Permit #: **#28.0801-33**

Effective Date: **Draft**

Expiration Date: **Draft**

SOUTH DAKOTA

DEPARTMENT OF ENVIRONMENT

AND

NATURAL RESOURCES

MINOR AIR QUALITY OPERATING PERMIT

Steven M. Pirner, Secretary
Department of Environment and Natural Resources

Under the South Dakota Air Pollution Control Regulations

Pursuant to Chapter 34A-1-21 of the South Dakota Codified Laws and the Air Pollution Control Regulations of the State of South Dakota and in reliance on statements made by the owner designated below, a permit to operate is hereby issued by the Secretary of the Department of Environment and Natural Resources. This permit authorizes such owner to operate the source unit(s) at the location designated below and under the listed conditions.

A. Owner

1. Company Name and Mailing Address

Millerdale Hutterite Brethren
35362 - 206th Street
Miller, SD 57311-7118

2. Actual Source Location if Different from Above

Same as above

3. Permit Contact

Roland Marquardt
(702) 578-0790

4. Facility Contact

Edward Hofer
(605) 204-0836

5. Responsible Official

Mike Waldner
(605) 853-3908

B. Permit Revisions or Modifications

Not Applicable

C. Type of Operation

Hutterite Colony

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1.0 Standard Conditions

1.1 Operation of source

In accordance with Administrative Rules of South Dakota (ARSD) 74:36:04:15(9), the owner or operator shall operate the units, controls, and processes as described in Table 1-1 in accordance with the statements, representations, and supporting data contained in the complete permit application received May 2, 2014, unless modified by the conditions of this permit. Except as otherwise provided herein, the control equipment shall be operated at all times in accordance with the manufacturer's specification and in a manner that achieves compliance with the conditions of this permit. The application consists of the application forms, supporting data, and supplementary correspondence. If the owner or operator becomes aware it failed to submit any relevant facts in a permit application or submitted incorrect information in an application, such information shall be promptly submitted.

Table 1-1 – Description of Permitted Units, Operations, and Processes

Unit	Description	Maximum Operating Rate	Control Device
#1	Non-emergency Generator –2002, Detroit Diesel, model #750ROZDA, compression ignition, fired with distillate oil.	1,120 horsepower or 835 kilowatts	Oxidation Catalyst

1.2 Duty to comply

In accordance with ARSD 74:36:04:15(12), the owner or operator shall comply with the conditions of this permit. An owner or operator who knowingly makes a false statement in any record or report or who falsifies, tampers with, or renders inaccurate, any monitoring device or method is in violation of this permit. A violation of any condition in this permit is grounds for enforcement, reopening this permit, permit termination, or denial of a permit renewal application. The owner or operator, in an enforcement action, cannot use the defense that it would have been necessary to cease or reduce the permitted activity to maintain compliance. The owner or operator shall provide any information requested by the Secretary to determine compliance or whether cause exists for reopening or terminating this permit. This permit does not waive compliance with federal, state, or local laws and ordinances.

1.3 Property rights or exclusive privileges

In accordance with ARSD 74:36:04:15(12), the State's issuance of this permit, adoption of design criteria, and approval of plans and specifications does not convey any property rights of any sort, any exclusive privileges, any authorization to damage, injure or use any private property, any authority to invade personal rights, any authority to violate federal, state or local laws or regulations, or any taking, condemnation or use of eminent domain against any property owned by third parties. The State does not warrant the owner's or operator's compliance with this permit, design criteria, approved plans and specifications, and operation under this permit, will not cause damage, injury or use of private property, an invasion of personal rights, or

violation of federal, state or local laws or regulations. The owner or operator is solely and severally liable for all damage, injury or use of private property, invasion of personal rights, infringement of federal, state or local laws and regulations, or taking or condemnation of property owned by third parties, which may result from actions taken under the permit.

1.4 Penalty for violating a permit condition

In accordance with South Dakota Codified Laws (SDCL) 34A-1-39 and 34A-1-47, a violation of a permit condition may subject the owner or operator to civil or criminal prosecution, a state penalty of not more than $10,000 per day per violation, injunctive action, administrative permit action, and other remedies as provided by law.

1.5 Inspection and entry

In accordance with SDCL 34A-1-41, the owner or operator shall allow the Secretary, upon presentation of credentials, to:

1. Enter the premises where a regulated activity is located or where pertinent records are stored;
2. Have access to and copy any records required under this permit;
3. Inspect operations regulated under this permit; and/or
4. Sample or monitor any substances or parameters for the purpose of assuring compliance.

1.6 Severability

In accordance with ARSD 74:36:04:15(11), any portion of this permit that is void or challenged shall not affect the validity of the remaining permit requirements.

1.7 Permit termination, modification, or revocation

In accordance with ARSD 74:36:04:27, the Secretary may recommend that the Board of Minerals and Environment terminate, modify, or revoke this permit for violations of SDCL 34A-1 or the federal Clean Air Act or for nonpayment of any outstanding enforcement penalty.

2.0 Permit Amendments and Modifications

2.1 Permit flexibility

In accordance with ARSD 74:36:04:18, the owner or operator shall have the flexibility to make changes to the source during the term of this permit. The owner or operator shall provide the Secretary written notice at least seven days in advance of the proposed change (NOTE: The Secretary will forward a copy of the written notice to EPA). The written notice shall include a brief description of the change, the date on which the change is to occur, any change in emissions, the proposed changes to the permit, and whether the requested revisions are for an administrative permit amendment, minor permit amendment, or permit modification.

The Secretary will notify the owner or operator whether the change is an administrative permit amendment, a minor permit amendment, or a permit modification. A proposed change that is considered an administrative permit amendment or a minor permit amendment can be completed immediately after the Secretary receives the written notification. The owner or operator must comply with both the applicable requirements governing the change and the proposed permit terms and conditions until the Secretary takes final action on the proposed change.

A proposed change that is considered a modification cannot be implemented until the Secretary takes final action on the proposed change or the owner or operator was issued an air quality construction permit. Permit modifications are subject to the same procedural requirements, including public comment, as the original permit issuance except that the required review shall cover only the proposed changes.

2.2 Administrative permit amendment

In accordance with ARSD 74:36:04:20, the Secretary has 15 days from receipt of a written notice to verify the proposed change is an administrative permit amendment. As provided in ARSD 74:36:01:03, the Secretary considers a proposed change an administrative permit amendment if the proposed change accomplishes one of the following:

1. Corrects typographical errors;
2. Changes the name, address, or phone number of any person identified in this permit or provides a similar minor administrative change;
3. Requires more frequent monitoring or reporting;
4. The ownership or operational control changes and the Secretary determines no other change in this permit is necessary. However, the new owner must submit a certification of applicant form and a written statement specifying the date for transfer of operating permit responsibility, coverage, and liability; or
5. Any other changes the Secretary and the administrator of EPA determines to be similar to those requirements in this condition.

2.3 Minor permit amendment

In accordance with ARSD 74:36:04:20.04, the Secretary has 90 days from receipt of a written notice to take final action on a minor permit amendment. Final action consists of issuing or denying a minor permit amendment or determining the proposed change is a permit modification. As provided in ASRD 74:36:04:20:02, the Secretary considers a proposed change to be a minor permit amendment if the proposed change:

1. Does not violate any applicable requirements;
2. Does not involve significant changes to existing monitoring, reporting, or recordkeeping requirements;
3. Does not require or change a case-by-case determination of an emission limit or other standard, a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis; or

4. Does not seek to establish or change a permit term or condition for which the source has assumed to avoid an applicable requirement, a federally enforceable emission cap, or an alternative emission limit. An alternative emission limit is approved pursuant to regulations promulgated under section 112(i)(5) of the federal Clean Air Act.

2.4 Permit modification

In accordance with ARSD 74:36:04:21, an owner or operator may apply for a permit modification. A permit modification is defined in ARSD 74:36:01:10 as a physical change in or change in the operation of a source that results in at least one of the following:

1. An increase in the amount of an air pollutant emitted by the source or results in the emission of an air pollutant not previously emitted;
2. A significant change to existing monitoring, reporting, or recordkeeping requirements in the permit;
3. The change requires or changes a case-by-case determination of an emission limit or other standard, a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis; or
4. The change seeks to establish or change a permit term or condition for which there is a corresponding underlying applicable requirement that the source has assumed to avoid an applicable requirement, a federally enforceable emissions cap assumed to avoid classification as a modification under a provision of the Title I of the Clean Air Act, or an alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Clean Air Act.

Permit modifications are subject to the same procedural requirements, including public comment, as the original permit issuance except the required review shall cover only the proposed changes.

2.5 Permit revision

In accordance with ARSD 74:36:04:23, the Secretary may reopen and revise this permit to meet requirements of SDCL 34A-1 or the federal Clean Air Act. In accordance with ARSD 74:36:04:24, the Secretary shall notify the owner or operator at least 30 days before reopening this permit. The 30-day period may be less in the case of an emergency.

2.6 Testing new fuels or raw materials

In accordance with ARSD 74:36:11:04, an owner or operator may request permission to test a new fuel or raw material to determine if it is compatible with existing equipment before requesting a permit amendment or modification. A complete test proposal shall consist of the following:

1. A written proposal describing the new fuel or raw material, operating parameters, and parameters that will be monitored and any testing associated with air pollutant emissions during the test;

2. An estimate of the type and amount of regulated air pollutant emissions resulting from the proposed change; and
3. The proposed schedule for conducting the test. In most cases the owner or operator will be allowed to test for a maximum of one week. A request for a test period longer than one week will need additional justification. A test period shall not exceed 180 days.

The Secretary shall approve, conditionally approve, or deny in writing the test proposal within 45 days after receiving a complete proposal. Approval conditions may include changing the test schedule or pollutant sampling and analysis methods. Pollutant sampling and analysis methods may include, but are not limited to performance testing, visible emission evaluation, fuel analysis, dispersion modeling, and monitoring of raw material or fuel rates.

If the Secretary determines the proposed change will result in an increase in the emission of a regulated air pollutant or result in the emission of an additional regulated air pollutant, the Secretary shall give public notice of the proposed test for 30 days. The Secretary shall consider all comments received during the 30-day public comment period before making a final decision on the test.

The Secretary will not approve a test if the test would cause or contribute to a violation of a national ambient air quality standard.

3.0 Permit Renewal

3.1 Permit effective

In accordance with ARSD 74:36:04:05, this permit shall expire five years from date of issuance unless reopened or terminated for cause.

3.2 Permit renewal

In accordance with ARSD 74:36:04:06, the owner or operator shall submit an application for a permit renewal at least 90 days before the date of permit expiration if the owner or operator wishes to continue to operate an activity regulated by this permit. The current permit shall not expire and shall remain in effect until the Secretary takes final action on the timely permit renewal application.

3.3 Permit expiration

In accordance with ARSD 74:36:04:16, permit expiration terminates the owner's or operator's right to operate any unit covered by this permit.

4.0 Recordkeeping and Reporting

4.1 Recordkeeping and reporting

In accordance with ARSD 74:36:04:15(10), the owner or operator shall maintain all monitoring data, records, reports, and pertinent information specified by this permit for five years from the date of sample, measurement, report, or application unless otherwise specified in this permit. The records shall be maintained on site for the first two years and may be maintained off site for the last three years. All records must be made available to the Secretary for inspection. All notifications and reports shall be submitted to the following address:

South Dakota Department of Environment and Natural Resources
PMB 2020, Air Quality Program
523 E. Capitol, Joe Foss Building
Pierre, SD 57501-3182

4.2 Signatory requirements

In accordance with ARSD 74:36:04:07, all applications, reports or other information submitted to the Secretary shall be signed and certified by a responsible official or a duly authorized representative. A responsible official for a corporation is a responsible corporate officer and for a partnership or sole proprietorship is a general partner or the proprietor, respectively. A person is a duly authorized representative only if:

1. The authorization is made in writing by a person described above and submitted to the Secretary; and
2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters.

The duly authorized representative must be designated prior to or together with any reports or information to be signed by a duly authorized representative. The responsible official shall notify the Secretary if an authorization is no longer accurate.

4.3 Certification statement

In accordance with ARSD 74:36:04:15(10), all documents required by this permit, including application forms, reports, and compliance certification, must be certified by a responsible official or a duly authorized representative. The certification shall include the following statement:

> "I certify that, based on information and belief formed after reasonable inquiry, the statements and information in this document and all attachments are true, accurate, and complete."

4.4 Record of engine/generator hours of operation

In accordance with ARSD 74:36:04:15(10), the owner or operator shall record the number of hours the engine/generator is operated each month. The hours shall be recorded from the run

timer on the engine/generator. A 12-month rolling total shall be calculated every month using that month's value and the previous 11 months' values.

4.5 Reporting permit violations

In accordance with ARSD 74:36:04:15(10), the owner or operator shall report all permit violations. A permit violation should be reported as soon as possible, but no later than the first business day following the day the violation was discovered. The permit violation may be reported by telephone to the South Dakota Department of Environment and Natural Resources at (605) 773-3151 or by FAX at (605) 773-4068.

A written report shall be submitted within five days of discovering the permit violation. Upon prior approval from the Secretary, the submittal deadline for the written report may be extended up to 30 days. The written report shall contain:

1. A description of the permit violation and its cause(s);
2. The duration of the permit violation, including exact dates and times; and
3. The steps taken or planned to reduce, eliminate, and prevent reoccurrence of the permit violation.

The Secretary may waive the written report on a case-by-case basis if the oral report has been received within the reporting period and dependent upon the severity of the permit violation.

5.0 Control of Regulated Air Pollutants

5.1 Visibility limit

In accordance with ARSD 74:36:12:01, the owner or operator may not discharge into the ambient air an air contaminant of a density equal to or greater than that designated as 20 percent opacity from any permitted unit, operation, or process listed in Table 1-1, unless otherwise specified in this permit. This provision does not apply when the presence of uncombined water is the only reason for failure to meet the requirement.

5.2 Visibility exceedances

In accordance with ARSD 74:36:12:02, an exceedance of the opacity limit in permit condition 5.1 is not considered a violation during brief periods of soot blowing, start-up, shutdown, or malfunctions. Malfunction means any sudden and unavoidable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. A failure caused entirely or in part by poor maintenance, careless operation, preventable equipment breakdown, or any other cause within the control of the owner or operator is not a malfunction and is considered a violation.

5.3 Total suspended particulate matter limits

In accordance with ARSD 74:36:06:02(1), the owner or operator shall not allow the emission of total suspended particulate matter in excess of the emission limit specified in Table 5-1 for the appropriate permitted unit, operation, and process.

Table 5-1 – Total Suspended Particulate Matter Emission Limit

Unit	Description	Emission Limit
#1	Non-emergency generator	0.6 pounds per million Btu heat input

5.4 Sulfur dioxide limits

In accordance with ARSD 74:36:06:02(2), the owner or operator shall not allow the emission of sulfur dioxide in excess of the emission limit specified in Table 5-2 for the appropriate permitted unit, operations, and process.

Table 5-2 – Sulfur Dioxide Emission Limit

Unit	Description	Emission Limit
#1	Non-emergency generator	3.0 pounds per million Btu heat input

Compliance with the sulfur dioxide emission limit is based on a three-hour rolling average, which is the arithmetic average of three contiguous one-hour periods.

5.5 Operational restriction for non-emergency generator

In accordance with ARSD 74:36:04:15(9), the owner or operator shall not allow the non-emergency generator to operate for more than 3,858 hours during any 12-month period. Compliance with the operational limit shall be determined by a 12-month rolling total based on the monthly records required in permit condition 4.4. At the beginning of each month, a new 12-month total shall be calculated using the total hours of operation for the non-emergency generator for the previous 12-months. The non-resettable clock required in permit condition 8.22 shall be used to determine the hours of operation.

5.6 Circumvention not allowed

In accordance with ARSD 74:36:04:31, the owner or operator may not install, use a device, or use a means that conceals or dilutes an air emission that would otherwise violate this permit. This includes operating a unit or control device that emits air pollutants from an opening other than the designed stack, vent, or equivalent opening.

5.7 Minimizing emissions

In accordance with ARSD 74:36:08:03, as referenced to 40 CFR § 63.6(e)(1)(i), the owner or operator shall at all times, including periods of startup, shutdown, and malfunction, operate and maintain any permitted unit, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. During a period of startup, shutdown, or malfunction, this general duty to minimize emissions requires the owner or operator to reduce emissions from the permitted unit to the greatest extent which is consistent with safety and good air pollution control practices. The

general duty to minimize emissions during a period of startup, shutdown, or malfunction does not require the owner or operator to achieve emission levels that would be required by the applicable standard at other times if this is not consistent with safety and good air pollution control practices, nor does it require the owner or operator to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Secretary which may include, but is not limited to, monitoring results, review of operation and maintenance procedures (including a startup, shutdown, and malfunction plan, if required), review of operation and maintenance records, and inspection of the operation.

6.0 Title V Air Quality Operating Permit Exemption

6.1 Title V air quality operating permit exemption

In accordance with ARSD 74:36:04:15(9), the owner or operator is exempt from needing a Title V air quality operating permit. Any relaxation or exceedance of a permit condition that increases air emission greater than 95 tons per 12-month period is considered a modification and may require a Title V air quality operating permit.

7.0 Performance Tests

7.1 Performance test may be required

In accordance with ARSD 74:36:11:02, the Secretary may request a performance test during the term of this permit. A performance test shall be conducted while operating the unit at or greater than 90 percent of its maximum design capacity, unless otherwise specified by the Secretary. A performance test conducted while operating less than 90 percent of its maximum design capacity will result in the operation being limited to the percent achieved during the performance test. The Secretary has the discretion to extend the deadline for completion of performance test required by the Secretary if circumstances reasonably warrant but will not extend the deadline past a federally required performance test deadline.

7.2 Test methods and procedures

In accordance with ARSD 74:36:11:01, the owner or operator shall conduct the performance test in accordance with 40 CFR Part 60, Appendix A, 40 CFR Part 63, Appendix A, and 40 CFR Part 51, Appendix M. The Secretary may approve an alternative method if a performance test specified in 40 CFR Part 60, Appendix A, 40 CFR Part 63, Appendix A, and 40 CFR Part 51, Appendix M is not federally applicable or federally required.

7.3 Representative performance test

In accordance with ARSD 74:36:07:01, as referenced to 40 CFR § 60.8(c), performance tests shall be conducted under such conditions as the Secretary shall specify to the owner or operator based on the representative performance of the unit being tested. The owner or operator shall make available

to the Secretary such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in this permit.

7.4 Submittal of test plan

In accordance with ARSD 74:36:11:01, the owner or operator shall submit the proposed testing procedures to the Secretary at least 30 days prior to any performance test. The Secretary will notify the owner or operator if the proposed test procedures are approved or denied. If the proposed test procedures are denied, the Secretary will provide written notification outlining what needs to be completed for approval.

7.5 Notification of test

In accordance with ARSD 74:36:11:03, the owner or operator shall notify the Secretary at least 10 days prior to the start of a performance test to arrange for an agreeable test date when the Secretary may observe the test. The Secretary may extend the deadline for the performance test in order to accommodate schedules in arranging an agreeable test date.

7.6 Performance test report

In accordance with ARSD 74:36:04:15(10), the owner or operator shall submit a performance test report to the Secretary within 60 days after completing the performance test or by a date designated by the Secretary. The performance test report shall contain the following information:

1. A brief description of the process and the air pollution control system being tested;
2. Sampling location description(s);
3. A description of sampling and analytical procedures and any modifications to standard procedures;
4. Test results represented in the same terminology as the permit limits;
5. Quality assurance procedures and results;
6. Records of operating conditions during the test necessary for demonstrating compliance with the permit limits, preparation of standards, and calibration procedures;
7. Raw data sheets for field sampling and field and laboratory analyses;
8. Documentation of calculations;
9. All data recorded and used to establish parameters for compliance monitoring; and
10. Any other information required by the test method.

8.0 MACT Requirements – Non-emergency generator

8.1 Date to comply with non-emergency emission limits

In accordance with ARSD 74:36:08:40, as referenced to 40 CFR § 63.6595(a)(1), the owner or operator shall comply with the applicable emission standards and operating limitations specified in this chapter on and after May 3, 2014.

8.2 Emission limit for non-emergency engine

In accordance with ARSD 74:36:08:40, as referenced to 40 CFR §§ 63.6603(a) and 63.6625(h), except during periods of startup, the owner or operator shall limit concentrations of carbon monoxide emission from the non-emergency engine to less than or equal to 23 parts per million by volume on a dry basis at 15 percent oxygen or reduce carbon monoxide emissions from the non-emergency engine by 70 percent or more. Compliance with the numerical emission limit is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in permit condition 8.9.

8.3 Operating limits for non-emergency engines

In accordance with ARSD 74:36:08:40, as referenced to 40 CFR §§ 63.6603(a) and 63.6630(b), the owner or operator shall comply with the emission limit in permit condition 8.2 by one of the following methods:

1. If the owner or operator uses a oxidation catalyst, the owner or operator shall:
   a. Maintain the catalyst so the pressure drop across the catalyst does not change by more than 2 inches of water from the pressure drop across the catalyst measured during the initial performance test; and
   b. Maintain the temperature of the exhaust gases so the catalyst inlet temperature is greater than or equal to 450 degrees Fahrenheit and less than or equal to 1,350 degrees Fahrenheit.
2. If the owner or operator complies without using an oxidation catalyst, the owner or operator shall comply with operating limits approved by the Secretary.

8.4 Fuel requirements for non-emergency engines

In accordance with ARSD 74:36:08:40, as referenced to 40 CFR § 63.6604(a), the owner or operator shall only combust diesel fuel in the non-emergency engine that meets the following per gallon standards:

1. Maximum sulfur content of 15 parts per million; and
2. Minimum cetane index of 40; or
3. Maximum aromatic content of 35 volume percent.

8.5 General requirements for non-emergency engines

In accordance with ARSD 74:36:08:40, as referenced to 40 CFR § 63.6605, the owner or operator shall be in compliance with permit condition 8.2 and 8.3 at all times. The owner or

operator at all times shall operate and maintain the non-emergency engine, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the owner or operator to make any further efforts to reduce emissions if levels required in permit condition 8.2 and 8.3 have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on available information which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the non-emergency engine.

8.6 Initial compliance demonstration for non-emergency engines

In accordance with ARSD 74:36:08:40, as referenced to 40 CFR §§ 63.6612(a) and 63.6630(a), the owner or operator shall conduct an initial compliance demonstration within 180 days after May 3, 2013, according to one of the following applicable methods:

1. If the owner or operator reduces carbon monoxide emissions using an oxidation catalyst and continuous parameter monitoring system, initial compliance is demonstrated by conducting an initial performance test using the applicable procedures described in permit condition 8.9 and if:
   a. The average reduction of carbon monoxide emissions determined from the initial performance test achieves the required carbon monoxide percent reduction in permit condition 8.2;
   b. The owner or operator installed a continuous parameter monitoring system to continuously monitor catalyst inlet temperature according to permit condition 8.11; and
   c. The owner or operator recorded the catalyst pressure drop and inlet temperature during the initial performance test.
2. If the owner or operator limits the concentration of carbon monoxide emissions using an oxidation catalyst and continuous parameter monitoring system, initial compliance is demonstrated by conducting an initial performance test using the applicable procedures described in permit condition 8.9 and if:
   a. The average carbon monoxide concentration determined from the initial performance test is less than or equal to the carbon monoxide emission limit in permit condition 8.2;
   b. The owner or operator installed a continuous parameter monitoring system to continuously monitor catalyst inlet temperature according to permit condition 8.11; and
   c. The owner or operator recorded the catalyst pressure drop and inlet temperature during the initial performance test.
3. If the owner or operator reduces carbon monoxide emissions and does not use an oxidation catalyst, initial compliance is demonstrated by conducting an initial performance test using the applicable procedures described in permit condition 8.9 and if:

a. The average reduction of carbon monoxide emissions determined from the initial performance test achieves the required carbon monoxide percent reduction in permit condition 8.2;
b. The owner or operator installed a continuous parameter monitoring system to continuously monitor operating parameters approved by the Secretary, if any, according to permit condition 8.11; and
c. The owner or operator recorded the approved operating parameters, if any, during the initial performance test.

4. If the owner or operator limits the concentration of carbon monoxide emissions and does not use an oxidation catalyst, initial compliance is demonstrated by conducting an initial performance test using the applicable procedures described in permit condition 8.9 and if:
   a. The average carbon monoxide concentration determined from the initial performance test is less than or equal to the carbon monoxide emission limit in permit condition 8.2;
   b. The owner or operator installed a continuous parameter monitoring system to continuously monitor operating parameters approved by the Secretary, if any, according to permit condition 8.11; and
   c. The owner or operator recorded the approved operating parameters, if any, during the initial performance test.
5. If the owner or operator reduces carbon monoxide emissions using an oxidation catalyst and continuous emission monitoring system, initial compliance is demonstrated if:
   a. The owner or operator installed the continuous emission monitoring system to continuously monitor carbon monoxide and either oxygen or carbon dioxide emissions at both the inlet and outlet of the oxidation catalyst according to permit condition 8.10;
   b. The owner or operator conducted a performance evaluation of the continuous emission monitoring system using 40 CFR Part 60, Appendix B, Performance Specification 3 and 4A; and
   c. The average reduction of carbon monoxide as calculated using permit condition 8.9 equals or exceeds the required percent reduction in permit condition 8.2. The initial performance test comprises the first 4-hour period after successful validation of the continuous emission monitoring system. Compliance is based on the average percent reduction achieved during the 4-hour period.
6. If the owner or operator limits the concentration of carbon monoxide emissions using a oxidation catalyst and continuous emission monitoring system, initial compliance is demonstrated if:
   a. The owner or operator installed a continuous emission monitoring system to continuously monitor carbon monoxide and either oxygen or carbon dioxide emissions at the outlet of the oxidation catalyst according to permit condition 8.10;
   b. The owner or operator conducted a performance evaluation of the continuous emission monitoring system using 40 CFR Part 60, Appendix B, Performance Specification 3 and 4A; and

c. The average concentration of carbon monoxide as calculated using permit condition 8.9 is less than or equal to the carbon monoxide emission limit in permit condition 8.2. The initial performance test comprises the first 4-hour period after successful validation of the continuous emission monitoring system. Compliance is based on the average concentration measured during the 4-hour period.

8.7 Initial performance test for non-emergency engines may not be required

In accordance with ARSD 74:36:08:40, as referenced to 40 CFR §§ 63.6612(b) and 63.6670(c)(5), the owner or operator is not required to conduct the initial performance testing on a non-emergency engine for which a performance test was previously conducted provided the test meets all of the following requirements:

1. The test shall have been conducted using the same methods specified in this chapter and the methods were followed correctly;
2. The test shall not be older than 2 years;
3. The test shall be reviewed and accepted by the Administrator of EPA through the Secretary; and
4. Either no process or equipment changes shall have been made since the test was performed or the owner or operator shall be able to demonstrate the results of the performance test, with or without the adjustments, reliably demonstrates compliance despite process or equipment changes.

8.8 Subsequent performance test schedule for non-emergency engines

In accordance with ARSD 74:36:08:40, as referenced to 40 CFR § 63.6615, if a continuous emission monitoring system is not being used, the owner or operator shall conduct subsequent performance tests every 8,760 hours or 3 years, whichever comes first.

8.9 Performance test procedures for non-emergency engines

In accordance with ARSD 74:36:08:40, as referenced to 40 CFR §§ 63.7(e)(3) and 63.6620, the owner or operator shall conduct each performance test according to the following:

1. If the owner or operator reduces carbon monoxide emissions, the owner or operator shall:
   a. Measure the oxygen at the inlet and outlet of the control device with a portable oxygen analyzer using ASTM Method D6522-00 (2005) or 40 CFR Part 60, Appendix A, Methods 3, 3A, or 3B. Oxygen measurements shall be made at the same time as the measurements for carbon monoxide concentrations; and
   b. Measure the carbon monoxide at the inlet and outlet of the control device with a portable carbon monoxide analyzer using ASTM D6522-00 (2005), ASTM D6348-03, 40 CFR Part 60, Appendix A, Methods 10, or 40 CFR Part 63, Appendix A, Method 320. The carbon monoxide concentrations shall be at 15 percent oxygen, dry basis.
2. If the owner or operator limits the concentration of carbon monoxide emissions, the owner or operator shall:

a. Select the sampling port locations and the number of traverse points using 40 CFR Part 60, Appendix A, Method 1 or 1A. If using a control device, the sampling site shall be located at the outlet of the control device;
b. Determine the oxygen concentration at the sampling port location using 40 CFR Part 60, Appendix A, Method 3, 3A, or 3B or ASTM Method D6522-00 (2005). Oxygen concentration measurements shall be made at the same time and location as the measurements for carbon monoxide concentrations;
c. Measure the moisture content at the sampling port location using 40 CFR Part 60, Appendix A, Method 4, 40 CFR Part 63, Appendix A, Method 320, or ASTM D6348-03. Moisture content measurements shall be made at the same time and location as the measurements for carbon monoxide concentrations; and
d. Measure the carbon monoxide concentrations at the sampling port for the exhaust of the non-emergency engine using 40 CFR Part 60, Appendix A, Method 10, 40 CFR Part 63, Appendix A, Method 320, ASTM D6522-00 (2005), or ASTM D6348-03. The carbon monoxide concentration shall be at 15 percent oxygen, dry basis.

3. The owner or operator shall conduct three separate test runs for each performance test and each test run shall last at least 1 hour. Upon receiving approval from the Secretary, results of a test run may be replaced with the results of an additional test run in the event that:
   a. A sample is accidentally lost after the testing team leaves the site;
   b. Conditions occur in which one of the three runs shall be discontinued because of forced shutdown;
   c. Extreme meteorological conditions occur; or
   d. Other circumstances occur that are beyond the control of the owner or operator.
4. Equation 8-1 shall be used to determine compliance with the percent reduction requirement;

Equation 8-1 – Demonstrating compliance with percent reduction

$$R = \frac{C_i - C_o}{C_i} \times 100$$

Where:

- C_i = Concentration of carbon monoxide at the control device inlet;
- C_o = Concentration of carbon monoxide at the control device outlet; and
- R = Percent reduction of carbon monoxide emissions.

5. The owner or operator shall normalize the carbon monoxide concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen or an equivalent percent of carbon dioxide. If pollutant concentrations are corrected to 15 percent oxygen and carbon dioxide concentrations is measured in lieu of oxygen concentration measurement, a carbon dioxide correction factor is needed. The carbon dioxide correction factor shall be calculated as follows:

a. Calculate the fuel-specific F_o value for the fuel burned during the test using values obtained from 40 CFR Part 60, Appendix A, Method 19, section 15.2 and Equation 8-2;

Equation 8-2 – Fuel-specific F_o value

$$F_o = \frac{0.209 F_d}{F_c}$$

Where:

- F_o = Fuel factor based on the ratio of oxygen volume to ultimate carbon dioxide volume produced by the fuel at zero percent excess air;
- 0.209 = Fraction of air that is oxygen, percent/100;
- F_d = Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from 40 CFR Part 60, Method 19, dry standard cubic foot per 10^6 Btus; and
- F_c = Ratio of the volume of carbon dioxide produced to the gross calorific value of the fuel from 40 CFR Part 60, Method 19, dry standard cubic foot per 10^6 Btus.

b. Calculate the carbon dioxide correction factor for correcting measurement data to 15 percent oxygen using Equation 8-3; and

Equation 8-3 – Carbon dioxide correction factor

$$X_{CO2} = \frac{5.9}{F_o}$$

Where:

- X_{CO2} = Carbon dioxide correction factor, percent; and
- 5.9 = 20.9 percent oxygen-15 percent oxygen, the defined oxygen correction value, percent.

c. Calculate the carbon monoxide gas concentrations adjusted to 15 percent oxygen using carbon dioxide and Equation 8-4;

Equation 8-4 – Carbon dioxide correction factor

$$C_{adj} = C_d \frac{X_{CO2}}{\%CO2}$$

Where:

- C_{adj} = Calculated concentration of carbon monoxide adjusted to 15 percent oxygen;
- Cd = Measured concentration of carbon monoxide, uncorrected; and
- %CO2 = Measured carbon dioxide concentration, dry basis, percent.

6. If the owner or operator complies with the emission limit to reduce carbon monoxide and is not using an oxidation catalyst, the owner or operator shall submit the operational limits to be established during the initial performance test and continuously monitor those parameter(s) thereafter or request approval of no operating limits. The initial performance

test shall not be conducted until after the proposed operational limits or no operational limitation has been approved by the Secretary. The submittal for proposing operational limits shall include the following:

a. Identification of the specific parameters the owner or operator proposes to use as operating limits;
b. A discussion of the relationship between these parameters and hazardous air pollutant emissions, identifying how hazardous air pollutant emissions change with changes in these parameters, and how limits on these parameters will serve to limit hazardous air pollutant emissions;
c. A discussion of how the owner or operator will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limits;
d. A discussion identifying the methods the owner or operator will use to measure and the instruments the owner or operator will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and
e. A discussion identifying the frequency and methods for recalibrating the instruments the owner or operator will use for monitoring these parameters.

7. The submittal for proposing no operational limitations shall include the following:
   a. Identification of the parameters associated with operation of the non-emergency engine and any emission control device which could change intentionally (i.e., operator adjustment, automatic controller adjustment) or unintentionally (i.e. wear and tear, error) on a routine basis or over time;
   b. A discussion of the relationship, if any, between changes in the parameters and changes in hazardous air pollutant emissions;
   c. For the parameters which could change in such a way as to increase hazardous air pollutant emissions, a discussion of whether establishing limits on the parameters would serve to limit hazardous air pollutant emissions;
   d. For the parameters which could change in such a way as to increase hazardous air pollutant emissions, a discussion of how the owner or operator could establish upper and/or lower values for the parameters which would establish limits on the parameters in operating limits;
   e. For the parameters, a discussion identifying the methods the owner or operator could use to measure them and the instruments the owner or operator could use to monitor them, as well as the relative accuracy and precision of the methods and instruments;
   f. For the parameters, a discussion identifying the frequency and methods for recalibrating the instruments the owner or operator could use to monitor them; and
   g. A discussion of why, from the owner's or operator's point of view, it is infeasible or unreasonable to adopt the parameters as operating limits.
8. The engine percent load during a performance test shall be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination shall be included in the notification of compliance status. The following information shall be included in the written report:

a. The engine model number;
b. The engine manufacturer;
c. The year of purchase;
d. The manufacturer's site-rated brake horsepower;
e. The ambient temperature, pressure, and humidity during the performance test;
f. All assumptions made to estimate or calculate percent load during the performance test shall be clearly explained; and
g. If measurement devices such as flow meters, kilowatt meters, beta analyzers, stain gauges, etc. are used, the model number of the measurement device, and an estimate of its accurate in percentage of true value shall be provided.

If the non-emergency engine is non-operational but subject to performance testing, the owner or operator is not required to start the non-emergency engine solely to conduct the performance test. However, the owner or operator shall conduct the performance test when the non-emergency engine is started up again.

8.10 Requirements for a continuous emission monitoring system

In accordance with ARSD 74:36:08:40, as referenced to 40 CFR § 63.6625(a), if the owner or operator elects to install a continuous emission monitoring system for demonstrating compliance, the owner or operator shall install, operate, and maintain a continuous emission monitoring system to monitor carbon monoxide and either oxygen or carbon dioxide that meets the following requirements. If the owner or operator is meeting the requirement to reduce carbon monoxide emissions, the continuous emission monitoring system shall be installed at both the inlet and outlet of the control device. If the owner or operator is meeting a requirement to limit the concentration of carbon monoxide, the continuous emission monitoring system shall be installed at the outlet of the control device:

1. Each continuous emission monitoring system shall be installed, operated, and maintained according to the applicable performance specifications of 40 CFR Part 60, Appendix B;
2. The owner or operator shall conduct an initial performance evaluation and an annual relative accuracy test audit (RATA) of each continuous emission monitoring system according to the applicable performance specifications of 40 CFR Part 60, Appendix B as well as daily and periodic data quality checks in accordance with 40 CFR Part 60, Appendix F, Procedure 1;
3. Each continuous emission monitoring system shall complete a minimum of one cycle of operation (i.e., sampling, analyzing and data recording) for each successive 15-minute period. The owner or operator shall have at least two data points, with each representing a different 15-minute period, to have a valid hour of data; and
4. The continuous emission monitoring system data shall be reduced to 1-hour average computed from four or more data points equally spaced over each 1-hour period, except during periods when calibration, quality assurance, or maintenance activities are being performed. During these periods, a valid hourly average shall consist of at least two data points with each representing a 15-minute period. Alternatively, an arithmetic or

integrated 1-hour average of continuous emission monitoring data may be used. The continuous emission monitoring data shall be recorded in parts per million at 15 percent oxygen or the equivalent carbon dioxide concentration.

8.11 Requirements for a continuous parameter monitoring system

In accordance with ARSD 74:36:08:40, as referenced to 40 CFR § 63.6625(b), if the owner or operator elects to install a continuous parameter monitoring system for demonstrating compliance, the owner or operator shall install, operate, and maintain a continuous parameter monitoring system according to the following requirements:

1. The owner or operator shall prepare a site-specific monitoring plan that addresses the monitoring system design, data collection, and the quality assurance and quality control elements outlined below:
    a. The performance criteria and design specifications for the monitoring system equipment, including the sample interface, detector signal analyzer, and data acquisition and calculations;
    b. Sampling interface (i.e., thermocouple) location such that the monitoring system will provide representative measurements;
    c. Equipment performance evaluations, system accuracy audits, or other audit procedures;
    d. Initial and any subsequent calibration of the continuous parameter monitoring system;
    e. Determination and adjustment of the calibration drift of the continuous parameter monitoring system;
    f. Preventive maintenance of the continuous parameter monitoring system, including spare parts inventory;
    g. Data recording, calculations, and reporting;
    h. Accuracy audit procedures, including sampling and analysis methods;
    i. Program of corrective action for a malfunctioning continuous parameter monitoring system;
    j. Ongoing operation and maintenance procedures that are consistent with good air pollution control practices and meet at least the following:
        i. The owner or operator shall keep the necessary parts for routine repairs of the equipment associated with the continuous parameter monitoring system; and
        ii. All continuous parameter monitoring systems shall be installed, operational, and the data verified prior to or in conjunction with conducting the performance test. Verification of operational status shall at a minimum include completion of the manufacturer's written specification or recommendations for installation, operation, and calibration of the system.
    k. The following recordkeeping and reporting requirements:
        i. All required continuous parameter monitoring system measurements including monitoring data recorded during unavoidable continuous parameter monitoring system breakdowns and out-of-control periods;

ii. The date and time identifying each period during which the continuous parameter monitoring system was inoperative except for zero (low-level) and high-level checks;
iii. The date and time identifying each period during which the continuous parameter monitoring system was out of control. A continuous parameter monitoring system is out of control if the zero (low-level) or high-level calibration drift exceeds two times the applicable calibration drift specification or the relevant standard or the continuous parameter monitoring system fails a performance test audit, relative accuracy audit, relative accuracy test audit or linearity test audit. The beginning of the out-of-control period is the hour the owner or operator conducts a performance check that indicates an exceedance of the performance requirements. The end of the out-of-control period is the hour following completion of corrective action and successful demonstration the system is within the allowable limits;
iv. The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions and parameter monitoring exceedances that occurs during startups, shutdowns, and malfunctions of the generator;
v. The specific identification (i.e., the date and time of commencement and completion) of each time period of excess emissions and parameter monitoring exceedances that occurs during periods other than startups, shutdowns, and malfunctions of the generator;
vi. The nature and cause of any malfunction (if known);
vii. The corrective action taken or preventive measures adopted;
viii. The nature of the repairs or adjustments to the continuous parameter monitoring system that was inoperative or out of control;
ix. The total process operating time during the reporting period;
x. All procedures that are part of a quality control program developed and implemented for the continuous parameter monitoring system; and
xi. The owner or operator shall submit a copy of a written report of the results of the continuous parameter monitoring system performance evaluation within 60 days of completion of the performance evaluation.

2. The owner or operator shall install, operate, and maintain each continuous parameter monitoring system in continuous operation according to the procedures in the owner's or operator's site-specific monitoring plan;
3. The continuous parameter monitoring system shall collect data at least once every 15 minutes;
4. For a continuous parameter monitoring system measuring a temperature range, the temperature sensor shall have a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit) or 1 percent of the measurement range, whichever is larger;
5. The owner or operator shall conduct the continuous parameter monitoring system equipment performance evaluation, system accuracy audits, or other audit procedures specified in the owner's or operator's site-specific monitoring plan at least annually; and

6. The owner or operator shall conduct a performance evaluation of each continuous parameter monitoring system in accordance with the owner's or operator's site-specific monitoring plan.

The owner or operator shall maintain these written procedures on record for the life of the facility or until the facility is no longer subject to this permit condition and shall be made available for inspection. If the written procedures are revised, the owner or operator shall keep previous (i.e., superseded) versions of the performance evaluation plan on record to be made available for inspection, upon request, by the Secretary, for a period of 5 years after each revision.

The owner or operator may request approval of monitoring system quality assurance and quality control procedures alternative to those specified above for the owner's or operator's site-specific monitoring plan.

8.12 Installation of open or closed crankcase system

In accordance with ARSD 74:36:08:40, as referenced to 40 CFR § 63.6625(g), if the non-emergency engine is not equipped with a closed crankcase ventilation system, the owner or operator shall comply with one of the following:

1. Install a closed crankcase ventilation system that prevents crankcase emissions from being emitted to the atmosphere; or
2. Install an open crankcase filtration emission control system that reduces emissions from the crankcase by filtering the exhaust stream to remove oil mist, particulates, and metals.

The owner and operator shall follow the manufacturer's specified maintenance requirements for operating and maintaining the open or closed crankcase ventilation system and replacing the crankcase filters, or can request the Secretary to approve different maintenance requirements that are as protective as manufacturer's requirements.

8.13 Minimizing engine time during startup

In accordance with ARSD 74:36:08:40, as referenced to 40 CFR § 63.6625(h), the owner or operator shall minimize the non-emergency engine's time spent at idle during startup and minimize the non-emergency engine's startup time to a period needed for appropriate and safe loading of the non-emergency engine, not to exceed 30 minutes, after which time the emission standards in permit condition 8.2 apply.

8.14 Monitoring and collecting data

In accordance with ARSD 74:36:08:40, as referenced to 40 CFR § 63.6635, the owner or operator shall continuously monitor the non-emergency engine at all times when it is operating, except for monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data.

Monitoring failure caused in part by poor maintenance or carless operation are not malfunctions. The owner or operator shall not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels.

8.15 Demonstrating continuous compliance

In accordance with ARSD 74:36:08:40, as referenced to 40 CFR § 63.6640(a), the owner or operator shall demonstrate continuous compliance with each emission limit in permit condition 8.2 and operating limit in permit condition 8.3 according to the following methods:

1. If the owner or operator reduced carbon monoxide emissions or limits the concentration of carbon monoxide in the non-emergency engine's exhaust and using a continuous emission monitoring system, demonstrating continual compliance with permit condition 8.2 is demonstrated by:
   a. Collecting the monitoring data according to permit condition 8.10;
   b. Reducing the measurements to 1-hour averages;
   c. Calculating the percent reduction or concentration of carbon monoxide emission according to permit condition 8. 9;
   d. Demonstrating the catalyst achieves the required percent reduction of carbon monoxide emissions over the 4-hour averaging period or the emissions remain at or below the carbon monoxide concentration limit; and
   e. Conduct an annual relative accuracy test audit of the continuous emission monitoring system using 40 CFR Part 60, Appendix B, Performance Specification 3 and 4A as well as daily and periodic data quality checks in accordance with 40 CFR Part 60, Appendix F, Procedure 1.
2. If the owner or operator reduces carbon monoxide emissions or limits the concentration of carbon monoxide in the non-emergency engine's exhaust and uses a oxidation catalyst, demonstrating continual compliance with permit condition 8.2 is demonstrated by:
   a. Conducting performance tests every 8,760 hours or 3 years, whichever comes first, for carbon monoxide to demonstrate the required carbon monoxide percent reduction is achieved or the emissions remain at or below the carbon monoxide concentration limit;
   b. Collecting the catalyst inlet temperature data according to permit condition 8.11;
   c. Reduce the data to 4-hour rolling averages;
   d. Maintain the 4-hour rolling averages within the operating limit for the catalyst inlet temperature; and
   e. Measure the pressure drop across the catalyst once per month and demonstrate the pressure drop across the catalyst is within the operation limit established during the performance test.
3. If the owner or operator reduces carbon monoxide emissions or limits the concentration of carbon monoxide in the non-emergency engine's exhaust and does not use a oxidation catalyst, demonstrating continual compliance with permit condition 8.2 is demonstrated by:

a. Conducting performance tests every 8,760 hours or 3 years, whichever comes first, for carbon monoxide to demonstrate the required carbon monoxide percent reduction is achieved or the emissions remain at or below the carbon monoxide concentration limit;
b. Collecting the approved operating parameter data, if any, according to permit condition 8.11;
c. Reduce the data to 4-hour rolling averages; and
d. Maintain the 4-hour rolling averages within the operating limit for the operating parameters established during the performance test.

8.16 Reporting deviations

In accordance with ARSD 74:36:08:40, as referenced to 40 CFR § 63.6640(b), the owner or operator shall report instances when the non-emergency engine did not meet the emission limits in permit condition 8.2 or operating limits in permit condition 8.3. These deviations shall be reported in the semiannual report required in permit condition 8.19. If the owner or operator changes the catalyst, the owner or operator shall reestablish the values of the operating parameters measured during the initial performance test. When the owner or operator reestablishes the values of the operating parameters, the owner or operator shall also conduct a performance test to demonstrate the owner or operator is meeting the required emission limits in permit condition 8.2.

8.17 Performance test notifications

In accordance with ARSD 74:36:08:40, as referenced to 40 CFR §§ 63.7(b)(1), 63.7(c), 63.8(e)(3), and 66.6645(g), the owner or operator shall submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin to allow the Secretary an opportunity to review and approve the site-specific test plan and have an observer present during the test. The site-specific test plan shall include:

1. A test program objectives and summary;
2. The test schedule;
3. Data quality objectives, which are the pretest expectations of precision, accuracy, and completeness data;
4. An internal quality assurance program which includes, at a minimum, the activities planned by routine operators and analysts to provide an assessment of the continuous monitoring system performance; and
5. An external quality assurance program which includes, at a minimum, systems audits that include the opportunity for onsite evaluation of instrument calibration, data validation, sample logging, and documentation of quality control data and field maintenance activities.

8.18 Notification of compliance status

In accordance with ARSD 74:36:08:40, as referenced to 40 CFR §§ 63.9(h)(2)(ii), 63.6630(c) and 63.6645(h), the owner or operator shall submit a Notification of Compliance Status containing the following information for each performance test or compliance demonstration:

1. The methods used to determine compliance;
2. The results of any performance tests, continuous monitoring system performance evaluations, and/or other monitoring procedures or methods conducted;
3. The methods used for determining continuing compliance, including a description of monitoring and reporting requirements and test methods;
4. The quantity of carbon monoxide emitted by the non-emergency engine reported in the appropriate units for demonstrating compliance with permit condition 8.2;
5. A description of the air pollution control device (or method) for each non-emergency engine, including the control efficiency (percent) for each control device (or method); and
6. A statement by the owner or operator as to whether the source has complied with the relevant standard or other requirements.

If the compliance demonstration does not require a performance test, the owner or operator shall submit the Notification of Compliance Status within 30 days after completion of the compliance demonstration. A Notification of Compliance Status for each performance test and compliance demonstration that involves a performance test shall be submitted within 60 days after completion of the performance test.

8.19 Semiannual compliance report

In accordance with ARSD 74:36:08:40, as referenced to 40 CFR § 63.6650(a), (b), (c), (d), and (e), the owner or operator shall submit a semiannual report which contains the following:

1. Company name and address;
2. Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report;
3. Date of report and beginning and ending dates of the reporting period;
4. If a malfunction occurred during the reporting period, the compliance report shall include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused the emission limit in permit condition 8.2 to be exceeded. The report shall also include a description of actions taken by the owner or operator during the malfunction to minimize emissions, including actions taken to correct a malfunction;
5. If there are no deviations from any emission limit in permit condition 8.2 or operating limits in permit condition 8.3, a statement that there were no deviations from the emission limits or operating limits during the reporting period;
6. If there were no periods during which the continuous monitoring system (i.e., continuous emission monitoring system and/or continuous parameter monitoring system) was out-of-

control as specified in permit condition 8.11, a statement there were no periods during which the continuous monitoring system was out-of-control during the reporting period;

7. For each deviation where the owner or operator is not using a continuous monitoring system to comply, the semiannual report shall contain the following:
   a. The total operating time of the non-emergency engine involved with the deviation; and
   b. Information on the number, duration, and cause of deviations, including unknown causes, and the corrective action taken;
8. For each deviation where the owner or operator is using a continuous monitoring system to comply, the semiannual report shall contain the following:
   a. The date and time each malfunction started and stopped;
   b. The date, time, and duration that each continuous monitoring system was inoperative, except for zero (low-level) and high-level checks;
   c. The date, time, and duration that each continuous monitoring system was out-of-control, including a description of any corrective actions taken;
   d. The date and item each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period;
   e. A summary of the total duration of the deviation during the reporting period and total duration as a percent of the total operating time of the generator during the reporting period;
   f. A summary of the total duration of continuous monitoring system downtimes during the reporting period and total duration of continuous monitoring system downtime as a percent of the total operating time of the generator during the reporting period;
   g. An identification of each parameter and pollutant that was monitored for the generator;
   h. A brief description of the generator;
   i. A brief description of the continuous monitoring system;
   j. The date of the latest continuous monitoring system certification or audit; and
   k. A description of any changes in the continuous monitoring system, processes, or controls since the last reporting period.

The first semiannual report shall cover the period beginning May 3, 2013 and ending on June 30, 2013, and be postmarked or delivered no later than July 31, 2013. Each subsequent semiannual report shall cover the semiannual reporting period from January 1 through June 30 or July 1 through December 31. Each subsequent semiannual report shall be postmarked or delivered no later than July 31 or January 31.

8.20 Recordkeeping for non-emergency engines

In accordance with ARSD 74:36:08:40, as referenced to 40 CFR §§ 63.6655(a), (b), and (d) and 63.6660, the owner or operator shall maintain the following records:

1. A copy of each notification and report the owner or operator submitted to comply with this chapter, including all documentation supporting any Initial Notification or Notification of Compliance Status reports;
2. Records of the occurrence and duration of each malfunction of operation or the air pollution control and monitoring equipment;
3. Records of performance tests and performance evaluations;
4. Records of all required maintenance performed on the air pollution control and monitoring equipment;
5. Records of actions taken during periods of malfunction to minimize emissions, corrective actions taken or preventive measures adopted to restore a malfunctioning process, air pollution control, and/or monitoring equipment to its normal or usual manner of operation;
6. For each continuous monitoring system, the owner or operator shall keep the following records:
    a. All measurements during periods of unavoidable continuous monitoring system breakdowns and out-of-control periods;
    b. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero (low-level) and high-level checks;
    c. The date and time identifying each period during which the continuous monitoring system was out-of-control;
    d. The date and time of each period of excess emissions and parameter monitoring exceedances that occurs during startups, shutdowns, and malfunctions;
    e. The date and time of each time period of excess emissions and parameter monitoring exceedances during periods other than startups, shutdowns, and malfunctions;
    f. The nature of the repairs or adjustments to the continuous monitoring system that was inoperative or out of control;
    g. The total process operating time during the reporting period;
    h. All procedures that are part of the quality control program developed in accordance with paragraph (1) of permit condition 8.11;
    i. All required measurements needed to demonstrate compliance with a relevant standard including, but not limited to, 15-minute averages of continuous monitoring system data, raw performance testing measurements, and raw performance evaluation measurements that support data submitted in the semiannual report;
    j. If the owner or operator installs a continuous emissions monitoring system where the system installed is automated and the calculated data averages do not exclude periods of continuous emission monitoring system breakdown or malfunction, in lieu of maintaining a file of all continuous emission monitoring system sub-hourly measurements as required under subparagraph (6)(b) of this permit condition, the owner or operator shall retain the most recent consecutive three averaging periods of sub-hourly measurements and a file that contains a hard copy of the data acquisition system algorithm used to reduce the measured data into the reportable form of the standard. An automated continuous emission monitoring system records and reduces

the measured data to the form of the pollutant emission standard through the use of a computerized data acquisition system;

k. If the owner or operator installs a continuous emissions monitoring system where the measured data is manually reduced to obtain the reportable form of the standard and where the calculated data averages do not exclude periods of continuous emissions monitoring system breakdown or malfunction, in lieu of maintaining a file of all continuous emissions monitoring system sub-hourly measurements as required under subparagraph (6)(b) of this permit condition, the owner or operator shall retain all sub-hourly measurements for the most recent reporting period. The sub-hourly measurements shall be retained for 120 days from the date of the most recent summary or excess emission report;

l. All results of performance tests and continuous monitoring system performance evaluations;

m. All measurements as may be necessary to determine the conditions of performance tests and performance evaluations;

n. All continuous monitoring system calibration checks; and

o. All adjustments and maintenance performed on the continuous monitoring system;

p. Previous versions of the performance evaluation plan as required in permit condition 8.11; and

q. Requests for alternatives to the relative accuracy test for the continuous monitoring system as required in permit condition 8.11.

7. Records required in permit condition 8.15 to show continuous compliance with the emission limits in permit condition 8.2 and operating limits in permit condition 8.3.

All records shall be maintained in a form suitable and readily available for expeditious review for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site.

8.21 Circumvention not allowed

In accordance with ARSD 74:36:08:03, as referenced to 40 CFR § 63.4(b), no owner or operator shall build, erect, install, or use any article, machine, equipment, or process to conceal an emission that would otherwise constitute noncompliance with a relevant standard. Such concealment includes, but is not limited to the use of diluents to achieve compliance with a relevant standard based on the concentration of a pollutant in the effluent discharged to the atmosphere.

8.22 Installation of a non re-settable clock on the non-emergency generator

In accordance with ARSD 74:36:04:15(9), the owner or operator shall install a non re-settable clock on the non-emergency generator and continuously record the hours of operation.

9.0 Recommendation

A review of this facility indicates it can operate in compliance with South Dakota's Air Pollution Control rules and the federal Clean Air Act. The Secretary, therefore, recommends that the Board of Minerals and Environment issue this minor air quality operating permit with conditions to ensure compliance with SDCL 34A-1 and the federal Clean Air Act. Any questions pertaining to the Secretary's recommendation should be directed to April Soukup, Engineer I, at (605) 773-4051.