

STATE OF COLORADO

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



CONSTRUCTION PERMIT

PERMIT NO: 07BR0956

INITIAL APPROVAL

DATE ISSUED: March 19, 2008

ISSUED TO: Sun Microsystems

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

Emergency power generation equipment located at Sun Microsystems, 500 Eldorado Blvd,
Broomfield, Broomfield County, CO.

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

Ten (10) diesel fired emergency generator sets as listed in Attachment A.

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:

1. 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 measured by EPA Method 9. (Reference: Regulation No. 1, Section II.A.1. & 4.)
2. The permit number shall be marked on the subject equipment for ease of identification. (Reference: Regulation No. 3, Part B, Section III.E.) (State only enforceable)
3. This source shall be limited to a fuel use rate and hours of operation as listed below and all other activities, operational rates and numbers of equipment as stated in the application. Annual records of the actual fuel consumption rate and hours of operation 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).

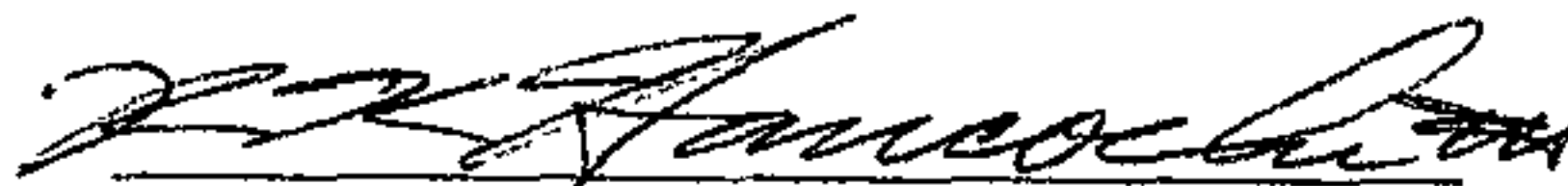
Consumption of No. 2 Diesel Fuel in the ten (10) generator engines shall not exceed 312,950 gallons per year. Operation of each engine shall not exceed 500 hours per year.
4. Emissions of air pollutants from these generators combined shall not exceed the following limitations (as calculated in the Division's preliminary analysis): (Reference: Regulation No. 3, Part B, Section II.A.4)

Nitrogen Oxides	85.3 tons per year
Carbon Monoxide	18.4 tons per year
Particulate Matter:	6.1 tons per year.
PM10 (Particulate Matter<10 μ m):	6.1 tons per year.
Sulfur Dioxide:	5.7 tons per year.

5. The sulfur content of the diesel fuel used in the generators shall not exceed 0.0045% by weight. 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. (Reference: Regulation No. 3, Part B, III.E).
6. 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. (Information on how to certify compliance was mailed with the permit.)



Michael Harris, P.E.
Permit Review Engineer



R K Hancock III, P.E.
Construction Permits Unit Leader

- 1) The production or raw material processing limits and emission limits contained in this permit are based on the production/processing rates requested in the permit application. These limits may be revised upon request of the permittee providing there is no exceedence 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/100102aqcccommonprovisionsreg.pdf>.
- 3) The emission levels contained in this permit are based on the following emission factors:

Particulate Matter:	0.0022	pounds per HP-hr
PM ₁₀ (particles less than 10 microns):	0.0022	pounds per HP-hr
Nitrogen Oxides:	0.031	pounds per HP-hr
Sulfur Oxides:	0.00205	pounds per HP-hr
Carbon Monoxide:	0.00668	pounds per HP-hr
- 4) This source is classified as a: Minor Source
At a: Minor Facility
- 5) In accordance with C.R.S. 25-7-114.1, the Air Pollutant Emission Notice (APEN) associated with this permit is valid for a term of five years. The five year term for the APEN received with this permit application expires on October 4, 2012. A revised APEN shall be submitted no later than 30 days before the five year term expires.

GENERAL TERMS AND CONDITIONS: (IMPORTANT! READ ITEMS 5, 6, 7 AND 8)

1. 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.
2. Unless specifically stated otherwise, the general and specific conditions contained in this permit have been determined by the APCD to be necessary to assure compliance with the provisions of Section 25-7-114.5(7)(a), C.R.S.
3. 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 final approval by the Air Pollution Control Division (APCD) on grounds set forth in the Colorado Air Quality Control Act and regulations of the Air Quality Control Commission (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 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.
4. This permit and any required attachments must be retained and made available for inspection upon request at the location set forth herein. With respect to a portable source that is moved to a new location, a copy of the Relocation Notice (required by law to be submitted to the APCD whenever a portable source is relocated) should be attached to this permit. The permit may be reissued to a new owner by the APCD as provided in AQCC 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.
5. Issuance (initial approval) of an emission permit does not provide "final" authority for this activity or operation of this source. Final approval of the permit must be secured from the APCD in writing in accordance with the provisions of 25-7-114.5(12)(a) C.R.S. and AQCC 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 APCD as conforming in all respects with the conditions of the permit. If the APCD so determines, it will provide written documentation of such final approval, which does constitute "final" authority to operate. ***Compliance with the permit conditions must be demonstrated within 180 days after commencement of operation.***
6. **THIS PERMIT AUTOMATICALLY EXPIRES IF** you (1) do not commence construction or operation within 18 months after either the date of issuance of this permit or the date on which such construction or activity was scheduled to commence as set forth in the permit, whichever is later; (2) discontinue construction for a period of 18 months or more; or (3) do not complete construction within a reasonable time of the estimated completion date. Extensions of the expiration date may be granted by the APCD upon a showing of good cause by the permittee prior to the expiration date.
7. **YOU MUST** notify the APCD at least thirty days (fifteen days for portable sources) prior to commencement of the permitted operation or activity. Failure to do so is a violation of Section 25-7-114.5(12)(a), C.R.S. and AQCC Regulation No. 3, Part B, Section III.G.1., and can result in the revocation of the permit. ***You must demonstrate compliance with the permit conditions within 180 days after commencement of operation as stated in condition 5.***
8. 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.
9. 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 or criminal enforcement actions under Sections 25-7-115 (enforcement), -121 (injunctions), -122 (civil penalties), -122.1 (criminal penalties), C.R.S.

Attachment A

Listing of emergency generators

AIRS Point ID	Equipment Designation	Equipment Description, Model, Serial Number, rated power, and operational limitations	Installation Date	Emission Limits (tons per year) Based on 500 hours
003	Generator #1	Caterpillar, model SR-4B, SN 2GM00675 rated at 1000 KW (1342 HP) operation limited to 500 hours per year	1997	NOx = 10.40 CO = 2.24
004	Generator #2	Caterpillar, model SR-4B, SN 2GM00682 rated at 1000 KW (1342 HP) operation limited to 500 hours per year	1997	NOx = 10.40 CO = 2.24
005	Generator #3	Caterpillar, model SR-4B, SN 2GM00683 rated at 900 KW (1206 HP) operation limited to 500 hours per year	1997	NOx = 9.35 CO = 2.02
006	Generator #4	Caterpillar, model SR-4B, SN 2GM00680 rated at 1000 KW (1342 HP) operation limited to 500 hours per year	1997	NOx = 10.40 CO = 2.24
007	Generator #5	Caterpillar, model SR-4B, SN 5DM0045 rated at 1500 KW (2011 HP) operation limited to 500 hours per year	2001	NOx = 15.59 CO = 3.36
008	Generator #6	Caterpillar, model 3208, SN 9EF02328 rated at 200 KW (268 HP) operation limited to 500 hours per year	1997	NOx = 2.08 CO = 0.45
009	Generator #7	Cummins model DFHA-4479810, SN E000103753 rated at 750 KW (1005 HP) operation limited to 500 hours per year	1997	NOx = 7.8 CO = 1.68
010	Generator #8	Caterpillar, model 3208, SN 9EF02713 rated at 200 KW (268 HP) operation limited to 500 hours per year	1997	NOx = 2.08 CO = 0.45
011	Generator #9	Cummins, model DFCC-4487429, SN J000166145 rated at 1500 KW (2011 HP) operation limited to 500 hours per year	2001	NOx = 15.59 CO = 3.36
012	Generator #10	Cummins, model DGFC-4956205, SN CO10214008 rated at 150 KW (201 HP) operation limited to 500 hours per year	2001	NOx = 1.56 CO = 0.34