

AIR EMISSION GENERAL PERMIT NO. <Permit Number>

IS ISSUED TO

Facility Name
Facility Address
City, County, State, Zip

The emission units, control equipment and emission stacks at the stationary source authorized in this general permit are as described in the Permit Applications Table.

This general permit supersedes Air Emission General Permit No. <> and authorizes the Permittee to construct, modify, and operate nonmetallic mineral processing stationary sources at multiple locations in Minnesota under the conditions set forth herein as long as all conditions of this general permit are always met at each stationary source covered by the Permittee's general permit. (Portable crushing spreads or aggregate processing plants in some situations may be stationary sources themselves, or in other situations parts of another stationary source). If the construction, modification, or operation of a nonmetallic mineral processing stationary source by the Permittee would not comply with all conditions of this general permit, the Permittee must apply for and obtain an individual Part 70, state, or registration permit before beginning actual construction of the modification or change. Terms used in this general permit are as defined in the state air quality rules unless the term is explicitly defined in this general permit.

Unless otherwise indicated, all the Minnesota rules cited as the origin of the permit terms are incorporated into the State Implementation Plan under 40 CFR § 52.1220 and as such are enforceable by the U.S. Environmental Protection Agency (EPA) Administrator or citizens under the Clean Air Act.

Permit Type: State General, Limits to Avoid Pt 70/Limits to Avoid NSR

Issue Date: December 8, 2008

Expiration: Nonexpiring
Title I Conditions do not expire

Don Smith, P.E., Manager
Air Quality Permits Section
Industrial Division

for Commissioner
Minnesota Pollution Control Agency

Permit Applications Table

| Permit Type | Application Date(s) | Permit Action |
|---|----------------------------|----------------------|
| Nonmetallic Mineral General Permit -Reissuance | | |

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Attached Forms: These forms are available on the MPCA Website at <http://www.pca.state.mn.us/air/permits/forms.html>

Form Name: NM-CR, MN General Permit Annual Compliance Certification

Form Name: NM-EQ, Equipment Description and Notification Form

Form Name: GP-01, Air Emission General Permit Administrative Changes

Form Name: NM-DRF, Deviations Report

Form Name: NM-RE, Location Notification

NOTICE TO THE PERMITTEE:

Your stationary source may be subject to the requirements of the Minnesota Pollution Control Agency's (MPCA) solid waste, hazardous waste, and water quality programs. If you wish to obtain information on these programs, including information on obtaining any required permits, please contact the MPCA general information number at:

| | |
|--------------------|----------------|
| Metro Area | 651-296-6300 |
| Outside Metro Area | 1-800-657-3864 |
| TTY | 651-282-5332 |

The rules governing these programs are contained in Minn. R. chs. 7000-7105. Written questions may be sent to: Minnesota Pollution Control Agency, 520 Lafayette Road North, St. Paul, Minnesota 55155-4194.

Questions about this air emission permit or about air quality requirements can also be directed to the telephone numbers and address listed above.

PERMIT SHIELD:

Subject to the limitations in Minn. R. 7007.1800, compliance with the conditions of this permit shall be deemed compliance with the specific provision of the applicable requirement identified in the permit as the basis of each condition.

Subject to the limitations of Minn. R. 7007.1800 and 7017.0100, subp. 2, notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements.

TABLE A: LIMITS AND OTHER REQUIREMENTS

Table A contains the limits and other requirements with which your nonmetallic mineral processing stationary source(s) must comply. These limits are located in the first column of the table (What to do). The limits can be emission limits or operational limits. This column also contains the actions that you must take and the records you must keep to show that you are complying with the limits. The second column of Table A (Why to do it) lists the regulatory basis for these limits. An appendix is included in your general permit. Unless specifically indicated otherwise, requirements contained in the various parts of the appendix are enforceable conditions of this general permit. The limits and other requirements contained in Table A apply to each nonmetallic mineral processing stationary source constructed, modified, or operated by the Permittee which is covered by this general permit.

Stationary Source: “Stationary source” has the meaning given in Minn. R. 7005.0100, subp. 42c. For there to be a nonmetallic mineral processing stationary source, one or more pieces of processing equipment (such as those listed in Table A.1, namely crushers, screens, transfer operations, etc.) must be present and operational (storage of equipment in an inoperative state does not constitute a stationary source). Stationary sources may contain portable, mobile, and stationary equipment.

Multiple-Party Site: A multiple-party site is a stationary source location where two or more equipment owners or operators operate nonmetallic mineral processing equipment on the same site and there exists a contractual or other similar relationship between them regarding processing of nonmetallic minerals or their nonmetallic mineral processing operations support each other at the site.

At a multiple-party site, the governing permit is the permit held by the nonmetallic mineral processing company that establishes the stationary source and hires others to perform part of the nonmetallic mineral processing there. This company, which is the holder of the governing permit, is the Permittee responsible for the multiple-party site. If you are the Permittee of a stationary source location which is a multiple-party site, you shall require all parties to comply with the provisions of your permit.

Table A.1: Eligibility Requirements

| What to do | Why to do it |
|---|--|
| <p>Emission Units Allowed: Each nonmetallic mineral processing stationary source constructed, modified and operated under this general permit shall consist only of:</p> <ul style="list-style-type: none"> Crushers (subject to the fines crushing production limitation described, below, under “Materials Allowed”) Screens Wet screening operations and associated transfer operations downstream of the wet screening operation in the production line process up to, but not including, the next crusher in the production line of a nonmetallic mineral processing stationary source. A wet screening operation means a screening facility designed and operated to remove unwanted material from the product by a washing process whereby the product is completely saturated with water in a slurry Transfer operations (including belt conveyors, enclosed truck/railcar loading stations, bucket elevators, storage bins, stackers, ladders, chutes, classification screws, feeders, pneumatic systems, and bagging operations) Internal combustion engines Sand heaters Air separators (closed system) Storage piles Paved and unpaved roads and parking lots Bulldozers, loaders, and other related vehicles Insignificant activities as defined in Minn. R. 7007.1300, subp. 2 and 3 Conditionally insignificant activities listed in Minn. R. 7008. | <p>Minn. Stat. § 116.07, subd. 4a; Minn. R. 7007.0800, subp. 2, and Minn. R. 7007.1100</p> |
| <p>Emission Units Not Allowed: Although only the emission units listed in “Emission Units Allowed” are allowed under this general permit, the following emission units that are sometimes part of a nonmetallic mineral processing stationary source are specifically not allowed under this general permit: grinding mills, air conveying systems, air classifiers, calciners, and aggregate heaters/dryers.</p> | <p>Minn. Stat. § 116.07, subd. 4a, Minn. R. 7007.0800, subp. 2, and Minn. R. 7007.1100</p> |
| <p>New Source Performance Standards: If applicable, the owner or operator shall comply with NSPS standards for nonmetallic mineral processing, volatile organic liquid storage vessels (storage tanks), compression ignition internal combustion engines and spark ignition internal combustion engines.</p> | <p>40 CFR pt. 60, subps. OOO, Kb, III and JJJ; Minn. Stat. § 116.07, subd. 4a, Minn. R. 7007.0800, subp. 2, and Minn. R. 7007.1100</p> |

Table A.1. (Continued)

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| <p>National Emission Standards for Hazardous Air Pollutions: If applicable, the owner or operator shall comply with the NESHAP standards for reciprocating internal combustion engines.</p> | <p>40 CFR pt. 63, subp. ZZZZ; Minn. R. 7007.0800, subp. 2</p> |
| <p>Revised New Source Performance Standards for Nonmetallic Mineral Processing: If 40 CFR 60, subp. OOO is revised after October 28, 2008, those changes shall be automatically applicable under this permit. The Permittee shall comply with any changes according to the schedule provided in Subpart OOO as allowed by US. EPA.</p> | <p>40 CFR pt. 60, subp. OOO; Minn. R. 7007.0800, subp. 2</p> |
| <p>Materials Allowed: Except as specifically provided below, a nonmetallic mineral processing stationary source constructed, modified, and operated under this general permit may produce or process only:</p> <ul style="list-style-type: none"> Crushed and broken limestone Crushed and broken granite Crushed and broken stone Construction sand and gravel Recycled concrete Recycled asphalt pavement The initial steps in producing manufactured sand <p>Exceptions:</p> <p>Other - De Minimis Quantities: A de minimis quantity is a quantity of materials, other than those listed above, that may be produced or processed such that the total amount of actual emissions from producing or processing of all de minimis quantities in any calendar year at any stationary source location is less than one ton (i.e., 1 ton/year per site) of Particulate Matter (PM). No pollutants other than PM, Particulate Matter less than 10 microns (PM₁₀) or Particulate Matter less than 2.5 (PM_{2.5}) may be emitted as a result of producing or processing the other material, except those emitted from the operation of associated internal combustion engines. Whenever the Permittee produces or processes de minimis quantities of other materials, calculations of the projected and actual PM, PM₁₀ and PM_{2.5} emissions from producing or processing de minimis quantities must be kept by the Permittee along with records of the dates, site, tons of material produced or processed and a description of the material.</p> <p>Fines Crushing: Crushing material to a maximum size of 3/16 inch or smaller in any calendar year at any stationary source location covered by this general permit is limited to less than 50,000 tons (i.e., 50,000 tons/year per site). Whenever the Permittee performs fines crushing, records must be kept by the Permittee indicating the dates, site, and tons of material produced or processed as well as a description of the material. Crushing material to a maximum size of 3/16 inch is referred to in this general permit as “fines crushing.” Fines crushing involve the production of manufactured sand and products of a similar size.</p> | <p>Minn. Stat. § 116.07, subd. 4a, Minn. R. 7007.0800, subp. 2, and Minn. R. 7007.1100</p> |

Table A.1. (Continued)

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| <p>Control Equipment Allowed: A nonmetallic mineral processing stationary source constructed, modified, and operated under this general permit may contain add-on air pollution control equipment to capture and remove air pollutants from process air streams or have equipment located indoors provided that compliance with all emission limits in this general permit is maintained without considering the effect of such controls. Because no prescribed operation and maintenance and recordkeeping are required, reduced emissions due to such add-on control equipment will not be considered when calculating emissions for the annual emissions inventory.</p> | <p>Minn. Stat. § 116.07, subd. 4a, Minn. R. 7007.0800, subp. 2, and Minn. R. 7007.1100</p> |
| <p>Geographic Areas of Operation Allowed: Under this general permit, provided all conditions are met at all stationary sources, the Permittee is authorized to construct, modify and operate multiple stationary sources simultaneously anywhere in Minnesota except any area designated as maintenance area for PM₁₀. If the Permittee wishes to operate at a location in an area that is or becomes reclassified nonattainment for PM₁₀ after issuance of this general permit, the Permittee must submit an application for an individual part 70, state, or registration permit to cover that location before commencing operation or beginning actual construction or modification of a nonmetallic mineral processing stationary source.</p> | <p>Minn. Stat. § 116.07, subd. 4a, Minn. R. 7007.0800, subp. 2, Minn. R. 7007.0800, subp. 12, and Minn. R. 7007.1100</p> |

Table A.2: Total Facility Requirements

| What to do | Why to do it |
|--|--|
| Circumvention: Do not install or use a device or means that conceals or dilutes emissions, which would otherwise violate a federal or state air pollution control rule, without reducing the total amount of pollutant emitted. | Minn. R. 7011.0020 |
| Fugitive Emissions: The owner or operator shall not cause or permit the handling, use, transporting, or storage of any material in a manner which may allow avoidable amounts of particulate matter to become airborne. Comply with all other requirements listed in Minn. R. 7011.0150. | Minn. R. 7011.0150 |
| Noise: The Permittee shall comply with the noise standards set forth in Minn. R. 7030.0010 to 7030.0080 at all times during the operation of any emission units. This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act. | Minn. R. 7030.0010 - 7030.0080 |
| Inspections: The owner or operator shall comply with the inspection procedures and requirements as found in Minn. R. 7007.0800, subp. 9(A). | Minn. R. 7007.0800, subp. 9(A) |
| General Conditions: The Permittee shall comply with the General Conditions listed in Minn. R. 7007.0800, subp. 16 | Minn. R. 7007.0800, subp. 16 |
| Performance Testing: Conduct all performance testing in accordance with Minn. R. ch. 7017 unless otherwise noted. The Commissioner may request additional performance testing under Minn. R. 7017.2020, subp. 1. | Minn. R. 7017.2001-7017.2060 |
| <p>Performance Test Notifications and Submittals: Performance Tests Notification (written): due 30 days before each Performance Test Performance Test Plan: due 30 days before each Performance Test. To be submitted on <i>form NM-TP</i> Performance Test Pretest Meeting: due 7 days before each Performance Test Performance Test Report: due 45 days after each Performance Test Performance Test Microfiche/CD Copy: due 105 days after each Performance Test</p> <p>The Notification, Test Plan, and Test Report may be submitted in alternative format as allowed by Minn. R. 7017.2018.</p> | Minn. R. 7017.2018; Minn. R. 7017.2030, subsps. 1-4; and Minn. R. 7017.2035, subp. 1-2 |
| Recordkeeping: Retain all records required by this general permit at each stationary source or at the Permittee’s option, the Permittee’s central office for a period of five years from the date of monitoring, emission calculations, sampling, measurement, or report. Records which must be retained include all calibration and maintenance records, all original chart recordings for continuous monitoring instrumentation, and copies of all reports and records required by this general permit. Records must conform to the requirements listed in Minn. R. 7007.0800, subp. 5(A). | Minn. R. 7007.0800, subp. 5(A) and 5(C) |
| Submittals: All submittals required by this general permit must be certified by a responsible official, defined in Minn. R. 7007.0100, subp. 21. Submittals which must be provided on forms approved by the Commissioner are noted in Tables A and B. All submittals must be postmarked or received by the date specified in the tables. | Minn. R. 7007.0800, subp. 6 |

Table A.2 (Continued)

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| <p>Notification of Deviations Endangering Human Health or the Environment: As soon as possible after discovery, notify the Commissioner or the state duty officer, either orally or by facsimile, of any deviation from permit conditions which could endanger human health or the environment.</p> | <p>Minn. R. 7019.1000, subp. 1</p> |
| <p>Notification of Deviations Endangering Human Health or the Environment Report: Within 2 working days of discovery, notify the Commissioner in writing of any deviation from permit conditions which could endanger human health or the environment. Include the following information in this written description:</p> <ol style="list-style-type: none"> 1. the cause of the deviation; 2. the exact dates of the period of the deviation, if the deviation has been corrected; 3. whether or not the deviation has been corrected; 4. the anticipated time by which the deviation is expected to be corrected, if not yet corrected; and 5. steps taken or planned to reduce, eliminate, and prevent reoccurrence of the deviation. | <p>Minn. R. 7019.1000, subp. 1</p> |
| <p>Operation Changes: In any shutdown, breakdown, or deviation the Permittee shall immediately take all practical steps to modify operations to reduce the emission of any regulated air pollutant. The Commissioner may require feasible and practical modifications in the operation to reduce emissions of air pollutants. No emissions units that have an unreasonable shutdown or breakdown frequency of process or control equipment shall be permitted to operate.</p> | <p>Minn. R. 7019.1000, subp. 4</p> |
| <p>Shutdown Notifications: Notify the Commissioner at least 24 hours in advance of a planned shutdown of any control equipment or process equipment if the shutdown would cause any increase in the emissions of any regulated air pollutant. If the owner or operator does not have advance knowledge of the shutdown, notification shall be made to the Commissioner as soon as possible after the shutdown. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 3.</p> <p>At the time of notification, the owner or operator shall inform the Commissioner of the cause of the shutdown and the estimated duration. The owner or operator shall notify the Commissioner when the shutdown is over.</p> | <p>Minn. R. 7019.1000, subp. 3</p> |
| <p>Breakdown Notifications: Notify the Commissioner within 24 hours of a breakdown of more than one hour duration of any control equipment or process equipment if the breakdown causes any increase in the emissions of any regulated air pollutant. The 24-hour time period starts when the breakdown was discovered or reasonably should have been discovered by the owner or operator. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 2.</p> <p>At the time of notification or as soon as possible thereafter, the owner or operator shall inform the Commissioner of the cause of the breakdown and the estimated duration. The owner or operator shall notify the Commissioner when the breakdown is over.</p> | <p>Minn. R. 7019.1000, subp. 2</p> |

Table A.2 (Continued)

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| Semiannual Deviations Report: Due 30 days after the end of each calendar half-year. The first semi-annual report submitted by the Permittee shall cover the calendar half-year in which the permit was issued. The first report of each calendar year covers January 1 – June 30 due by July 30. The second report of each calendar year covers July 1 – December 31 due by January 30. If no deviations have occurred, the Permittee shall submit the report stating no deviations. <i>To be submitted on a form NM-DRF.</i> | Minn. R. 7007.0800, subp. 6(A)(2) |
| Annual Compliance Certification: Due 31 days after the end of each calendar year (<i>January 31</i>) following general permit issuance (for the previous calendar year). The report covers all deviations experienced during the calendar year. <i>To be submitted on a form NM-CR.</i> | Minn. R. 7007.0800, subp. 6(C) |
| Emissions Inventory Report: Due on or before April 1 of each calendar year following permit issuance. To be submitted on a form approved by the Commissioner. | Minn. R. 7019.3000-7019.3010 |
| Emission Fees: Due 60 days after receipt of an MPCA invoice. | Minn. R. 7002.0005-7002.0095 |
| Name Change of Ownership or Control of Stationary Source: The owner or operator shall submit to the MPCA the Air Emission General Permit <i>Administrative Changes Form (GP-01)</i> within 7 days of the name change in ownership or control of the stationary source. If the Commissioner determines that the new owner or operator meets the eligibility requirements of the general permit for general permit issuance, then the Commissioner shall issue the general permit to the new owner or operator. Issuance of a general permit to the new owner or operator of an eligible stationary source voids and supersedes the general permit of the previous owner or operator. If the Commissioner determines the new owner or operator does not meet the eligibility requirements, the new owner or operator shall submit a permit application for a registration, state, or part 70 permit within 120 days of the Commissioner's written request for the application. | Minn. R. 7007.1100, subp. 8; Minn. R. 7007.0800, subp. 2 |

Table A.3: Requirements and Limits that Apply to the Entire Stationary Source

| What to do | Why to do it |
|---|---|
| <p>Material Moisture Content:</p> <p>At each stationary source, the feed material moisture content shall be greater than or equal to 1.5 percent. This shall be demonstrated at each stationary source by either 1 or 2 below:</p> <ol style="list-style-type: none"> 1. Test moisture content of each different feed material source (sampled at an area representative of the feed source and physically capable of being sampled), as follows: <ol style="list-style-type: none"> a. Use American Society for Testing and Materials (ASTM) method numbers D 2216-92 or D 4643-93 (or equivalent). b. Keep records of each moisture content test summarizing the method used, results, date, time, and initials of person performing test. c. Test weekly, when operating, unless three consecutive tests at the stationary source location show moisture contents of greater than or equal to 1.5 percent after which testing is no longer required until the source of the feed material changes. d. When testing indicates that feed material moisture content is less than 1.5 percent, or in situations where it is infeasible to sample and test, or where the Permittee elects not to sample and test, the Permittee must operate a moisture addition device at or immediately prior to the initial crusher(s) or initial screen(s) where unprocessed feed material is being fed to achieve a moisture content greater than or equal to 1.5 percent. Moisture addition during operation shall continue until subsequent moisture content testing demonstrates that feed material moisture content is greater than or equal to 1.5 percent. Daily, when operating, either: (i) keep records of the date, water flow rate, material throughput rate, and initials of the person making the record and the time the record was made; or (ii) conduct moisture content testing daily on the feed material after water application following a. and b. above, and if results show moisture content is less than 1.5 percent, increase water addition to insure moisture is 1.5 percent or greater and re-test to verify. | <p>Title I Condition: To qualify for this general permit under Minn. R. 7007.1100; Limit to avoid classification as major source and modification under 40 CFR § 52.21 and Minn. R. 7007.3000; Limit to avoid major source classification under 40 CFR § 70.2 and Minn. R. 7007.0200; Minn. Stat. § 116.07, subd. 4a, Minn. R. 7007.0800, subp. 2, and Minn. R. 7007.1100</p> |

Table A.3 (Continued)

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| <p><u>OR</u> 2. Keep records indicating that feed material is being removed from below the water table - or from below the surface of a waterway (e.g., creek, river, lake) - or that the feed material is recycled asphalt pavement. Records shall include a description of the source (if recycled asphalt pavement, so indicate), the corresponding dates, and the initials of the person making the record.</p> | |
| <p>Stationary Source Designation and Capacity Limits: Only one option (Small, Medium, or Large) at a time shall apply at each stationary source covered by this general permit. The option that shall apply to a particular stationary source is selected by the Permittee from the Stationary Source Designation Matrix in Appendix I, either Table 1 or Table 2. The option, along with the limit on annual production (throughput), and the limit on the amount of equipment shall be indicated in a Location Notification submitted by the Permittee as required by this general permit on a form approved by the Commissioner.</p> <p>(Wet screening operations and associated transfer operations downstream of the wet screening operation in the production line process up to, but not including, the next crusher in the production line of a nonmetallic mineral processing stationary source shall not be counted towards the number of units or capacity levels indicated under the three site designation options. A wet screening operation means a screening facility designed and operated to remove unwanted material from the product by a washing process whereby the product is completely saturated with water in slurry.)</p> <p>To demonstrate compliance with the annual production limit at each stationary source location, the Permittee shall maintain daily record of the production, in tons. The Permittee shall also maintain record of the monthly calculation and the 12-month rolling sum (i.e., the current month plus the eleven preceding months). If a stationary source has less than 12 months of operational data, the Permittee shall determine compliance during the first 12 months under this general permit using the following formula: $N = 0.95 \times (\text{Annual Production Limit}) + 0.0045 \times (\text{Annual Production Limit}) \times (n-1)$ Where “n” is the number of months in operation, and “N” is the rolling sum limit for the current month.</p> <p>At its option, the Permittee may calculate and record individual monthly sums, in lieu of 12-month rolling sums, for a stationary source location such that the annual production limit divided by 12 is not exceeded. These calculations and records must be made by the 15th day of the following month.</p> <p>(At a multiple-party site, the number of pieces of equipment (Table 1) or the capacity of equipment (Table 2) of all parties operating at the site at the same time shall be added together by the Permittee to determine the stationary source designation and the appropriate non-process dust control option for that site. Likewise, the production of all parties shall be added together by the Permittee to determine compliance with the annual production limit from the Stationary Source Designation Matrix, in Appendix I.)</p> | <p>Title I Condition. To qualify for this general permit under Minn. R. 7007.1100; Limit to avoid classification as major source and modification under 40 CFR § 52.21 and Minn. R. 7007.3000; Limit to avoid major source classification under 40 CFR § 70.2 and Minn. R. 7007.0200; Minn. Stat. § 116.07, subd. 4a, Minn. R. 7007.0800, subp. 2, Minn. R. 7007.1100, and Minn. R. 7011.0150</p> |

Table A.3 (Continued)

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| <p>Non-Process Dust Control Options:</p> <p>The option (Small, Medium, or Large), and the associated non-process dust control requirements, that shall apply to each stationary source covered by this general permit is selected by the Permittee from the Stationary Source Designation Matrix as described above.</p> <p><u>Small Stationary Source Non-Process Dust Control:</u></p> <p>The Permittee shall comply with the requirements of Minn. R. 7011.0150. This means that all reasonable measures shall be taken to prevent avoidable amounts of particulate matter from becoming airborne. In a practical manner this refers to preventing avoidable visible dust emissions beyond the lot line surrounding the stationary source. Control of non-process dust emissions can be achieved through such measures as applying water or commercially available dust suppressant to stock piles, unpaved roads and handling areas.</p> <p><u>Medium Stationary Source Non-Process Dust Control:</u></p> <p>In addition to the requirements described in the “Small” option, the following requirements apply to the Permittee:</p> <ol style="list-style-type: none">1. Record date and time of action and initials of person making the record.2. Record amount of water or dust suppressant applied.3. If a commercially available dust suppressant is used, it shall be applied in accordance with the manufacturer’s guidelines. A copy of these manufacturer’s guidelines must be kept by the Permittee. <p><u>Large Stationary Source Non-Process Dust Control:</u></p> <p>In addition to the requirements described in the “Small” option, the following requirements apply to the Permittee:</p> <ol style="list-style-type: none">1. Record date and time of action and initials of person making the record;2. Record amount of water or dust suppressant applied;3. If a commercially available dust suppressant is used, it shall be applied in accordance with the manufacturer’s guidelines. A copy of these manufacturer’s guidelines must be kept by the Permittee;4. Record the location (e.g., on a site sketch) of water or dust suppressant application;5. Install a rain gauge at the site and record the precipitation in the previous 24 hours for each day of operation at the site;6. Make and record basic weather observations according to the Weather Summary Criteria listed in Appendix I that best characterize each operating day;7. Unpaved roads at the site shall be posted with speed limit signs indicating a maximum speed of 10 miles per hour; and8. Equipment to apply water or dust suppressant shall always be available at the site or on call for use at the site within a given operating day. | <p>Title I Condition: Limit to avoid classification as major source and modification under 40 CFR § 52.21 and Minn. R. 7007.3000; Limit to avoid major source classification under 40 CFR § 70.2 and Minn. R. 7007.0200; Minn. Stat. § 116.07, subd. 4a, Minn. R. 7007.0800, subp. 2, Minn. R. 7007.1100, and Minn. R. 7011.0150</p> |
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Table A.3 (Continued)

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| <p>Equipment Inventory List: The Permittee shall maintain a written list of each piece of equipment on site, if applicable. The list shall include the type of equipment, serial number, dates of installation, modification and reconstruction, all applicable Standards of Performance for New Stationary Sources, subparts OOO, IIII and JJJJ records, and for the National Emission Standards for Hazardous Air Pollutants, subpart ZZZZ, if applicable. The list shall be updated to include any new, modified or changed equipment just before making a change. When the list is updated, the Permittee shall maintain copies of all previous equipment lists on site or the central office for a period of 5 years. Notation of the evaluation shall be done before making every modification or change. In the notation, the Permittee shall re-evaluate whether if the facility still qualifies for this general permit. If the answer is no, the Permittee must apply for a Part 70 permit that would authorize the modification or change that would allow to operate the facility before making the modification or change. <i>The Permittee may use Form NM-EQ as an equivalent for the equipment inventory list but must include the additional requirements listed above.</i></p> | <p>To qualify for this general permit under Minn. R. 7007.1100 and Minn. R. 7007.0800, subp. 2</p> |
| <p>Labeling Requirements: The Permittee shall permanently affix the manufacturer’s serial number (or otherwise unique identifying number) to each piece of crushing, screening, transfer operation, heaters, air separators, and stationary internal combustion engine equipment for tracking purposes within 60 days of permit issuance, if applicable. The number shall be permanently affixed and maintained so that it is readable and visible at all times from a safe distance at each stationary source. This number shall correspond to the number contained in records regarding the piece of equipment.</p> | <p>Minn. Stat. § 116.07, subd. 4a, Minn. R. 7007.0800, subp. 2, and Minn. R. 7007.1100</p> |
| <p>Location Notification: Submit a Location Notification at least 48 hours prior to each change in location of a stationary source, establishment of a new stationary source location, or change in a capacity/dust control option at an individual stationary source. <i>To be submitted on a form NM-RE.</i></p> | <p>Minn. Stat. § 116.07, subd. 4a, Minn. R. 7007.0800, subp. 2, Minn. R. 7007.0800, subp. 12, and Minn. R. 7007.1100</p> |
| <p>Source Specific Requirements: Comply with the source-specific requirements in Appendix I of this permit</p> | <p>To qualify for this general permit under Minn. R. 7007.1100. See Appendix I</p> |

Table A.4: Limits that Apply to NSPS Crushers

(Those subject to 40 CFR pt. 60, subp. 000.)

| What to do | Why to do it |
|---|---|
| Opacity: less than 15 percent opacity. | 40 CFR § 60.672(c) and Minn. R. 7011.3350 |

Table A.5: Limits that Apply to other Equipment Subject to NSPS

(Those subject to 40 CFR pt. 60, subp. 000. Included here are, screens, belt conveyors, bucket elevators, bagging operations, storage bins, and enclosed truck or railcar loading stations.)

| What to do | Why to do it |
|---|---|
| Opacity: less than 10 percent opacity. | 40 CFR § 60.672(b) and Minn. R. 7011.3350 |

Table A.6: Limits that Apply to Equipment not Subject to NSPS

| What to do | Why to do it |
|---|--------------------------------|
| Opacity: For equipment put in operation on or after 7/9/69: less than 20 percent opacity. | Minn. R. 7011.0715, subp. 1(B) |
| Opacity: For equipment put in operation before 7/9/69: less than 20 percent opacity except that a maximum of 60 percent opacity shall be permissible for four minutes in any 60-minute period and 40 percent opacity shall be permissible for four additional minutes in any 60-minute period. | Minn. R. 7011.0710, subp. 1(B) |

Table A.7: NSPS Notification and Testing Requirements for Equipment Newly Subject to NSPS (Subpart OOO) and Submittal Requirements for Replacements

(If you are the Permittee responsible for a stationary source location which is a multiple-party site covered by your general permit you shall take all reasonable measures to insure that all equipment being operated at the stationary source has met these requirements in Table A.7. You are not required to repeat the notices and tests if they have already been done; however, you must be able to indicate where the documentation of the notices and tests can be found (e.g., the Air Quality file associated with a company you have hired).)

| What to do | Why to do it |
|--|---|
| <p>CONSTRUCTION OR RECONSTRUCTION: Notification of construction or reconstruction postmarked no later than 30 days after the start of construction as defined in 40 CFR§ 60.2 except for mass-produced (prefabricated) affected facilities.</p> | <p>40 CFR § 60.7(a)(1) and Minn. R. 7019.0100, subp. 1</p> |
| <p>ACTUAL INITIAL STARTUP: Notification of actual initial startup date postmarked within 15 days after such date.</p> | <p>40 CFR § 60.7(a)(3) and Minn. R. 7019.0100, subp. 1</p> |
| <p>INITIAL PERFORMANCE TESTING: Shall be completed within 60 days of achieving maximum production rate but no later than 180 days after initial startup date.</p> | <p>40 CFR § 60.8(a), 60.675, 60.676, Minn. R. 7017.2015, and Minn. R. 7011.3350</p> |
| <p>PERFORMANCE TEST NOTIFICATION: Performance test notification postmarked at least 30 days prior to conducting a performance test.</p> | <p>40 CFR § 60.8(d), and Minn. R. 7017.2015, subp. 2(A)</p> |
| <p>REPLACEMENT: Notification postmarked within 60 days after making the replacement.</p> | <p>40 CFR § 60.670(d), 60.676, and Minn. R. 7011.3350</p> |
| <p>NOTIFICATION OF ANY PHYSICAL CHANGE OR OPERATIONAL CHANGE: Notification postmarked 60 days or as soon as practicable before the change is commenced.</p> | <p>40 CFR § 60.7(a)(4); 40 CFR § 60.670 and Minn. R. 7019.0100, subp. 1</p> |

Table A.8: Requirements and Limits that Apply to Stationary Internal Combustion Engines at Each Stationary Source

(This includes generators as well as other stationary internal combustion engines (e.g., those which directly drive crushers or screens), but does not include mobile sources, such as loaders, haul trucks and other vehicles.)

| What to do | Why to do it |
|---|---|
| <p>Allowed Fuels: Diesel fuel, natural gas, liquefied petroleum gas (LPG)/propane, biodiesel and gasoline, subject to the limitation described below. No other fuels shall be used.</p> <p>For each stationary source location covered by this general permit, the Permittee shall monthly record the amount of each fuel used during the previous month and do the calculation on the Stationary Internal Combustion Engines Fuel Use <i>form (NM-EN)</i> in Appendix I by the 15th of the following month, if more than one fuel was used. The Permittee may elect to make and record this calculation in a different format, but it must include the same information.</p> <p>(At a multiple-party site, the fuel used by all parties operating at the site at the same time shall be added together by the Permittee to determine compliance for that site.)</p> | <p>Title I Condition. Limit to avoid classification as major source and modification under 40 CFR § 52.21 and Minn. R. 7007.3000; limit to avoid major source classification under 40 CFR § 70.2 and Minn. R. 7007.0200; Minn. R. 7011.2300, subp. 2; Minn. Stat. § 116.07, subd. 4a, Minn. R. 7007.0800, subp. 2, and Minn. R. 7007.1100</p> |
| <p>SO₂: less than or equal to 0.5 lbs/mmBtu heat input using a 3-hour rolling average</p> | <p>Minn. R. 7011.2300, subp. 2</p> |
| <p>Opacity: less than or equal to 20 percent opacity once operating temperatures have been obtained.</p> | <p>Minn. R. 7011.2300, subp. 1</p> |
| <p>Sitting Conditions: The Permittee shall maintain the sitting conditions for generators as listed in Appendix I.</p> | <p>Minn. R. 7007.1100; Minn. R. 7007.0800, subp. 2</p> |
| <p>Fuel Supplier Certification: The Permittee shall obtain and maintain a fuel supplier certification for each shipment of diesel fuel, certifying that the sulfur content does not exceed 0.50% by weight.</p> | <p>Minn. R. 7007.0800, subps. 4 & 5</p> |

Table A.9: Requirements and Limits that Apply to Stationary Emergency Internal Combustion Engines at Each Stationary Source

| What to do | Why to do it |
|---|----------------------------------|
| SO₂: less than or equal to 0.5 lbs/mmBtu heat input using a 3-hour rolling average | Minn. R. 7011.2300, subp. 2 |
| Opacity: less than or equal to 20 percent opacity once operating temperatures have been obtained. | Minn. R. 7011.2300, subp. 1 |
| Fuel type: Natural gas/propane/diesel/biodiesel only by design. | Minn. R. 7005.0100, subp. 35a |
| Hours of Operation: The Permittee shall maintain documentation on site that the unit is an emergency generator by design that qualifies under the U.S. EPA memorandum entitled "Calculating Potential to Emit (PTE) for Emergency Generators" dated September 6, 1995, limiting operation to 500 hours per year. | Minn. R. 7007.0800, subps. 4 & 5 |
| Fuel Supplier Certification: The Permittee shall obtain and maintain a fuel supplier certification for each shipment of diesel fuel, certifying that the sulfur content does not exceed 0.50% by weight. | Minn. R. 7007.0800, subps. 4 & 5 |

Table A.10: Limits and Requirements that Apply to Volatile Organic Liquid Storage Tanks (Must be Insignificant Activities) Which are Subject to 40 CFR pt. 60, subp. Kb

Tanks *subject* to 40 CFR pt. 60, subp. Kb includes those meeting both of the following requirements:

- storage capacity is greater than or equal to 40 m³ (10,568 gallons); *and*
- tank construction, reconstruction, or modification commenced after July 23, 1984.

(If you are the Permittee responsible for a stationary source location which is a multiple-party site covered by your general permit, you shall take all reasonable measures to insure that all subject tanks meet these requirements in Table A.10. You are not required to repeat the recordkeeping requirement if it has already been met.)

| What to do | Why to do it |
|--|---|
| Tank size: Any volatile organic liquid storage tank constructed, reconstructed, or modified after July 23, 1984, must have a design capacity less than 75 m ³ (19,815 gallons) | Minn. Stat. § 116.07, subd. 4a, Minn. R. 7007.0800, subp. 2, and Minn. R. 7007.1100 |
| Records: For each tank, keep records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. Retain records for the life of the tank. | 40 CFR § 60.116b(b) and 60.116b(a), and Minn. R. 7011.1520(C) |

Table A.11: Limits and Requirements that Apply to New and Existing Sand Heaters

| What to do | Why to do it |
|--|---|
| PM: less than or equal to 0.30 grains per dry standard cubic foot unless required to reduce emissions to less than or equal to either the amount allowed by Minn. R. 7011.0700 to 7011.0735 | Minn. R. 7011.0610, subp. 1(A)(1) |
| Opacity: less than or equal to 20% opacity except for one-six minute period per hour of not more than 60 % percent opacity. | Minn. R. 7011.0610, subp. 1(A)(2) |
| SO₂: less than or equal to 2.0 lbs/mmBtu using a 3-hour rolling average | Minn. R. 7011.0610, subp. 2 (A) |
| Maximum Capacity of Total Heaters: less than or equal to 10.0 mmBtu/hr | Minn. Stat. § 116.07, subd. 4a, Minn. R. 7007.0800, subp. 2, and Minn. R. 7007.1100 |
| Fuel Type: Natural Gas and Propane only | Minn. Stat. § 116.07, subd. 4a, Minn. R. 7007.0800, subp. 2, and Minn. R. 7007.1100 |

Table A.12: The following Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (40 CFR pt. 60, subp. IIII) for Engines with less than 30 liters per cylinder that were constructed, modified, or reconstructed after July 11, 2005.

The date that construction commences is the date the engine is ordered by the owner or operator. Applies to owners and operators that commence construction after July 11, 2005, of the following engines:

- 1) *engines manufactured after April 1, 2006, and are not fire pump engines*
- 2) *engines manufactured as a certified National Fire Protection Association (NFPA) fire pump engine after July 1, 2006.*

Engines modified or reconstructed after July 11, 2005, must meet the emission standards for the model year in which the engine was originally new, not the year that the engine was modified or reconstructed.

Emergency Stationary Internal Combustion Engine (ICE) is defined as an engine whose operation is limited to emergency situations and required testing and maintenance. Examples include stationary ICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary ICE used to pump water in the case of fire or flood, etc. Stationary CI ICE used to supply power to an electric grid or that supply power as part of a financial arrangement with another entity are not considered to be emergency engines.

HP- Horsepower

g/HP-hr- grams per horsepower-hour

Owners and Operators of Non-Emergency Engines (Pre-2007) and < 10 liters/cylinder

| What to do | Why to do it |
|---|---|
| A. EMISSION STANDARDS | hdr |
| MAXIMUM ENGINE POWER LESS THAN 11 HP | hdr |
| <i>NMHC + NOx</i> : less than 7.8 g/HP-hr | 40 CFR § 60.4204 (a); Minn. R. 7011.3520 |
| <i>CO</i> : less than 6.0 g/HP-hr | 40 CFR § 60.4204 (a); Minn. R. 7011.3520 |
| <i>PM</i> : less than 0.75 g/HP-hr | 40 CFR § 60.4204 (a); Minn. R. 7011.3520 |
| MAXIMUM ENGINE POWER GREATER THAN OR EQUAL TO 11 HP BUT LESS THAN 25HP | hdr |
| <i>NMHC + NOx</i> : less than 7.1 g/HP-hr | 40 CFR § 60.4204 (a); Minn. R. 7011.3520 |
| <i>CO</i> : less than 4.9 g/HP-hr | 40 CFR § 60.4204 (a); Minn. R. 7011.3520 |
| <i>PM</i> : less than 0.60 g/HP-hr | 40 CFR § 60.4204 (a); Minn. R. 7011.3520 |
| MAXIMUM ENGINE POWER GREATER THAN OR EQUAL TO 25 HP BUT LESS than 50 HP | hdr |
| <i>NMHC + NOx</i> : less than 7.1 g/HP-hr | 40 CFR § 60.4204 (a); Minn. R. 7011.3520 |
| <i>CO</i> : less than 4.1 g/HP-hr | 40 CFR § 60.4204 (a); Minn. R. 7011.3520 |
| <i>PM</i> : less than 0.60 g/HP-hr | 40 CFR § 60.4204 (a); Minn. R. 7011.3520 |

| | |
|--|---|
| MAXIMUM ENGINE POWER GREATER THAN OR EQUAL TO 50 HP BUT LESS than 175 HP | hdr |
| <i>NOx</i> : less than 6.9 g/HP-hr for engine power greater | 40 CFR § 60.4204 (a); Minn. R. 7011.3520 |
| MAXIMUM ENGINE POWER GREATER THAN OR EQUAL TO 175 HP BUT GREATER THAN 750 HP | hdr |
| <i>HC</i> : less than 1.0 g/HP-hr | 40 CFR § 60.4204 (a); Minn. R. 7011.3520 |
| <i>NOx</i> : less than 6.9 g/HP-hr | 40 CFR § 60.4204 (a); Minn. R. 7011.3520 |
| <i>CO</i> : less than 8.5 g/HP-hr | 40 CFR § 60.4204 (a); Minn. R. 7011.3520 |
| <i>PM</i> : less than 0.40 g/HP-hr | 40 CFR § 60.4204 (a); Minn. R. 7011.3520 |

Owners and Operators of Non-Emergency Engines (Pre-2007) and ≥ 10 liters/cylinder and < 30 liters/cylinder

| What to do | Why to do it |
|--|--|
| A. EMISSION STANDARDS | hdr |
| <i>NOx</i> : less than 12.7 g/HP-hr (17.0 g/KW-hr) when maximum test speed is less than 130 revolutions per minute (rpm) | 40 CFR § 60.4204; 40 CFR § 94.8(a)(1); Minn. R. 7011.3520 |
| <i>NOx</i> : less than 33.6 g/HP-hr ($45.0 \times N^{-0.20}$) when maximum test speed is at least 130 rpm but less than 2000 rpm, where N is the maximum test speed of the engine in rpm | 40 CFR § 60.4204; 40 CFR § 94.8(a)(1); Minn. R. 7011.3520 |
| <i>NOx</i> : less than 7.3 g/HP-hr (9.8 g/kW-hr) when maximum test speed is 2000 rpm or more. | 40 CFR § 60.4204; 40 CFR § 94.8(a)(1); Minn. R. 7011.3520 |

Owners and Operators of Non-Emergency Engines (2007 and later) and < 30 liters/cylinder

| What to do | Why to do it |
|--|--|
| A. EMISSION STANDARDS | hdr |
| <i>NOx</i> : less than 12.7 g/HP-hr (17.0 g/KW-hr) when maximum test speed is less than 130 revolutions per minute (rpm) | 40 CFR § 60.4204; 40 CFR § 94.8(a)(1); Minn. R. 7011.3520 |
| <i>NOx</i> : less than 33.6 g/HP-hr ($45.0 \times N^{-0.20}$) when maximum test speed is at least 130 rpm but less than 2000 rpm, where N is the maximum test speed of the engine in rpm | 40 CFR § 60.4204; 40 CFR § 94.8(a)(1); Minn. R. 7011.3520 |
| <i>NOx</i> : less than 7.3 g/HP-hr (9.8 g/kW-hr) when maximum test speed is 2000 rpm or more. | 40 CFR § 60.4204; 40 CFR § 94.8(a)(1); Minn. R. 7011.3520 |

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|--|--|
| B. FUEL REQUIREMENTS FOR OWNERS AND OPERATORS OF NON-EMERGENCY ENGINES | hdr |
| <i>Fuel Restriction:</i> On October 1, 2007, the owners and operators that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR§ 80.510(a) | 40 CFR § 60.4207; 40 CFR § 80.510(a); Minn. R. 7011.3520 |
| <i>Fuel Restriction:</i> On October 1, 2010, the owners and operators of stationary CI internal combustion engines with a displacement of less than 30 liters per cylinder that use diesel fuel must use the requirements of 40 CFR§ 80.510(b) for nonroad diesel fuel | 40 CFR § 60.4207; 40 CFR § 80.510(b); Minn. R. 7011.3520 |
| <i>Fuel Used Up:</i> Owners and operators of pre-2011 model year stationary CI internal combustion engines may petition the EPA Administrator for approval to use remaining non-compliant fuel that does not meet the fuel requirements of 40 CFR§ 60.4207 (a) and (b) beyond the dates required for purpose of using up existing fuel inventories. If approved, the petition will be valid for a period of up to 6 months. If additional time is needed, the owner or operator is required to submit a new petition to the EPA Administrator. | 40 CFR § 60.4207; Minn. R. 7011.3520 |

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|--|--|
| C. COMPLIANCE REQUIREMENTS FOR OWNERS AND OPERATORS OF NON-EMERGENCY ENGINES | hdr |
| The owner or operator must comply with the emission standards specified in 40 CFR§ 60.4204, and must operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. In addition, owners and operators may only change those settings that are permitted by the manufacturer. The owner and operator must also meet the requirements of 40 CFR pts. 89, 94 and/or 1068, as they apply to you. | 40 CFR § 60.4211; Minn. R. 7011.3520 |
| <p>For <u>pre-2007 model year engines</u> with a displacement < 30 liters per cylinder that are not fire pump engines, you must demonstrate compliance according to <u>one</u> of the methods specified below:</p> <ol style="list-style-type: none"> (1) Purchasing an engine certified according to 40 CFR pt. 89 or 40 CFR pt. 94, as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications; (2) Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in this subpart and these methods must have been followed correctly; (3) Keeping records of engine manufacturer data indicating compliance with the standards; (4) Keeping records of control device vendor data indicating compliance with the standards; or (5) Conducting an initial performance test to demonstrate compliance with the emission standards according to the requirements specified in 40 CFR§ 60.4212, as applicable. | 40 CFR § 60.4211(b)(1) through (5); Minn. R. 7011.3520 |
| The owner or operator of a 2007 model year and later with a displacement < 30 liters per cylinder stationary CI internal combustion engine and must comply with the emission standards specified in 40 CFR§ 60.4204(b) or 40 CFR§ 60.4205(b). The engine must be installed and configured according to the manufacturer's specifications. | 40 CFR § 60.4211(c) Minn. R. 7011.3520 |
| D. MONITORING FOR OWNERS AND OPERATORS FOR NON-EMERGENCY ENGINES | hdr |
| The owner or operator of a stationary CI internal combustion engine equipped with a diesel particulate filter to comply with the emission standards in 40 CFR § 60.4204, the diesel particulate filter must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached. | 40 CFR § 60.4209(b); Minn. R. 7011.3520 |

| | |
|--|---|
| E. NOTIFICATIONS AND REPORTING FOR OWNERS AND OPERATORS FOR NON-EMERGENCY ENGINES | hdr |
| <p>Owners and operators of non-emergency stationary CI ICE that are greater than 2,237 KW (3,000 HP), or have a displacement of greater than or equal to 10 liters per cylinder, or are pre-2007 model year engines that are greater than 130 KW (175 HP) and not certified, must meet the following requirements:</p> <p>Submit an initial notification as required in 40 CFR § 60.7(a)(1). The notification must include the following information :</p> <ol style="list-style-type: none"> 1) Name and address of the owner or operator; 2) The address of the affected source; 3) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement; 4) Emission control equipment; and 5) Fuel used. | 40 CFR § 60.4214(a)(1); Minn. R. 7011.3520 |
| F. RECORDKEEPING FOR OWNERS AND OPERATORS FOR NON-EMERGENCY ENGINES | hdr |
| <p>Owners and operators of non-emergency stationary CI ICE that are greater than 2,237 KW (3,000 HP), or have a displacement of greater than or equal to 10 liters per cylinder, or are pre-2007 model year engines that are greater than 130 KW (175 HP) and not certified, must meet the following requirements:</p> <p>Keep records of the following information:</p> <ol style="list-style-type: none"> 1) All notifications submitted and all documentation supporting any notification; 2) Maintenance conducted on the engine; 3) If the stationary CI internal combustion is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards; and 4) If the stationary CI internal combustion is not a certified engine, documentation that the engine meets the emission standards. | 40 CFR § 60.4214(a)(2); Minn. R. 7011.3520 |
| <p><i>Records of Any Corrective Actions:</i> If the stationary CI internal combustion engine is equipped with a diesel particulate filter, the owner or operator must keep records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached.</p> | 40 CFR § 60.4214(c); Minn. R. 7011.3520 |

Owners and Operators of Emergency Engines Except Fire Pump Engines (Pre-2007) and < 10 liters/cylinder

| What to do | Why to do it |
|---|---|
| A. EMISSION STANDARDS | hdr |
| MAXIMUM ENGINE POWER LESS THAN 11 HP | hdr |
| <i>NMHC + NOx</i> : less than 7.8 g/HP-hr | 40 CFR § 60.4205 (a); Minn. R. 7011.3520 |
| <i>CO</i> : less than 6.0 g/HP-hr | 40 CFR § 60.4205 (a); Minn. R. 7011.3520 |
| <i>PM</i> : less than 0.75 g/HP-hr | 40 CFR § 60.4205 (a); Minn. R. 7011.3520 |
| MAXIMUM ENGINE POWER GREATER THAN OR EQUAL TO 11 HP BUT LESS THAN 25HP | hdr |
| <i>NMHC + NOx</i> : less than 7.1 g/HP-hr | 40 CFR § 60.4205 (a); Minn. R. 7011.3520 |
| <i>CO</i> : less than 4.9 g/HP-hr | 40 CFR § 60.4205 (a); Minn. R. 7011.3520 |
| <i>PM</i> : less than 0.60 g/HP-hr | 40 CFR § 60.4205 (a); Minn. R. 7011.3520 |
| MAXIMUM ENGINE POWER GREATER THAN OR EQUAL TO 25 HP BUT LESS than 50 HP | hdr |
| <i>NMHC + NOx</i> : less than 7.1 g/HP-hr | 40 CFR § 60.4205 (a); Minn. R. 7011.3520 |
| <i>CO</i> : less than 4.1 g/HP-hr | 40 CFR § 60.4205 (a); Minn. R. 7011.3520 |
| <i>PM</i> : less than 0.60 g/HP-hr | 40 CFR § 60.4205 (a); Minn. R. 7011.3520 |
| MAXIMUM ENGINE POWER GREATER THAN OR EQUAL TO 50 HP BUT LESS than 175 HP | hdr |
| <i>NOx</i> : less than 6.9 g/HP-hr for engine power greater | 40 CFR § 60.4205 (a); Minn. R. 7011.3520 |
| MAXIMUM ENGINE POWER GREATER THAN OR EQUAL TO 175 HP BUT GREATER THAN 750 HP | hdr |
| <i>HC</i> : less than 1.0 g/HP-hr | 40 CFR § 60.4205 (a); Minn. R. 7011.3520 |
| <i>NOx</i> : less than 6.9 g/HP-hr | 40 CFR § 60.4205 (a); Minn. R. 7011.3520 |
| <i>CO</i> : less than 8.5 g/HP-hr | 40 CFR § 60.4205 (a); Minn. R. 7011.3520 |
| <i>PM</i> : less than 0.40 g/HP-hr | 40 CFR § 60.4205 (a); Minn. R. 7011.3520 |

Owners and Operators of Emergency Engines Except Fire Pump Engines (Pre-2007) and ≥ 10 liters/cylinder and < 30 liters/cylinder

| What to do | Why to do it |
|--|--|
| <i>NOx</i> : less than 12.7 g/HP-hr (17.0 g/KW-hr) when maximum test speed is less than 130 revolutions per minute (rpm) | 40 CFR § 60.4205(a); 40 CFR § 94.8(a)(1); Minn. R. 7011.3520 |
| <i>NOx</i> : less than 33.6 g/HP-hr ($45.0 \times N^{-0.20}$) when maximum test speed is at least 130 rpm but less than 2000 rpm, where N is the maximum test speed of the engine in rpm | 40 CFR § 60.4205(a); 40 CFR § 94.8(a)(1); Minn. R. 7011.3520 |
| <i>NOx</i> : less than 7.3 g/HP-hr (9.8 g/kW-hr) when maximum test speed is 2000 rpm or more. | 40 CFR § 60.4205(a); 40 CFR § 94.8(a)(1); Minn. R. 7011.3520 |

Owners and Operators of Emergency Engines Except Fire Pump (2007 and later) and < 30 liters/cylinder

| What to do | Why to do it |
|---|--|
| A. EMISSION STANDARDS | hdr |
| MAXIMUM ENGINE POWER LESS THAN 50 HP (Model Year 2007). Shall comply with the certification emission standards for new nonroad CI engines. | hdr |
| <i>NMHC+NOx</i> : less than 3.5 g/HP-hr (4.7 g/kW-hr) | 40 CFR § 60.4205(b); 40 CFR § 60.4202; 40 CFR § 89.112; Minn. R. 7011.3520 |
| <i>CO</i> : less than 3.7 g/HP-hr (5.0 g/kW-hr) | 40 CFR § 60.4205(b); 40 CFR § 60.4202; 40 CFR § 89.112; Minn. R. 7011.3520 |
| <i>PM</i> : less than 0.30 g/HP-hr (0.40 g/kW-hr) | 40 CFR § 60.4205(b); 40 CFR § 60.4202; 40 CFR § 89.112; Minn. R. 7011.3520 |
| Opacity: shall not exceed the following: (1) 20 percent during the acceleration mode; (2) 15 percent during the lugging mode; and (3) 50 percent during the peaks in either the acceleration or lugging modes. | 40 CFR § 60.4205(b); 40 CFR § 60.4202; 40 CFR § 89.113; Minn. R. 7011.3520 |
| MAXIMUM ENGINE POWER LESS THAN 11 HP (Model Year 2008+) | hdr |
| <i>NMHC + NOx</i> : less than 5.6 g/HP-hr | 40 CFR § 60.4205 (b); 40 CFR § 1039.104, 105, 107, 115 and 40 CFR § 60.4202, Table 2 ; Minn. R. 7011.3520 |
| <i>CO</i> : less than 6.0 g/HP-hr | 40 CFR § 60.4205 (b); 40 CFR § 1039.104, 105, 107, 115 and 40 CFR § 60.4202, Table 2; Minn. R. 7011.3520 |
| <i>PM</i> : less than 0.30 g/HP-hr | 40 CFR § 60.4205 (b); 40 CFR § 1039.104, 105, 107, 115 and 40 CFR § 60.4202, Table 2; Minn. R. 7011.3520 |
| MAXIMUM ENGINE POWER GREATER THAN OR EQUAL TO 11 HP BUT LESS THAN 25 HP (Model Year 2008+) | hdr |
| <i>NMHC + NOx</i> : less than 5.6 g/HP-hr | 40 CFR § 60.4205 (b); 40 CFR § 1039.104, 105, 107, 115 and 40 CFR § 60.4202, Table 2; Minn. R. 7011.3520 |
| <i>CO</i> : less than 4.9 g/HP-hr | 40 CFR § 60.4205 (b); 40 CFR § 1039.104, 105, 107, 115 and 40 CFR § 60.4202, Table 2; Minn. R. 7011.3520 |

| | |
|--|---|
| <i>PM</i> : less than 0.30 g/HP-hr | 40 CFR § 60.4205 (b); 40 CFR § 1039.104, 105, 107, 115 and 40 CFR § 60.4202, Table 2; Minn. R. 7011.3520 |
| MAXIMUM ENGINE POWER GREATER THAN OR EQUAL TO 25 HP BUT LESS THAN 50 HP (Model Year 2008+) | hdr |
| <i>NMHC + NOx</i> : less than 5.6 g/HP-hr | 40 CFR § 60.4205 (b); 40 CFR § 1039.104, 105, 107, 115 and 40 CFR § 60.4202, Table 2; Minn. R. 7011.3520 |
| <i>CO</i> : less than 4.1 g/HP-hr | 40 CFR § 60.4205 (b); 40 CFR § 1039.104, 105, 107, 115 and 40 CFR § 60.4202, Table 2; Minn. R. 7011.3520 |
| <i>PM</i> : less than 0.22 g/HP-hr | 40 CFR § 60.4205 (b); 40 CFR § 1039.104, 105, 107, 115 and 40 CFR § 60.4202, Table 2; Minn. R. 7011.3520 |
| MAXIMUM ENGINE POWER GREATER THAN OR EQUAL 50 HP (Model Year 2007). Shall comply with the certification emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR§ 89.112 and 40 CFR§ 89.113 for all pollutants beginning in model year 2007 | hdr |

Owners and Operators of Fire Pump Engines (All years 2007 and after) and < 30 liters/cylinder

| What to do | Why to do it |
|---|---|
| A. EMISSION STANDARDS | hdr |
| MAXIMUM ENGINE POWER LESS THAN 11 HP (Model Year 2010 and earlier) | hdr |
| <i>NMHC + NOx</i> : less than 7.8 g/HP-hr | 40 CFR § 60.4205 (c); Minn. R. 7011.3520 |
| <i>CO</i> : less than 6.0 g/HP-hr | 40 CFR § 60.4205 (c); Minn. R. 7011.3520 |
| <i>PM</i> : less than 0.75 g/HP-hr | 40 CFR § 60.4205 (c); Minn. R. 7011.3520 |
| MAXIMUM ENGINE POWER LESS THAN 11 HP (Model Year 2011+) | hdr |
| <i>NMHC + NOx</i> : less than 5.6 g/HP-hr | 40 CFR § 60.4205 (c); Minn. R. 7011.3520 |
| <i>PM</i> : less than 0.30 g/HP-hr | 40 CFR § 60.4205 (c); Minn. R. 7011.3520 |
| MAXIMUM ENGINE POWER GREATER THAN OR EQUAL TO 11 HP BUT LESS THAN 25HP (Model Year 2010 and earlier) | hdr |
| <i>NMHC + NOx</i> : less than 7.1 g/HP-hr | 40 CFR § 60.4205 (c); Minn. R. 7011.3520 |
| <i>CO</i> : less than 4.9 g/HP-hr | 40 CFR § 60.4205 (c); Minn. R. 7011.3520 |
| <i>PM</i> : less than 0.60 g/HP-hr | 40 CFR § 60.4205 (c); Minn. R. 7011.3520 |
| MAXIMUM ENGINE POWER GREATER THAN OR EQUAL TO 11 HP BUT LESS THAN 25HP (Model Year 2011+) | hdr |
| <i>NMHC + NOx</i> : less than 5.6 g/HP-hr | 40 CFR § 60.4205 (c); Minn. R. 7011.3520 |
| <i>PM</i> : less than 0.30 g/HP-hr | 40 CFR § 60.4205 (c); Minn. R. 7011.3520 |
| MAXIMUM ENGINE POWER GREATER THAN OR EQUAL TO 25 HP BUT LESS than 50 HP (Model Year 2010 and earlier) | hdr |
| <i>NMHC + NOx</i> : less than 7.1 g/HP-hr | 40 CFR § 60.4205 (c); Minn. R. 7011.3520 |
| <i>CO</i> : less than 4.1 g/HP-hr | 40 CFR § 60.4205 (c); Minn. R. 7011.3520 |
| <i>PM</i> : less than 0.60 g/HP-hr | 40 CFR § 60.4205 (c); Minn. R. 7011.3520 |
| MAXIMUM ENGINE POWER GREATER THAN OR EQUAL TO 25 HP BUT LESS than 50 HP (Model Year 2011+) | hdr |
| <i>NMHC + NOx</i> : less than 5.6 g/HP-hr | 40 CFR § 60.4205 (c) |
| <i>PM</i> : less than 0.22 g/HP-hr | 40 CFR § 60.4205 (c) |
| MAXIMUM ENGINE POWER GREATER THAN OR EQUAL TO 50 HP BUT LESS than 75 HP (Model Year 2010 and earlier) | hdr |
| <i>NMHC + NOx</i> : less than 7.8 g/HP-hr | 40 CFR § 60.4205 (c); Minn. R. 7011.3520 |
| <i>CO</i> : less than 3.7 g/HP-hr | 40 CFR § 60.4205 (c); Minn. R. 7011.3520 |

| | |
|--|--|
| <i>PM</i> : less than 0.60 g/HP-hr | 40 CFR§ 60.4205 (c); Minn. R. 7011.3520 |
| MAXIMUM ENGINE POWER GREATER THAN OR EQUAL TO 50 HP BUT LESS than 75 HP (Model Year 2011+) ¹ | hdr |
| <i>NMHC</i> + <i>NOx</i> : less than 3.5g/HP-hr | 40 CFR§ 60.4205 (c); Minn. R. 7011.3520 |
| <i>PM</i> : less than 0.30 g/HP-hr | 40 CFR§ 60.4205 (c); Minn. R. 7011.3520 |
| MAXIMUM ENGINE POWER GREATER THAN OR EQUAL TO 75 HP BUT LESS than 100 HP (Model Year 2010 and earlier) | hdr |
| <i>NMHC</i> + <i>NOx</i> : less than 7.8 g/HP-hr | 40 CFR§ 60.4205 (c); Minn. R. 7011.3520 |
| <i>CO</i> : less than 3.7 g/HP-hr | 40 CFR§ 60.4205 (c); Minn. R. 7011.3520 |
| <i>PM</i> : less than 0.60 g/HP-hr | 40 CFR§ 60.4205 (c); Minn. R. 7011.3520 |
| MAXIMUM ENGINE POWER GREATER THAN OR EQUAL TO 75 HP BUT LESS than 100 HP (Model Year 2011+) ¹ | hdr |
| <i>NMHC</i> + <i>NOx</i> : less than 3.5 g/HP-hr | 40 CFR§ 60.4205 (c); Minn. R. 7011.3520 |
| <i>PM</i> : less than 0.30 g/HP-hr | 40 CFR§ 60.4205 (c); Minn. R. 7011.3520 |
| MAXIMUM ENGINE POWER GREATER THAN OR EQUAL TO 100 HP BUT LESS than 175 HP (Model Year 2009 and earlier) | hdr |
| <i>NMHC</i> + <i>NOx</i> : less than 7.8 g/HP-hr | 40 CFR§ 60.4205 (c); Minn. R. 7011.3520 |
| <i>CO</i> : less than 3.7 g/HP-hr | 40 CFR§ 60.4205 (c); Minn. R. 7011.3520 |
| <i>PM</i> : less than 0.60 g/HP-hr | 40 CFR§ 60.4205 (c); Minn. R. 7011.3520 |
| MAXIMUM ENGINE POWER GREATER THAN OR EQUAL TO 100 HP BUT LESS than 175 HP (Model Year 2010+) ² | hdr |
| <i>NMHC</i> + <i>NOx</i> : less than 3.0 g/HP-hr | 40 CFR§ 60.4205 (c); Minn. R. 7011.3520 |
| <i>PM</i> : less than 0.22 g/HP-hr | 40 CFR§ 60.4205 (c); Minn. R. 7011.3520 |
| MAXIMUM ENGINE POWER GREATER THAN OR EQUAL TO 175 HP BUT LESS than 300 HP (Model Year 2008 and earlier) | hdr |
| <i>NMHC</i> + <i>NOx</i> : less than 7.8 g/HP-hr | 40 CFR§ 60.4205 (c); Minn. R. 7011.3520 |
| <i>CO</i> : less than 2.6 g/HP-hr | 40 CFR§ 60.4205 (c); Minn. R. 7011.3520 |
| <i>PM</i> : less than 0.40 g/HP-hr | 40 CFR§ 60.4205 (c); Minn. R. 7011.3520 |
| MAXIMUM ENGINE POWER GREATER THAN OR EQUAL TO 175 HP BUT LESS than 300 HP (Model Year 2009+) | hdr |
| <i>NMHC</i> + <i>NOx</i> : less than 3.0 g/HP-hr | 40 CFR§ 60.4205 (c); Minn. R. 7011.3520 |
| <i>PM</i> : less than 0.15 g/HP-hr | 40 CFR§ 60.4205 (c); Minn. R. 7011.3520 |
| MAXIMUM ENGINE POWER GREATER THAN OR EQUAL TO 300 HP BUT LESS than 600 HP (Model Year 2008 and earlier) | hdr |

| | |
|---|--|
| <i>NMHC + NOx</i> : less than 7.8 g/HP-hr | 40 CFR§ 60.4205 (c); Minn. R. 7011.3520 |
| <i>CO</i> : less than 2.6 g/HP-hr | 40 CFR§ 60.4205 (c); Minn. R. 7011.3520 |
| <i>PM</i> : less than 0.40 g/HP-hr | 40 CFR§ 60.4205 (c); Minn. R. 7011.3520 |
| MAXIMUM ENGINE POWER GREATER THAN OR EQUAL TO 300 HP BUT LESS than 600 HP (Model Year 2009+) | hdr |
| <i>NMHC + NOx</i> : less than 3.0 g/HP-hr | 40 CFR§ 60.4205 (c); Minn. R. 7011.3520 |
| <i>PM</i> : less than 0.15 g/HP-hr | 40 CFR§ 60.4205 (c); Minn. R. 7011.3520 |
| MAXIMUM ENGINE POWER GREATER THAN OR EQUAL TO 600 HP BUT LESS OR EQUAL TO 750 HP (Model Year 2008 and earlier) | hdr |
| <i>NMHC + NOx</i> : less than 7.8 g/HP-hr | 40 CFR§ 60.4205 (c); Minn. R. 7011.3520 |
| <i>CO</i> : less than 2.6 g/HP-hr | 40 CFR§ 60.4205 (c); Minn. R. 7011.3520 |
| <i>PM</i> : less than 0.40 g/HP-hr | 40 CFR§ 60.4205 (c); Minn. R. 7011.3520 |
| MAXIMUM ENGINE POWER GREATER THAN OR EQUAL TO 600 HP BUT LESS OR EQUAL TO 750 HP (Model Year 2009+) | hdr |
| <i>NMHC + NOx</i> : less than 3.0 g/HP-hr | 40 CFR§ 60.4205 (c); Minn. R. 7011.3520 |
| <i>PM</i> : less than 0.15 g/HP-hr | 40 CFR§ 60.4205 (c); Minn. R. 7011.3520 |
| MAXIMUM ENGINE POWER GREATER THAN 750 HP (Model Year 2007 and earlier) | hdr |
| <i>NMHC + NOx</i> : less than 7.8 g/HP-hr | 40 CFR§ 60.4205 (c); Minn. R. 7011.3520 |
| <i>CO</i> : less than 2.6 g/HP-hr | 40 CFR§ 60.4205 (c); Minn. R. 7011.3520 |
| <i>PM</i> : less than 0.40 g/HP-hr | 40 CFR§ 60.4205 (c); Minn. R. 7011.3520 |
| MAXIMUM ENGINE POWER GREATER THAN 750 HP (Model Year 2008+) | hdr |
| <i>NMHC + NOx</i> : less than 4.8 g/HP-hr | 40 CFR§ 60.4205 (c); Minn. R. 7011.3520 |
| <i>PM</i> : less than 0.15 g/HP-hr | 40 CFR§ 60.4205 (c); Minn. R. 7011.3520 |

¹ For model years 2011-2013, owners and operators of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,560 revolutions per minute (rpm) may comply with the emission limitations for 2010 model year engines

² For model years 2010-2012, owners and operators of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,560 rpm may comply with the emission limitations for 2009 model year engines

| | |
|---|--|
| B. MONITORING, REPORTING AND RECORDKEEPING FOR OWNERS AND OPERATORS OF EMERGENCY ENGINES | hdr |
| <p>The owner or operator is not required to submit an initial notification.</p> <p>Starting with the model year 2013 for engine power less than 75 HP; model year 2012 for engine power less than 175 HP; and model year 2011 for engine power greater than and equal to 175 HP.</p> <p>If the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter.</p> <p>The owner must record the time of operation of the engine and the reason the engine was in operation during that time.</p> | 40 CFR§ 60.4214 (b); Minn. R. 7011.3520 |
| <p>Starting with the model year 2013 for engine power less than 75 HP; model year 2012 for engine power less than 175 HP; and model year 2011 for engine power greater than and equal to 175 HP, stationary CI internal combustion engine manufacturers must add a permanent label stating that the engine is for stationary emergency use only to each new emergency stationary CI internal combustion engine greater than or equal to 19 KW (25 HP) that meets all the emission standards for emergency engines in 40 CFR§ 60.4202 but does not meet all the emission standards for non-emergency engines in 40 CFR§ 60.4201. The label must be added according to the labeling requirements specified in 40 CFR§ 1039.135(b). Engine manufacturers must specify in the owner's manual that operation of emergency engines is limited to emergency operations and required maintenance and testing.</p> | 40 CFR§ 60.4210 (f); Minn. R. 7011.3520 |

Table A.12: The following Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (40 CFR pt. 60, subp. JJJJ) for Engines with less than or equal to 500 brake horsepower. These engines can use gasoline fuel only.

The engines that are constructed, modified or reconstructed after June 12, 2006, are subject to these rules. The date that construction commences is the date the engine is ordered by the owner or operator.

1. Non-emergency engines with a maximum engine power less than 500 HP, manufactured on or after July 1, 2008;
2. Emergency engines with a maximum engine power greater than 25HP, manufactured on or after January 1, 2009;
3. Engines than are acting as temporary replacement units and that are located at a stationary source for less than 1 year and that have been properly certified as meeting the standards that would be applicable to such engine under the appropriate nonroad engine provisions, are not required to meet any other requirements.

| |
|--|
| Owners and Operators of Non-Emergency Engines (Manufactured after July 1, 2008) |
|--|

| What to do | Why to do it |
|---|---|
| Owners and operators use gasoline must use gasoline that meets the per gallon sulfur limit in 40 CFR § 80.195. | 40 CFR§ 60.4235 |
| After July 1, 2010, owners and operators may not install stationary SI ICE with a maximum engine power of less than 500 HP that do not meet the applicable requirements in 40 CFR § 60.4233. | 40 CFR§ 60.4236(c) |
| The owner or operator must operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, and must keep records of conducted maintenance to demonstrate compliance, but no performance testing is required. | 40 CFR§ 60.4243(a) |
| <p>Owners and operators of all stationary SI ICE must keep records of the information in (1) through (4).</p> <p>(1) All notifications and all documentation supporting any notification as described in 40 CFR §§ 60.7 and 60.19.</p> <p>(2) Maintenance conducted on the engine.</p> <p>(3) If the stationary SI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 90 and 1048.</p> <p>(4) If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to 40 CFR§ 60.4243(a)(2), documentation that the engine meets the emission standards.</p> | 40 CFR§ 60.4245 (a); 40 CFR§ 60.7 and 60.19. |
| For all stationary SI emergency ICE greater than or equal to 130 HP and less than 500 HP manufactured on or after July 1, 2011 that do not meet the standards applicable to non-emergency engines, the owner or operator of must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. | 40 CFR§ 60.4243(d) |

Owners and Operators of Emergency Engines (Manufactured after July 1, 2008)

| What to do | Why to do it |
|--|---------------------------|
| <p>The owner or operator of an emergency stationary SI internal combustion engine that is less than 130 HP, was built on or after July 1, 2008, and does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter upon startup of your emergency engine.</p> | <p>40 CFR§ 60.4237</p> |
| <p>Emergency stationary ICE may be operated 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 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.</p> | <p>40 CFR§ 60.4243(d)</p> |
| <p>Emergency stationary SI ICE with a maximum engine power of greater than 19 KW (25 HP), owners and operators may not install engines that do not meet the applicable requirements in <i>40 CFR§ 60.4233 after January 1, 2011</i>.</p> | <p>40 CFR§ 60.4236(a)</p> |
| <p>For all stationary SI emergency ICE greater than 25 HP and less than 130 HP manufactured on or after July 1, 2008, that do not meet the standards applicable to non-emergency engines, the owner or operator of must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation; including what classified the operation as emergency and how many hours are spent for non-emergency operation.</p> | <p>40 CFR§ 60.4245(b)</p> |

Table A.14: The following are the requirements of the National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines (40 CFR pt. 63, subp. ZZZZ)

Owners and operators of new and reconstructed stationary engines located at area sources of HAP emissions must meet the requirements of 40 CFR pt. 60, subps. IIII or JJJJ, as appropriate. If the owners and operators are in compliance with either 40 CFR pt. 60, subps. IIII or JJJJ, as appropriate, they would be in compliance with 40 CFR pt. 63, subp. ZZZZ, for new and reconstructed engines.

Existing Source: Constructed or reconstructed before June 12, 2006

New Source: Constructed or reconstructed on or after June 12, 2006

Reconstructed must meet the definition of reconstruction in 40 CFR§ 63.2 and reconstruction is commenced on or before June 12, 2006.

TABLE B: SUBMITTALS

Table B lists the submittals you must send to the Commissioner. Table B is divided into two sections, for source-specific submittal requirements and for submittals required of all Permittees. Source-specific submittals are further organized as either one-time only or recurrent requirements.

Return complete permit application to: Minnesota Pollution Control Agency
Air Quality Permit Coordinator
520 Lafayette Road North,
St. Paul, Minnesota 55155-4194

Send all other submittals to: Minnesota Pollution Control Agency,
Air Quality Compliance Tracking Coordinator
520 Lafayette Road North,
St. Paul, Minnesota 55155-4194.

| New Source and Equipment One-Time Submittals | | | |
|--|--|--|--|
| What to Send | When to Send | What is affected | Citation |
| Location Notification on a form approved by the Commissioner | At least 48 hours prior to each change in location of a stationary source, establishment of a new stationary source location, or a change in capacity/dust control option at an individual stationary source | Each stationary source (plant location) to be covered by your general permit | Minn. R. 7007.0800, subp. 12 |
| NSPS Equipment Description and Notification of commencement of construction (defined in 40 CFR§ 60.2) on a form approved by the Commissioner Notifying | No later than 30 days after start of construction | Equipment newly subject to NSPS except for mass-produced (i.e., prefabricated) facilities | 40 CFR §. 60.7(a)(1); Minn. R. 7019.0100 |
| NSPS Equipment Description and Notification of initial startup date on a form approved by the Commissioner | Within 15 days after initial startup | Equipment newly subject to NSPS | 40 CFR §. 60.7(a)(3); Minn. R. 7019.0100 |
| NSPS Equipment Description and Notification of equipment replacement on a form approved by the Commissioner (With information required in 40 CFR§ 60.676) | Within 60 days after making the replacement | An existing facility (piece of equipment not subject to NSPS) being replaced by a piece of equipment of equal or smaller size or capacity) | 40 CFR § 60.676(a) and 60.670(d); Minn. R. 7011.3350 |

| Routine Submittals | | | |
|---|---|---|----------------------------------|
| What to Send | When to Send | What is affected | Citation |
| Semiannual Deviations Reporting on a form approved by the Commissioner with a summary of <i>all</i> instances of deviations from permit conditions (or indicating none occurred). Submit the report for the second half-year report with your annual Compliance Certification. Use Form NM-DRF | Semiannually: due July 30, covering January 1 through June 30, and due January 31, covering July 1 through December 31 | All stationary sources (plant locations) covered by your general permit (A single form may be submitted supplying necessary information for all stationary sources covered by this general permit during the reporting period) | Minn R. 7007.0800, subp. 6(A)(2) |
| Annual Compliance Certification on a form approved by the Commissioner. Submit with the second half-year semiannual deviations report. Use Form NM-CR | Annually, by January 31 for the previous calendar year | | Minn. R. 7007.0800 subp. 6(C) |
| Emissions inventory report A form will be sent for you to complete and return | Annually, by April 1 for the previous calendar year | | Minn. R. 7019.3000-7019.3100 |
| Emission fees | Annually, within 60 days of receipt of an MPCA invoice | | Minn. R. 7002.0005-7002.0085 |
| Periodic Submittals (required as necessary) | | | |
| Oral notification of deviation endangering human health or the environment | Immediately after discovery | Stationary source (plant location) covered by your general permit | Minn. R. 7019.1000, subp. 1 |
| Written description of deviation endangering human health or the environment | Within 2 days of discovery | (A single notification and/or submittal may be submitted supplying necessary information for all stationary sources covered by this general permit if events coincide. Otherwise, each requirement applies separately to each stationary source for each individual event.) | Minn. R. 7019.1000, subp. 1 |
| Shutdown notification | At least 24 hours before a planned shutdown of process or control equipment if it would cause an increase in the emission of air pollutants and again when the shutdown is over | | Minn. R. 7019.1000, subp. 3 |
| Breakdown notification | Immediately for a breakdown of more than one hour duration of any process or control equipment if the breakdown causes an increase in the emission of air pollutants and again when the breakdown is over | | Minn. R. 7019.1000, subp. 2 |

| | | | |
|--|--|--|-----------------------------|
| Notification and Test Plan on a form approved by the Commissioner | At least 30 days before performance test date | Affected facility (piece of equipment) as defined in 40 CFR § 60.676 and any other equipment required to be tested | Minn. R. 7017.2030 |
| Pre-test meeting | At least 7 days prior to performance test date | | Minn. R. 7017.2030, subp. 4 |
| Test report | Within 45 days after performance test date | Affected facility (piece of equipment) as defined in 40 CFR § 60.676 and any other equipment tested | Minn. R. 7017.2035, subp. 2 |
| Microfiche or CD copy of test report | Within 105 days after performance test date | | Minn. R. 7017.2035, subp. 2 |

APPENDIX I: SOURCE-SPECIFIC REQUIREMENTS

Stationary Source Designation Matrix

Stationary Internal Combustion Engines Fuel Use

Weather Summary Criteria

Generator Sitting Conditions

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NONMETALLIC MINERAL PROCESSING GENERAL PERMIT, STATIONARY SOURCE DESIGNATION MATRIX

TABLE 1 - Annual Production versus Numbers of Units

| Table 1. Stationary Source Category Annual Production (tons) - Up to: | | | | | | | | | | | | | |
|---|-----------------|---------|---------------------|--|-----------|-----------|-----------|-------------|-------------|-------------|-------------|-------------|-------------|
| Category | Number of Units | | | Stationary Source Annual Production (tons) | | | | | | | | | |
| | Crushers | Screens | Transfer Operations | 500,000 | 1,000,000 | 1,250,000 | 1,500,000 | 1,750,000 | 2,000,000 | 2,250,000 | 2,500,000 | 2,750,000 | 3,000,000 |
| A | 1 | 1 | 10 | small | small | small | small | medium | medium | medium | medium | medium | large |
| B | 2 | 2 | 20 | small | small | small | small | medium | medium | medium | large | large | large |
| C | 3 | 3 | 30 | small | small | small | medium | medium | medium | large | large | large | not allowed |
| D | 4 | 4 | 40 | small | small | small | medium | medium | large | large | not allowed | not allowed | not allowed |
| E | 5 | 5 | 50 | small | small | medium | medium | large | large | not allowed | not allowed | not allowed | not allowed |
| F | 6 | 6 | 60 | small | small | medium | medium | large | not allowed | not allowed | not allowed | not allowed | not allowed |
| G | 7 | 7 | 70 | small | small | medium | large | not allowed | not allowed | not allowed | not allowed | not allowed | not allowed |
| H | 8 | 8 | 80 | medium | medium | medium | large | not allowed | not allowed | not allowed | not allowed | not allowed | not allowed |

TABLE 2 - Annual Production versus In-Place Capacity

| Table 2. Stationary Source Category Annual Production (tons) Versus In-Place Capacity | | | | | | | | | | | | | |
|---|------------------------------------|---------|---------------------|---|-----------|-----------|-----------|-----------|-----------|-------------|-------------|-------------|-------------|
| Category | Cumulative In-Place Capacity (tph) | | | Stationary Source Annual Production (tons) Up to: | | | | | | | | | |
| | Crushers | Screens | Transfer Operations | 500,000 | 1,000,000 | 1,250,000 | 1,500,000 | 1,750,000 | 2,000,000 | 2,250,000 | 2,500,000 | 2,750,000 | 3,000,000 |
| I | 750 | 750 | 7500 | small | small | small | medium | medium | medium | large | large | large | not allowed |
| II | 1250 | 1250 | 12500 | medium | medium | medium | medium | medium | large | large | not allowed | not allowed | not allowed |
| III | 2500 | 2500 | 25000 | large | large | large | large | large | large | not allowed | not allowed | not allowed | not allowed |

Stationary sources, using Table 2, with cumulative capacities above 2,500 tons per hour (tph) for crushers or for screens or above 25,000 tph for transfer operations are not allowed under this general permit.

If Table 2 is used for determining the stationary source designation, in order to demonstrate compliance with the cumulative capacity limitation, the Permittee must keep an up-to-date record (e.g., a site plan or process flow diagram) showing the cumulative in-place capacity of each equipment type at the stationary source. This record does not need to identify specific unique identifying numbers for pieces of equipment. It may be generic in nature, but must be sufficiently detailed to determine the cumulative capacity of all equipment types at the stationary source. Wet screening operations are excluded from counting toward the number of units in the matrix above.



Minnesota Pollution Control Agency

520 Lafayette Road North
St. Paul, MN 55155-4194

NM-EN

STATIONARY INTERNAL COMBUSTION ENGINES FUEL USE

Air Quality Permit Program - General Permit Nonmetallic Mineral Processing

- 1) AQD File No.: _____
- 2) AQD Permit No.: _____
- 3) Company Name: _____
- 4) Stationary Source Name/Location: _____
- 5) Dates of period covered by calculation _____
- 6) Printed name of person recording calculation: _____
- 7) Date (must be done by 15th of following month): _____

| Fuel Type | Amount Burned in Previous 12-Month Period at Stationary Source Location * | Units | Multiplying Factor | Subtotal |
|---|---|------------|------------------------|----------|
| Diesel Fuel | | Gallons | x 3.09 ÷ 10,000 | |
| Diesel Fuel with up to 20% Biodiesel | | Gallons | x 2.83 ÷ 10,000 | |
| Natural Gas | | Cubic Feet | x 1.70 ÷ 1,000,000 | |
| Liquefied Petroleum Gas (LPG) / Propane | | Gallons | x 6.95 ÷ 100,000 | |
| Gasoline | | Gallons | x 4.24 ÷ 1,000 | |
| Calculation Total | (Sum subtotals) | | Must be less than 90 * | |

* If a stationary source has less than 12 months of operational data, the Permittee shall determine compliance during the first 12 months under this general permit using the following formula:

$$N = 0.95 \times (\text{Annual Limit}) + 0.0045 \times (\text{Annual Limit}) \times (n-1)$$

Where "n" is the number of months in operation, and "N" is the rolling sum limit for the current month.

At its option, the Permittee may calculate and record individual monthly sums, in lieu of 12-month rolling sums, for a stationary source location such that the annual production limit divided by 12 is not exceeded. Also at its option, if only one fuel is used, the Permittee may record and sum the quantity of fuel used directly, in which case the annual limits are as follows: 291,545 gallons for diesel fuel, 317,851 gallons for diesel fuel with up to 20% biodiesel, 53 million cubic feet for natural gas, 1.3 million gallons for propane, and 21,221 gallons for gasoline.

TDD (for hearing and speech impaired only): (651) 282-5332

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**WEATHER SUMMARY CRITERIA
FOR
LARGE STATIONARY SOURCE NON-PROCESS DUST CONTROL OPTION
NONMETALLIC MINERAL PROCESSING GENERAL PERMIT**

Sky Conditions

| | |
|------------------|---|
| CLR | <1/10 cloud coverage |
| SCT (Ptly Cldy) | 1/10-5/10 cloud coverage (opaque) |
| BKN (Mstly Cldy) | 6/10-9/10 cloud coverage (opaque) |
| OVC (Cloudy) | 10/10 cloud coverage (opaque) |
| THN OVC | Sky is completely covered with high thin clouds and <5/10 cloud coverage is opaque |

Note: The cloud coverage is a cumulative total of all cloud layers.

Weather Conditions

| | |
|----------------------|---|
| Fog | May also be associated with drizzle and may obstruct sky |
| Drizzle | Small particles of rain many times associated with fog |
| Lt Rain | Continuous falling at a light rate (good horizontal visibility) |
| Mod Rain | Continuous falling at a mod. rate (horiz. visibility decreased) |
| Hvy. Rain | Continuous falling at heavy rate; in sheets (horizontal visibility low) |
| T-Strm | Thunderstorm -- thunder, lightning, and usually mod. to hvy. rain |
| Hail | Associated with thunderstorms |
| Frz Rain | Rain that freezes on contact of cold objects; glazing |
| Sleet | Mixture of rain and ice pellets |
| Ice Pellets | Clear/mostly translucent pellets of ice -- not easily broken/crushed |
| Snw Grns/Snw Pellets | Hard/crunchy opaque (white) pellets of snow -- easily crushed |
| Lt Snow | Falling at a light rate; flurries (good horizontal visibility) |
| Mod Snow | Falling at a moderate rate (horizontal visibility decreased) |
| Hvy Snow | Falling at a heavy rate (poor horizontal visibility) |

Wind Scale

| | | |
|-----------|--------------|---|
| 0-10 MPH | Light Breeze | Leaves rustle |
| 10-20 MPH | Light Wind | Small tree branches move; wind extends light flag |
| 20-30 MPH | Mod. Wind | Large branches in motion; umbrella used with difficulty |
| 30-40 MPH | Mod. Gale | Whole trees in motion; difficulty walking against wind |
| 40-50 MPH | Strong Gale | Twigs break off of trees |

Temperature

Approximate using a range of 5 degrees Fahrenheit if the actual temperature is not known.

GENERATOR/ENGINE SITTING CONDITIONS

| Capacity Allowed to Operate Simultaneously horsepower | Minimum Stack Height Feet (meters) | Minimum Distance Between Engines and Property Boundaries Feet (meters) |
|--|---|---|
| 500 | 14(4.27) | 60 (18.30) |
| 750 | 14(4.27) | 135(41.15) |
| 1000 | 14(4.27) | 210(64.0) |
| 1500 | 14(4.27) | 330(100.0) |