Permit #: **28.3301-22**

Effective Date: **February 17, 2006**

Expiration Date: **February 17, 2011**

SOUTH DAKOTA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

TITLE V AIR QUALITY OPERATING PERMIT

Steven M Pirner, Secretary
Department of Environment and Natural Resources

Under the South Dakota Air Pollution
Control Regulations

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

A. Owner

1. Company Name and Mailing Address

   Dakota Foundry, Inc.
   20 North Park Lane
   Webster, South Dakota 57274

2. Actual Source Location if Different from Above

   Same as above

3. Permit Contact

   Doug Valsvig, Controller
   (605) 345-3349

4. Facility Contact

   Doug Valsvig, Controller
   (605) 345-3349

5. Responsible Official

   Terry Sampson, President
   (605) 881-5524 (cell)

B. Permit Revisions or Modifications

   Not applicable

C. Type of Operation

   Cast iron foundry

TABLE OF CONTENTS

		Page
1.0	**Standard Conditions**	**1**
1.1	**Operation of source**	**1**
1.2	**Duty to comply**	**2**
1.3	**Property rights or exclusive privileges**	**2**
1.4	**Penalty for violating a permit condition**	**2**
1.5	**Inspection and entry**	**3**
1.6	**Severability**	**3**
1.7	**Permit termination, modification, or revocation**	**3**
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**	**4**
3.3	**Minor permit amendment**	**4**
3.4	**Permit modification**	**5**
3.5	**Permit revision**	**5**
3.6	**Testing new fuels or raw materials**	**5**
4.0	**Permit Renewal Requirements**	**6**
4.1	**Permit effective**	**6**
4.2	**Permit renewal**	**6**
4.3	**Permit expiration**	**6**
5.0	**Record Keeping and Reporting Requirements**	**6**
5.1	**Record keeping and reporting**	**6**
5.2	**Signatory requirement**	**6**
5.3	**Certification statement**	**7**
5.4	**Monitoring log**	**7**
5.5	**Annual records**	**7**
5.6	**Annual compliance certification**	**8**

TABLE OF CONTENTS

		Page
5.7	Reporting permit violations	8
6.0	Control of Regulated Air Pollutants	8
6.1	Visibility limit	8
6.2	Visibility exceedances	9
6.3	Particulate matter limits	9
6.4	Sulfur dioxide limits	9
6.5	Operating without control equipment not allowed	9
6.6	Air emission exceedances -- emergency conditions	10
6.7	Circumvention not allowed	10
6.8	Minimizing emissions	10
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	11
7.5	Notification of test	11
7.6	Performance test report	11
7.7	Stack test for particulate	11
8.0	Monitoring	12
8.1	Periodic monitoring for opacity limits	12
8.2	Certified personnel – visible emission tests	13

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 in accordance with the statements, representations, and supporting data contained in the complete permit application submitted and dated December 21, 2004, and May 30, 2005, unless modified by the conditions of this permit. 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
Description of Permitted Units, Operations, and Processes

Unit	Description	Maximum Operating Rate	Control Device
#1	1988 Modern Equipment Company cupola preheated with propane and fired with coke.	The cupola is a batch process with each batch taking approximately 18 hours to complete and producing a maximum of 6 tons of iron per hour. The maximum design rate of the heat source is 17 million Btus per hour heat input.	2000 Mereen-Johnson Machine Company cinder collector and 1994 C.P. Environmental Filter, Inc., 495 bag pulse jet baghouse in sequence.
#2	• 1991 ventilation hood used for exhausting gases during shake out of molds; • 2000 Simplicity mechanical sand reclaimer • 1966 Wheelabrator Corporation 14 cubic foot super tumble blast machine; • 1994 Jet blast PH4-12 spinner hanger shot blast machine; and Two 1973 Fox grinders.	The maximum process rate is 10 tons per hour.	1974 Carter Day Company reverse air baghouse containing 180 bags.

Unit	Description	Maximum Operating Rate	Control Device
#3	Kloster Corporation thermo sand reclaimer, model Versa Therm #050. A natural gas fired burner is used to burn off residual resin attached to the sand.	• The reclaimer is designed to process 1,000 pounds of sand per hour; and • The natural gas fired burner has a maximum design capacity of 0.65 million Btus per hour.	A 2000 Kinetic-Air pulse jet baghouse containing 20 bags.

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 SDCL 34A-1, a violation of a permit condition may subject the owner or operator to civil or criminal prosecution, fines 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.

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 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 <u>Administrative permit amendment.</u> 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 determines to be similar to those requirements in this condition.

3.3 <u>Minor permit amendment.</u> 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.

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. 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, 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 the air pollution control equipment specified for Units #1 through #3, inclusive. At a minimum, the maintenance schedule shall meet the manufacturer's recommended schedule for maintenance; and
2. The following maintenance information shall be recorded for each baghouse:
   a. Identify the baghouse;
   b. The date and time maintenance was performed;
   c. Description of the type of maintenance;
   d. Reason for performing maintenance; and
   e. Signature of person performing maintenance.

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 sulfur content and amount of coke burned in Unit #1;
2. The amount of scrap metal charged to Unit #1;
3. The amount of iron produced in Unit #1;
4. The number of hours of production, and
5. The amount of hazardous air pollutants released during the sand molding operations.

The amount of coke consumed in Unit #1 shall be based on production records, consumption records, purchase records, etc. The hazardous air pollutant emissions shall be based on the emission rates established in the statement of basis and the amount of material processed or consumed, or a method approved by the Secretary.

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.

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.** 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. 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 74:36:12:01, an exceedance of the operating limit in permit condition 6.1 is not considered a violation during 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 **Particulate limits.** In accordance with ARSD 74:36:06:03(1), the owner or operator shall not allow the emission of particulate in excess of the emission limit specified in Table #2 for the appropriate permitted unit, operation, and process:

Table #2
Particulate Emission Limit

Unit	Description	Emission Limit
#1	Modern Equipment Company cupola	13.6 pounds per hour
#2	Carter Day Company reverse air baghouse	19.2 pounds per hour
#3	Kinetic-Air pulse jet baghouse	2.6 pounds per hour

6.4 **Sulfur dioxide limits.** In accordance with 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 #3 for the appropriate permitted unit, operations, and process:

Table #3
Sulfur Dioxide Emission Limit

Unit	Description	Emission Limit
#1	Modern Equipment Company cupola	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 **Operating without control equipment not allowed.** In accordance with ARSD 74:36:04:15(9), and to remain in compliance with ARSD 74:36:06:03(1), the owner or operator shall not operate the permitted units without the control equipment specified in Table #1. Each baghouse shall be operated in accordance with the manufacturer specifications.

6.6 **Air emission exceedances – emergency conditions.** In accordance with ARSD 74:36:05:16.01(18), the Secretary will allow for an 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.

6.7 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.

6.8 Minimizing emissions. In accordance with ARSD 74:36:05:16.01(8), the owner or operator shall at all time, 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. 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 that is 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 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.

7.7 **Stack test for particulate.** In accordance with ARSD 74:36:11:02, the owner or operator shall conduct a stack test on Unit #1 within 60 days after the issuance of this permit. That stack test shall be conducted to determine the total suspended particulate emission rate and demonstrate compliance with the emission limit.

8.0 MONITORING

8.1 **Periodic monitoring for opacity limits.** In accordance with ARSD 74:36:13:07, 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 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 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.