

STATE OF COLORADO

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



GENERAL CONSTRUCTION PERMIT

PERMIT NO: GP06

APPROVAL No. 1

THE SOURCES TO WHICH THIS GENERAL PERMIT, GP06 APPLIES IS DESCRIBED AS FOLLOWS:

Diesel Fuel-Fired Reciprocating Internal Combustion Engines (RICE)

Roland C. Hea, P.E.
Permitting Section Supervisor

November 20, 2013

Date Issued

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Permit History

Issuance	Date	Description
Approval No. 1	This issuance	Issued to diesel fuel-fired reciprocating internal combustion engines covered by this General Permit, GP06.

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I. GENERAL PERMIT APPLICABILITY

- I.A. This General Permit, GP06, can be used only for a diesel fuel-fired reciprocating internal combustion engine that is a stationary source, including a portable unit which meets the following requirements:
- I.A.1. It is a true minor or synthetic minor source for Operating Permits (OP), Prevention of Significant Deterioration (PSD) or New Source Review (NSR) programs applicability.
 - I.A.2. It is a true minor or synthetic minor source under the provisions of 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants for Source Categories.
 - I.A.3. It meets all the requirements in New Source Performance Standard (NSPS) Subpart IIII as applicable to the specific engine, including the standards required for relocating into Colorado as set in Regulation No. 6, Part B, Section I.C.
 - I.A.4. It meets all of the conditions of Section II.A of this General Permit, GP06.
- I.B. The following types of sources may not use this General Permit for diesel fuel fired reciprocating internal combustion engines:
- I.B.1. A major source as defined in Regulation No. 3, Part A, Section I.B.25.
 - I.B.2. Any diesel fuel-fired internal combustion engine that does not meet the requirements of NSPS Subpart IIII as applicable to the specific engine.
- I.C. With the exception of Sections II.A.2, II.A.3 and IV.C.1, this General Permit applies only to the equipment as described in Section I.A of this General Permit above for which the operator has obtained approval from the APCD for registration under this General Permit, GP06. Other equipment at the same stationary source must be permitted separately as required by Regulation No. 3, Part B.

II. EMISSION LIMITATION REQUIREMENTS

II.A. Facility-Wide Emission Limitation Requirements

- II.A.1. The maximum allowable emissions of criteria air pollutants from all APEN-reportable emissions points at the same stationary source (including those of the engine subject to this general permit) shall not exceed the following limitations: (Reference: Regulation No. 3, Part B, Section II.A.4)
- | | | |
|-----------|---------------------------------------|------------------------|
| II.A.1.a. | Nitrogen Oxides (NO _x): | 90.0 tons per year |
| II.A.1.b. | Volatile Organic Compounds (VOC): | 90.0 tons per year |
| II.A.1.c. | Carbon Monoxide (CO): | 90.0 tons per year |
| II.A.1.d. | Greenhouse Gases (CO ₂ e): | 90,000.0 tons per year |

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II.A.2. The maximum allowable individual criteria pollutant emissions increase for the project which includes the engine covered by this general permit shall be less than the respective criteria air pollutants' significant emission levels as follows:

II.A.2.a.	NO _x :	40.0 tons per year
II.A.2.b.	VOC:	40.0 tons per year
II.A.2.c.	CO:	90.0 tons per year

II.A.3. The maximum allowable emissions of hazardous air pollutants (HAPs) from all APEN-reportable emissions points at the same stationary source (including those of the engine(s) subject to this permit) shall not exceed the following limitations: (Reference: Regulation No. 3, Part B, Section II.A.4.)

II.A.3.a.	Each Individual HAP:	8.0 tons per year
II.A.3.b.	Total of all HAPs:	20.0 tons per year

II.B. Emission Limitations Specific to Engines Registered Under this General Permit

The owner/operator shall construct and operate this registered engine in accordance with the representations made in the general permit application including, but not limited to, emission factors, nameplate and site-rated horsepower, hours of operation, emissions control measures, requested fuel consumption and other parameters that affect emissions.

III. STATE AND FEDERAL REGULATORY REQUIREMENTS

III.A. 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. (Reference: Regulation No. 1, Section II.A.1. & 4.)

III.B. The engine covered under this general permit is subject to the odor requirements of Regulation No. 2. (State only enforceable)

III.C. Portable Engines covered under this General Permit shall comply with the following requirements in addition to other requirements contained in this General Permit. (Reference: Regulation No. 3, Part A, Section II.C.1.f and Part B, Section III.E.)

III.C.1. When relocating the engine, the owner or operator shall:

III.C.1.a. Submit a Relocation Notice each time this equipment is moved to a new location. The Relocation Notice shall be received by the Division at least ten (10) days prior to the change in location.

III.C.1.b. The Relocation Notice shall include a facility emission inventory that includes all emission units at the new location. An ambient air

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quality impact analysis for the site shall be submitted with the Relocation Notice for this equipment, if so requested by the Division.

III.C.1.c. Maintain records of compliance with all additional requirements that are triggered by the relocation. Such requirements may include, but are not limited to:

III.C.1.c.(i) State or Federal New Source Performance Standards (NSPS), National Emission Standards for Hazardous Air Pollutants (NESHAP), Maximum Achievable Control Technology (MACT), and Generally Available Control Technology (GACT) requirements; and

III.C.1.c.(ii) Major source requirements, including Title V Operating Permit, Nonattainment Area New Source Review (NANSR) and Prevention of Significant Deterioration (PSD) program requirements; and

III.C.1.c.(iii) Permitting requirements for sources no longer permit exempt due to the relocation of this unit to the site (i.e. previously Air Pollutant Emission Notice (APEN) required, permit exempt sources).

III.C.1.d. Keep a record of all relocation notices submitted to the Division.

III.C.1.e. This unit shall not remain at any one site for more than two (2) years. Permittee shall keep records of time spent at each site (Reference: Regulation No. 3, Part A, Section I.B.36.). If this unit remains at a site for two years then the permittee shall submit a revised Air Pollutant Emission Notice (APEN) requesting a permit as a non-portable stationary source.

III.C.1.e.(i) Note: If this replaces a unit and is intended to perform the same function as the unit being replaced then the cumulate time for both units, including the time between removal of the original unit and installation of the replacement unit, will be counted toward the total time spent at the site.

III.C.1.f. If this source relocates to a site causing the facility to become Title V Operating Permit major (see Regulation No. 3, Part A, Section I.B.25.) or relocates to an existing Title V Permitted source then this source is subject to the provisions of Regulation No. 3, Part C, Operating Permits (Title V of the 1990 Federal Clean Air Act Amendments). The application for the Operating Permit, or modification for inclusion in the existing Operating Permit, is due within one year of the date of relocation to the site.

III.D. NSPS Units:

III.D.1. This engine shall comply with the New Source Performance Standards (NSPS) requirements of Regulation No. 6, Part A, Subpart IIII, Standards of

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Performance for Stationary Compression Ignition Internal Combustion Engines (CI ICE). This includes all the applicable requirements including, but not limited to, the following:

- III.D.1.a. All fuel used shall meet the following specifications:
- III.D.1.a.(i) Sulfur content shall not exceed 15 ppm.
 - III.D.1.a.(ii) Have a minimum cetane index of 40 or have a maximum aromatic compound content of 35% by volume
 - III.D.1.a.(iii) 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.
- III.D.1.b. The engine and control devices must be installed, configured, operated, and maintained according to the specifications and instructions provided by the engine manufacturer.
- III.D.1.c. If the 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.
- III.D.1.d. If the engine is used for emergency purposes, a non-resettable hour meter must be installed prior to start-up.
- III.D.1.e. If the diesel fuel-fired engine covered under this general permit avoids tier 4 or 4i requirements by being an emergency generator, the 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

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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.

III.D.2. Emission Standards:

III.D.2.a. The engine covered under this permit shall meet all the emission standards applicable to the engine.

III.D.2.b. Compliance with the NSPS Subpart IIII Emissions Standards for Non-Methane Hydrocarbons (NMHC), Nitrogen Oxides (NO_x), Carbon Monoxide (CO) and Particulate Matter (PM) shall be demonstrated by filing a copy of the unit's certification documentation of compliance with the NSPS Subpart IIII emission standards with the application for this General Permit coverage.

III.D.3. If the engine is subject to NSPS Subpart IIII, the following requirements of Regulation No. 6, Part A, Subpart A, General Provisions, shall apply as follow:

III.D.3.a. At all times, including periods of start-up, shutdown, and malfunction, the engine 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

III.D.3.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)

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- III.D.3.c. Written notification of construction and initial startup dates shall be submitted to the Division as required under § 60.7.
- III.D.3.d. Records of startups, shutdowns, and malfunctions shall be maintained, as required under § 60.7.
- III.D.4. If the engine covered by this general permit is located in an ozone non-attainment or attainment-maintenance area, it is subject to the Reasonably Available Control Technology (RACT) requirements of Regulation Number 3, Part B, III.D.2.b as follows:
 - III.D.4.a. The requirements of condition numbers III.D.1, III.D.2 and III.D.3 above have been determined to be RACT for the engine.

IV. Recordkeeping Plan

- IV.A. Records shall be located on-site or at a local field office with stationary source responsibility. Records may be kept in either electronic or hard copy format provided that they can be promptly supplied to the APCD upon request.
- IV.B. The following records shall be maintained for the emission unit while covered by this general permit:
 - IV.B.1. The current version of this general permit.
 - IV.B.2. The APEN(s) submitted to the APCD for each engine covered by this general permit.
 - IV.B.3. The supporting documents submitted with the application:
 - IV.B.3.a. The engine's displacement documentation
 - IV.B.3.b. The engine's horsepower rating documentation
 - IV.B.3.c. The engine's year of manufacturing documentation, and
 - IV.B.3.d. The engine's year of locating/relocating into Colorado.
 - IV.B.4. The general permit registration approval letter.
 - IV.B.5. The Notice of Startup (NOS) submitted to the APCD as required under Section VII.D of this General Permit.
- IV.C. The following records shall be maintained for a period of five years:
 - IV.C.1. Records that demonstrate compliance with the emission limits of this permit.
 - IV.C.1.a. Compliance Time Period
 - IV.C.1.a.(i) If the stationary source at which the covered engine(s) is located is a true minor source, compliance with the annual emission limits for the

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engine(s) shall be monitored by calculating and recording the annual emissions from each engine on a calendar year basis.

- IV.C.1.a.(ii) If the stationary source at which the engine(s) is located is a synthetic minor source, compliance with the annual emission limits for the engine(s) shall be monitored by calculating emissions on a monthly basis and recording the annual emissions from each engine 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' emissions data. During the first year of operation, compliance shall be based upon cumulative emissions from all months of operation.
- IV.C.1.b. Emissions from diesel fuel-fired engines covered by this General Permit shall be calculated using the methodologies listed in this Subsection IV.C.1.b. (i) & (ii) of this General Permit. The same emission factors (EF), site rated horsepower (HP), design rate (FuelRate), hours of operation (RunTime) or Fuel Usage (FuelUsage) and lower fuel heat value (LHV) as specified in the most recent registration approved by the APCD shall be used in the calculations. Equations Eq. 1, Eq. 2, Eq. 3, Eq. 4 and Eq. 5 represent annual calculations and should be adjusted using the appropriate time period (monthly or annual) as required by this Subsection IV.C.1.a of this General Permit above.
- IV.C.1.b.(i) Emission estimates based upon hours of operation shall be calculated using either Eq. 1 with the appropriate emission factor:

$$\text{Eq. 1.a. } \textit{Emission} \left(\frac{\text{ton}}{\text{year}} \right) = \textit{EF} \left(\frac{\text{X lb}}{10^6 \text{Btu}} \right) * \textit{LHV} \left(\frac{\text{btu}}{\text{gal}} \right) * \textit{RunTime} \left(\frac{\text{hrs}}{\text{yr}} \right) * \textit{FuelUsage} \left(\frac{\text{gal}}{\text{hr}} \right) * \left(\frac{1 \text{ ton}}{2000 \text{ lb}} \right)$$

$$\text{Eq. 1.b. } \textit{Emission} \left(\frac{\text{ton}}{\text{year}} \right) = \textit{EF} \left(\frac{\text{X lb}}{\text{HP-hr}} \right) * \textit{HP} \left(\frac{\text{hp}}{1} \right) * \textit{RunTime} \left(\frac{\text{hrs}}{\text{yr}} \right) * \left(\frac{1 \text{ ton}}{2000 \text{ lb}} \right)$$

$$\text{Eq. 1.c } \textit{Emission} \left(\frac{\text{ton}}{\text{year}} \right) = \textit{EF} \left(\frac{\text{X g}}{\text{HP-hr}} \right) * \textit{HP} \left(\frac{\text{hp}}{1} \right) \left(\frac{0.0022 \text{lb}}{\text{g}} \right) * \textit{RunTime} \left(\frac{\text{hr}}{\text{yr}} \right) * \left(\frac{1 \text{ ton}}{2000 \text{ lb}} \right)$$

$$\text{Eq. 1.d } \textit{Emission} \left(\frac{\text{ton}}{\text{year}} \right) = \textit{EF} \left(\frac{\text{X lb}}{1000 \text{ gal}} \right) * \textit{RunTime} \left(\frac{\text{hr}}{\text{yr}} \right) * \textit{FuelRate} \left(\frac{\text{gal}}{\text{hr}} \right) * \left(\frac{1 \text{ ton}}{2000 \text{ lb}} \right)$$

$$\text{Eq. 1.e } \textit{Emission} \left(\frac{\text{ton}}{\text{year}} \right) = \textit{EF} \left(\frac{\text{X g}}{\text{kw-hr}} \right) \left(\frac{\text{kw-hr}}{1.341 \text{ hp-hr}} \right) \left(\frac{\text{HP}}{1} \right) \left(\frac{0.0022 \text{lb}}{\text{g}} \right) * \textit{RunTime} \left(\frac{\text{hr}}{\text{yr}} \right) \left(\frac{1 \text{ ton}}{2000 \text{ lb}} \right)$$

- IV.C.1.b.(ii) Emission estimates based upon fuel consumption shall be calculated using either Eq. 2 with the appropriate emission factor:

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$$\text{Eq. 2.a. } \textit{Emission} \left(\frac{\text{ton}}{\text{year}} \right) = EF \left(\frac{X \text{ lb}}{10^6 \text{ Btu}} \right) * LHV \left(\frac{\text{btu}}{\text{gal}} \right) * \textit{FuelUsage} \left(\frac{\text{gal}}{\text{yr}} \right) * \left(\frac{1 \text{ ton}}{2000 \text{ lb}} \right)$$

$$\text{Eq. 2.b. } \textit{Emission} \left(\frac{\text{ton}}{\text{year}} \right) = EF \left(\frac{X \text{ lb}}{\text{HP-hr}} \right) * HP \left(\frac{\text{hp}}{1} \right) * \textit{FuelUsage} \left(\frac{\text{gal}}{\text{yr}} \right) * \frac{1}{\textit{FuelRate}} \left(\frac{\text{hhr}}{\text{gal}} \right) * \left(\frac{1 \text{ ton}}{2000 \text{ lb}} \right)$$

$$\text{Eq. 2.c. } \textit{Emission} \left(\frac{\text{ton}}{\text{year}} \right) = EF \left(\frac{X \text{ g}}{\text{HP-hr}} \right) * HP \left(\frac{\text{hp}}{1} \right) \left(\frac{0.0022 \text{ lb}}{\text{g}} \right) * \textit{FuelUsage} \left(\frac{\text{gal}}{\text{yr}} \right) * \frac{1}{\textit{FuelRate}} \left(\frac{\text{hr}}{\text{gal}} \right) * \left(\frac{1 \text{ ton}}{2000 \text{ lb}} \right)$$

$$\text{Eq. 2.d. } \textit{Emission} \left(\frac{\text{ton}}{\text{year}} \right) = EF \left(\frac{X \text{ lb}}{1000 \text{ gal}} \right) * \textit{FuelUsage} \left(\frac{\text{gal}}{\text{yr}} \right) * \left(\frac{1 \text{ ton}}{2000 \text{ lb}} \right)$$

$$\text{Eq. 2.e. } \textit{Emission} \left(\frac{\text{ton}}{\text{year}} \right) = EF \left(\frac{X \text{ g}}{\text{kw-hr}} \right) * \left(\frac{\text{kw-hr}}{1.341 \text{ hp-hr}} \right) * HP \left(\frac{\text{hp}}{1} \right) \left(\frac{0.0022 \text{ lb}}{\text{g}} \right) * \textit{FuelUsage} \left(\frac{\text{gal}}{\text{yr}} \right) * \frac{1}{\textit{FuelRate}} \left(\frac{\text{hr}}{\text{gal}} \right) * \left(\frac{1 \text{ ton}}{2000 \text{ lb}} \right)$$

- IV.C.2. Records of the hours of operation and fuel consumption for each engine covered by this General Permit shall be recorded and made available to the APCD upon request. Records shall be for the same time period (monthly or annual) as determined by Subsection IV.C.1.a of this General Permit for the emission calculations.
- IV.C.3. An alternative operating scenario (AOS) modification log containing all details required by any AOS in this permit. (Reference: Regulation No. 3, Part A, Section IV.A.1.)
- IV.C.4. Records that demonstrate compliance with the facility-wide emission limit requirements that facilities must meet in order to qualify for use of this General Permit as set forth in Section II.A of this General Permit.
- IV.C.5. Results of initial compliance and periodic performance testing required by Sections V and VI of this General Permit below.
- IV.C.6. Operating and maintenance records required by Section VI of this General Permit below.

V. COMPLIANCE TESTING AND SAMPLING

V.A. Initial Testing Requirements

- V.A.1. Within 180 days of startup of the engine, the owner or operator of the engines covered by this General Permit shall demonstrate compliance with Section III.A of this General Permit above, using EPA Method 9 to measure opacity from the engine covered by this general permit. 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)

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V.B. Periodic Testing Requirements

- V.B.1. Replacements of this unit completed as Alternative Operating Scenarios may be subject to additional testing requirements as specified in Engine Alternative Operating Scenarios (AOS) in Section VII of this general permit below.

VI. OPERATING & MAINTENANCE REQUIREMENTS

- VI.A. Whenever the engines covered by this permit are located at facility that is a synthetic minor source, the permittee must follow the Recordkeeping / Operating and Maintenance (O&M) plans specified in Section IV above. (Reference: Regulation No. 3, Part B, Section III.I.6.)
- VI.B. The engines covered by this general permit that are true minor and are located at a true minor facility are not required to follow a Division-approved operating and maintenance plan. The operating and maintenance plan provided by the manufacturer shall be followed for this source.
- VI.C. Engine Operating and Maintenance (O&M) Plan
- VI.C.1. This Section VI applies only to engines covered by this General Permit that are synthetic minor itself or are located at a stationary source that is synthetic minor or major for NO_x, CO, or VOC.
- VI.C.2. These general requirements apply to all subparts of Section VI.
- VI.C.2.a. Each engine and associated emission control device, if applicable, shall be maintained and operated according to the manufacturer's scheduled maintenance guide or equivalent. A company may establish its own equivalent maintenance schedule providing it achieves efficient engine operation and meets or exceeds the performance standards of this permit.
- VI.C.2.b. A copy of maintenance schedules shall be kept.
- VI.C.2.c. Records indicating the date and description of maintenance shall be kept
- VI.C.2.d. If maintenance activities or actions are dependent upon hours of operation, then engine operating hours shall be tracked and recorded. If a method other than hours of operation is used, then the tracking method must be recorded.
- VI.C.3. 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 General Permit. **Compliance with the O&M plan shall commence at startup.**

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VII. General Permit Registration Approval Process

- VII.A. Conditional certification of a registration under this general permit is effective from the date the complete registration request is received by the APCD. A complete registration request consists of all General Permit application materials required by the APCD. The owner or operator may commence construction and operation of the engine as represented in the registration upon receipt of the completed registration request by the APCD. In the event the engine(s) does not qualify for registration under the general permit the owner or operator accepts the liability of commencing these activities.
- VII.B. The APCD will determine completeness of the General Permit registration request within thirty (30) days of the date of receipt of the request and provide written notification to the applicant. If the applicant does not receive notification of a completeness determination from the APCD within thirty (30) days, the General Permit registration request shall be deemed complete for the purpose of Condition IX.A.
- VII.C. The APCD has ninety (90) calendar days from the date the APCD receives a complete General Permit registration request to provide the applicant with a written approval or denial of the registration.
- VII.D. The permittee shall submit a Notice of Startup (NOS) within fifteen (15) calendar days after the commencement of operation of the engine(s) registered to this general permit. If all required information is available at the time of registration, the notice of startup may be submitted with the General Permit registration request.

VIII. GENERAL TERMS AND CONDITIONS:

- VIII.A. The General Permit number, GP06 and the AIRS ID number shall be marked on the subject engine covered under this General Permit for ease of identification. (Reference: Regulation No. 3, Part B, III.E.) (State only enforceable)
- VIII.B. A Revised Air Pollutant Emission Notice (APEN) shall be filed: (Reference: Regulation No. 3, Part A, Section II.C.)
- VIII.B.1. Annually whenever a significant increase in emissions occurs as follows:
- VIII.B.1.a. For sources emitting any criteria pollutant **less than 100 tons per year**, a change in actual emissions of five tons per year or more, above the level reported on the last APEN submitted; or
 - VIII.B.1.b. For volatile organic compounds (VOC) and nitrogen oxide (NO_x) sources in an ozone non-attainment area emitting **less than 100 tons of VOC or nitrogen oxide per year**, a change in actual emissions of one ton per year or more or five percent, whichever is greater, above the level reported on the last APEN submitted; or

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- VIII.B.1.c. For sources emitting **100 tons per year or more of a criteria pollutant**, a change in actual emissions of five percent or 50 tons per year or more, whichever is less, above the level reported on the last APEN submitted; or
 - VIII.B.1.d. For sources emitting **any amount of lead**, a change in actual emissions, above the level reported on the last APEN submitted, of fifty (50) pounds of lead
 - VIII.B.1.e. If the emissions of any non-criteria reportable pollutant increase by 50% or five (5) tons per year, whichever is less, above the level reported on the last APEN submitted to the Division.
 - VIII.B.1.f. Whenever there is a change in the owner or operator of any facility, process, or activity; or
 - VIII.B.1.g. Whenever new control equipment is installed, or whenever a different type of control equipment replaces an existing type of control equipment; or
 - VIII.B.1.h. Whenever a permit limitation must be modified; or
 - VIII.B.1.i. No later than 30 days before the existing APEN expires.
- VIII.B.2. Certain requirements of Regulation No. 3, Part D shall apply at such time that any stationary source or modification becomes a major stationary source or major modification solely by virtue of a relaxation in any enforceable limitation that was established after August 7, 1980 on the capacity of the source or modification to otherwise emit a pollutant, such as a restriction on hours of operation. (Reference: Regulation No. 3, Part D, Section V.A.7.b. and VI.B.4.)
- VIII.B.3. This stationary source may be able to utilize the Affirmative Defense Provision for Excess Emissions During Malfunctions contained in Common Provisions Regulation Part II, Subpart E. The permittee shall notify the APCD 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 APCD addressing all of the criteria set forth in Section II.E.1 of the Common Provisions Regulation.
- VIII.B.4. 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 and specific terms and conditions included in this document.
- VIII.B.5. Unless specifically stated otherwise, the general and specific conditions contained in this permit have been determined by the APCD to be

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necessary to assure compliance with the provisions of Section 25-7-114.5(7)(a), C.R.S.

- VIII.B.6. 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.
- VIII.B.7. Section 25-7-114.7(2)(a), C.R.S. requires that all stationary sources required to file an Air Pollution Emission Notice (APEN) must pay an annual fee to cover the costs of inspections and administration.
- VIII.B.8. 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.
- VIII.B.9. Registration under this permit is approved in reliance upon the accuracy and completeness of information supplied by the permittee and is conditioned upon operation of the stationary source, in accordance with this information and with representations made by the permittee or permittee's agents. It is valid only for the equipment and operations or activity specifically identified on the general permit registration.
- VIII.B.10. All terms and conditions of this permit that apply to the equipment covered by this permit shall be considered Applicable Requirements for the purposes of any future permit issued for the engine(s). (Reference: Regulation No. 3, Part A, Section I.B.9.a.)

VIII.C. **Registration Revision / Termination**

- VIII.C.1. The APCD may deny or revoke registration under the general permit under the circumstances specified in Regulation No. 3, Part B, Section III.I.3.c. and require the owner or operator to apply for an individual permit as required by Regulation No. 3, Part B.
- VIII.C.2. A registration under this general permit may be reissued to a new owner by the APCD as provided in Regulation No. 3, Part B, Section II.B upon request for transfer of ownership and the submittal of a revised APEN, revised general permit registration and the required fees.
- VIII.C.3. Registration under this general permit is voluntary. The permittee may withdraw or cancel a registration under this general permit at any time by notifying the APCD in writing and applying for an individual permit as required by Regulation No. 3, Part B.

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VIII.D. The permittee must follow the Recordkeeping/Operating and Maintenance plans specified in Sections IV and VI of this General Permit above. (Reference: Regulation No. 3, Part B, Section III.I.6.)

VIII.E. General:

VIII.E.1. This general permit remains in effect until revised or terminated by the APCD in accordance with the provisions of Regulation No. 3.

VIII.E.2. After public notice and comment as provided by Regulation No. 3, Part B, Section III.I.7., the APCD may revise this general permit in order to add or delete requirements or limitations to the permit. This public notice shall be conducted in a manner consistent with the provisions of Regulation No. 3, Part B, Section III.C.4.

VIII.E.3. If the APCD revises this general permit, it will provide written notice to affected permittees prior to the revision of the general permit. The notice will advise permittees that any existing registration to use the general permit will be automatically converted to a registration to use the revised general permit, provided that the permittee continues to meet all requirements of the revised general permit. Persons not wishing to continue coverage under the revised general permit shall have the option of applying for an individual permit as required by Regulation No. 3, Part B.

VIII.E.4. If the APCD terminates this general permit, it will provide written notice to affected permittees prior to the termination of the general permit. The notice will advise permittees that they must apply for an individual permit as required by Regulation No. 3, Part B.

VIII.E.5. The Division may require any source authorized by a general construction permit to apply for and obtain an individual permit if circumstances have changed since the time of the original general permit application so that the source is no longer appropriately controlled and/or permitted under the general construction permit. (Reference: Regulation No. 3, Part B,

VIII.E.6. Section III.I.3.c.(i)(B)

IX. ENGINE ALTERNATIVE OPERATING SCENARIOS (AOS)

IX.A. This engine may be replaced with another engine in accordance with the temporary engine replacement provision or with another engine of the same make and model, as originally reported for GP06 coverage, in accordance with the permanent replacement provision of the Alternate Operating Scenario (AOS), included in this section of GP06.

IX.B. 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,

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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.

- IX.C. 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.
- IX.C.1. All replacement engines are subject to all federally applicable and state-only requirements set forth in this permit (including monitoring and record keeping).
- IX.C.2. The results of any and 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.
- IX.C.3. 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.
- IX.D. 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 Condition IX.F.
- IX.E. 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

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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 IX.G. 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”.

- IX.E.1. 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.
- IX.E.2. 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.

- IX.F. Compliance of the replacement engine with the applicable emission limitations of the original engine shall be monitored by one of the following methods:
 - IX.F.1. Manufacturer certified emission factors showing compliance.
 - IX.F.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).
 - IX.F.3. Stack tests on the engine.

- IX.G. Applicable Regulations for Permanent Engine Replacements
 - IX.G.1. NSPS for stationary compression ignition internal combustion engines: 40 CFR Part 60, Subpart IIII.
 - IX.G.2. 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

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Colorado becomes equivalent to the date of manufacture for purposes of determining the applicability of NSPS III requirements).

IX.G.3. MACT for Stationary Reciprocating Internal Combustion Engines:40 CFR Part 63, Subpart ZZZZ.

IX.G.3.a. 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.

IX.H. 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.