

Permit #: 28.2201-06
Effective Date: November 10, 2016
Expiration Date: November 10, 2021



**SOUTH DAKOTA DEPARTMENT OF
ENVIRONMENT AND NATURAL RESOURCES
TITLE V AIR QUALITY OPERATING PERMIT**

A handwritten signature in black ink, appearing to read "S. M. Pirner".

**Steven M. Pirner, P.E., 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 unit(s) at the location designated below and under the listed conditions:

A. Owner

1. Company Name and Mailing Address

South Dakota State University
Facilities and Services Box 2150
Brookings, SD 57007

2. Actual Source Location if Different from Above

South Dakota State University
Rotunda Lane - SDSU
Brookings, SD 57007

3. Permit Contact

Dean Kattelman, Assistant Vice President
(605) 688-4136

4. Facility Contact

Barry Mielke, Director of Energy Systems
(605) 688-4136

5. Responsible Official

Wesley Tschetter, Vice President for Finance and Business/CFO
(605) 688-4920

B. Permit Revisions or Modifications

Not applicable

C. Type of Operation

South Dakota State University operates an incinerator, boilers, and emergency generators

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1.0 Standard Conditions

1.1 Operation of source

In accordance with Administrative Rules of South Dakota (ARSD) 74:36:05:16.01(8), 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 February 16, 2012, 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(s)
#2	Boiler #5 – 1960 Babcock & Wilcox steam boiler with spreader stoker dump grates, model #FP-18-N44, fired with natural gas	50 million Btus per hour heat output	Mechanical collector, 1992 Zurn cyclone and 1992 Zurn pulse jet type baghouse
#3	Boiler #6 – 1968 Babcock & Wilcox steam boiler with spreader stoker dump grates, model #FP-18-NAA, fired with natural gas	50.0 million Btus per hour heat output	Mechanical collector, 1992 Zurn cyclone and 1992 Zurn pulse jet type baghouse
#5	Boiler #8 – 1999 Johnston steam boiler, model #PFTA-1500-4LG150S, equipped with a low NOx burner. The unit is fired with natural gas and distillate oil	1,500 horsepower	Not applicable
#6	1994 ADR Advanced Combustion Systems single chambered incinerator, model #CA-1000, fired with natural gas	200 pounds per hour	Not applicable
#7	Boiler #9 – 2012 Victory Energy steam boiler, model D Type Water Tube DT-3-64, equipped with a low NOx burner and flue gas recirculation. The unit is fired with natural gas and distillate oil	76.2 million Btu per hour heat input	Not applicable
#8	Boiler #10 – 2012 Victory Energy steam boiler, model D Type Water Tube DT-2-44, equipped with a low NOx burner and flue gas recirculation. The unit is fired with natural gas and distillate oil	41.1 million Btu per hour heat input	Not applicable
#9	Administration East – 2011 Generac emergency generator fired with natural	150 kilowatts	Not applicable

Unit	Description	Maximum Operating Rate	Control Device(s)
	gas		
#10	Administration West – 2011 Generac emergency generator fired with natural gas	170 kilowatts	Not applicable
#13	Animal Science Complex #2 – 2013 Generac emergency generator fired with diesel	60 kilowatts	Not applicable
#15	Daktronics Engineering Hall #1 – 2008 Yamaha emergency generator fired with natural gas	3.5 kilowatts	Not applicable
#16	Daktronics Engineering Hall #2 – 2008 Yamaha emergency generator fired with natural gas	6 kilowatts	Not applicable
#17	Daktronics Engineering Hall #3 – 2008 Kohler emergency generator fired with natural gas	12 kilowatts	Not applicable
#18	Daktronics Engineering Hall #4 – 2010 Kohler emergency generator fired with natural gas	15 kilowatts	Not applicable
#19	Facilities and Services – 1989 Kohler emergency generator fired with diesel	200 kilowatts	Not applicable
#25	SDSU UPD & Stadium – 2014 Caterpillar emergency generator fired with diesel	200 kilowatts	Not applicable
#26	Swine Unit – 2016 MTU Onsite Power emergency generator fired with diesel	80 kilowatts	Not applicable
#27	Cow/Calf Unit – 2013 Kohler emergency generator fired with diesel	62 kilowatts	Not applicable

1.2 Duty to comply

In accordance with ARSD 74:36:05:16.01(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.

1.3 Property rights or exclusive privileges

In accordance with ARSD 74:36:05:16.01(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 (S13L) 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 S13L 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 74:36:05:16.01(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 74:36:05:46, the Secretary may recommend the Board of Minerals and Environment terminate, modify, or revoke this permit for violations of S13L 34A-1 or the federal Clean Air Act or for nonpayment of any outstanding fee or enforcement penalty.

1.8 Credible evidence

In accordance with ARSD 74:36:13:07, credible evidence may be used for the purpose of establishing whether the owner or operator has violated or is in violation of this permit. Credible evidence may consist of the following:

1. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred:
 - a. A monitoring method approved pursuant to 40 CFR § 70.6(a)(3) and incorporated in

- this permit; or
- b. Compliance methods specified in an applicable plan;
2. The following testing, monitoring, or information gathering methods are presumptively credible testing, monitoring, or information-gathering methods:
 - a. Any monitoring or testing methods approved in this permit, including those in 40 CFR Parts 51, 60, 61, and 75; or
 - b. Other testing, monitoring, or information-gathering methods that produce information comparable to that produced by any method in paragraph (1) or (2)(a).

2.0 Permit Fees

2.1 Annual air fee required

In accordance with ARSD 74:36:05:06.01, the owner or operator shall submit an annual administrative fee and an annual fee. The fee is based on actual emissions in accordance with ARSD 74:37.

2.2 Annual operational report

In accordance with ARSD 74:37:01:06, the Secretary will supply the owner or operator with an annual operational report in January of each year. The owner or operator shall complete and submit the operational report to the Secretary by March 1 of each year. The responsible official shall sign the operational report in the presence of a notary public.

2.3 Annual air fee

In accordance with ARSD 74:37:01:08, the Secretary will notify the owner or operator of the required annual air emission fee and administrative fee by June 1 of each year. The fees shall accrue on July 1 and are payable to the Department of Revenue by July 31 of each year.

3.0 Permit Amendments and Modifications

3.1 Permit flexibility

In accordance with ARSD 74:36:05:30, 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.

3.2 Administrative permit amendment

In accordance with ARSD 74:36:05:33, the Secretary has 60 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.

3.3 Minor permit amendment

In accordance with ARSD 74:36:05:38, the Secretary has 90 days from receipt of a written notice or 15 days after the end of EPA's 45-day review period, whichever is later, 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 ARSD 74:36:05:35, 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.

3.4 Permit modification

In accordance with ARSD 74:36:05:39, 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.

3.5 Permit revision

In accordance with ARSD 74:36:05:40, the Secretary may reopen and revise this permit to meet requirements of S13L 34A-1 or the federal Clean Air Act. In accordance with ARSD 74:36:05:41, 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.

3.6 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.

4.0 Permit Renewal

4.1 Permit effective

In accordance with ARSD 74:36:05:07, this permit shall expire five years from date of issuance unless reopened or terminated for cause. The current permit shall not expire and shall remain in effect until the Secretary takes final action on the renewal application.

4.2 Permit renewal

In accordance with ARSD 74:36:05:08, the owner or operator shall submit an application for a permit renewal at least 180 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.

4.3 Permit expiration

In accordance with ARSD 74:36:05:28, permit expiration terminates the owner's or operator's right to operate any unit covered by this permit.

5.0 Recordkeeping and Reporting

5.1 Recordkeeping and reporting

In accordance with ARSD 74:36:05:16.01(9), 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

5.2 Signatory requirements

In accordance with ARSD 74:36:05:12 and 74:36:05:16.01, 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.

5.3 Certification statement

In accordance with ARSD 74:36:05:16.01(14)(a), 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.”

5.4 Monitoring log

In accordance with ARSD 74:36:05:16.01(9), the owner or operator shall maintain a monitoring log. The monitoring log shall contain the following information.

1. Maintenance schedule for each piece of control equipment listed in Table 1-1. At a minimum, the maintenance schedule shall meet the manufacturer’s recommended schedule for maintenance. The following information shall be recorded for maintenance:
 - a. Identify the unit;
 - b. The date and time maintenance was performed;
 - c. Description of the type of maintenance;
 - d. Reason for performing maintenance; and
 - e. Signature of person performing maintenance;

2. Identify each unit subject to an opacity limit in Chapter 6.0 and if the unit operates on a monthly or more frequent basis, quarterly basis, semiannual basis, or annual basis.
3. The following information shall be recorded for each visible emission reading required in permit condition 8.1:
 - a. The date and time the visible emission reading was performed;
 - b. If visible emissions were observed;
 - c. Description of maintenance performed to eliminate visible emissions;
 - d. Visible emission evaluation if visible emissions are not eliminated; and
 - e. Signature of person performing visible emission reading and/or visible emission evaluation; and
4. The following information shall be recorded within two days of each emergency exceedance:
 - a. The date of the emergency exceedance and the date the emergency exceedance was reported to the Secretary;
 - b. The cause(s) of the emergency;
 - c. The reasonable steps taken to minimize the emissions during the emergency; and
 - d. A statement the permitted equipment was at the time being properly operated.

5.5 Annual records

In accordance with ARSD 74:36:05:16.01(9), the owner or operator shall calculate and record the following amounts from January 1 to December 31 of each year:

1. The amount of natural gas burned in each unit, in million cubic feet;
2. The amount of distillate oil burned in each unit, in gallons;
3. The amount of waste burned in Unit #6, in tons; and
4. The number of hours each unit operated during the year.

5.6 Annual compliance certification

In accordance with ARSD 74:36:05:16.01(14), the owner or operator shall submit an annual compliance certification letter to the Secretary by March 1 of each year this permit is in effect (NOTE: The Secretary will forward a copy of the certification letter to EPA). The certification shall contain the following information:

1. Methods used to determine compliance, including: monitoring, recordkeeping, performance testing and reporting requirements;
2. The source is in compliance and will continue to demonstrate compliance with all applicable requirements;
3. In the event the source is in noncompliance, a compliance plan that indicates how the source has or will be brought into compliance; and
4. Certification statement required in permit condition 5.3.

5.7 Reporting permit violations

In accordance with ARSD 74:36:05:16.01(9), 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.

6.0 Control of Regulated Air Pollutants

6.1 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. The visibility limit is not applicable to Unit #8. This provision does not apply when the presence of uncombined water is the only reason for failure to meet the requirement.

6.2 Visibility exceedances

In accordance with ARSD 74:36:12:02, an exceedance of the opacity limit in permit condition 6.1 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.

6.3 Total suspended particulate matter limits

In accordance with ARSD 74:36:06:02(1) and ARSD 74:36:06:03(1), the owner or operator shall not allow the emission of total suspended particulate matter in excess of the emission limit specified in Table 6-1 for the appropriate permitted unit, operation, and process.

Table 6-1 – Total Suspended Particulate Matter Emission Limit

Unit	Description	Emission Limit
#2	Boiler #5	0.5 pounds per MMBtus
#3	Boiler #6	0.5 pounds per MMBtus
#5	Boiler #8	0.5 pounds per MMBtus
#6	Incinerator	0.5 pounds per hour
#7	Boiler #9	0.5 pounds per MMBtus

Unit	Description	Emission Limit
#9	Administration East – Emergency generator	0.6 pounds per MMBtus
#10	Administration West – Emergency generator	0.6 pounds per MMBtus
#15	Daktronics Engineering Hall #1 – Emergency generator	0.6 pounds per MMBtus
#16	Daktronics Engineering Hall #2 – Emergency generator	0.6 pounds per MMBtus
#17	Daktronics Engineering Hall #3 – Emergency generator	0.6 pounds per MMBtus
#18	Daktronics Engineering Hall #4 – Emergency generator	0.6 pounds per MMBtus
#19	Facilities and Services – Emergency generator	0.6 pounds per MMBtus

6.4 Sulfur dioxide limits

In accordance with ARSD 74:36:06:02(2) and ARSD 74:36:06:03(2), the owner or operator shall not allow the emission of sulfur dioxide in excess of the emission limit specified in Table 6-2 for the appropriate permitted unit, operations, and process.

Table 6-2 – Sulfur Dioxide Emission Limit

Unit	Description	Emission Limit
#2	Boiler #5	3.0 pounds per million Btu heat input
#3	Boiler #6	3.0 pounds per million Btu heat input
#6	Incinerator	3.0 pounds per million Btu heat input
#9	Administration East – Emergency generator	3.0 pounds per million Btu heat input
#10	Administration West – Emergency generator	3.0 pounds per million Btu heat input
#15	Daktronics Engineering Hall #1 – Emergency generator	3.0 pounds per million Btu heat input
#16	Daktronics Engineering Hall #2 – Emergency generator	3.0 pounds per million Btu heat input
#17	Daktronics Engineering Hall #3 – Emergency generator	3.0 pounds per million Btu heat input
#18	Daktronics Engineering Hall #4 – Emergency generator	3.0 pounds per million Btu heat input
#19	Facilities and Services – 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.

6.5 Air emission exceedances – emergency conditions

In accordance with ARSD 74:36:05:16.01(18), the Secretary will allow for an unavoidable emission exceedance of a technology-based emission limit if the exceedance is caused by an emergency condition and immediate action is taken by the owner or operator to restore the operations back to normal. An emergency condition is a situation arising from a sudden and reasonably unforeseeable event beyond the control of the owner or operator, including acts of God. An emergency shall not include an emission exceedance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error. The owner or operator shall notify the Secretary within two working days of the incident and take all steps possible to eliminate the excess emissions. The notification must

provide a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. If the notification is submitted orally, a written report summarizing the information required by the notification shall be submitted and postmarked within 30 days of the oral notification

6.6 Circumvention not allowed

In accordance with ARSD 74:36:07:01, as referenced to 40 CFR § 60.12, 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.

6.7 Minimizing emissions

In accordance with ARSD 74:36:07:01, as referenced to 40 CFR § 60.11(d), the owner or operator shall at all times, when practicable, maintain and operate all permitted units in a manner that minimizes air pollution emissions

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 74:36:05:16.01(9), 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 Monitoring

8.1 Periodic opacity monitoring

In accordance with ARSD 74:36:05:16.01(9), the owner or operator shall demonstrate compliance with the opacity limits in permit condition 6.1 on a periodic basis. Periodic monitoring for units that operate on a monthly or more frequent basis shall be based on Step 1 and 2.

Step 1: Periodic monitoring shall consist of a visible emission reading. A visible emission reading shall consist of a visual survey of each unit over a two-minute period to identify if there are visible emissions. The visible emission reading must be conducted while the unit is in operation; but not during periods of startup, shutdown, or malfunctions. Visible emission

readings shall be based on the following frequency:

- a. The owner or operator shall conduct a visible emission reading once per calendar month;
- b. If no visible emissions are observed from a unit in six consecutive monthly visible emission readings, the owner or operator may decrease the frequency of readings from monthly to semiannually for that unit; or
- c. If no visible emissions are observed from a unit in two consecutive semiannual visible emission readings, the owner or operator may decrease the frequency of testing of readings from semiannually to annually for that unit.

Step 2: If visible emissions are observed during a visible emission reading required in Step 1 from a unit at any time other than periods of startup, shutdown, or malfunction, the owner or operator shall conduct a visible emission test to determine if the unit is in compliance with its applicable opacity limit. The visible emission test shall be for at least six minutes and conducted in accordance with 40 CFR Part 60, Appendix A, Method 9. The visible emission test must be conducted while the unit is in operation; but not during periods of startup, shutdown, or malfunctions. Visible emission tests shall be based on the following frequency:

- a. The visible emission test must be conducted within one hour of witnessing a visible emission from a unit;
- b. If the visible emission test required in Step 2(a) results in an opacity value less than or equal to 50 percent of the opacity limit for the unit, the owner or operator shall perform a visible emission test once per month;
- c. If the opacity value of a visible emission test in Step 2(b) is less than five percent for three straight monthly tests, the owner or operator may revert back to monthly visible emission readings as required in Step 1(a);
- d. If the visible emission test required in Step 2(a) results in an opacity value greater than 50 percent of the opacity limit but less than the opacity limit, the owner or operator shall perform a visible emission test once per week; or
- e. If the visible emission test in Step 2(d) results in an opacity value less than or equal to 50 percent of the opacity limit for four straight weekly readings, the owner or operator may revert back to a monthly visible emission test as required in Step 2(b).

Periodic monitoring for units that operate on a quarterly shall be based on Step 3.

Step 3: For units that operate on a quarterly basis, monitoring shall consist of the following:

- a. Monitoring shall consist of a visible emission reading once per quarter. A visible emission reading shall consist of a visual survey of the unit over a two-minute period to identify if there are visible emissions. The visible emission reading must be conducted while the unit is in operation; but not during periods of startup, shutdown, or malfunctions;
- b. If visible emissions are observed from a unit at any time other than periods of startup, shutdown, or malfunction, the owner or operator shall conduct a visible emission test

on that unit to determine if the unit is in compliance with its opacity limit. The visible emission test must be conducted within one hour of witnessing visible emissions from the unit during a visible emission reading. The visible emission test shall be for at least six minutes and conducted in accordance with 40 CFR Part 60, Appendix A, Method 9. The visible emission test must be conducted while the unit is in operation; but not during periods of startup, shutdown, or malfunctions.

Periodic monitoring for units that operate on a semiannual or annual basis shall be based on Step 4.

Step 4: For units that operate on a semiannual or annual basis, monitoring shall consist of the following:

- a. Monitoring shall consist of a visible emission reading once per year. A visible emission reading shall consist of a visual survey of the unit over a two-minute period to identify if there are visible emissions. The visible emission reading must be conducted while the unit is in operation; but not during periods of startup, shutdown, or malfunctions;
- b. If visible emissions are observed from a unit at any time other than periods of startup, shutdown, or malfunction, the owner or operator shall conduct a visible emission test on that unit to determine if the unit is in compliance with its opacity limit. The visible emission test must be conducted within one hour of witnessing visible emissions from the unit during a visible emission reading. The visible emission test shall be for at least six minutes and conducted in accordance with 40 CFR Part 60, Appendix A, Method 9. The visible emission test must be conducted while the unit is in operation; but not during periods of startup, shutdown, or malfunctions.

The person conducting the visible emission reading does not have to be certified in accordance with 40 CFR Part 60, Appendix A, Method 9. The person conducting the visible emission test must be certified in accordance with 40 CFR Part 60, Appendix A, Method 9. If a visible emission test is required before a person is certified in accordance with permit condition 8.2, the owner or operator shall notify the Secretary within 24 hours of observing the visible emissions to schedule a visible emission test performed by a state inspector.

8.2 Certified personnel – visible emission tests

In accordance with ARSD 74:36:13:07, within 180 days after permit issuance the owner or operator shall retain a person that is certified to perform a visible emission test in accordance with 40 CFR Part 60, Appendix A, Method 9. The owner or operator shall retain a certified person throughout the remaining term of this permit.

9.0 Co-Fired Combustor Exemption (Unit #6)

9.1 Co-fired combustor limit for Unit #6

In accordance with ARSD 74:36:07:06.01, as referenced to 40 CFR § 60.32e(c), the owner or

operator shall not burn hospital and/or medical/infectious waste in Unit #6 at a rate greater than 10% by weight on a calendar quarter basis. For purposes of this definition, pathological waste, chemotherapeutic waste, and low-level radioactive waste are not considered hospital and/or medical/infectious wastes when calculating the percentage of hospital waste and medical/infectious waste combusted.

“Hospital waste” means discards generated at a hospital, except unused items returned to the manufacturer. The definition of hospital waste does not include human corpses, remains, and anatomical parts that are intended for interment or cremation.

“Medical/infectious waste” means any waste generated in the diagnosis, treatment, or immunization of human beings or animals, in research pertaining thereto, or in the production or testing of biologicals that are listed below:

1. Cultures and stocks of infectious agents and associated biologicals, including: Cultures from medical and pathological laboratories; cultures and stocks of infectious agents from research and industrial laboratories; wastes from the production of biologicals; discarded live and attenuated vaccines; and culture dishes and devices used to transfer, inoculate, and mix cultures;
2. Human pathological waste, including tissues, organs, and body parts and body fluids that are removed during surgery or autopsy, or other medical procedures, and specimens of body fluids and their containers;
3. Human blood and blood products including:
 - a. Liquid waste human blood;
 - b. Products of blood;
 - c. Items saturated and/or dripping with human blood; or
 - d. Items that were saturated and/or dripping with human blood that are now caked with dried human blood; including serum, plasma, and other blood components, and their containers, which were used or intended for use in either patient care, testing and laboratory analysis or the development of pharmaceuticals. Intravenous bags are also included in this category.
4. Sharps that have been used in animal or human patient care or treatment or in medical, research, or industrial laboratories, including hypodermic needles, syringes (with or without the attached needle), pasteur pipettes, scalpel blades, blood vials, needles with attached tubing, and culture dishes (regardless of presence of infectious agents). Also included are other types of broken or unbroken glassware that were in contact with infectious agents, such as used slides and cover slips;
5. Animal waste including contaminated animal carcasses, body parts, and bedding of animals that were known to have been exposed to infectious agents during research (including research in veterinary hospitals), production of biologicals or testing of pharmaceuticals;
6. Isolation wastes including biological waste and discarded materials contaminated with blood, excretions, exudates, or secretions from humans who are isolated to protect others from certain highly communicable diseases, or isolated animals known to be infected with highly communicable diseases; and

7. Unused sharps including the following unused, discarded sharps: hypodermic needles, suture needles, syringes, and scalpel blades.

The definition of medical/infectious waste does not include hazardous waste identified or listed under the regulations in 40 CFR Part 261; household waste, as defined in 40 CFR § 261.4(b)(1); ash from incineration of medical/infectious waste, once the incineration process has been completed; human corpses, remains, and anatomical parts that are intended for interment or cremation; and domestic sewage materials identified in 40 CFR § 261.4(a)(1).

9.2 Secondary chamber temperature requirements.

In accordance with ARSD 74:36:05:16.01(8), the owner or operator shall maintain a temperature at or above 1,800 degrees Fahrenheit in the secondary chamber at all times during the operation of the incinerator. This includes prior to loading the primary chamber, loading the primary chamber, and until all waste is completely combusted.

9.3 Retention time

In accordance with ARSD 74:36:05:16.01(8), the secondary chamber in Unit #6 shall be designed and maintained to provide turbulent mixing of the exhaust gases and maintain the exhaust gases at a temperature of at least 1,800 degrees Fahrenheit for a minimum of a one-second retention time. The one-second retention time shall be measured from the location of the secondary chamber burner to the location of the thermocouple that measures the temperature in the secondary chamber.

9.4 Waste loading

In accordance with ARSD 74:36:05:16.01(8), the waste charging system for Unit #6 shall prevent the disruption of the combustion process as waste is charged and prevent overcharging to assure complete combustion of the waste. The continuous waste charging system for Unit #6 shall be equipped with a lock-out mechanism to prevent the charging of the primary chamber until the secondary chamber temperature is established and holding at 1,800 degrees Fahrenheit and automatically stops charging if the secondary temperature drops below 1,800 degrees Fahrenheit for any continuous 15 minute period.

9.5 Quarterly records

In accordance with ARSD 74:36:07:06.01, as referenced to 40 CFR § 60.32e(c)(3), the owner or operator shall maintain records on a calendar quarter basis of the weight of hospital waste and medical/infectious waste combusted and the weight of all other fuels and wastes combusted in Unit #6.

9.6 Monitoring Unit #6 temperatures

In accordance with ARSD 74:36:05:16.01(9) and ARSD 74:35:01:19, the owner or operator shall install, calibrate, operate, and maintain a device that continuously monitors and records the primary and secondary chamber temperatures of Unit #6. The device must have an accuracy of the greater of plus or minus 0.75 percent of the measured temperature or 2.5 degrees Celsius. The device shall be operational at all times when Unit #6 is operational. If the continuous monitoring or recording equipment is not functional for more than one hour, the owner or

operator shall discontinue charging the incinerator and will shut down the incinerator once all combustibles are combusted. The incinerator will not be used again until the continuous monitor and recorder are operational.

9.7 Hospital and medical/infectious waste incinerator exemption

In accordance with ARSD 74:36:07:06.01, as referenced to 40 CFR § 60.32e(c), the owner or operator is exempt from complying with 40 CFR Part 60, Subpart Ce. Any relaxation in this permit may require a permit modification to include the requirements in 40 CFR Part 60, Subpart Ce.

10.0 Emergency Generator (Unit #13, #25, #26, and #27)

10.1 Emergency engine emission limits

In accordance with ARSD 74:36:07:88, as referenced to 40 CFR §§ 60.4205(b) and 60.4206, the owner or operator shall operate and maintain the emergency engine that achieves the emission limits in Table 10-1 over the entire life of the emergency engine.

Table 10-1 – Emission Limits for Emergency Engines (grams per kilowatt-hour)

Unit	Nonmethane Hydrocarbon + Nitrogen Oxide	Carbon Monoxide	Particulate Matter
#13	4.7	5.0	0.40
#25	4.0	3.5	0.20
#26	4.0	5.0	0.30
#27	4.7	5.0	0.40

In addition, the exhaust gases from the emergency engine, except single-cylinder engines and constant-speed engines, shall not exceed the following opacity levels:

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.

10.2 Fuel requirements for Unit #13, #25, #26, and #27

In accordance with ARSD 74:36:07:88, as referenced to 40 CFR § 60.4207(b), the owner or operator shall only combust diesel fuel in the 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.

The owner or operator may use any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, until depleted.

10.3 Operating requirements for Unit #13, #25, #26, and #27

In accordance with ARSD 74:36:07:88, as referenced to 40 CFR § 60.4211(a), the owner or operator shall comply with the following, except as specified in permit condition 10.6:

1. Operate and maintain the engine according to the manufacturer's emission-related written instructions;
2. Change only those emission-related settings permitted by the manufacturer; and
3. Meet the applicable requirements in 40 CFR Part 89, 94, and/or 1068.

10.4 Compliance with Unit #13, #25, #26, and #27 emission limits

In accordance with ARSD 74:36:07:88, as referenced to 40 CFR § 60.4211(c), the owner or operator shall demonstrate compliance with the emission limits in permit condition 10.1 by purchasing an engine certified to meet the emission limits in permit condition 10.1 and install and configure the engine according to the manufacturer's emission-related specifications, except as permitted in permit condition 10.6.

10.5 Annual operation of Unit #13, #25, #26, and #27

In accordance with ARSD 74:36:07:88, as referenced to 40 CFR § 60.4211(f), the owner or operator shall operate the emergency engine as follows:

1. There is no time limit on the use of emergency engine in emergency situations;
2. The owner or operator may operate the emergency engine for any combination of the following purposes for a maximum of 100 hours per calendar year:
 - a. Emergency engines may be operated for maintenance checks and readiness testing, provided the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Secretary 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 federal, state, or local standards require maintenance and testing of the emergency engine beyond 100 hours per calendar year;
 - b. Emergency engines may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies, or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3; and
 - c. Emergency engines may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency;
3. Emergency engines may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year provided in paragraph (2) of this permit condition. The 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for the

owner or operator to an electric grid or otherwise supply power as part of a financial arrangement with another entity, except if all of the following are met:

- a. The engine is dispatched by the local balancing authority or local transmission and distribution system operator;
- b. The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region;
- c. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines;
- d. The power is provided only to the owner or operator itself or to support the local transmission and distribution system; and
- e. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the owner or operator.

10.6 Alternative requirements for Unit #13, #25, #26, and #27

In accordance with ARSD 74:36:07:88, as referenced to 40 CFR § 60.4211(g), if the owner or operator does not install, configure, operate, and maintain the emergency engine according to the manufacturer's emission-related written instructions or changes the emission-related settings in a way that is not permitted by the manufacturer, the owner or operator shall demonstrate compliance as follows:

1. Maintain a maintenance plan and records of conducted maintenance;
2. To the extent practicable, maintain and operate the generator in a manner consistent with good air pollution control practice for minimizing emissions;
3. Conduct an initial performance test to demonstrate compliance with the emission limits in Table 10-1 within 1 year of initial startup or within 1 year of such action; and
4. If the emergency engine is greater than 500 horsepower, the owner or operator shall conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable limits in Table 10-1.

10.7 Performance test requirements for Unit #13, #25, #26, and #27

In accordance with ARSD 74:36:07:88, as referenced to 40 CFR § 60.4212(a) and (c), if the owner or operator conducts a performance test to demonstrate compliance with Table 10-1, the following procedures shall be followed:

1. The performance test must be conducted according to the in-use testing procedures in 40 CFR Part 1039, Subpart F for emergency engines with a displacement of less than 10 liters per cylinder and according to 40 CFR Part 1042, Subpart F, for emergency engines with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder; and

2. Exhaust emissions from the emergency engine shall not exceed the “NTE” numerical requirements, rounded to the same number of decimal places as the applicable emission limit in Table 10-1 and determined by Equation 10-1.

Equation 10-1 – NTE formula

$$NTE = 1.25 \times STD$$

Where:

- NTE = Numerical requirement for each pollutant identified in Table 10-1; and
- STD = Emission limit for each pollutant identified in Table 10-1

10.8 Non-resettable hour meter

In accordance with ARSD 74:36:07:88, as referenced to 40 CFR § 60.4209(a) and ARSD 74:36:05:16.01(9), the owner or operator shall install, maintain, and operate a non-resettable hour meter on Unit #13, #25, #26, and #27 prior to initial startup.

10.9 Recordkeeping for Unit #13, #25, #26, and #27

In accordance with ARSD 74:36:07:88, as referenced to 40 CFR § 60.4214(b), the owner or operator shall maintain records for 2011 or later emergency engines. The owner or operator shall record the date, start time, and end time of operation using the non-resettable hour meter and the reason the engine was in operation during that time.

10.10 Annual reporting for Unit #25

In accordance with ARSD 74:36:07:88, as referenced to 40 CFR § 60.4214(d), if the owner or operator operates an emergency engine with a maximum engine power of more than 100 horsepower that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in subparagraph (2)(b) and (c) in permit condition 10.5 or that operates for the purposes specified in paragraph (3) of permit condition 10.5, the owner or operator shall submit an annual report. The annual report shall contain the following:

1. Company name and address where the engine is located;
2. Date of the report and beginning and ending dates of the reporting period;
3. Engine site rating and model year;
4. Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place;
5. Hours operated for the purposes specified in subparagraph (2)(b) and (c) in permit condition 10.5, including the date, start time, and end time;
6. Number of hours the engine is contractually obligated to be available for the purposes specified in subparagraph (2)(b) and (c) in permit condition 10.5, if applicable; and
7. Hours spent for operation for the purposes specified in paragraph (3) of permit condition 10.5, including the date, start time, and end time. The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year. The annual report must be submitted

electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time the report is due, the written report must be submitted to the Secretary.

11.0 Emergency Generator (Unit #9 and #10)

11.1 Emission limits

In accordance with ARSD 74:36:07:90, as referenced to 40 CFR §§ 60.4233(e) and 60.4234, the owner or operator shall not allow Unit #9 and #10 to exceed the emission limits in Table 11-1 over the entire life of the emergency engine.

Table 11-1 – Emission limits for the emergency engines ¹

Fuel Type	Grams per Horsepower-Hour			Parts per Million by Volume at 15% Oxygen		
	NOx ²	CO ²	VOC ^{2,3}	NOx ²	CO ²	VOC ^{2,3}
Natural Gas	2.0	4.0	1.0	160	540	86

¹ – The owner or operator may choose to comply with the emission standards in units of grams per horsepower-hour or parts per million by volume at 15 percent oxygen;

² – “NOx” means nitrogen oxide, “CO” means carbon monoxide; and “VOC” means volatile organic compounds; and

³ – When calculating emissions of volatile organic compounds, emissions of formaldehyde should not be included.

11.2 Compliance requirements for Unit #9 and #10

In accordance with ARSD 74:36:07:90, as referenced to 40 CFR § 60.4243(b), the owner or operator shall comply with the following:

1. Purchase an emergency generator certified to meet the emission in Table 11-1 and maintain a copy of the certification. The emergency generator must be installed and configured according to the manufacturer’s specifications; and
2. Operate and maintain the emergency generator according to or consistent with the manufacturer's emission-related written instructions; and
3. Maintain a maintenance plan and records of conducted maintenance.

11.3 Unit #9 and #10 operation

In accordance with ARSD 74:36:07:90, as referenced to 40 CFR § 60.4243(d), the owner or operator may operate the emergency generator for the following reasons:

1. There is no time limit on the use of emergency generators in emergency situations;
2. Emergency engines may be operated up to 100 hours per year for the following purposes:
 - a. During emergency operations and maintenance checks/readiness testing as recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company. The owner or operator may exceed the maintenance checks/readiness testing limit of 100 hours if the owner or operator maintains records

- indicating that Federal, State, or local standards require maintenance and testing of emergency generators beyond 100 hours per year;
- b. During emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3; and
 - c. During periods where there is a deviation of voltage or frequency of five percent or greater below standard violator or frequency;
3. Emergency generators 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; The 50 hours per year non-emergency situation may be used to supply power as part of a financial arrangement if all of the following conditions are met:
 - a. The engine is dispatched by the local balancing authority or local transmission and distribution system operator;
 - b. The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region;
 - c. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines;
 - d. The power is provided only to the facility itself or to support the local transmission and distribution system; and
 - e. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.
 4. Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year is prohibited.

11.4 Recordkeeping requirements for Unit #9 and #10

In accordance with ARSD 74:36:07:90, as referenced to 40 CFR § 60.4245(a), the owner or operator shall maintain the following records:

1. All notifications submitted to comply with this chapter and all documentation supporting any notification;
2. Maintenance conducted on the emergency generator; and
3. The owner operator shall maintain documentation that the emergency generator is meeting the emission standards in Table 11-1.

11.5 Installation of a non re-settable clock

In accordance with ARSD 74:36:07:90, as referenced to 40 CFR §§ 60.4237 and 60.4245(b), the owner or operator shall install a non re-settable clock on Unit #9 and #10 and continuously

record and keep records of the hours of operation.

12.0 SUBPART JJJJ – Emergency Engine (Units #15, #16, #17, and #18)

12.1 Emission limits

In accordance with ARSD 74:36:07:90, as referenced to 40 CFR §§ 60.4231(a) and 60.4234, the owner or operator shall not allow emissions from Units #15, #16, #17, and #18 to exceed the emission limits in Table 12-1 over the entire life of the emergency engine.

Table 12-1 – Emission limits for Units #15, #16, #17, and #18

Unit	Grams per Kilowatt-Hour	
	HC + NOx ¹	CO ¹
#15	13.4	519
#16	13.4	519
#17	13.4	519
#18	13.4	519

¹ – “HC + NOx” means hydrocarbons + oxides of nitrogen and “CO” means carbon monoxide.

12.2 Compliance options

In accordance with ARSD 74:36:07:90, as referenced to 40 CFR § 60.4243(a), the owner or operator shall comply with one of the following:

1. Operate and maintain Units #15, #16, #17, and #18 and associated control device(s) according to the manufacturer's emission-related written instructions and meet the applicable requirements as specified in 40 CFR Part 1068, Subparts A through D; and
2. If the owner or operator does not operate and maintain Units #15, #16, #17, and #18 and associated control device(s) according to the manufacturer's emission-related written instructions, Units #15, #16, #17, and #18 will be considered a non-certified engine and the owner or operator shall keep a maintenance plan and records of conducted maintenance to demonstrate compliance and shall, to the extent practicable, maintain and operate Units #15, #16, #17, and #18 in a manner consistent with good air pollution control practice for minimizing emissions.

12.3 Emergency generator operation

In accordance with ARSD 74:36:07:90, as referenced to 40 CFR § 60.4243(d), the owner or operator may operate Units #15, #16, #17, and #18 for the following reasons:

1. There is no time limit on the use of Unit # in emergency situations;
2. Units #15, #16, #17, and #18 may be operated up to 100 hours per year for the following purposes:
 - a. During emergency operations and maintenance checks/readiness testing as recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company. The owner or operator may exceed the maintenance

- checks/readiness testing limit of 100 hours if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency generators beyond 100 hours per year;
- b. During emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3; and
 - c. During periods where there is a deviation of voltage or frequency of five percent or greater below standard violator or frequency.
3. Units #15, #16, #17, and #18 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; The 50 hours per year non-emergency situation may be used to supply power as part of a financial arrangement if all of the following conditions are met:
- a. The engine is dispatched by the local balancing authority or local transmission and distribution system operator;
 - b. The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region;
 - c. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines;
 - d. The power is provided only to the facility itself or to support the local transmission and distribution system; and
 - e. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.
4. Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year is prohibited.

12.4 Recordkeeping requirements

In accordance with ARSD 74:36:07:90, as referenced to 40 CFR § 60.4245(a), the owner or operator shall maintain the following records:

1. All notifications submitted to comply with this chapter and all documentation supporting any notification;
2. Maintenance conducted on Units #15, #16, #17, and #18; and
3. Documentation that Units #15, #16, #17, and #18 are certified to meet the emission limits in Table 12-1.

12.5 Installation of a non re-settable clock

In accordance with ARSD 74:36:07:90, as referenced to 40 CFR § 60.4237(c), the owner or

operator shall install a non re-settable hour meter on Units #15, #16, #17, and #18.

13.0 Boiler NSPS Requirements (Unit #5, #7, and #8)

13.1 Sulfur limit for diesel

In accordance with ARSD 74:36:07:05, as referenced to 40 CFR § 60.42c(d), (h)(1), and (i), the owner or operator shall not combust diesel in Unit #5, #7, and #8 that contains greater than 0.5 weight percent sulfur. Compliance with the diesel sulfur limit shall be determined based on a certification from the fuel supplier that includes the information identified in permit condition 13.3. The diesel sulfur limit applies at all times, including periods of startup, shutdown, and malfunctions.

13.2 Visibility limit for Unit #5 (Boiler #8)

In accordance with ARSD 74:36:07:05, as referenced to 40 CFR § 60.43c(c) and (d), the owner or operator may not discharge into the ambient air from Boiler #8 an air contaminant of a density equal to or greater than that designated as 20 percent opacity, except for one 6-minute period per hour of not more than 27 percent opacity. This opacity limit applies at all times, except during periods of startup, shutdown, or malfunctions.

13.3 Diesel supplier certification

In accordance with ARSD 74:36:07:05, as referenced to 40 CFR § 60.48c(f)(1), the owner or operator shall obtain a fuel supplier certification for each load of diesel purchased or received. The fuel supplier certification shall include the following information:

1. The name of the fuel supplier;
2. A statement from the fuel supplier the diesel complies with the specifications under the definition of distillate oil given in permit condition 13.7; and
3. A statement that the sulfur content of the diesel does not exceed 0.5 weight percent sulfur.

13.4 Natural gas supplier certification

In accordance with ARSD 74:36:07:05, as referenced to 40 CFR § 60.48c(f)(4), the owner or operator shall maintain the following natural gas fuel supplier information:

1. The name of the fuel supplier;
2. The potential sulfur emissions rate or maximum potential sulfur emissions rate of the natural gas in nanogram per Joules heat input; and
3. The method used to determine the potential sulfur emissions rate of the natural gas.

13.5 Recordkeeping requirements for boiler

In accordance with ARSD 74:36:07:05, as referenced to 40 CFR § 60.48c(g) and (i), the owner or operator shall maintain the following records:

1. Each fuel supplier certification;

2. A copy of the initial startup notification;
3. A copy of each semiannual report; and
4. Records of the amount of each fuel combusted during each calendar month; or
5. Records of the total amount of each fuel delivered to the property during each calendar month.

All records shall be maintained for a period of two years following the date of such record.

13.6 Semiannual reporting for boiler

In accordance with ARSD 74:36:07:05, as referenced to 40 CFR § 60.48c(d), (e), and (j), the owner or operator shall submit a semiannual report to the Secretary. The semiannual reports shall contain the following information:

1. Name of facility, permit number, reference to this permit condition, identifying the submittal as a semiannual report, and the calendar dates covered in the reporting period;
2. Copies of the fuel supplier certification for each load of diesel purchased or received during the reporting period. If no diesel is purchased or received during the reporting period, a statement that no diesel was purchased or received shall be included;
3. A certified statement signed by the owner or operator that the records of fuel supplier certifications submitted represent all of the diesel combusted during the reporting period.

The semiannual reports must be postmarked no later than 30 days after the end of the reporting period (e.g., July 30th and January 30th).

13.7 Changing boiler fuel

In accordance with ARSD 74:36:07:05, as referenced to 40 CFR § 60.40c, Unit #5, #7, and #8 shall be fired with natural gas or diesel. If Unit #5, #7, and #8 is fueled with other fuels such as coal, other oil, or wood, additional standards and requirements in 40 CFR Part 60, Subpart 13 may apply. The owner or operator shall apply for and obtain approval from the Secretary before other fuels can be used as a fuel in Unit #5, #7, and #8.

Distillate oil means diesel that complies with the specifications for fuel oil numbers 1 or 2. Residual oil means crude oil that does not comply with the specifications under the definition of distillate oil, and all fuel oil numbers 4, 5, and 6. Specifications for fuel oils are defined in the American Society for Testing and Materials in ASTM D396-78, "Standards Specifications for Fuel Oils".