

STATE OF COLORADO

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT
AIR POLLUTION CONTROL DIVISION
TELEPHONE: (303) 692-3150



CONSTRUCTION PERMIT

PERMIT NO: **12EP1411**

Initial Approval

DATE ISSUED: **SEP 11 2013**

ISSUED TO: **Hewlett-Packard**

THE SOURCE TO WHICH THIS PERMIT APPLIES IS DESCRIBED AND LOCATED AS FOLLOWS:

Emergency generator, located at 305 Rockrimmon Blvd., Colorado Springs, in El Paso County, Colorado.

THE SPECIFIC EQUIPMENT OR ACTIVITY SUBJECT TO THIS PERMIT INCLUDES THE FOLLOWING:

Facility Equipment ID	AIRS Point	Description
CX03 GEN2-2	031	Diesel fueled engine powering an electrical generator Cummins, Model: QST30-G5 NR2, SN: X11H311058 Design rated at 1490 BHP at sea level 2.5 L/cyl Equipped with a turbocharger Manufacture date of 9/20/11, date of entry into Colorado October 2011 This engine is subject to NSPS IIII Tier 2 Standards

THIS PERMIT IS GRANTED SUBJECT TO ALL RULES AND REGULATIONS OF THE COLORADO AIR QUALITY CONTROL COMMISSION AND THE COLORADO AIR POLLUTION PREVENTION AND CONTROL ACT C.R.S. (25-7-101 et seq), TO THOSE GENERAL TERMS AND CONDITIONS INCLUDED IN THIS DOCUMENT AND THE FOLLOWING SPECIFIC TERMS AND CONDITIONS:

REQUIREMENTS TO SELF-CERTIFY FOR FINAL APPROVAL

1. **YOU MUST** notify the Air Pollution Control Division (the Division) no later than fifteen days after commencement of the permitted operation or activity **by submitting a Notice of Startup form to the Division.** The Notice of Startup form may be downloaded online at www.cdphe.state.co.us/ap/downloadforms.html. Failure to notify the Division of startup of the permitted source is a violation of Air Quality Control Commission (AQCC) Regulation No. 3, Part B, Section III.G.1 and can result in the revocation of the permit.
2. Within one hundred and eighty days (180) after commencement of operation, compliance with the conditions contained on this permit shall be demonstrated to the Division. It is the permittee's responsibility to self certify compliance with the conditions. Failure to demonstrate

compliance within 180 days may result in revocation of the permit or enforcement action by the Division. Information on how to certify compliance was mailed with the permit or can be obtained from the Division. (Reference: Regulation No. 3, Part B, II.G.2)

3. This permit shall expire if the owner or operator of the source for which this permit was issued:
(i) does not commence construction/modification or operation of this source within 18 months after either, the date of issuance of this construction permit or the date on which such construction or activity was scheduled to commence as set forth in the permit application associated with this permit; (ii) discontinues construction for a period of eighteen months or more; (iii) does not complete construction within a reasonable time of the estimated completion date. The Division may grant extensions of the deadline per Regulation No. 3, Part B, III.F.4.b. (Reference: Regulation No. 3, Part B, III.F.4.)
4. Within one hundred and eighty days (180) after commencement of operation, the operator shall complete all initial compliance testing and sampling as required in this permit and submit the results to the Division as part of the self-certification process. (Reference: Regulation No. 3, Part B, Section III.E.)
5. Within one hundred and eighty days (180) after commencement of operation, the permit number shall be marked on the subject equipment for ease of identification. (Reference: Regulation No. 3, Part B, III.E.) (State only enforceable)

EMISSION LIMITATIONS AND RECORDS

6. Emissions of air pollutants shall not exceed the following limitations (as calculated using the emission factors included in the Notes to Permit Holder section of this permit). Monthly records of the actual emission rates shall be maintained by the applicant and made available to the Division for inspection upon request. (Reference: Regulation No. 3, Part B, Section II.A.4)

Hourly Limits:

Hours of operation will be recorded on a rolling 12-month basis and available for review upon request by the Division. The rolling 12-month total of hours of operation shall not exceed the annual "Process/Consumption Limits" in Condition #11.

Emissions will be calculated on a rolling 12-month basis. The rolling 12-month total of emissions shall not exceed the annual emissions given in the "Annual Limits" below. Monthly emissions shall be calculated using the formula:

$$\text{Emissions}_{\text{Monthly}} = \left[\frac{\text{Emission Factor (lb/hr)} * \text{Hours of Operation (hr/month)}}{(2000\text{lb/1 ton})} \right]$$

Emission factors used to calculate limits shall be those found in "Notes to Permit Holder #3".

Annual Limits:

Facility Equipment ID	AIRS Point	Tons per Year						Emission Type
		PM	PM ₁₀	PM _{2.5}	NO _x	VOC	CO	
CX03 GEN2-2	031	-	-	-	0.66	-	-	Point

Emissions of air pollutants on an annual basis shall be found using the following formula:

$$\text{Emissions}_{\text{Annual}} = \frac{[\text{Emission Factor (lb/hr)} * \text{Hours of Operation (hr/yr)}]}{(2000\text{lb/1 ton})}$$

Emission factors used to calculate limits shall be those found in "Notes to Permit Holder #3".

During the first twelve (12) months of operation, compliance with both the hourly and yearly emission limitations shall be required. After the first twelve (12) months of operation, compliance with only the yearly limitation shall be required.

Compliance with the annual limits shall be determined by calculating the facility's annual criteria pollutant emissions from each emission unit, on a rolling (12) month total. By the end of each month a new twelve-month total shall be calculated based on the previous twelve months' data. The permit holder shall calculate monthly emissions and keep a compliance record on site, or at a local field office with site responsibility, for Division review. This rolling twelve-month total shall apply to all emission units, requiring an APEN, at this facility.

PROCESS LIMITATIONS AND RECORDS

7. This source shall be limited to the following maximum consumption, processing and/or operational rates as listed below. Annual and hourly records of the actual process rate shall be maintained by the applicant and made available to the Division for inspection upon request. (Reference: Regulation 3, Part B, II.A.4)

Process/Consumption Limits

Facility Equipment ID	AIRS Point	Process Parameter	Annual Limit	Hourly Limit
CX03 GEN2-2	031	Hours of Operation	100 hr/yr	13.1 lb/hr

Compliance with these consumption limits will be demonstrated by installing a non-resettable hour meter on the engine and recording the hours of the engine's operation.

During the first twelve (12) months of operation, compliance with the annual usage limit and the hourly emission limitations shall be required. After the first twelve (12) months of operation, compliance with only the yearly limitation shall be required.

Compliance with the yearly process limits shall be determined on a rolling twelve (12) month total. By the end of each month a new twelve-month total is calculated based on the previous twelve months' data. The permit holder shall calculate monthly process rate and keep a compliance record on site or at a local field office with site responsibility, for Division review.

STATE AND FEDERAL REGULATORY REQUIREMENTS

8. Visible emissions shall not exceed twenty percent (20%) opacity during normal operation of the source. During periods of startup, process modification, or adjustment of control equipment visible emissions shall not exceed 30% opacity for more than six minutes in any sixty

consecutive minutes. Opacity shall be determined using EPA Method 9. (Reference: Regulation No. 1, Section II.A.1. & 4.)

9. This source is subject to the odor requirements of Regulation No. 2. (State only enforceable)
10. This source is subject to the New Source Performance Standards requirements of Regulation No. 6, Part A, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (CI ICE) including, but not limited to, the following:
 - a. Emissions of Non-Methane Hydrocarbons and Nitrogen Oxides combined shall not exceed 4.8 grams per horsepower hour.
 - b. Emissions of Carbon Monoxide shall not exceed 2.6 grams per horsepower hour.
 - c. Emissions of Particulate Matter shall not exceed 0.15 grams per horsepower hour.
 - d. All fuel purchased shall meet the following specifications:
 - (1) Sulfur content shall not exceed 15 ppm.
 - (2) Have a minimum cetane index of 40 **or**
Have a maximum aromatic compound content of 35% by volume.
Compliance shall be demonstrated by maintaining copies of the fuel specifications provided by the supplier on-site or in a readily accessible location and made available to the Division for inspection upon request.
 - e. All engines and control devices must be installed, configured, operated, and maintained according to the specifications and instructions provided by the engine manufacturer.
 - f. If engine is equipped with a diesel particulate filter, the filter must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached. Records shall be kept of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit is approached.
 - g. If engine is used for emergency purposes, a non-resettable hour meter must be installed prior to start-up. (Reference: NSPS IIII, § 60.4209 (a))
 - h. This engine shall not be used for any purpose except emergency power generation and for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. Emergency stationary ICE may operate up to 50 hours per year in non-emergency situations, but those 50 hours are

counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply non-emergency power as part of a financial arrangement with another entity. For owners and operators of emergency engines, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as permitted in this section, is prohibited. (Reference: NSPS IIII, § 60.4211 (f))

11. The following requirements of Regulation No. 6, Part A, Subpart A, General Provisions, apply.
 - a. At all times, including periods of start-up, shutdown, and malfunction, the facility and control equipment shall, to the extent practicable, be maintained and operated in a manner consistent with good air pollution control practices for minimizing emissions. Determination of whether or not acceptable operating and maintenance procedures are being used will be based on information available to the Division, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. (Reference: Regulation No. 6, Part A. General Provisions from 40 CFR 60.11)
 - b. No article, machine, equipment or process shall be used to conceal an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. (§ 60.12)
 - c. Written notification of construction and initial startup dates shall be submitted to the Division as required under § 60.7.
 - d. Records of startups, shutdowns, and malfunctions shall be maintained, as required under § 60.7.

OPERATING & MAINTENANCE REQUIREMENTS

12. The owner or operator shall develop an operating and maintenance (O&M) plan, along with a recordkeeping format, that outlines how the applicant will maintain compliance on an ongoing basis with the requirements of this permit. **Compliance with the O&M plan shall commence at startup.** Within one hundred and eighty days (180) after commencement of operation, the owner or operator shall submit the O&M plan to the Division. Failure to submit an acceptable operating and maintenance plan could result in revocation of the permit. (Reference: Regulation No. 3, Part B, III.E.)

COMPLIANCE TESTING AND SAMPLING

Initial Testing Requirements

13. Within 180 days of startup, the owner or operator shall demonstrate compliance with Condition 9, using EPA Method 9 to measure opacity from the engine. This measurement shall consist of a minimum twenty-four consecutive readings taken at fifteen second intervals over a 6 minute period. (Reference: Regulation No. 1, Section II.A.1 & 4)

Periodic Testing Requirements

14. No periodic testing is required for this source.

ADDITIONAL REQUIREMENTS

15. The permit number shall be marked on the subject equipment for ease of identification. (Reference: Regulation No. 3, Part B, III.E.) (State only enforceable)
16. A revised Air Pollutant Emission Notice (APEN) shall be filed: (Reference: Regulation No. 3, Part A, II.C)

- a. Annually whenever a significant increase in emissions occurs as follows:

For any criteria pollutant:

For sources emitting **less than 100 tons per year of a criteria pollutant**, a change in annual actual emissions of five (5) tons per year or more, above the level reported on the last APEN; or

For volatile organic compounds (VOC) and nitrogen oxides sources (NO_x) in ozone nonattainment areas emitting **less than one hundred tons of VOC or NO_x per year**, a change in annual actual emissions of one (1) ton per year or more or five percent, whichever is greater, above the level reported on the last APEN; or

For sources emitting **100 tons per year or more of a criteria pollutant**, a change in annual actual emissions of five percent or fifty (50) tons per year or more, whichever is less, above the level reported on the last APEN submitted; or

For sources emitting **any amount of lead**, a change in actual emissions of fifty (50) pounds of lead above the level reported on the last APEN submitted.

For any non-criteria reportable pollutant:

If the emissions increase by 50% or five (5) tons per year, whichever is less, above the level reported on the last APEN submitted to the Division.

- b. Whenever there is a change in the owner or operator of any facility, process, or activity; or
- c. Whenever new control equipment is installed, or whenever a different type of control equipment replaces an existing type of control equipment; or
- d. Whenever a permit limitation must be modified; or
- e. No later than 30 days before the existing APEN expires.
17. Operating Permit (OP) requirements shall apply to this source at any such time that the facility wide potential to emit equals or exceeds the major source level. Once the facility wide potential to emit equals or exceeds the major source level a Title V operating permit application shall be submitted in accordance with the requirements in Regulation No. 3, Part C.

GENERAL TERMS AND CONDITIONS:

18. This permit and any attachments must be retained and made available for inspection upon request. The permit may be reissued to a new owner by the Division as provided in Regulation No. 3, Part B, Section II.B upon a request for transfer of ownership and the submittal of a revised APEN and the required fee.

19. If this permit specifically states that final approval has been granted, then the remainder of this condition is not applicable. Otherwise, the issuance of this construction permit does not provide "final" authority for this activity or operation of this source. Final approval of the permit must be secured from the Division in writing in accordance with the provisions of 25-7-114.5(12)(a) C.R.S. and Regulation No. 3, Part B, Section III.G. Final approval cannot be granted until the operation or activity commences and has been verified by the Division as conforming in all respects with the conditions of the permit. Once self-certification of all points has been reviewed and approved by the Division, it will provide written documentation of such final approval. **Details for obtaining final approval to operate are located in the Requirements to Self-Certify for Final Approval section of this permit.**
20. This permit is issued in reliance upon the accuracy and completeness of information supplied by the applicant and is conditioned upon conduct of the activity, or construction, installation and operation of the source, in accordance with this information and with representations made by the applicant or applicant's agents. It is valid only for the equipment and operations or activity specifically identified on the permit.
21. Unless specifically stated otherwise, the general and specific conditions contained in this permit have been determined by the Division to be necessary to assure compliance with the provisions of Section 25-7-114.5(7)(a), C.R.S.
22. Each and every condition of this permit is a material part hereof and is not severable. Any challenge to or appeal of a condition hereof shall constitute a rejection of the entire permit and upon such occurrence, this permit shall be deemed denied *ab initio*. This permit may be revoked at any time prior to self-certification and final authorization by the Division on grounds set forth in the Colorado Air Pollution Prevention and Control Act and regulations of the AQCC including failure to meet any express term or condition of the permit. If the Division denies a permit, conditions imposed upon a permit are contested by the applicant, or if the Division revokes a permit, the applicant or owner or operator of a source may request a hearing before the AQCC for review of the Division's action.
23. Section 25-7-114.7(2)(a), C.R.S. requires that all sources required to file an Air Pollution Emission Notice (APEN) must **pay an annual fee** to cover the costs of inspections and administration. If a source or activity is to be discontinued, the owner must notify the Division in writing requesting a cancellation of the permit. Upon notification, annual fee billing will terminate.
24. Violation of the terms of a permit or of the provisions of the Colorado Air Pollution Prevention and Control Act or the regulations of the AQCC may result in administrative, civil and/or criminal enforcement actions under Sections 25-7-115 (enforcement), -121 (injunctions), -122 (civil penalties), -122.1 (criminal penalties), C.R.S.

By: KC Houlden
K.C. Houlden
Permit Engineer

By: Charles R. Tracy for
R K Hancock III, P.E.
Construction Permits Unit Supervisor

Permit History

Issuance	Date	Description
Initial Approval	This Issuance	Issued to Hewlett-Packard

Notes to Permit Holder (as of date of permit issuance):

- 1) The production or raw material processing limits and emission limits contained in this permit are based on the consumption rates requested in the permit application. These limits may be revised upon request of the permittee providing there is no exceedance of any specific emission control regulation or any ambient air quality standard. A revised air pollution emission notice (APEN) and application form must be submitted with a request for a permit revision.
- 2) This source is subject to the Common Provisions Regulation Part II, Subpart E, Affirmative Defense Provision for Excess Emissions During Malfunctions. The permittee shall notify the Division of any malfunction condition which causes a violation of any emission limit or limits stated in this permit as soon as possible, but no later than noon of the next working day, followed by written notice to the Division addressing all of the criteria set forth in Part II.E.1. of the Common Provisions Regulation. See: <http://www.cdphe.state.co.us/regulations/airregs/5CCR1001-2.pdf>.
- 3) The emission levels contained in this permit are based on the following emission factors:

Points 031:

CAS	Pollutant	Emission Factors - Uncontrolled		Emission Factors - Controlled	
		lb/hr	Source	lb/hr	Source
-	NO _x	13.041	Mfr	13.041	Mfr

- 4) In accordance with C.R.S. 25-7-114.1, the Air Pollutant Emission Notices (APENs) associated with this permit are valid for a term of five years. As of the issuance of this permit, the five-year term for these APENs expires per the table below. A revised APEN shall be submitted no later than 30 days before the five-year term expires.

AIRS Point	Date of Expiration
031	April 4, 2017

- 5) This facility is classified as follows:

Applicable Requirement	Status
Operating Permit	Minor Source at a Synthetic minor facility for NO _x
NANSR	Minor Source at a minor facility
PSD	Minor Source at a minor facility

- 6) Full text of the Title 40, Protection of Environment Electronic Code of Federal Regulations can be found at the website listed below:

<http://ecfr.gpoaccess.gov/>

Part 60: Standards of Performance for New Stationary Sources		
NSPS	60.4200-60.4219	Subpart IIII

- 7) This engine shall be used for emergency purposes only. If engine is to be used for any non-emergency purpose (demand response, peak shaving, base power, etc.), the source must submit a new Air Pollutant Emission Notice (APEN) and must meet the NSPS IIII Interim Tier 4 Standards.
- 8) Certification documentation of compliance with the NSPS IIII emission standards was received with the initial application.