

STATE OF COLORADO

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



CONSTRUCTION PERMIT

PERMIT NO: **12EP1937**

Initial Approval

DATE ISSUED: March 20, 2013

ISSUED TO: **Verizon Wireless**

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

Data center facility located at 4323 Arrowswest Drive, 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
Generator A1 & Generator B1	005 & 006	Two (2) diesel powered emergency generator engines Make: Caterpillar Model: 3516C Serial Number: SBK00495 & SBK00494 Site Rating: 3,019 hp Equipped with turbocharger Manufacture Date: July 2008 Displacement: 4.88 L/cyl These engines were ordered new in January 2010 therefore, the date of entry into Colorado is considered to be January 2010. These engine are subject to NSPS IIII Tier 2 Standards These engines were previously permitted under 10EP1681 & 10EP1682

Facility Equipment ID	AIRS Point	Description
Generators 1 - 10	007	Ten (10) diesel powered emergency generator engines Make: Caterpillar Model: C175-16 Serial Number: TBD Site Rating: 3,810 hp Equipped with turbocharger Manufacture Date: TBD Displacement: 5.29 L/cyl These engines were ordered new in February 2012 therefore, the date of entry into Colorado is considered to be February 2012. These engines are subject to NSPS IIII Tier 2 Standards

These engines may be replaced with other engines in accordance with the temporary engine replacement provision or with another engine with the same make and model in accordance with the permanent replacement provision of the Alternate Operating Scenario (AOS), included in this permit as 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:

REQUIREMENTS TO SELF-CERTIFY FOR FINAL APPROVAL

- Point 007: 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.
- Point 007:** Within one hundred and eighty days (180) after commencement of operation of point 007, compliance with the conditions contained on this permit pertaining to point 007 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 portion of the permit pertaining to point 007 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)
- Point 007:** The portion of this permit pertaining to point 007 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 point 007 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. **Point 007:** Within one hundred and eighty days (180) after commencement of operation of point 007, 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 AIRS ID numbers shall be marked on the subject equipment for ease of identification. (Reference: Regulation No. 3, Part B, III.E.) (State only enforceable)
6. **Point 007:** The serial numbers and manufactured dates of the engines under point 007 shall be provided to the Division within one hundred and eighty days (180) after commencement of operation. (Reference: Regulation No. 3, Part B, III.E.)

EMISSION LIMITATIONS AND RECORDS

7. 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). Hourly and 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:

Facility Equipment ID	AIRS Point	Pounds per Hour			Emission Type
		NO _x	VOC	CO	
Generator A1, Generator B1, Generators 1-10	005, 006, 007	727.80	30.72	157.56	Point

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

$$\text{Emissions}_{\text{Hourly}} = \text{Hourly Emission Factor (lb/hr)}$$

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
		NO _x	VOC	CO	
Generator A1, Generator B1, Generators 1-10	005, 006, 007	39.97	7.51	18.57	Point

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

$$\text{Emissions} = \frac{[\text{Emission Factor for Annual Emission Limit (lb/gal)} * \text{Diesel Fuel Consumption (gal)}]}{(2000\text{lb/1 ton})}$$

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 recording the facility's annual emissions for the pollutants listed in the table above and all HAPs above the de-minimis reporting level 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

8. This source shall be limited to the following maximum consumption, processing and/or operational rates as listed below. Monthly 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
Generator A1, Generator B1, Generators 1-10	005, 006, 007	Diesel Fuel Consumption (total for all 12 engines)	281,000 gal/yr
		Hours of Operation (per engine)	500 hr/yr

Compliance with the Hours of Operation limit will be demonstrated by installing a non-resettable hour meter on the engines and recording the hours of each engine's operation.

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 rates and keep a compliance record on site or at a local field office with site responsibility, for Division review.

STATE AND FEDERAL REGULATORY REQUIREMENTS

9. 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.)
10. This source is subject to the odor requirements of Regulation No. 2. (State only enforceable)
11. 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:
- Emissions of Non-Methane Hydrocarbons and Nitrogen Oxides combined shall not exceed 4.8 grams per horsepower hour.
 - Emissions of Carbon Monoxide shall not exceed 2.6 grams per horsepower hour.
 - Emissions of Particulate Matter shall not exceed 0.15 grams per horsepower hour.

Compliance with these emission standards shall be demonstrated by maintaining a copy of the engine manufacturer's emissions certification for each engine model covered under this permit.

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))

12. 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

- 13. 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

- 14. Within 180 days of startup, the owner or operator shall demonstrate compliance with Condition 9, using EPA Method 9 to measure opacity from the engines. 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)
- 15. A source initial compliance test shall be conducted within 180 days of startup on five (5) of the engines under point 007 to measure the emission rate(s) for the pollutants listed below in order to demonstrate compliance with the annual emission limitations in condition 7 at the permitted fuel use rate of 281,000 gallons per year. The test protocol, test and test report must be in accordance with the requirements of the Air Pollution Control Division Compliance Test Manual. The protocol shall be submitted to the Division for review and approval at least thirty (30) days prior to testing. No compliance test shall be conducted without prior approval from the Division. Any compliance test conducted to show compliance with a monthly or annual emission limitation shall have the results projected up to the monthly or annual averaging time by multiplying the test results by the allowable fuel usage for that averaging time (Reference: Regulation No. 3, Part B., Section III.G.3)

Oxides of Nitrogen (NOx) using EPA approved methods
Carbon Monoxide (CO) using EPA approved methods

Note: Stack testing for points 005 and 006 is not required provided that these engines will be removed from the facility once the engines under point 007 commence normal operation.

Periodic Testing Requirements

16. Replacements of this unit completed as Alternative Operating Scenarios may be subject to additional testing requirements as specified in Attachment A.

ADDITIONAL REQUIREMENTS

17. This permit replaces the following permits, which are canceled upon issuance of this permit.

Permit No.	AIRS ID	Notes
10EP1681	041/0831/005	Caterpillar engine, Model: 3516C, SN: SBK00495: This equipment is being combined onto permit no. 12EP1937
10EP1682	041/0831/006	Caterpillar engine, Model: 3516C, SN: SBK00494: This equipment is being combined onto permit no. 12EP1937

18. The AIRS ID number shall be marked on the subject equipment for ease of identification. (Reference: Regulation No. 3, Part B, III.E.) (State only enforceable)
19. 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:

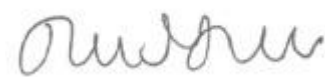
If the emissions increase by 50% or five (5) tons per year, whichever is less, above the level reported on the last APEN submitted to the Division.

- 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.

GENERAL TERMS AND CONDITIONS:

20. 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.
21. 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.**
22. 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.
23. 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.
24. 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.
25. 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.
26. 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:



Renee Mayer
Permit Engineer

By:



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

Permit History

Issuance	Date	Description
Initial Approval	This Issuance	Issued to Verizon Wireless. Points 005 & 006, which were previously permitted under 10EP1681 & 10EP1682, are being incorporated into this permit in order to share the fuel usage limitation with point 007.

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 005, 006, & 007 – Emission Factors for Hourly Emission Limits:

CAS	Pollutant	Emission Factors - Uncontrolled		Emission Factors – Controlled	
		lb/hr	Source	lb/hr	Source
--	NO _x	727.80	Mfg	727.80	Mfg
--	VOC	30.72	Mfg	30.72	Mfg
--	CO	157.56	Mfg	157.56	Mfg

Points 005, 006, & 007 – Emission Factors for Annual Emission Limits:

CAS	Pollutant	Emission Factors - Uncontrolled		Emission Factors – Controlled	
		lb/gal	Source	lb/gal	Source
--	NO _x	0.2845	Mfg	0.2845	Mfg
--	VOC	0.0534	Mfg	0.0534	Mfg
--	CO	0.1322	Mfg	0.1322	Mfg

Note: The emission factors for annual emission limits were reported in units of g/hp-hr and were converted to units of lb/gal for simpler record keeping.

- 4) In accordance with C.R.S. 25-7-114.1, each Air Pollutant Emission Notice (APEN) associated with this permit is valid for a term of five years from the date it was received by the Division. A revised APEN shall be submitted no later than 30 days before the five-year term expires. Please refer to the most recent annual fee invoice to determine the APEN expiration date for each emissions point associated with this permit. For any questions regarding a specific expiration date call the Division at (303)-692-3150.

- 5) This facility is classified as follows:

Applicable Requirement	Status
Operating Permit	Synthetic Minor Source NOx
PSD	Minor Source NOx, VOC, CO

- 6) These engines are subject to 40 CFR, Part 63, Subpart ZZZZ - **National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines (Federally enforceable only)**. A copy of the complete subpart is available on the EPA website at: <http://www.epa.gov/ttn/atw/rice/ricepg.html>. All initial notifications, compliance demonstrations, and required documentation should be submitted directly to U.S. EPA Region 8 and copies sent to the Colorado Air Pollution Control Division
- 7) 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
Part 63: National Emission Standards for Hazardous Air Pollutants for Source Categories		
MACT	63.6580-63.6675	Subpart ZZZZ

- 8) **Point 007:** The engines under point 007 shall be used for emergency purposes only. If the engines under point 007 are 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.
- 9) Certification documentation of compliance with the NSPS IIII emission standards was received with the initial application.
- 10) The permit holder is required to pay fees for the processing time for this permit. An invoice for these fees will be issued after the permit is issued. The permit holder shall pay the invoice within 30 days of receipt of the invoice. Failure to pay the invoice will result in revocation of this permit (Reference: Regulation No. 3, Part A, Section VI.B.)

ATTACHMENT A: ALTERNATIVE OPERATING SCENARIOS STATIONARY (CI) ENGINE

October 1, 2011

2. Alternative Operating Scenarios

The following Alternative Operating Scenario (AOS) for the temporary and permanent replacement of Stationary (CI) engines has been reviewed in accordance with the requirements of Regulation No. 3., Part A, Section IV.A, Operational Flexibility- Alternative Operating Scenarios, Regulation No. 3, Part B, Construction Permits, and Regulation No. 3, Part D, Major Stationary Source New Source Review and Prevention of Significant Deterioration, and it has been found to meet all applicable substantive and procedural requirements. This permit incorporates and shall be considered a Construction Permit for any engine replacement performed in accordance with this AOS, and the owner or operator shall be allowed to perform such engine replacement without applying for a revision to this permit or obtaining a new Construction Permit.

2.1 Engine Replacement

The following AOS is incorporated into this permit in order to deal with an engine breakdown or periodic routine maintenance and repair of an existing onsite engine that requires the use of either a temporary or permanent replacement engine. "Temporary" is defined as in the same service for 90 operating days or less in any 12 month period. "Permanent" is defined as in the same service for more than 90 operating days in any 12 month period. The 90 days is the total number of days that the engine is in operation. If the engine operates only part of a day, that day shall count as a single day towards the 90-day total. The compliance demonstrations and any periodic monitoring required by this AOS are in addition to any compliance demonstrations or periodic monitoring required by this permit.

All replacement engines are subject to all federally applicable and state-only requirements set forth in this permit (including monitoring and record keeping).

The results of any all tests and the associated calculations required by this AOS shall be submitted to the Division within 60 days. Results of all tests shall be kept on site for five (5) years and made available to the Division upon request.

The owner or operator shall maintain a log on-site and contemporaneously record the start and stop date of any engine replacement, the manufacturer, date of manufacture, model number, horsepower, and serial number of the engine(s) that are replaced during the term of this permit, and the manufacturer, model number, horsepower, and serial number of the replacement engine.

2.1.1 The owner or operator may **temporarily** replace an existing engine that is covered by this permit with a different engine without modifying this permit, so long as the temporary replacement engine complies with all permit limitations and other requirements applicable to the existing engine. Calculation of emissions from the temporary replacement engine shall be made as set forth in section 2.1.3.

2.1.2 An Air Pollutant Emissions Notice (APEN) that includes the specific manufacturer, model and serial number and horsepower of the permanent replacement engine shall be filed with the Division for the permanent replacement engine within 14 calendar days of commencing operation of the replacement

engine. The APEN shall be accompanied by the appropriate APEN filing fee, a cover letter explaining that the owner or operator is exercising an alternative operating scenario and is installing a permanent replacement engine and an analysis of any new applicable requirements for the replacement engine as required by Condition 2.2. This submittal shall be accompanied by a certification from the Responsible Official indicating that "based on the information and belief formed after reasonable inquiry, the statements and information included in the submittal are true, accurate and complete".

This AOS cannot be used for permanent engine replacement of a grandfathered or permit exempt engine or an engine that is not subject to emission limits.

The owner or operator shall agree to pay fees based on the normal permit processing rate for review of information submitted to the Division in regard to any permanent engine replacement.

2.1.3 Compliance of the replacement engine with the applicable emission limitations of the original engine shall be monitored by one of the following methods:

- 1) Manufacturer certified emission factors showing compliance.
- 2) Stack tests of same make and model showing compliance. This would only be considered if the test was done under similar conditions to Colorado (i.e. at altitude).
- 3) Stack tests on the engine.

2.2 Applicable Regulations for Permanent Engine Replacements

2.2.1 NSPS for stationary compression ignition internal combustion engines: 40 CFR Part 60, Subpart IIII.

A permanent replacement engine that is ordered after July 11, 2005 and manufactured after April 1, 2006 **or** is modified or reconstructed after July 11, 2005 is subject to the requirements of 40 CFR Part 60, Subpart IIII. An analysis of applicable monitoring, recordkeeping, and reporting requirements for the permanent engine replacement shall be included in any request for a permanent engine replacement.

Note that under the provisions of Regulation No. 6. Part B, section I.B. that Relocation of a source from outside of the State of Colorado into the State of Colorado is considered to be a new source, subject to the requirements of Regulation No. 6 (i.e., the date that the source is first relocated to Colorado becomes equivalent to the date of manufacture for purposes of determining the applicability of NSPS IIII requirements).

2.2.2. MACT for Stationary Reciprocating Internal Combustion Engines: 40 CFR Part 63, Subpart ZZZZ.

Any permanent replacement engine located at either an area or major source is subject to the requirements of 40 CFR Part 63, Subpart ZZZZ. An analysis of applicable monitoring, recordkeeping, and reporting requirements for the permanent engine replacement shall be included in any request for a permanent engine replacement.

2.3 Additional Sources

The replacement of an existing engine with a new engine is viewed by the Division as the installation of a new emissions unit, not "routine replacement" of an existing unit. The AOS is therefore essentially an advanced construction permit review. The AOS cannot be used for additional new emission points for any site; an engine that is being installed as an entirely new emission point and not as part of an AOS-approved replacement of an existing onsite engine has to go through the appropriate Construction/Operating permitting process prior to installation.