

Permit #: 28.0101-02

Effective Date: June 23, 2008

Expiration Date: June 18, 2012

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

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

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

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

Under the South Dakota Air Pollution Control Regulations

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

A. Owner

1. Company Name and Mailing Address

Rapid City Regional Hospital
353 Fairmont Boulevard
Rapid City, SD 57701

2. Actual Source Location if Different from Above

Same as above

3. Permit Contact

Gerald P. Austin, Director of Engineering Services
(605) 719-8009

4. Facility Contact

Gerald P. Austin, Director of Engineering Services
(605) 719-8009

5. Responsible Official

Timothy H. Sughrue, Executive Senior Vice President
(605) 719-8162

B. Permit Revisions or Modifications

June 23, 2008 – modification to reflect equipment changes

C. Type of Operation

Hospital with boilers, emergency generators, and an incinerator

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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 construct and 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 applications submitted and dated February 22, 2007, and March 6, 2008, unless modified by the conditions of this permit. 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 Capacity	Control Equipment
#1	1988 Simonds Corporation medical waste incinerator, Model # Pyro 35. The incinerator has a primary and secondary chamber. Both chambers are fired with natural gas. The incinerator is batch fed.	35 pounds per hour	Not Applicable
#2	1993 Kewanee steam boiler (blue boiler), Model #H35-500-GO2, fired with natural gas and distillate oil.	20.9 million Btus per hour heat input	Not Applicable
#3	1979 Kewanee hydronic boiler (orange boiler - east), Model #7L287-KG02, fired with natural gas and distillate oil.	11.1 million Btus per hour heat input	Not Applicable
#4	1979 Kewanee hydronic boiler (orange boiler - west), Model #7L287-KG02, fired with natural gas and distillate oil.	11.1 million Btus per hour heat input	Not Applicable
#5	1984 Kewanee steam boiler (green boiler), Model #H35250-KGO-2AA, fired with natural gas and distillate oil.	10.5 million Btus per hour heat input	Not Applicable
#6	1994 Sanyo-McQuay boiler, Model #TSA-CD-53U-R, fired with natural gas.	8.5 million Btus per hour heat input	Not Applicable
#7	1993 Caterpillar emergency generator, Model #3516, fired with distillate oil.	2,000 kilowatts	Not Applicable
#8	1979 Caterpillar emergency generator, Model #D399, fired with distillate oil.	930 kilowatts	Not Applicable
#9	2008 Hurst Corporation steam boiler (South Boiler), 500 Series, fired with natural gas and distillate oil.	20.1 million Btus per hour heat input	Not Applicable
#10	2008 Hurst Corporation steam boiler (North Boiler), 500 Series, fired with natural gas and distillate oil.	20.1 million Btus per hour heat input	Not Applicable
#11	2008 Cummins 2250DQKH, emergency generator, fired with distillate oil.	2,250 kilowatts	Not Applicable
#12	2008 Cummins 2250DQKH, emergency generator, fired with distillate oil.	2,250 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 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, 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).

1.9 Definitions. In accordance with ARSD 74:36:07:06.01, as referenced to 40 CFR Part 60, Subpart Ce, the terms used in this permit have the following meaning:

1. “**Chemotherapeutic waste**,” means waste material resulting from the production or use of antineoplastic agents used for the purpose of stopping or reversing the growth of malignant cells;
2. “**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;
3. “**Low-level radioactive waste**,” means waste material which contains radioactive nuclides emitting primarily beta or gamma radiation, or both, in concentrations or quantities that exceed applicable federal or state standards for unrestricted release. Low-level radioactive waste is not high-level radioactive waste, spent nuclear fuel, or by-product material as defined by the Atomic Energy Act of 1954; and
4. “**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. The definition of medical/infectious waste does not include hazardous waste identified or listed under the regulation 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, and domestic sewage materials identified in 40 CFR § 261.4(a)(1). The following is a list of biologicals:
 - a. 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.
 - b. 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.
 - c. Human blood and blood products including:
 - (i) Liquid waste human blood;

- (ii) Products of blood;
 - (iii) Items saturated and/or dripping with human blood; or
 - (iv) 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.
- d. 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.
 - e. 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.
 - f. 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.
 - g. Unused sharps including the following unused, discarded sharps: hypodermic needles, suture needles, syringes, and scalpel blades.

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, and the proposed changes to this permit.

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 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. 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. 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 any proposed change that meets the definition of a modification in ARSD 74:36:01:10 or is not an administrative amendment or a minor permit amendment. Modification is defined as a physical change or change in operation that increases the amount of air pollutant emitted by the source or results in the emission of an air pollutant not previously emitted. 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.

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.

3.7 Changing boiler fuels. In accordance with ARSD 74:36:07:05, as referenced to 40 CFR § 60.40c, Unit #2, #9, and #10 shall be fueled only with natural gas or distillate oil. If the boiler burns other fuels such as coal, residual 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 are used in these units.

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".

4.0 PERMIT RENEWAL REQUIREMENTS

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 AND REPORTING 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, unless otherwise specified in this permit. 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 Construction date notification. In accordance with ARSD 74:36:07:01, as referenced to 40 CFR § 60.7(a)(1), the owner or operator shall notify the Secretary of the date construction or reconstruction of each applicable boiler (Unit #2, unit #9, and Unit #10) commenced. The notification shall be postmarked no later than 30 days after the start of construction.

5.5 Initial startup notification. In accordance with ARSD 74:36:07:01, as referenced to 40 CFR § 60.7(a)(3), the owner or operator shall notify the Secretary of the actual date of initial startup of each boiler (Unit #2, unit #9, and Unit #10). The initial startup notification shall be postmarked within 15 days after such date and contain the following information:

1. Identify submittal as initial startup notification;
2. Name of facility, permit number, and reference to this permit condition;
3. Actual date of initial startup of each boiler (EU-01 and EU-02);

5.6 Daily records. In accordance with ARSD 74:36:05:16.01(14) and 74:35:01:08, the owner or operator shall calculate and/or record the following information on a daily basis:

1. The type of material burned in Unit #1 categorized as pathological waste, low-level radioactive waste, chemotherapeutic waste, hospital/medical/infectious waste, and other types of waste;
2. The amount of each type of material identified in subsection 1 above in pounds;
3. A facility, which receives medical/infectious waste from others for decontamination or destruction is considered a "destination facility". A destination facility is required to maintain a log indicating the approximate quantities of medical/infectious waste received by waste category; the date of receipt; and the name and address of the generator, intermediate handler, or transporter from whom the waste was received; and
4. Date of disposal of medical/infectious waste received from other sources.

5.7 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. The following information shall be recorded for each visible emission reading required in permit condition 9.1:
 - 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; and
3. 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.

5.8 Monthly records – emergency generator operation. In accordance with ARSD 74:36:07:16.01(9), ARSD 74:36:07:05, as referenced to 40 CFR § 60.48c, and 40 CFR § 60.4214, the owner or operator shall maintain the following records on a monthly basis:

1. Identify the operating periods as emergency or non emergency and record the time of operation, in hours, of Unit #7, #8, #11, and #12. A 12-month rolling total for each unit shall be calculated every month by summing that month's value with the previous 11 months' values; and
2. The volume of each type of fuel combusted in Unit #2, #9, and #10.

5.9 Quarterly summary. In accordance with ARSD 74:35:01:23 and 74:36:05:16.01(9) and (14), the owner or operator shall maintain a quarterly summary of the amount and types of waste burned in Unit #1. The quarterly summary shall include:

1. The total amount of material burned on a daily basis;
2. The total amount of each type of material, as identified in subsection 1 of permit condition 5.4, burned in pounds on a daily basis;
3. The percent, by weight, of hospital waste and medical/infectious waste burned during the quarter; and
4. The number of hours Unit #1 was operated on a daily basis.

5.10 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 consumed in Unit #1 through Unit #6 inclusive and Unit #9 and Unit #10, in million cubic feet;
2. The number of hours each emergency generator operated;
3. The amount of distillate oil consumed in Unit #2 through Unit #12, inclusive, in gallons; and
4. The amount of material incinerated in Unit #1, in pounds.

5.11 Semi-annual report. In accordance with ARSD 74:36:05:16.01(9) and ARSD 74:36:07:05, as referenced to 40 CFR § 60.48c, the owner or operator shall submit a semi-annual report. The following information shall be contained in each report:

1. Name of facility, permit number, reference to this permit condition, identifying the submittal as a semi-annual report, and calendar dates covered in the reporting period;
2. A copy of each fuel supplier certification form for each shipment of distillate oil purchased or received during the reporting period. The quarterly report must include a certified statement signed by the owner or operator that the records of the fuel supplier certifications represent all the distillate oil possibly combusted in Unit #2, #9, and #10 during the reporting period; and
3. The percent of hospital and/or medical/infectious waste burned in Unit #1 for each quarter in the reporting period.

The semi-annual report shall be postmarked by the 30th day following the end of the reporting period (i.e., January 30th and July 30th).

5.12 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.

5.13 Notification of equipment failure. In accordance with ARSD 74:35:01:23, the owner or operator shall notify the Secretary, in writing, of any failure of Unit #1 or monitoring equipment associated with Unit #1 of one hour or more in duration or an operational error which results in an increase in emissions above any allowable rate. The notification shall be received by the Secretary within five working days from the occurrence and indicate the type of failure or error and measures undertaken to correct the problem.

5.14 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;
3. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the permit violation; and
4. The Secretary may waive the written report on a case-by-case basis if the oral report has been received within the reporting period and dependent upon the severity of the permit violation.

6.0 CONTROL OF REGULATED AIR POLLUTANTS

6.1 Visibility limit for boilers and generators. 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 (excluding Unit #1), 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 limits 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 Visibility limit for Unit #1. In accordance with ARSD 74:35:01:12, the owner or operator may not discharge into the ambient air from Unit #1 an air contaminant of a density equal to or greater than that designated as 10 percent opacity. This provision applies 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.

6.4 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 Emission Limit

Unit	Emission Limit
#2	0.5 pounds per million Btu heat input
#3	0.6 pounds per million Btu heat input
#4	0.6 pounds per million Btu heat input
#5	0.6 pounds per million Btu heat input
#6	0.6 pounds per million Btu heat input
#7	0.5 pounds per million Btu heat input
#8	0.6 pounds per million Btu heat input
#9	0.6 pounds per million Btu heat input
#10	0.6 pounds per million Btu heat input

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

Table 6-2 – Sulfur Dioxide Emission Limit

Unit	Fuel Type	Emission Limit
#2	Natural gas	3.0 pounds per million Btu heat input
#3	Natural gas or distillate oil	3.0 pounds per million Btu heat input
#4	Natural gas or distillate oil	3.0 pounds per million Btu heat input
#5	Natural gas or distillate oil	3.0 pounds per million Btu heat input
#6	Natural gas or distillate oil	3.0 pounds per million Btu heat input
#7	Distillate oil	3.0 pounds per million Btu heat input
#8	Distillate oil	3.0 pounds per million Btu heat input
#9	Distillate oil	3.0 pounds per million Btu heat input
#10	Natural gas	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.

6.6 Sulfur dioxide limits for Unit #2, #9, and #10 – distillate oil. In accordance with ARSD 74:36:07:05, as referenced to 40 CFR, § 60.42c(d) and (h), the owner or operator shall not discharge into the atmosphere from Unit #2, #9, and #10 any gases that contain sulfur dioxide in excess of 0.5 pounds per million Btu heat input. Compliance with the sulfur limit shall be determined based on a certification from the fuel supplier. The 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; and
3. A statement that the sulfur content of the oil does not exceed 0.5 weight percent sulfur.

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

6.7 Secondary chamber temperature limit for Unit #1. In accordance with ARSD 74:35:01:20, the owner or operator shall maintain a temperature at or above 1,800 degrees Fahrenheit in the secondary chamber for Unit #1 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.

6.8 Limit on hospital and medical/infectious waste burned in Unit #1. In accordance with ARSD 74:36:05:16.01(8), the owner or operator shall not burn hospital and/or medical/infectious waste in Unit #1 at a rate greater than 10% by weight on a calendar quarter basis. This limit exempts the owner or operator from complying with 40 CFR Part 60, Subpart Ce. Any relaxation in this permit condition will require a permit modification to include the requirements in 40 CFR Part 60, Subpart Ce.

6.9 Operating limit for Unit #7 and #8. In accordance with ARSD 74:36:05:16.01(8), the owner or operator shall not operate Unit #7 or #8 for more than 500 hours per unit during any 12-month rolling period. The 12-month rolling total shall be calculated every month by summing that month's value with the previous 11 months' values.

6.10 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.

6.11 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.

6.12 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. The owner or operator shall c 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 STATE ONLY – MEDICAL WASTE REQUIREMENTS

8.1 Reusable containers. In accordance with ARSD 74:35:01:25, the owner or operator of a facility which generates or receives medical/infectious waste for disposal must comply with the following requirements for reusing containers:

1. All nonrigid packaging and inner liners must be managed as medical/infectious waste and may not be reused;
2. Any container used for the storage or transport, or both, of medical/infectious waste and designated for reuse once emptied must be decontaminated if the container shows signs of visible contamination; and
3. If any container used for the storage or transport, or both, of medical/infectious waste is for any reason not capable of being rendered free of any visible signs of contamination, the container must be managed as medical/infectious waste and labeled, marked, and treated or disposed of as medical/infectious waste.

8.2 Storage. In accordance with ARSD 74:35:01:26, the storage of medical/infectious waste before treatment or disposal on-site must comply with the following storage requirements:

1. The medical/infectious waste must be stored in a manner and location that maintains the integrity of the packaging and provides protection from the elements;
2. The medical/infectious waste must be maintained in a nonputrescent state, using refrigeration when necessary;
3. Outdoor storage areas containing medical/infectious waste must be locked to prevent unauthorized access;
4. The medical/infectious waste must be stored in a manner that affords protection from animals and does not provide a breeding place or a food source for insects and rodents;
5. All on-site storage of medical/infectious waste must be in a designated area away from traffic flow patterns and must be accessible only to authorized personnel; and
6. Containment of medical/infectious waste must be effected in such a manner that no discharge or release of any waste occurs.

8.3 Radioactive and hazardous waste. In accordance with ARSD 74:35:01:22, neither radioactive waste nor hazardous waste shall be burned in the medical/infectious waste incinerator unless the appropriate requirements and standards for those materials are met.

8.4 Ash handling. In accordance with ARSD 74:28:23:01, if it is determined that the ash from the medical waste incinerator is a hazardous waste, the medical waste ash shall be disposed of in a permitted hazardous waste facility.

8.5 Retention time. In accordance with ARSD 74:35:01:20, the owner or operator shall design the secondary chamber in a manner that provides turbulent mixing of the exhaust gases and a minimum of a one-second retention time of at least 1,800 degrees Fahrenheit. 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.

8.6 Waste loading. In accordance with ARSD 74:35:01:21, the waste charging system must prevent the disruption of the combustion process as waste is being charged. The waste charging system shall be equipped with a mechanism to prevent the primary burner from firing until the secondary chamber temperature is established and holding at 1,800 degrees Fahrenheit. The waste charging system shall be equipped with a lock-out mechanism to prevent charging after start-up and until the combustion process is complete.

9.0 MONITORING

9.1 Periodic monitoring for opacity emissions. In accordance with ARSD 74:36:13:07, the owner or operator shall demonstrate compliance with the opacity and particulate 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 on each unit subject to an opacity limit in Chapter 6.0 shall be based on the following frequency:

- a. The owner or operator shall conduct a visible emission readings 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 9.2, 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.

9.2 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.

9.3 Monitoring sulfur dioxide emissions. In accordance with ARSD 74:36:05:16.01(9) and ARSD 74:36:07:05, as referenced to 40 CFR § 60.46c, the owner or operator shall monitor the sulfur content of distillate oil. For each load of distillate oil purchased or received, the owner or operator shall obtain a fuel supplier certification. 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. 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"; and
3. A statement that the sulfur content of the oil does not exceed 0.5 weight percent sulfur.

In the case where a fuel supplier certification is not obtained, the owner or operator shall collect a grab sample from the distillate oil storage tank within 30 days of receiving the shipment of distillate oil but before another load of distillate oil is transferred into the storage tank. The grab

sample shall be analyzed to determine the sulfur content of the distillate oil in the storage tank. A copy of the results of the distillate oil analysis shall be submitted with the semiannual report.

9.4 Monitoring Unit #1 temperatures. In accordance with 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. 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. 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.

10.0 Stationary Compression Ignition Internal Combustion Engines

10.1 Emission limits for Unit #11 and #12. In accordance with ARSD 74:36:07:88, as referenced to 40 CFR § 60.4202(b), the owner or operator shall not allow the emissions from Unit #11 or #12 to exceed the emission limits specified in Table 10-1 for the appropriate permitted unit.

Table 10-1 – Emission Limits for Unit #11 and #12

Nitrogen Oxide	Carbon Monoxide	Particulate Matter	Hydrocarbons
6.9 ¹	8.5 ¹	0.40 ¹	1.0 ¹

¹ – Units are in grams per horsepower hour.

10.2 Operating requirements. In accordance with ARSD 74:36:07:88, as referenced to 40 CFR § 60.4206, the owner and operator must operate and maintain Unit #11 and #12 in a manner that achieves the emission standards as required in Table 10-1 according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine.

10.3 Fuel requirements. In accordance with ARSD 74:36:07:88, as referenced to 40 CFR § 60.4207, the owner and operator must fuel Unit #11 and #12 with fuel that meets the requirements of 40 CFR 80.510(a). Beginning October 1, 2010, that fuel must meet the requirements of 40 CFR 80.510(b) for nonroad diesel fuel.

10.4 Monitoring requirements. In accordance with ARSD 74:36:07:88, as referenced to 40 CFR § 60.4209, the owner and operator must install a non-resettable hour meter on Unit #11 and #12 prior to startup of the engines.

10.5 Compliance requirements. In accordance with ARSD 74:36:07:88, as referenced to 40 CFR § 60.4211, the owner and operator must operate and maintain Unit #11 and #12 according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. In addition, owners and operators may only change those settings that are permitted by the manufacturer. The owner and operator must also meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply.

Unit #11 and #12 must be certified to comply with the emission standards in ARSD 74:36:07:88, as referenced to 40 CFR § 60.4204(b), or §60.4205(b) or (c), as applicable, for the same model year and maximum engine power. Unit #11 and #12 must be installed and configured according to the manufacturer's specifications.

10.6 Operating limit for emergency stationary internal combustion engines. In accordance with ARSD 74:36:07:88, as referenced to 40 CFR § 60.4211, the owner or operator shall not, except in the event of actual emergency operation, allow Unit #11 or Unit #12 to operate for more than 100 hours per unit during any 12-month rolling period. There is no time limit on the use of emergency stationary internal combustion engine in emergency situations. The 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 that federal, state, or local standards require maintenance and testing of emergency internal combustion engine beyond 100 hours per year.