

Permit #: 28.0102-27
Effective Date: March 4, 2013
Expiration Date: January 25, 2015

The seal of the State of South Dakota is a large, circular emblem with a serrated outer edge. It features a central landscape scene with a river, trees, and mountains. The text "STATE OF SOUTH DAKOTA" is arched across the top, and "1889" is at the bottom. A banner across the middle reads "UNDER GOD THE PEOPLE RULE".

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



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

TABLE OF CONTENTS

Page

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

Black Hills Health Care System
Department of Veteran Affairs
Hot Springs Medical Center
500 North 5th Street
Hot Springs, SD 57747-1497

2. Actual Source Location if Different from Above

Same as above

3. Permit Contact

John Henderson, Engineering Program Manager
(605) 745-7257

4. Facility Contact

William Baker, Chief Facilities Management
(605) 745-2054

5. Responsible Official

William Baker, Chief Facilities Management
(605) 745-2054

B. Permit Revisions or Modifications

December 2012 - Addition of existing generators to permit.

C. Type of Operation

Steam generation for hospital, domiciliary, and out buildings.

TABLE OF CONTENTS

	Page
1.0 STANDARD CONDITIONS	1
1.2 Duty to comply	1
1.3 Property rights or exclusive privileges.....	1
1.4 Penalty for violating a permit condition	2
1.5 Inspection and entry	2
1.6 Severability	2
1.7 Permit termination, modification, or revocation	2
1.8 Credible evidence	2
2.0 PERMIT FEES	3
2.1 Annual air fee required	3
2.2 Annual operational report	3
2.3 Annual air fee	3
3.0 PERMIT AMENDMENT AND MODIFICATION CONDITIONS	3
3.1 Permit flexibility.....	3
3.2 Administrative permit amendment	3
3.3 Minor permit amendment	4
3.4 Permit modification	4
3.5 Permit revision	5
3.6 Testing new fuels or raw materials.....	5
4.0 PERMIT RENEWAL.....	5
4.1 Permit effective.....	5
4.2 Permit renewal	5
4.3 Permit expiration	5
5.0 RECORD KEEPING REQUIREMENTS	6
5.1 Record keeping and reporting	6
5.2 Signatory Requirements.....	6
5.3 Certification statement	6
5.4 Monitoring log.....	6
5.5 Annual records.....	7
5.6 Annual compliance certification.....	7
5.7 Reporting permit violations.	7
6.0 CONTROL OF REGULATED AIR POLLUTANTS	8
6.1 Visibility limit.....	8
6.2 Visibility exceedances	8
6.5 Air emission exceedances – emergency conditions	9
6.6 Circumvention not allowed	9
6.7 Minimizing emissions.....	9

TABLE OF CONTENTS

	Page
7.0 PERFORMANCE TESTS	10
7.1 Performance test may be required	10
7.2 Test methods and procedures	10
7.3 Representative performance test	10
7.4 Submittal of test plan.....	10
7.5 Notification of test.....	10
7.6 Performance test report.	10
8.0 MONITORING.....	11
8.1 Periodic monitoring for opacity limits	11
8.2 Certified personnel – visible emission tests.	12
9.0 NEW SOURCE PERFORMANCE STANDARD SUBPART Dc.....	12
9.1 Date of construction and startup notification.	12
9.2 Changing boiler fuels.....	12
9.3 Standard for sulfur dioxide.....	13
9.4 Monitoring sulfur content.	13
9.5 Records of fuel used.	13
9.6 Semi-annual report.	13
9.7 Initial performance test.	13
10.0 MACT SUBPART JJJJJ FOR BOILERS	14
10.1 Particulate matter emissions limit.	14
10.2 Work practice standard.	14
10.3 Operational limit.....	14
10.4 Site-Specific Monitoring plan.	14
10.5 Initial compliance demonstration for emission and operational limit.	15
10.6 Performance test procedures.	15
10.7 Initial compliance with work practice standard.	16
10.8 Periodic performance tests.....	16
10.9 Demonstration of continuous compliance with monitoring data.	16
10.10 Demonstration of continuous compliance with emission limit.	16
10.11 Boiler tune-up.....	17
10.12 Initial startup of boiler.	17
10.13 Notice of Compliance Status.	17
10.14 Annual compliance certification report.	18
10.15 Boiler recordkeeping requirements.....	18
10.16 Reporting electronically to EPA.	18
10.17 Asserting an affirmative defense.	19
10.18 Notification of exceedance during a malfunction.....	19
11.0 EMERGENCY GENERATOR MACT REQUIREMENTS.....	20
11.1 Date to comply with emergency generator requirements.	20

TABLE OF CONTENTS

	Page
11.2 Maintenance requirements for emergency generator.	20
11.3 Minimizing emissions from emergency generator.	20
11.4 Operate emergency generator according to manufacturer’s instructions.	20
11.5 Installation and operation of a non-resettable hour meter.	20
11.6 Minimizing startup time.	21
11.7 Alternative maintenance schedule.	21
11.8 Operation of emergency generator.	21
11.9 Recordkeeping for emergency generator.	22
11.10 Circumvention not allowed.	22

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 submitted and dated July 19, 2007, July 6, 2009, July 24, 2009, June 22, 2012, and August 1, 2012, and , unless modified by the conditions of this permit. Except as otherwise provided herein, the control equipment shall be operated in a manner that achieves compliance with the conditions of this permit at all times. The application consists of the application forms, supporting data, and supplementary correspondence. If the owner or operator becomes aware that 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
Unit #3	Boiler #3 - 1974 Nebraska boiler, water tube model, fired with distillate oil.	20.4 million Btus per hour heat input	Not Applicable
Unit #4	Boiler #4 - 2004 Hurst boiler fired with distillate oil.	7.5 million Btus per hour heat input	Not Applicable
Unit #5	Boiler #1 – 2008 Cleaver Brooks boiler, model CEW-101-500-150, fired on distillate oil	20.4 million Btus per hour heat input	Not Applicable
Unit #6	Boiler #2 -- 2011 Cleaver Brooks CEW-101-500-200ST 500 hp fired on distillate oil.	20.4 million Btus per hour heat input	Not Applicable
Unit #7	Emergency Generator #1, Gen-Dom- 1998 Generac 98A 032195 fired on distillate oil.	80 kilowatts 60 horsepower	Not Applicable
Unit #8	Emergency Generator #2, Gen-BP- 1997 Cummins Onan 230DFAB fired on distillate oil.	230 kilowatts 172 horsepower	Not Applicable
Unit #9	Emergency Generator #3, Gen-Hosp- 2001 Generac 1740510100 Type SD400 fired on distillate oil.	400 kilowatts 298 horsepower	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 that 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 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 that are 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 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 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 violation of this permit. Credible evidence is as follows:

1. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred at the source:
 - a. A monitoring method approved for the source 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 section (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 AMENDMENT AND MODIFICATION CONDITIONS

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 can not be constructed until the Secretary takes final action on the proposed change. 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 that 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 at the source;

3. Requires more frequent monitoring or reporting by the source;
4. The ownership or operational control of a source change and the Secretary determines that 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 that 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 that 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 record keeping 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 record keeping 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 that 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 SDCL 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 that describes 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 that will result 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 that 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.

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 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 RECORD KEEPING REQUIREMENTS

5.1 Record keeping 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 ARSD 74:36:05:16.01, all applications submitted to the Secretary shall be signed and certified by a responsible official. 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. All reports or other information submitted to the Secretary shall be signed and certified by a responsible official or a duly authorized representative. 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 responsible official shall notify the Secretary if an authorization is no longer accurate. The new duly authorized representative must be designated prior to or together with any reports or information to be signed by a duly authorized representative.

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;
 - e. Signature of person performing maintenance;
2. The following information shall be recorded for each visible emission reading required in permit condition 8.1:
 - a. Identify the unit;
 - b. The date and time the visible emission reading was performed;
 - c. If visible emissions were observed;
 - d. Description of maintenance performed to eliminate visible emissions;
 - e. Visible emission evaluation if visible emissions are not eliminated; and
 - f. Signature of person performing visible emission reading and/or visible emission evaluation;
 3. The owner or operator shall maintain relevant records of the occurrence and duration of each startup, shutdown, or malfunction of process equipment and/or air pollution control equipment; 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 that 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 volume of distillate oil fired in the boilers in gallons;
2. The average sulfur content of the distillate oil burned based on fuel supplier certifications; and
3. The number of hours each unit operated.

The amount distillate oil consumed shall be based on production records, consumption records, purchase records, etc.

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, record keeping, 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) 773-5286.

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. Description of the permit violation and its cause(s);
2. Duration of the permit violation, including exact dates and times; and
3. 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. 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 operating 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 of the source 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/or 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
Unit #3	1974 Nebraska boiler	0.5 pounds per million Btus
Unit #4	2004 Hurst boiler	0.6 pounds per million Btus
Unit #5	2008 Cleaver Brooks boiler	0.5 pounds per million Btus
Unit #7	Emergency Generator #1	0.6 pounds per million Btus
Unit #8	Emergency Generator #2	0.6 pounds per million Btus
Unit #9	Emergency Generator #3	0.6 pounds per million Btus

6.4 Sulfur dioxide limits.

In accordance with ARSD 74:36:06:02(2) and/or 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
Unit #3	1974 Nebraska boiler	3.0 pounds per million Btu heat input
Unit #4	2004 Hurst boiler	3.0 pounds per million Btu heat input
Unit #7	Emergency Generator #1	3.0 pounds per million Btu heat input
Unit #8	Emergency Generator #2	3.0 pounds per million Btu heat input
Unit #9	Emergency Generator #3	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 source, 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 74:36:05:47.01, 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 74:36:08:03, 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.

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 that outlines 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;
5. Quality assurance procedures and results;
6. Records of operating conditions during the test, 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 monitoring for opacity limits. In accordance with ARSD 74:36:05:16.01(9), the owner or operator shall demonstrate compliance with the opacity limits in Chapter 6.0 on a periodic basis. Periodic monitoring shall be based on the amount of visible emissions from each unit and evaluated according to the following steps:

Step 1: If there are no visible emissions from a unit subject to an opacity limit, 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 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 the opacity limit specified in Chapter 6.0. The emission test shall be for 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 during a visible emission reading;
- 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 is less than five percent for six straight monthly tests, the owner or operator may revert back to monthly visible emission readings as required in Step 1;

- d. If the visible emission test required in Steps 2(a) or 2(b) 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 six straight weekly readings, the owner or operator may revert back to a monthly visible emission test as required in Step 2(b).

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 NEW SOURCE PERFORMANCE STANDARD SUBPART Dc

9.1 Date of construction and startup notification. In accordance with ARSD 74:36:07:01 and ARSD 74:36:07:05, as referenced to 40 CFR § 60.7(a) and § 60.48c(a), the owner or operator shall submit notification of the date of construction and initial startup of Units #5 and #6. The notification shall include:

1. Name of facility, permit number, and reference to this permit condition
2. Identify the submittal as a construction or initial startup notification;
3. Identify the date of construction and/or date of initial startup, whichever notification is applicable; and
4. The design heat input capacity of Units #5 and #6 and identification of fuels to be combusted in the unit.

The notification of the date of construction or reconstruction must be postmarked no later than 30 days after construction or reconstruction commences. The initial startup notification must be postmarked within 15 days after the date of actual startup.

9.2 Changing boiler fuels. In accordance with ARSD 74:36:07:05, as referenced to 40 CFR § 60.40c, Units #5 and #6 shall be fueled distillate oil only. If the boilers are fueled with other fuels such as propane, coal, other oil, or wood, additional standards and requirements in 40 CFR Part 60, Subpart Dc 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 and #6.

Distillate oil means fuel oil that complies with the specifications for fuel oil numbers 1 or 2. Residual oil means crude oil, fuel 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".

9.3 Standard for sulfur dioxide. 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 oil that contains greater than 0.5 weight percent sulfur in Units #5 and #6. Compliance with the sulfur limit shall be determined based on a certification from the fuel supplier. The fuel certification must include the information in permit conditions 9.4.

The fuel oil sulfur limit shall apply at all times, including periods of start-up, shutdown, and malfunctions.

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

1. The name of the oil supplier;
2. A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil given in permit condition 9.2; and
3. A statement that the sulfur content of the oil does not exceed 0.5 weight percent sulfur.

9.5 Records of fuel used. In accordance with ARSD 74:36:07:05, as referenced to 40 CFR, § 60.48c(g)(2), the owner or operator shall record and maintain records of the amount of distillate oil combusted in Units #5 and #6 during each calendar month.

The records required under this Chapter must be maintained for a minimum of two years from the date of such record.

9.6 Semi-annual report. In accordance with ARSD 74:36:07:05, as referenced to 40 CFR § 60.48c(d), (e)(11), and (j), the owner or operator shall submit a semi-annual report to the Secretary. The semi-annual reports shall contain the following information:

1. Name of facility, permit number, reference to this permit condition, identifying the submittal as a semi-annual report, and the calendar dates covered in the reporting period; and
2. Copies of the fuel supplier certification, as required in permit condition 9.3, for each load of distillate oil purchased or received during the reporting period. If no distillate oil is purchased or received during the reporting period, a statement that no distillate oil was purchased or received shall be included;
3. A certified statement signed by the owner or operator of the affected facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period; and
4. The certification statement as required in permit condition 5.3.

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

9.7 Initial performance test. In accordance with ARSD 74:36:07:05, as referenced to 40 CFR § 60.44c(h), the initial performance test shall consist of the certification from the fuel supplier, as described in permit condition 9.4.

10.0 MACT SUBPART JJJJJJ FOR BOILERS

10.1 Particulate matter emissions limit. In accordance with 40 CFR § 63.11201(a) and (d), the owner or operator shall not allow emissions of particulate matter in excess of the emission limit specified in Table 10-1 for the identified boiler. The emission limit applies at all times except during periods of startup and shutdown.

Table 10-1 –Particulate Matter Emission Limit

Unit	Description	Emission Limit
#6	Boiler	0.03 pounds per million Btu heat input

10.2 Work practice standard. In accordance with 40 CFR § 63.11201(b), the owner or operator shall conduct the following work practice standards for Unit #6:

1. The owner or operator shall minimize startup and shutdown periods following the manufacturer's recommended procedures for startup and shutdown of Unit #6. If the manufacturer recommended procedures are not available, the owner or operator shall follow the recommend procedures of a similar designed boiler for which manufacturer's recommended procedures are available; and
2. The owner or operator shall conduct a biennial tune-up of Unit #6 as specified in permit condition 10.11.

10.3 Operational limit. In accordance with 40 CFR §§ 63.11201(c) and (d) and 63.11212(c), the owner or operator shall at all times maintain the operating load of the Unit #6 to less than or equal to 110 percent of the operating load recorded during the most recent performance test.

10.4 Site-Specific Monitoring plan. In accordance with 40 CFR §§ 63.11205(c) and 63.11224(c), the owner or operator shall develop and maintain a site-specific monitoring plan to demonstrate Unit #6 will not exceed 110 percent of the operating load recorded during the most recent performance test. The site-specific monitoring plan shall include the following requirements:

1. Performance and equipment specifications for the device measuring the operating load and the data collection system;
2. Performance evaluation procedures and acceptance criteria (e.g. calibrations) for the device measuring the operating load;
3. Ongoing operation and maintenance procedures in accordance with the following requirements:
 - a. Maintain the necessary parts for routine repairs of the device measuring the operating load and data collection system; and
 - b. Install, operate, and verify data as specified by the manufacturer either prior to or in conjunction with the initial performance test required in permit condition 10.5. Verification of operational status shall, at a minimum, include completion of the manufacturer's written specifications or recommendation for installation, operation, and calibration of the system;
4. Ongoing data quality assurance procedures in accordance with the following:
 - a. Initial and any subsequent calibration of the device measuring the operating load;
 - b. Preventative maintenance of the device measuring the operating load, include spare parts inventory;
 - c. Data recording and reporting;

- d. Accuracy audit procedures, including analysis methods; and
- e. Program of corrective action if the device measuring the operating load or data collection system malfunctions;
5. Ongoing recordkeeping and reporting procedures in accordance with the following:
 - a. All measurements from the device measuring the operating load;
 - b. Date and time identifying each period during which the device measuring the operating load was inoperative;
 - c. The specific identification (e.g., the date and time of commencement and completion) of each time period where the operating load exceeds 110 percent of the operating load recorded during the most recent performance test that occurs during startups, shutdowns, and malfunctions of Unit #6;
 - d. The specific identification (e.g., the date and time of commencement and completion) of each time period where the operating load exceeds 110 percent of the operating load recorded during the most recent performance test that occurs during periods other than startups, shutdowns, and malfunctions;
 - e. The nature of the repairs or adjustment of the device measuring the operating load or data collection system; and
 - f. The total operating time of Unit #6 during the reporting period.
6. The owner or operator shall conduct a performance evaluation of the device measuring the operating load in accordance with the site-specific monitoring plan; and
7. The owner or operator shall operate and maintain the device measuring the operating load in continuous operation in accordance with the site-specific monitoring plan.

The owner or operator shall submit a copy of the site-specific monitoring plan to the Secretary, upon request, for approval. The site-specific monitoring plan, if requested, shall be submitted at least 60 days prior to the initial performance evaluation of the device measuring the operating load.

10.5 Initial compliance demonstration for emission and operational limit. In accordance with 40 CFR §§ 63.11210(a) and (d), 63.11211(a), and 63.11212(c), the owner or operator shall demonstrate initial compliance with permit condition 10.1 by conducting an initial particulate matter performance test in accordance with permit condition 10.6 within 180 days after the initial startup of Unit #6, establish the operational limit in permit condition 10.2 according to permit condition 10.10, and conduct a performance evaluation of the device measuring the operating load according to permit condition 10.4.

10.6 Performance test procedures. In accordance with 40 CFR § 63.11212, the owner or operator shall conduct particulate matter performance tests in accordance with the following procedures:

1. Select a sampling port location and the number of traverse points according to 40 CFR Part 60, Appendix A, Method 1;
2. Determine velocity and volumetric flow rate of the stack gas according to 40 CFR Part 60, Appendix A, Methods 2, 2F, or 2G
3. Determine oxygen and carbon dioxide concentrations of the stack gas according to 40 CFR Part 60, Appendix A, Methods 3A or 3B or ASTM D6522-00 (reapproved 2005) or ANSI/ASME PTC 19.10-1981;
4. Measure the moisture content of the stack gas according to 40 CFR Part 60, Appendix A, Method 4;

5. Measure the particulate matter emission concentrations according to 40 CFR Part 60, Appendix A, Methods 5 or 17 with a minimum of 1 dry standard cubic meters of sample volume per run; and
6. Convert the particulate matter emissions concentration to a pounds per million Btus emission rate using the F-Factor methodology and equations in section 12.2 and 12.3 of 40 CFR Part 60, Appendix A, Method 19.

10.7 Initial compliance with work practice standard. In accordance with 40 CFR § 63.11214(b) and (d), the owner or operator shall demonstrate initial compliance with permit condition 10.2 by the following:

1. Conduct a performance tune-up within 180 days after the initial startup of Unit #6 according to permit condition 10.11 and submit a signed statement in the Notification of Compliance Status report required in permit condition 10.13 that indicates the owner or operator conducted a tune-up of Unit #6; and
2. Submit a signed statement in the Notification of Compliance Status report required in permit condition 10.13 that indicates the owner or operator minimized Unit #6's startup and shutdown periods by conducting startups and shutdowns according to the manufacturer's recommended procedures or procedures specified for a boiler of similar design if the manufacturer's recommended procedures are not available.

10.8 Periodic performance tests. In accordance with 40 CFR § 63.11220(a), the owner or operator shall conduct a subsequent particulate matter performance test on a triennial basis. The performance test shall be conducted within 37 months from the date the initial or periodic performance was previously completed to determine compliance with the particulate matter emission limit in permit condition 10.1 and re-establish the operational limit in permit condition 10.3. The particulate matter test shall be conducted in accordance with permit condition 10.6.

10.9 Demonstration of continuous compliance with monitoring data. In accordance with 40 CFR §§ 63.11221 and 63.11224(d), the owner or operator shall monitor and collect data according to the following:

1. The owner or operator shall operate the device measuring the operating load and the data collection system at all times Unit #6 is operating except for periods of monitoring system malfunctions, repairs associated with a monitoring system malfunction, and required monitoring system quality assurance or quality control activities. A monitoring system malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring system failures caused in part by poor maintenance or careless operation are not malfunctions. The owner or operator is required to return the monitoring system to operation as expeditiously as practicable;
2. The owner or operator may not use data recorded during monitoring system malfunctions, repairs associated with monitoring system malfunctions, or required monitoring system quality assurance or control activities; and
3. Except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions and required monitoring system quality assurance or quality control activities, failure to collect required data is a deviation of the monitoring requirements.

10.10 Demonstration of continuous compliance with emission limit. In accordance with 40 CFR § 63.11222(a)(1) and (b), following the date on which the initial compliance demonstration is completed or is required to be completed in accordance with permit condition 10.5, whichever

date comes first, the owner or operator shall continuously monitor the operating parameters in permit condition 10.3. Operation above the established maximum operating limit constitutes a deviation from the operating limit in permit condition 10.3, except during performance tests conducted to determine compliance with the emission and operating limits or to establish new operating limits. Operating limits are confirmed or reestablished during performance tests. The owner or operator must report each instance in which the owner or operator did not meet the emission limit in permit condition 10.1 or the operating limit in permit condition 10.3. These instances are deviations from the emission limit in permit condition 10.1 and must be reported in accordance with permit condition 10.14.

10.11 Boiler tune-up. In accordance with 40 CFR § 63.11223(a) and (b), the owner or operator shall conduct a tune-up of Unit #6 on a biennial basis. The biennial tune-up shall be conducted within 25 months from the date the previously conducted tune-up was completed. The tune-up shall meet the following requirements:

1. As applicable, inspect the burner, and clean or replace any components of the burner as necessary. The owner or operator may delay the burner inspection until the next scheduled shutdown, however, the burner must be inspected at least once every 36 months;
2. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;
3. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly;
4. Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available;
5. Measure the concentrations in the effluent stream of carbon monoxide in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made);
6. Maintain onsite and submit, if requested by the Secretary, a report containing the following information:
 - a. The concentrations of carbon monoxide in parts per million, by volume, and oxygen in volume percent, measured before and after the tune-up of Unit #6;
 - b. A description of any corrective actions taken as a part of the tune-up of Unit #6; and
 - c. The type and amount of fuel used over the 12 months prior to the biennial tune-up of Unit #6; and
7. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within one week of startup.

10.12 Initial startup of boiler. In accordance with 40 CFR §§ 63.11225(a)(1), the owner or operator shall submit a notification to the Secretary within 15 days after the initial startup of Unit #6. The initial startup of Unit #6 is the date fuel is first fired in Unit #6.

10.13 Notice of Compliance Status. In accordance with 40 CFR §§ 63.11225(a)(4), the owner or operator shall submit a Notification of Compliance Status to the Secretary within 60 days after the initial performance test in permit condition 10.5 is completed. The Notification of Compliance Status shall contain the following:

1. The methods used to determine compliance;

2. The quantity of particulate matter emitted during the performance test, in pounds per million Btus heat input;
3. The operating load during the performance test;
4. A description of the monitoring device that will be used to continuously measure the operating load and the data collection system;
5. A statement by the owner or operator as to whether the source has complied with the relevant standard or other requirements; and
6. A statement that the initial tune-up of Unit #6 was conducted in accordance with permit condition 10.7.

The Notice of Compliance Status shall be signed by the responsible official.

10.14 Annual compliance certification report. In accordance with 40 CFR § 63.11225(b), the owner or operator shall prepare an annual compliance certification report by March 1 of each year for the previous calendar year and submit it to the Secretary upon request. The report shall contain the following information:

1. Facility name and address;
2. Statement by a responsible official, with the official's name, title, phone number, e-mail address, and signature, certifying the truth, accuracy and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of Chapter 10.0;
3. If Unit #6 experiences any deviations from the applicable requirements during the reporting period, include a description of deviations, the time periods during which the deviations occurred, and the corrective actions taken; and
4. The total fuel use by Unit #6, for each calendar month within the reporting period, in gallons.

The owner or operator is required to submit the report by March 15 if Unit #6 experiences any deviations during the reporting period.

10.15 Boiler recordkeeping requirements. In accordance with 40 CFR § 63.11225(c), the owner or operator shall maintain the following records:

1. Identify the date of each boiler tune-up, the procedures followed for the tune-up, and the manufacturer's specifications to which Unit #6 was tuned;
2. Monthly records of fuel use by boiler(s), in gallons;
3. Occurrence and duration of each malfunction of Unit #6 or the device used to monitoring the operating load of Unit #6;
4. Record of actions taken during periods of malfunctions to minimize emissions, including corrective actions to restore Unit #6 and or monitoring equipment to normal or usual operation; and
5. All records gathered in accordance with permit condition 10.9 and 10.10.

10.16 Reporting electronically to EPA. In accordance with 40 CFR § 63.11225(e), as of January 1, 2012, the owner or operator shall submit the results of each performance test electronically to EPA's Central Data Exchange by using the Electronic Reporting Tool (e.g., <http://www.epa.gov/ttn/chief/ert/erttool.html/>) or other compatible electronic spreadsheet. Only data collected using test methods compatible with ERT are subject to this requirement. The owner or operator is required to submit the data electronically within 60 days after the date of completing each performance test.

10.17 Asserting an affirmative defense. In accordance with 40 CFR § 63.11226(a), the owner or operator may assert an affirmative defense to a claim of civil penalties for an exceedance of the emission limit in permit condition 10.1 that are caused by malfunction. Appropriate penalties may be assessed, however, if the owner or operator fails to meet the burden of proving all of the requirements in the affirmative defense. The affirmative defense shall not be available for claims of injunctive relief. To establish the affirmative defense in any action to enforce the emission limit in permit condition 10.1, the owner or operator must timely meet the notification requirement in permit condition 10.18 and prove by a preponderance of evidence that:

1. The excess emissions:
 - a. Were caused by a sudden, infrequent, and unavoidable failure of process equipment or a process to operate in a normal or usual manner;
 - b. Could not have been prevented through careful planning, proper design or better operation and maintenance practices;
 - c. Did not stem from any activity or event that could have been foreseen and avoided, or planned for; and
 - d. Were not part of a recurring pattern indicative of inadequate design, operation, or maintenance; and
2. Repairs were made as expeditiously as possible when the applicable emission limit in permit condition 10.1 was being exceeded. Off-shift and overtime labor were used, to the extent practicable to make these repairs;
3. The frequency, amount and duration of the excess emissions (including any bypass) were minimized to the maximum extent practicable during periods of such emissions;
4. If the excess emissions resulted from a bypass of a process, then the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
5. All possible steps were taken to minimize the impact of the excess emissions on ambient air quality, the environment and human health;
6. All emissions monitoring systems were kept in operation if at all possible, consistent with safety and good air pollution control practices;
7. All of the actions in response to the excess emissions were documented by properly signed, contemporaneous operating logs;
8. At all times, the facility was operated in a manner consistent with good practices for minimizing emissions; and
9. A written root cause analysis has been prepared, the purpose of which is to determine, correct, and eliminate the primary causes of the malfunction and the excess emissions resulting from the malfunction event at issue. The analysis shall also specify, using best monitoring methods and engineering judgment, the amount of excess emissions that were the result of the malfunction.

10.18 Notification of exceedance during a malfunction. In accordance with 40 CFR § 63.11226(b), the owner or operator shall notify the Secretary by telephone or facsimile (FAX) transmission if a boiler experiences an exceedance of the emission limit in permit condition 10.1 during a malfunction as soon as possible but no later than two business days after the initial occurrence of the malfunction, if the owner or operator wishes to avail itself of an affirmative defense to civil penalties for that malfunction. The owner or operator seeking to assert an affirmative defense shall also submit a written report to the Secretary within 45 days of the initial occurrence of the malfunction to demonstrate, with all necessary supporting documentation, that the owner or operator has met the requirements set forth in permit condition 10.17. The owner or operator may seek an extension of this deadline for up to 30 additional days by submitting a written request to the Secretary before the expiration of the 45 day period. Until a request for an

extension has been approved by the Secretary, the owner or operator is subject to the requirement to submit such report within 45 days of the initial occurrence of the exceedance.

11.0 EMERGENCY GENERATOR MACT REQUIREMENTS

11.1 Date to comply with emergency generator requirements. 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 requirements specified in this chapter on and after May 3, 2013.

11.2 Maintenance requirements for emergency generator. In accordance with ARSD 74:36:08:40, as referenced to 40 CFR § 63.6603(a), the owner or operator shall:
Change oil and oil filter every 500 hours of operation or annually, whichever comes first;
Inspect air cleaner every 1,000 hours of operation, or annually, whichever comes first; and
Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

If an emergency generator is operating during an emergency and it is not possible to shut down the engine in order to perform the maintenance requirements on the schedule or if performing the maintenance requirements on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the maintenance requirements can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The maintenance requirements should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. The owner or operator must report any failure to perform the maintenance requirements on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.

11.3 Minimizing emissions from emergency generator. In accordance with ARSD 74:36:08:40, as referenced to 40 CFR § 63.6605, the owner or operator shall be in compliance with the requirements in this chapter at all times. The owner or operator shall at all times operate and maintain the emergency generator, including associated 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 the requirements in this chapter 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 emergency generator.

11.4 Operate emergency generator according to manufacturer's instructions. In accordance with ARSD 74:36:08:40, as referenced to 40 CFR §§ 63.6625(e) and 63.6640(a), the owner or operator shall operate and maintain the emergency generator according to the manufacturer's emission-related written instructions or develop a maintenance plan which provides to the extent practicable for the maintenance and operation of the emergency generator in a manner consistent with good air pollution control practice for minimizing emissions.

11.5 Installation and operation of a non-resettable hour meter. In accordance with ARSD 74:36:08:40, as referenced to 40 CFR §§ 63.6625(f) and 63.6635(a) and (b), the owner or operator shall install, operate, and maintain a non-resettable hour meter on the emergency generator. Except for a non-resettable hour meter malfunction and associated repairs, the non-

resettable hour meter must monitor the operation of the emergency generator continuously at all times the emergency generator is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the non-resettable hour meter. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

11.6 Minimizing startup time. In accordance with ARSD 74:36:08:40, as referenced to 40 CFR § 63.6625(h), the owner or operator shall minimize the emergency generator's time spent at idle during startup and minimize the emergency generator's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

11.7 Alternative maintenance schedule. In accordance with ARSD 74:36:08:40, as referenced to 40 CFR § 63.6625(i), the owner or operator may utilize an oil analysis program in order to extend the specified oil change requirement in permit condition 11.2. The oil analysis must be performed at the same frequency specified for changing the oil in permit condition 11.2. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows:

Total Base Number is less than 30 percent of the Total Base Number of the oil when new;
Viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new;
or
Percent water content (by volume) is greater than 0.5.

If all of these condemning limits are not exceeded, the owner or operator is not required to change the emergency generator's oil. If any of the limits are exceeded, the owner or operator must change the emergency generator's oil within 2 days of receiving the results of the analysis. If the engine is not in operation when the results of the analysis are received, the owner or operator must change the emergency generator's oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

11.8 Operation of emergency generator. In accordance with ARSD 74:36:08:40, as referenced to 40 CFR § 63.6640(f), the owner or operator shall operate the emergency generator according to the following requirements:

There is no time limit on the use of emergency generator in emergency situations;
The owner or operator may operate the emergency generator for the purpose of maintenance checks and readiness testing, provided the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the emergency generator. Maintenance checks and readiness testing of the emergency generator is limited to 100 hours per year. 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 generator beyond 100 hours per year; and
The owner or operator may operate the emergency generator 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; except the owner and operator may operate the emergency generator for a maximum of 15 hours per year as part

of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level. The emergency generator may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the emergency generator operation must be terminated immediately after the owner or operator is notified the emergency condition is no longer imminent. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for non-emergency situations. The supply of emergency power to another entity or entities pursuant to financial arrangement is not limited by this paragraph, as long as the power provided by the financial arrangement is limited to emergency power.

Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (1) through (3) of this permit condition, is prohibited. If the owner or operator does not operate the engine according to the requirements in this permit condition, the emergency generator will no longer be considered an emergency generator and will need to meet all applicable requirements for non-emergency generator in 40 CFR §§ 63.6580 through 63.6675, inclusive.

11.9 Recordkeeping for emergency generator. In accordance with ARSD 74:36:08:40, as referenced to 40 CFR §§ 63.6655 and 63.6660, the owner or operator shall maintain the following records:

Records of all required maintenance performed on the emergency generator to demonstrate compliance with permit condition 11.2 or 11.7;

Records of all required maintenance performed on the non-resettable hour meter;

Records of hours of operation identifying the reason for operation of the emergency generator to demonstrate compliance with permit condition 11.6 and 11.8; and

Records of how the owner or operator complied with operating the emergency generator according to the manufacturer's emission-related instruction or the owner or operator's maintenance plan required in permit condition 11.4.

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, 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.

11.10 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.