
													Hg					
System No. & Name:																		
													PM					
													PM ₁₀					
													PM _{2.5}					
													SO ₂					
													NO _x					
													CO					
													VOC					
													Pb					
													Hg					

*Exact format may be changed, but requested information is still required

GREENHOUSE GASES (GHG) DETAILED CALCULATIONS

Unit No.	Unit Description	Operating Hours		Heat Input (MMBtu)		Fuel Usage			Controls		Emissions						References
		Daily	Annual	Hourly	Annual	Hourly	Annual	Units	Type	Efficiency or Dry Volume Flow Rate	Pollutant	Factor	GWP Multiplier	Unit	Hourly Rate (lbs/hr)	Yearly Rate (tons/yr)	
System No. & Name:																	
TBD	One (1) House Generator	24	100	17.40	1,739.9	127	12,700	Gal	1,250	kW	CO ₂		1			141.85	Subpart A of 40 CFR 98, Table A-1 "Global Warming Potentials "
											CH ₄		28			0.16	Subpart A of 40 CFR 98, Table A-1 "Global Warming Potentials "
											N ₂ O		265			0.30	Subpart A of 40 CFR 98, Table A-1 "Global Warming Potentials "
System No. & Name:																	
											CO ₂		1				
											CH ₄		25				
											N ₂ O		298				
System No. & Name:																	
											CO ₂		1				
											CH ₄		25				
											N ₂ O		298				
System No. & Name:																	
											CO ₂		1				
											CH ₄		25				
											N ₂ O		298				
System No. & Name:																	
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System No. & Name:																	
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System No. & Name:																	
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											N ₂ O		298				
System No. & Name:																	
											CO ₂		1				
											CH ₄		25				
											N ₂ O		298				
System No. & Name:																	

*Exact format may be changed, but requested information is still required

HAZARDOUS AIR POLLUTANTS (HAPS) DETAILED CALCULATIONS

[illegible]

*Exact format may be changed, but requested information is still required

**FACILITY-WIDE POTENTIAL TO EMIT TABLE
(FOR ALL SOURCES INCLUDING INSIGNIFICANT ACTIVITIES)
(POUND/HOUR AND TON/YEAR)**

Pollutant	Facility-Wide Potential to Emit (pound/hour)	Facility-Wide Potential to Emit (ton/year)
Total Particulate Matter (PM)	17.52	0.87
Total PM ₁₀	17.52	0.87
Total PM _{2.5}	17.52	0.87
Total Sulfur Dioxide (SO ₂)	2.12	0.22
Total Carbon Monoxide (CO)	201.53	10.08
Total Oxides of Nitrogen (NO _x)	714.742	24.17
Total Volatile Organic Compounds (VOC)	102.69	5.13767
Total Lead (Pb)	--	--
Total Hydrogen Sulfide (H ₂ S)	--	--
Total Sulfuric Acid Mist (H ₂ SO ₄)	--	--
Total Hazardous Air Pollutants (HAPs)	1.75	0.09
Total Greenhouse Gases (CO _{2e})	179790.39	9083.81
Other Regulated Pollutants (Specify)		

REVISION TABLE

Please complete the table below if this application is for a **Revision** of an existing Class II Air Quality Operating Permit. Add more columns if needed for any other applicable regulated pollutants. All Potential To Emit (PTE) must be in tons per year (TPY) [NAC 445B.3457(5)(b)]

Description	Pollutants									
	PM	PM ₁₀	PM _{2.5}	SO ₂	NO _x	CO	VOC	HAPs	CO _{2e}	Other
Permitted Facility-Wide PTE (TPY)	0.85	0.85	0.85	0.11	23.29	9.98	5.13	0.09	8,988.43	
Proposed Facility-Wide PTE (TPY)	0.88	0.88	0.88	0.11	24.16	10.08	5.14	0.09	9,130.75	
Change in Facility-Wide PTE (TPY)	0.02	0.02	0.02	1.13E-3	0.88	0.10	0.01	1.37E-3	142.31	

SURFACE AREA DISTURBANCE FORM

1. Total Acres of the Facility Site: 19.97
2. Total Acres Disturbed: >5 acres
3. Add Surface Area Disturbance location as Township(s), Range(s) and Section
PARCEL MAP ID : 2007-104 LOT : BLOCK : PT S11 T19N 22E TOWN : INDUSTRIAL GID
4. NAC 445B.22037 requires fugitive dust to be controlled (regardless of the size or amount of acreage disturbed), and requires an ongoing program, using best practical methods, to prevent particulate matter from becoming airborne. All activities which have the potential to adversely affect the local air quality must implement all appropriate measures to limit controllable emissions. Appropriate measures for dust control may consist of a phased approach to acreage disturbance rather than disturbing the entire area all at once; using wet suppression through such application methods as water trucks or water spray systems to control wind-blown dust; the application of soil binding agents or chemical surfactant to roadways and areas of disturbed soil; as well as the use of wind-break or wind limiting fencing designed to limit wind erosion soils.
5. If the Surface Area Disturbance is greater than 5 acres, please check each box that applies for Best Management Practices (BMPs) used for controlling dust on project's disturbed areas:
 - ☒ Water trucks
 - ☒ Graveling/paving of roadway storage areas and staging areas
 - ☐ Dust palliatives
 - ☒ Posting and limiting vehicle speeds to 10-15 miles per hour
 - ☒ Ceasing operations during high wind events
 - ☒ Fencing or berming to prevent unauthorized access to disturbed areas
 - ☐ Application of water sprays on material storage piles on a regular basis
 - ☐ Covering material storage piles with tarpaulin or geo-textiles; tenting
 - ☐ Use of overhead water spray racks or water hoses
 - ☒ Track-out controls (graveled entranced, exit area, and street sweeping)
 - ☐ Landscape preservation and impact avoidance
 - ☐ Wind fence
 - ☐ Pre-watering of areas to be disturbed (including all unpaved onsite roads and staging areas)
 - ☒ Inform all subcontractors (including truck drivers) of their responsibilities for the control of fugitive dust while they are on the project site
 - ☐ Training of equipment operators to recognize fugitive dust generation and having the authority to shut down operations until water truck arrives and sprays water on the disturbed areas
 - ☐ Other Applicable BMPs: [Click or tap here to enter text.](#)
 - ☐ Other Applicable BMPs: [Click or tap here to enter text.](#)
 - ☒ If using water trucks, list how many water trucks are used and their capacity in gallons:
TBD – Capacity TBD

PLANT BOUNDARY COORDINATES FORM

[illegible]

PLANT BUILDING PARAMETERS FORM if applicable

Building Parameters

Building Name: Novva Data Center
 Roof Height (ft): 40

Building Tier : N/A
 Building Diameter (ft): 838

Building UTM Coordinates

UTM Easting	UTM Northing	UTM Easting	UTM Northing
286059.8	4378416.4		
286050.7	4378400.6		
286047.3	4378402.4		
286002.3	4378330.3		
286009.0	4378326.0		
286007.2	4378322.4		
286191.5	4378212.3		
286189.1	4378206.8		
286222.6	4378186.7		
286278.2	4378283.1		

Building Parameters

Building Name: _____
 Roof Height (ft): _____

Building Tier : _____
 Building Diameter⁴ (ft): _____

Building UTM Coordinates

UTM Easting	UTM Northing	UTM Easting	UTM Northing

APPLICATION CERTIFICATION DOCUMENT

(With Required Attachments)

Please check all applicable boxes below to indicate the information provided in your application submittal:

- ☒ General Company Information Form
- ☐ Industrial Process Application Form(s)
- ☒ Combustion Equipment Application Form(s)
- ☐ Storage Silos Application Form(s)
- ☐ Liquid Storage Tank Application Form(s)
- ☒ Manufacturer's Guarantee
- ☒ Facility-Wide Potential to Emit Table
- ☒ Surface Area Disturbance Form
- ☒ Plant Boundary Coordinates Form *if applicable*
- ☒ Plant Building Parameters Form *if applicable*
- ☒ Detailed Emission Calculations (for all emission units including IA units)
- ☐ Source Testing Data (if referenced in calculations)
- ☒ Process Narrative
- ☐ Process Flow Diagram(s)
- ☒ Site Plan(s) showing the locations (UTM coordinates), dimensions, and heights of buildings on the site
- ☒ Maps:
 - ☒ Vicinity Map of where the facility is located in the State
 - ☒ Area Map of the Facility (including location of all emission units, building locations (with UTM's), location of front gate, and fence line/site boundary (with UTM's))
- ☐ Environmental Evaluation (AERMOD Air Dispersion Modeling) *if applicable*
[NAC 445B.310]
- ☒ Manufacturer's Guarantee *if applicable*
- ☒ Equipment Specifications *if applicable*
- ☐ TANKs Modeling Output *if applicable*
- ☒ Application Fee Attached or Electronically Submitted
- ☐ Digital Copy of Application on CD or Thumb Drive
- ☒ Application Certification Document with Original Responsible Official Signature

APPLICATION CERTIFICATION DOCUMENT (CONTINUED)

(With Required Attachments)

PLEASE NOTE THE FOLLOWING REQUIREMENTS WHICH APPLY TO PERMIT APPLICANTS DURING THE APPLICATION PROCESS:

- A. A permit applicant must submit supplementary facts or corrected information upon discovery [NAC 445B.297(1)(b)].
- B. A permit applicant is required to provide any additional information which the Director requests in writing within the time specified in the Director's request [NAC 445B.297(1)(c)].
- C. Submission of fraudulent data or other information may result in prosecution for an alleged criminal offense [NRS 445B.470].

CERTIFICATION:

I certify that, based on information and belief formed after reasonable inquiry, the statements and information contained in this application are true, accurate and complete.



Signature of Responsible Official

Steven Boyce, Vice President, Infrastructure Research and Design

Print or Type Name and Title

7/28/2020

Date

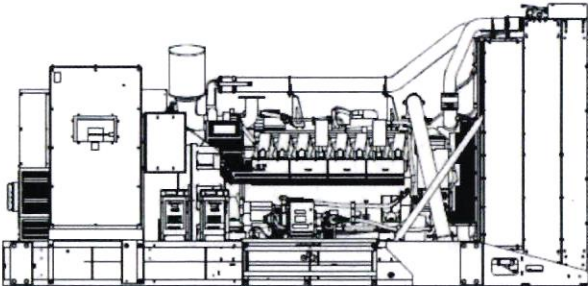
APPENDIX D. MANUFACTURER SPECIFICATIONS

TABLE OF CONTENTS

Section	Sub-Section	Literature
Bill Of Materials	Generator	Generator
Specs	Generator	KD1250
	Generator Controller	APM603
	Circuit Breaker	Kohler
	Engine Start Integrity Module	Kohler
	Starting Battery	Kohler
	Battery Charger	Kohler
	Voltage Regulator	Kohler
	Remote Annunciator	Kohler
	Enclosure and Subbase Tank	GPC
Alternator Data	Alternator Data Sheet	KH4590T04D
Emissions Data	Emissions Data Sheet	Emissions Data Sheet
	EPA Certificate	EPA Certificate
Dimensional Drawings	Assembly	140161-1
	Enclosure	140161-1
	Enclosure Skid	140161-3
	Subbase Tank	140161-4
	Generator	ADV-9015
	Controller	ADV-8869
	Remote Annunciator	GM85123
Wiring Schematics	Alternator	ADV-5875
	Controller Schematic Diagram	ADV-9872
	Controller Wiring Diagram	GM107895
	Communication	ADV-9169
	Remote Annunciator	GM62554
	Point-To-Point	BCEW-W39-02B
Miscellaneous	Battery	244578-CMP
	Battery Charger	107020026XX
	Circuit Breaker	GM78517
	Fuel/Water Separator	105010006XX
Warranty	Warranty	TP-7048
	Warranty	TP-7049
Certification	Certificate Of Registration	G15-152
	Prototype Test Report	G18-471
	Factory Test Program	G18-56
Pre-Startup Checklist	Startup Request	Startup Request
	Startup Notification	Startup Notification
	Installation Checklist	Installation Checklist
	Startup Checklist	Startup Checklist
	Training	Training
	Operating Instructions	Operating Instructions

KOHLER®

Spec Sheets



Standard Features

- Kohler Co. provides one-source responsibility for the generating system and accessories.
- Approved for use with certified renewable Hydrotreated Vegetable Oil (HVO) / Renewable Diesel (RD) fuels compliant with EN15940/ASTM D975.
- The generator set and its components are prototype-tested, factory-built, and production-tested.
- The 60 Hz generator set offers a UL 2200 listing.
- The generator set accepts rated load in one step.
- The 60 Hz generator set meets NFPA 110, Level 1, when equipped with the necessary accessories and installed per NFPA standards.
- A standard three-year or 1000-hour limited warranty for standby applications. Five-year basic, five-year comprehensive, and ten-year extended limited warranties are also available.
- A standard two-year or 8700-hour limited warranty for prime power applications.
- Tier 2 EPA-certified for Stationary Emergency Applications
- Closed Crankcase Ventilation (CCV) Filters
- Customer Connection
- Generator Heater (4160 Volt)
- Integral Vibration Isolation
- Local Emergency Stop Switch
- Oil Drain and Coolant Drain Extension
- Operation and Installation Literature

Alternator Features

- The pilot-excited, permanent magnet (PM) alternator provides superior short-circuit capability.
- All models are brushless, rotating-field alternators.
- NEMA MG1, IEEE, and ANSI standards compliance for temperature rise and motor starting.
- Sustained short-circuit current of up to 300% of the rated current for up to 10 seconds.
- Sustained short-circuit current enabling downstream circuit breakers to trip without collapsing the alternator field.
- Self-ventilated and dripproof construction.
- Superior voltage waveform from two-thirds pitch windings and skewed stator.

Other Features

- Kohler designed controllers for one-source system integration and remote communication.
- The low coolant level shutdown prevents overheating (standard on radiator models only).

Generator Set Rating

Standby 130C Rise Ratings						
Alternator	Voltage	Ph	Hz	Peak kVA	kW/kVA	Amps

KH04590TO4D	277/480	3	60	6030	1250/1562	1879
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RATINGS: All three-phase units are rated at 0.8 power factor.
Standby Ratings: The standby rating is applicable to varying loads for the duration of a power outage. There is no overload capability for this rating.
Prime Power Ratings: At varying load, the number of generator set operating hours is unlimited.
A 10% overload capacity is available for one hour in twelve. Ratings are in accordance with ISO-8528-1 and ISO-3046-1. For limited running time and continuous ratings, consult the factory.
Obtain technical information bulletin (TIB-101) for ratings guidelines, complete ratings definitions, and site condition derates.
The generator set manufacturer reserves the right to change the design or specifications without notice and without any obligation or liability whatsoever.

Model: KD1250-A, continued

Alternator Specifications

Specifications	Alternator
Alternator manufacturer	Kohler
Type	4-Pole, Rotating-Field
Exciter type	Brushless, Permanent-Magnet Pilot Exciter
Voltage regulator	Solid State, Volts/Hz
Insulation	NEMA MG1, UL 1446, Vacuum Pressure Impregnated (VPI)
Insulation: Material	Class H, Synthetic, Nonhygroscopic
Insulation: Temperature Rise	130 ° C, 150 ° C Standby
Bearing: quantity, type	1, Sealed
Coupling	Flexible disc
Amortisseur windings	Full
Rotor balancing (60Hz)	125%
Voltage regulation, no-load to full-load RMS	+/-0.25%
Unbalanced load capability	100% of Rated Standby Current
• The pilot-excited, permanent magnet (PM) alternator provides superior short-circuit capability. • All models are brushless, rotating-field alternators. • NEMA MG1, IEEE, and ANSI standards compliance for temperature rise and motor starting. • Sustained short-circuit current of up to 300% of the rated current for up to 10 seconds. • Sustained short-circuit current enabling downstream circuit breakers to trip without collapsing the alternator field. • Self-ventilated and dripproof construction. • Superior voltage waveform from two-thirds pitch windings and skewed stator. • Brushless alternator with brushless pilot exciter for excellent load response.	

Engine

Engine Specification

Engine Manufacturer	Kohler Diesel
Engine Model	KD36V16
Engine: type	4-Cycle, Turbocharged, Intercooled
Cylinder arrangement	16-V
Displacement, L (cu. in.)	36 (2197)
Bore and stroke, mm (in.)	135 x 157 (5.31 x 6.18)
Compression ratio	15.0:1
Piston speed, m/min. (ft./min.)	565 (1854)
Main bearings: quantity, type	11, Precision Half Shells
Rated rpm	1800
Max. power at rated rpm, kWm (BHP)	1391 (1865)
Cylinder head material	Cast Iron
Crankshaft material	Steel
Valve (exhaust) material	Steel
Governor: type, make/model	KODEC Electronic Control
Frequency regulation, no-load to-full load	Isochronous
Frequency regulation, steady state	± 0.25%
Frequency	Fixed
Air cleaner type, all models	Dry

Model: KD1250-A, continued

Exhaust

Exhaust System

Exhaust flow at rated kW, m ³ /min. (cfm)	250 (8840)
Exhaust temperature at rated kW, dry exhaust, °C (°F)	520 (968)
Maximum allowable back pressure, kPa (in. Hg)	8.5 (2.5)
Exh. outlet size at eng. hookup, mm (in.)	See ADV Drawing

Engine Electrical

Engine Electrical System

Starter motor qty. at starter motor power rating, rated voltage (DC)	Standard: 2 @ 8.4 kW, 24; Redundant (optional): 4 @ 8.4kW, 24
Battery charging alternator: Ground (negative/positive)	Negative
Battery charging alternator: Volts (DC)	24
Battery charging alternator: Ampere rating	140
Quantity, CCA rating each, type (with standard starters)	4, 1110, AGM
Quantity, CCA rating each, type (with optional redundant starters)	8, 1110, AGM
Battery voltage (DC)	12

Fuel

Fuel System

Fuel type	Diesel
Fuel supply line, min. ID, mm (in.)	19 (0.75)
Fuel return line, min. ID, mm (in.)	12 (0.5)
Max. fuel flow, Lph (gph)	480 (127)
Min./max. fuel pressure at engine supply connection, kPa (in. Hg)	-30/30 (-8.8/8.8)
Max. return line restriction, kPa (in. Hg)	30 (8.8)
Fuel Filter Primary	1
Fuel Filter Water Separator	1
Recommended fuel	#2 Diesel ULSD/HVO/RD

Cooling

Radiator System

Ambient temperature, °C (°F)	50 (122)
Engine jacket water capacity, L (gal.)	124 (33)
Radiator system capacity, including engine, L (gal.)	283 (74.7)
Engine jacket water flow, Lpm (gpm)	2241 (592)
Heat rejected to cooling water at rated kW, dry exhaust, kW (Btu/min.)	ESP & PRP 520 (29572) COP 305 (17345)
Heat rejected to charge air cooling water at rated kW, dry exhaust, Kw Btu/min.	ESP & PRP 332 (18880) COP 258 (14559)
Charge cooler air inlet temperature, °C (°F)	215 (419)
Turbocharger boost (abs) bar (psi)	3.62 (53)
Water pump type	Centrifugal
Fan diameter, including blades, mm (in.)	1750 (68.9)
Fan, kWm (HP)	33 (44.2)
Max. restriction of cooling air, intake and discharge side of radiator, kPA (in. H ₂ O)	0.125 (0.5)

* Enclosure with enclosed silencer reduces ambient temperature capability by 5 °C (9 °F).

Model: KD1250-A, continued

Remote Radiator System

Exhaust manifold type	Dry
Connection Size	-
Water inlet/outlet, mm (in.)	-
Charge air cooler inlet/outlet (pipe dia. of flange), mm (in.)	-
Static head allowable above engine, kPa (ft. H ₂ O)	70 (23.5)

Note:

Contact your local distributor for cooling system options and specifications based on your specific requirements.

Operation Requirements

Air Requirements

Radiator-cooled cooling air, m3/min. (scfm) *	1470 (51913)
Cooling air required for generator set when equipped with city water cooling or remote radiator, based on 14 ° C (25 ° F) rise, m3/min. rise and ambient temp. of 29 ° C (85 ° F) m3/min. (cfm)	938 (33131)
Combustion air, m3/min. (cfm)	89.6 (3166)
Heat rejected to ambient air: Engine, kW (Btu/min.)	171 (9733)
Heat rejected to ambient air: Alternator, kW (Btu/min.)	93 (5325)

*Air density = 1.20 kg/m³ (0.075 lbm/ft³)

Fuel Consumption

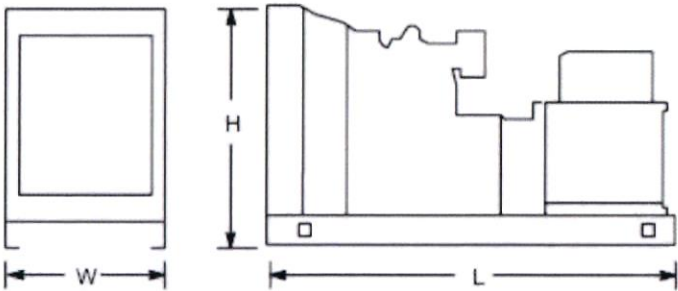
Diesel, Lph (gph), at % load	Rating
Standby Fuel Consumption at 100% load	322 Lph (85.1 gph)
Standby Fuel Consumption at 75% load	256 Lph (67.6 gph)
Standby Fuel Consumption at 50% load	181 Lph (47.8 gph)
Standby Fuel Consumption at 25% load	105 Lph (27.7 gph)
Prime Fuel Consumption at 100% load	293 Lph (77.4 gph)
Prime Fuel Consumption at 75% load	233 Lph (61.6 gph)
Prime Fuel Consumption at 50% load	164 Lph (43.3 gph)
Prime Fuel Consumption at 25% load	95 Lph (25.1 gph)
Continuous Fuel Consumption at 0% load	** Volumetric Fuel consumption is up to 4% higher when using HVO/RC than #2 ULSD.

Dimensions and Weights

Dim Weight Spec	Dim Weight Value
Fuel	Diesel
Engine Manufacturer	Kohler
Overall Size, L x W x H, mm (in.):	5291 x 2184 x 2480 (208.3 x 86.0 x 97.6)
Weight (radiator model), wet, kg (lb.):	11919 (26276)

- GENSET ONLY -
SEE ASSEMBLY DRAWING FOR
OVERALL WEIGHT AND DIMENSIONS

Model: KD1250-A, continued



NOTE: This drawing is provided for reference only and should not be used for planning installation. Contact your local distributor for more detailed information.

Qty	Part #	Description
1	6816	Mount and Wire Emissions SCR System SCR/Exhaust System Dosing Cabinet Urea Tank Tubing & Fitting Connection or GPC Supplied Breaker for Heater Injections
		Lift Base 8"H x 132"W x 320"L
1	6515	Generator Set & Enclosure Mounting Frame
9	8303	6" I-Beam Generator Set Support
12	8420	Isolator Pad Support Plate
1	8320	Diamond Plate Top Cover
1	8416	3/4" Gusset Lift Provision
1	Black-Gloss	Paint Color Gloss Black (9638)
1	Install Lift Base	Mount Generator Set & Enclosure to Lift Base
		UL-142 Listed Sub Base Fuel Tank Model SB2I-2200 Usable Gallons
1	DW-101	Double Wall Secondary Containment
1	4002	Internal Electrical Stub Up Area
1	3660	1" Supply/Return Dip Tube Package (2" NPT)
1	1000	Low Level Alarm (2" NPT, Set at 50%)
1	3502	Basin Drain, 1/2" NPT
1	1003	Rochester Fuel Level Gauge (2" NPT, Swing Arm)
1	3005	Locking Manual Fill Cap (2" NPT)
1	3152	Standard Vent Cap (2" NPT)
4	3166	Emergency Vent (6" NPT)
4	8410	Flush Mount Lifting Plate (Minimum of 4)
1	Black-Gloss	Paint Color Gloss Black (9638)
		Options Included
1	4300	Fuel in Basin Alarm (2" NPT, Top Mounted)
1	CALIFORNIA	California
1	3515	Vents & Fill Port Located at Radiator End
1	3520	Rain RUNOFF Option
1	3012	Extend Standard Vent(s) 12' Above Grade (Shipped Loose)
1	1010	High Level Alarm (2" NPT, Set at 90%)
1	1020	Critical High Level Alarm (2" NPT, Set at 95%)

Qty	Part #	Description
1	AFP4	Alarm Fill Panel for Leak, Low, High and Critical High Nema 3R, Relays, DC or AC
1	AFP4I	Mount & Wire Alarm Panel by Fill
1	8200	5 Gallon Spill Containment (Tank Mount)
1	3190	Extra Fitting w/Plug (3/8" NPT)
1	3155MBDS	Morrison Brothers 9095DS Overfill Prevention Valve (2" NPT)
1	3350	Scully Fill Connector (2" NPT)
2	3195	Extra Fitting w/Plug (2" NPT)
1	700-1075	SS Spring Check Valve, 1" NPT



Emissions Data



KD1250-A

60 Hz. Diesel Generator Set
Tier 2 EPA Certified for Stationary Emergency Applications
EMISSION OPTIMIZED DATA SHEET

ENGINE INFORMATION

Model:	KD36V16	Bore:	135 mm (5.31 in.)
Nameplate kW @ 1800 RPM:	1391	Stroke:	157 mm (6.18 in.)
Type:	4-Cycle, 16-V Cylinder	Displacement:	36 L (2197 cu. in.)
Aspiration:	Turbocharged, Intercooled	EPA Family:	PLHAL45.0ESP
Compression ratio:	15:0:1	EPA Certificate:	PLHAL45.0ESP-018
Emission Control Device:	Direct Diesel Injection, Engine Control Module, Turbocharger, Charge Air Cooler		

EXHAUST EMISSION DATA:

EPA D2 Cycle 5-mode weighted

HC	0.05 g/kWh
NO _x (Oxides of Nitrogen as NO ₂)	5.72 g/kWh
CO (Carbon Monoxide)	0.66 g/kWh
PM (Particulate Matter)	0.14 g/kWh

TEST METHODS AND CONDITIONS

Test Methods:

Steady-State emissions recorded per EPA CFR 40 Part 1065, and ISO8178-1 during operation at rated engine speed (+/-2%) and stated constant load (+/-2%) with engine temperatures, pressures and emission rates stabilized.

Fuel Specification:

40-48 Cetane Number, 0.05 Wt. % max. Sulfur; Reference ISO8178-5, 40CFR86.1313-98 Type 2-D and ASTM D975 No. 2-D.

Reference Conditions:

25 °C (77 °F) Air Inlet Temperature, 40 °C (104 °F) Fuel Inlet Temperature, 100 kPa (29.53 in Hg) Barometric Pressure; 10.7 g/kg (75 grains H₂O/lb.) of dry air Humidity (required for NO_x correction); Intake Restriction set to maximum allowable limit for clean filter; Exhaust Back pressure set to maximum allowable limit.

Data was taken from a single engine test according to the test methods, fuel specification and reference conditions stated above and is subjected to instrumentation and engine-to-engine variability. Tests conducted with alternate test methods, instrumentation, fuel or reference conditions can yield different results.

Data and specifications subject to change without notice.

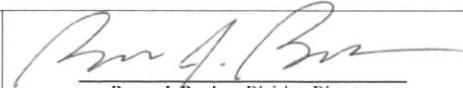


UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
2023 MODEL YEAR
CERTIFICATE OF CONFORMITY
WITH THE CLEAN AIR ACT

OFFICE OF TRANSPORTATION
AND AIR QUALITY
ANN ARBOR, MICHIGAN 48105

Certificate Issued To: Liebherr Machines Bulle SA
(U.S. Manufacturer or Importer)
Certificate Number: PLHAL45.0ESP-018

Effective Date:
12/06/2022
Expiration Date:
12/31/2023


Byron J. Bunker, Division Director
Compliance Division

Issue Date:
12/06/2022
Revision Date:
N/A

Model Year: 2023
Manufacturer Type: Original Engine Manufacturer
Engine Family: PLHAL45.0ESP

Mobile/Stationary Indicator: Stationary
Emissions Power Category: kW>560
Fuel Type: Diesel
After Treatment Devices: No After Treatment Devices Installed
Non-after Treatment Devices: Electronic Control

Pursuant to Section 111 and Section 213 of the Clean Air Act (42 U.S.C. sections 7411 and 7547) and 40 CFR Part 60, and subject to the terms and conditions prescribed in those provisions, this certificate of conformity is hereby issued with respect to the test engines which have been found to conform to applicable requirements and which represent the following engines, by engine family, more fully described in the documentation required by 40 CFR Part 60 and produced in the stated model year.

This certificate of conformity covers only those new compression-ignition engines which conform in all material respects to the design specifications that applied to those engines described in the documentation required by 40 CFR Part 60 and which are produced during the model year stated on this certificate of the said manufacturer, as defined in 40 CFR Part 60.

It is a term of this certificate that the manufacturer shall consent to all inspections described in 40 CFR 1068 and authorized in a warrant or court order. Failure to comply with the requirements of such a warrant or court order may lead to revocation or suspension of this certificate for reasons specified in 40 CFR Part 60. It is also a term of this certificate that this certificate may be revoked or suspended or rendered void *ab initio* for other reasons specified in 40 CFR Part 60.

This certificate does not cover engines sold, offered for sale, or introduced, or delivered for introduction, into commerce in the U.S. prior to the effective date of the certificate.

KOHLER®

Certification

Certificate of Registration

QUALITY MANAGEMENT SYSTEM - ISO 9001:2015

This is to certify that:

Kohler Power Systems
N7650 Lakeshore Road
Sheboygan
Wisconsin
53083
USA

Holds Certificate No:

FM 727336

and operates a Quality Management System which complies with the requirements of ISO 9001:2015 for the following scope:

Design, manufacture, and distributor support for electrical generators, alternators, fuel tanks, automatic transfer switches and switchgear.

For and on behalf of BSI:


Carlos Pitanga, Chief Operating Officer Assurance – Americas

Original Registration Date: 1995-02-28

Latest Revision Date: 2021-10-29

Effective Date: 2021-11-07

Expiry Date: 2024-11-06

Page: 1 of 2



...making excellence a habit.™

This certificate remains the property of BSI and shall be returned immediately upon request.

An electronic certificate can be authenticated [online](https://www.bsigroup.com/ClientDirectory). Printed copies can be validated at www.bsigroup.com/ClientDirectory. To be read in conjunction with the scope above or the attached appendix.

Information and Contact: BSI, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PR. Tel: + 44 345 080 9000
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G15-152 10/21