Permit #: **28.3301-22**

Effective Date: **December 5, 2016**

Expiration Date: **December 5, 2021**

SOUTH DAKOTA DEPARTMENT OF

ENVIRONMENT AND NATURAL RESOURCES

TITLE V AIR QUALITY OPERATING PERMIT

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

Under the South Dakota Air Pollution Control Regulations

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

A. Owner

1. Company Name and Mailing Address

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

2. Actual Source Location if Different from Above

20 Park Lane
Webster, SD 57274

3. Permit Contact

Josh Bartos, Vice President of Operations
(605) 345-3349

4. Facility Contact

Josh Bartos, Vice President of Operations
(605) 345-3349

5. Responsible Official

Kory Anderson, President
(605) 380-1827

B. Permit Revisions or Modifications

Not Applicable

C. Type of Operation

Dakota Foundry operates a cast iron foundry.

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1.0 Standard Conditions

1.1 Operation of source

In accordance with Administrative Rules of South Dakota (ARSD) 74:36:05:16.01(8), the owner or operator shall operate the units, controls, and processes as described in Table 1-1 in accordance with the statements, representations, and supporting data contained in the complete permit application received September 8, 2015, unless modified by the conditions of this permit. Except as otherwise provided herein, the control equipment shall be operated at all times in accordance with the manufacturer's specification and in a manner that achieves compliance with the conditions of this permit. The application consists of the application forms, supporting data, and supplementary correspondence. If the owner or operator becomes aware it failed to submit any relevant facts in a permit application or submitted incorrect information in an application, such information shall be promptly submitted.

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

Unit	Description	Maximum Operating Rate	Control Device
#1	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 series
#2	1991 ventilation hood used for exhausting gases during shake out of molds	The maximum process rate is 10 tons per hour	1974 Carter Day Company reverse air baghouse containing 180 bags
	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		
	Two 1973 Fox grinders		

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	2000 Kinetic-Air pulse jet baghouse containing 20 bags
		The natural gas fired burner has a maximum design capacity of 0.65 million Btus per hour.	

1.2 Duty to comply

In accordance with ARSD 74:36:05:16.01(12), the owner or operator shall comply with the conditions of this permit. An owner or operator who knowingly makes a false statement in any record or report or who falsifies, tampers with, or renders inaccurate, any monitoring device or method is in violation of this permit. A violation of any condition in this permit is grounds for enforcement, reopening this permit, permit termination, or denial of a permit renewal application. The owner or operator, in an enforcement action, cannot use the defense that it would have been necessary to cease or reduce the permitted activity to maintain compliance. The owner or operator shall provide any information requested by the Secretary to determine compliance or whether cause exists for reopening or terminating this permit.

1.3 Property rights or exclusive privileges

In accordance with ARSD 74:36:05:16.01(12), the State's issuance of this permit, adoption of design criteria, and approval of plans and specifications does not convey any property rights of any sort, any exclusive privileges, any authorization to damage, injure or use any private property, any authority to invade personal rights, any authority to violate federal, state or local laws or regulations, or any taking, condemnation or use of eminent domain against any property owned by third parties. The State does not warrant the owner's or operator's compliance with this permit, design criteria, approved plans and specifications, and operation under this permit, will not cause damage, injury or use of private property, an invasion of personal rights, or violation of federal, state or local laws or regulations. The owner or operator is solely and severally liable for all damage, injury or use of private property, invasion of personal rights, infringement of federal, state or local laws and regulations, or taking or condemnation of property owned by third parties, which may result from actions taken under the permit.

1.4 Penalty for violating a permit condition

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

1.5 Inspection and entry

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

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

1.6 Severability

In accordance with ARSD 74:36:05:16.01(11), any portion of this permit that is void or challenged shall not affect the validity of the remaining permit requirements.

1.7 Permit termination, modification, or revocation

In accordance with ARSD 74:36:05:46, the Secretary may recommend the Board of Minerals and Environment terminate, modify, or revoke this permit for violations of 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 in violation of this permit. Credible evidence may consist of the following:

1. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred:
   a. A monitoring method approved pursuant to 40 CFR § 70.6(a)(3) and incorporated in this permit; or
   b. Compliance methods specified in an applicable plan;
2. The following testing, monitoring, or information gathering methods are presumptively credible testing, monitoring, or information-gathering methods:
   a. Any monitoring or testing methods approved in this permit, including those in 40 CFR Parts 51, 60, 61, and 75; or
   b. Other testing, monitoring, or information-gathering methods that produce information comparable to that produced by any method in paragraph (1) or (2)(a).

2.0 Permit Fees

2.1 Annual air fee required

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

2.2 Annual operational report

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

2.3 Annual air fee

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

3.0 Permit Amendments and Modifications

3.1 Permit flexibility

In accordance with ARSD 74:36:05:30, the owner or operator shall have the flexibility to make changes to the source during the term of this permit. The owner or operator shall provide the Secretary written notice at least seven days in advance of the proposed change (NOTE: The Secretary will forward a copy of the written notice to EPA). The written notice shall include a brief description of the change, the date on which the change is to occur, any change in emissions, the proposed changes to the permit, and whether the requested revisions are for an administrative permit amendment, minor permit amendment, or permit modification.

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

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

3.2 Administrative permit amendment

In accordance with ARSD 74:36:05:33, the Secretary has 60 days from receipt of a written notice to verify the proposed change is an administrative permit amendment. As provided in ARSD 74:36:01:03, the Secretary considers a proposed change an administrative permit amendment if the proposed change accomplishes one of the following:

1. Corrects typographical errors;
2. Changes the name, address, or phone number of any person identified in this permit or provides a similar minor administrative change;

3. Requires more frequent monitoring or reporting;
4. The ownership or operational control changes and the Secretary determines no other change in this permit is necessary. However, the new owner must submit a certification of applicant form and a written statement specifying the date for transfer of operating permit responsibility, coverage, and liability; or
5. Any other changes the Secretary and the administrator of EPA determines to be similar to those requirements in this condition.

3.3 Minor permit amendment

In accordance with ARSD 74:36:05:38, the Secretary has 90 days from receipt of a written notice or 15 days after the end of EPA's 45-day review period, whichever is later, to take final action on a minor permit amendment. Final action consists of issuing or denying a minor permit amendment or determining the proposed change is a permit modification. As provided in ARSD 74:36:05:35, the Secretary considers a proposed change to be a minor permit amendment if the proposed change:

1. Does not violate any applicable requirements;
2. Does not involve significant changes to existing monitoring, reporting, or recordkeeping requirements;
3. Does not require or change a case-by-case determination of an emission limit or other standard, a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis; or
4. Does not seek to establish or change a permit term or condition for which the source has assumed to avoid an applicable requirement, a federally enforceable emission cap, or an alternative emission limit. An alternative emission limit is approved pursuant to regulations promulgated under section 112(i)(5) of the federal Clean Air Act.

3.4 Permit modification

In accordance with ARSD 74:36:05:39, an owner or operator may apply for a permit modification. A permit modification is defined in ARSD 74:36:01:10 as a physical change in or change in the operation of a source that results in at least one of the following:

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

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

3.5 Permit revision

In accordance with ARSD 74:36:05:40, the Secretary may reopen and revise this permit to meet requirements of 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 describing the new fuel or raw material, operating parameters, and parameters that will be monitored and any testing associated with air pollutant emissions during the test;
2. An estimate of the type and amount of regulated air pollutant emissions resulting from the proposed change; and
3. The proposed schedule for conducting the test. In most cases the owner or operator will be allowed to test for a maximum of one week. A request for a test period longer than one week will need additional justification. A test period shall not exceed 180 days.

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

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

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

4.0 Permit Renewal

4.1 Permit effective

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

4.2 Permit renewal

In accordance with ARSD 74:36:05:08, the owner or operator shall submit an application for a permit renewal at least 180 days before the date of permit expiration if the owner or operator wishes to continue to operate an activity regulated by this permit. The current permit shall not expire and shall remain in effect until the Secretary takes final action on the timely permit renewal application.

4.3 Permit expiration

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

5.0 Recordkeeping and Reporting

5.1 Recordkeeping and reporting

In accordance with ARSD 74:36:05:16.01(9), the owner or operator shall maintain all monitoring data, records, reports, and pertinent information specified by this permit for five years from the date of sample, measurement, report, or application unless otherwise specified in this permit. The records shall be maintained on site for the first two years and may be maintained off site for the last three years. All records must be made available to the Secretary for inspection. All notifications and reports shall be submitted to the following address:

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

5.2 Signatory requirements

In accordance with ARSD 74:36:05:12 and 74:36:05:16.01, all applications, reports, or other information submitted to the Secretary shall be signed and certified by a responsible official or a duly authorized representative. A responsible official for a corporation is a responsible corporate officer and for a partnership or sole proprietorship is a general partner or the proprietor, respectively. A person is a duly authorized representative only if:

1. The authorization is made in writing by a person described above and submitted to the Secretary; and

2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters.

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

5.3 Certification statement

In accordance with ARSD 74:36:05:16.01(14)(a), all documents required by this permit, including application forms, reports, and compliance certification, must be certified by a responsible official or a duly authorized representative. The certification shall include the following statement:

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

5.4 Monitoring log

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

1. Maintenance schedule for each piece of control equipment listed in Table 1-1. At a minimum, the maintenance schedule shall meet the manufacturer's recommended schedule for maintenance. The following information shall be recorded for maintenance:
   a. Identify the unit;
   b. The date and time maintenance was performed;
   c. Description of the type of maintenance;
   d. Reason for performing maintenance; and
   e. Signature of person performing maintenance;
2. Identify each unit subject to an opacity limit in Chapter 6.0 and if the unit operates on a monthly or more frequent basis, quarterly basis, semiannual basis, or annual basis.
3. The following information shall be recorded for each visible emission reading required in permit condition 8.1:
   a. The date and time the visible emission reading was performed;
   b. If visible emissions were observed;
   c. Description of maintenance performed to eliminate visible emissions;
   d. Visible emission evaluation if visible emissions are not eliminated; and
   e. Signature of person performing visible emission reading and/or visible emission evaluation; and
4. The following information shall be recorded within two days of each emergency exceedance:
   a. The date of the emergency exceedance and the date the emergency exceedance was reported to the Secretary;

b. The cause(s) of the emergency;
c. The reasonable steps taken to minimize the emissions during the emergency; and
d. A statement the permitted equipment was at the time being properly operated.

5.5 Annual records

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

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

5.7 Reporting permit violations

In accordance with ARSD 74:36:05:16.01(9), the owner or operator shall report all permit violations. A permit violation should be reported as soon as possible, but no later than the first business day following the day the violation was discovered. The permit violation may be reported by telephone to the South Dakota Department of Environment and Natural Resources at (605) 773-3151 or by FAX at (605) 773-4068.

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

1. A description of the permit violation and its cause(s);

2. The duration of the permit violation, including exact dates and times; and
3. The steps taken or planned to reduce, eliminate, and prevent reoccurrence of the permit violation.

6.0 Control of Regulated Air Pollutants

6.1 Visibility limit

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

6.2 Visibility exceedances

In accordance with ARSD 74:36:12:02, an exceedance of the opacity limit in permit condition 6.1 is not considered a violation during brief periods of soot blowing, start-up, shutdown, or malfunctions. Malfunction means any sudden and unavoidable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. A failure caused entirely or in part by poor maintenance, careless operation, preventable equipment breakdown, or any other cause within the control of the owner or operator is not a malfunction and is considered a violation.

6.3 Total suspended particulate matter limits

In accordance with ARSD 74:36:06:03(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
#3	Kinetic-Air pulse jet baghouse	0.6 pounds per million Btu

6.4 Sulfur dioxide limits

In accordance with 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
#1	Modern Equipment Company Cupola	3.0 pounds per million Btu heat input
#3	Kloster Corporation Thermo sand reclaimer	3.0 pounds per million Btu heat input

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

6.5 Air emission exceedances – emergency conditions

In accordance with ARSD 74:36:05:16.01(18), the Secretary will allow for an unavoidable emission exceedance of a technology-based emission limit if the exceedance is caused by an emergency condition and immediate action is taken by the owner or operator to restore the operations back to normal. An emergency condition is a situation arising from a sudden and reasonably unforeseeable event beyond the control of the owner or operator, including acts of God. An emergency shall not include an emission exceedance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error. The owner or operator shall notify the Secretary within two working days of the incident and take all steps possible to eliminate the excess emissions. The notification must provide a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. If the notification is submitted orally, a written report summarizing the information required by the notification shall be submitted and postmarked within 30 days of the oral notification

6.6 Circumvention not allowed

In accordance with ARSD 74:36:08:03, 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.

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 outlining what needs to be completed for approval.

7.5 Notification of test

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

7.6 Performance test report

In accordance with ARSD 74:36:05:16.01(9), the owner or operator shall submit a performance test report to the Secretary within 60 days after completing the performance test or by a date

designated by the Secretary. The performance test report shall contain the following information:

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

7.7 Stack test for particulate matter

In accordance with ARSD 74:36:11:02, the owner or operator shall conduct a performance test on the baghouse for Unit #1 and #2 within 1 year after the issuance of this permit. The stack test shall be conducted to determine the total suspended particulate matter, particulate matter less than or equal to 10 microns in diameter, and particulate matter less than or equal to 2.5 microns in diameter emission rates.

8.0 Monitoring

8.1 Periodic opacity monitoring

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

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

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

c. If no visible emissions are observed from a unit in two consecutive semiannual visible emission readings, the owner or operator may decrease the frequency of testing of readings from semiannually to annually for that unit.

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

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

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

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

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

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

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

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

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

8.2 Certified personnel – visible emission tests

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

9.0 Prevention of Significant Deterioration Exemption

9.1 Plant wide particulate limits (PM)

In accordance with ARSD 74:36:05:16.01(8), the owner or operator shall not emit into the ambient air greater than or equal to 238 tons of total suspended particulate matter (PM) per 12-month rolling period. The emission limits in Table 9-1 are established to ensure the long term limit of 238 tons per 12-month rolling period is not exceeded.

Table 9-1 – Particulate Matter Short Term Limits

Unit	Description	Short Term Limit
#1	Modern Equipment Company Cupola	0.05 grains per dry standard cubic foot
#2	Carter Day Company reverse air baghouse	0.05 grains per dry standard cubic foot

The particulate matter emission limit is based on a three-hour rolling average, which is the arithmetic average of three contiguous one-hour periods. Compliance with the short term limit will be based on the stack testing requirements in chapter 7.0.

9.2 Plant wide particulate limits (PM10)

In accordance with ARSD 74:36:05:16.01(8), the owner or operator shall not emit into the ambient air greater than or equal to 238 tons of particulate matter less than or equal to 10 microns in diameter (PM_{10}) per 12-month rolling period. The emission limits in Table 9-2 are established to ensure the long term limit of 238 tons per 12-month rolling period is not exceeded.

Table 9-2 – PM_{10} Short Term Limits

Unit	Description	Short Term Limit
#1	Modern Equipment Company Cupola	0.05 grains per dry standard cubic foot
#2	Carter Day Company reverse air baghouse	0.05 grains per dry standard cubic foot

The PM_{10} emission limit is based on a three-hour rolling average, which is the arithmetic average of three contiguous one-hour periods. Compliance with the short term limit will be based on the stack testing requirements in chapter 7.0.

9.3 Plant wide particulate limits ($PM_{2.5}$)

In accordance with ARSD 74:36:05:16.01(8), the owner or operator shall not emit into the ambient air greater than or equal to 238 tons of particulate matter less than or equal to 2.5 microns in diameter ($PM_{2.5}$) per 12-month rolling period. The emission limits in Table 9-3 are established to ensure the long term limit of 238 tons per 12-month rolling period is not exceeded.

Table 9-3 – $PM_{2.5}$ Short Term Limits

Unit	Description	Short Term Limit
#1	Modern Equipment Company Cupola	0.05 grains per dry standard cubic foot
#2	Carter Day Company reverse air baghouse	0.05 grains per dry standard cubic foot

The $PM_{2.5}$ emission limit is based on a three-hour rolling average, which is the arithmetic average of three contiguous one-hour periods. Compliance with the short term limit will be based on the stack testing requirements in chapter 7.0.

9.4 Prevention of significant deterioration review exemption

The owner or operator is exempt from a prevention of significant deterioration review for total suspended particulate matter, particulate matter less than or equal to 10 microns in diameter, and particulate matter less than or equal to 2.5 microns in diameter. Any relaxation in a permit

condition that increases applicable emissions equal to or greater than 238 tons per 12-month rolling period may require a full prevention of significant deterioration review as though construction had not commenced on the source.

10.0 Iron and Steel Foundry Area Source MACT

10.1 Management practices for metallic scrap

In accordance with ARSD 74:36:08:105, as referenced to 40 CFR § 63.10885(a), for each segregated metallic scrap storage area, bin or pile, the owner or operator must comply with the materials acquisition requirements in permit condition 10.2 or 10.3. The owner or operator must keep a copy of the material specifications onsite and readily available to all personnel with material acquisition duties, and provide a copy to each scrap provider. The facility may have certain scrap subject to permit condition 10.2 and other scrap subject to permit condition 10.3 provided the metallic scrap remains segregated until charge make-up.

10.2 Management practices for restricted metallic scrap

In accordance with ARSD 74:36:08:105, as referenced to 40 CFR § 63.10885(a)(1), the owner or operator must prepare and operate at all times according to written material specifications for the purchase and use of only metal ingot, pig iron, slitter, or other materials that do not include post-consumer automotive body scrap, post-consumer engine blocks, post-consumer oil filters, oily turnings, lead components, chlorinated plastics, or free liquids. “Free liquids” is defined as material that fails the paint filter test by EPA Method 9095B, “Paint Filter Liquids Test” (revision 2), November 2004, incorporated by reference in 40 CFR § 63.14. The requirements for no free liquids do not apply if the owner or operator can demonstrate that the free liquid is water that resulted from scrap exposure to rain.

10.3 Management practices for general iron and steel scrap

In accordance with ARSD 74:36:08:105, as referenced to 40 CFR § 63.10885(a)(2), the owner or operator must prepare and operate at all times according to written material specifications for the purchase and use of only iron and steel scrap that has been depleted (to the extent practicable) of organics and hazardous air pollutant metals in the charge materials. The materials specifications for metallic scrap must include, at minimum, that metallic scrap materials charged to a scrap preheater or metal melting furnace shall be depleted (to the extent practicable) of the presence of used oil filters, chlorinated plastic parts, accessible lead-containing components (e.g. batteries, wheel weights), and a program to ensure the scrap materials are drained of free liquids. “Hazardous air pollutant metals” is defined as antimony, arsenic, beryllium, cadmium, chromium, cobalt, lead, manganese, mercury, nickel, and selenium.

10.4 Mercury requirements

In accordance with ARSD 74:36:08:105, as referenced to 40 CFR § 63.10885(b), for scrap containing motor vehicle scrap, the owner or operator must procure the scrap pursuant to one of the compliance options in paragraphs (1), (2), or (3) below for each scrap provider, contract, or shipment. For scrap that does not contain motor vehicle scrap, the owner or operator must procure the scrap pursuant to the requirements in paragraph (4) below for each scrap provider, contract, or

shipment. The owner or operator may have one scrap provider, contract, or shipment subject to one compliance provision and others subject to another compliance provision.

1. **Site specific plan for mercury switches** – The owner or operator shall comply with the following requirements:
   a. The owner or operator must include a requirement in the written scrap specifications for removal of mercury switches from vehicle bodies used to make the scrap;
   b. The owner or operator must prepare and operate according to a plan demonstrating how the facility will implement the scrap specification in paragraph (1)(a) above for removal of mercury switches. The owner or operator must submit the plan to the Secretary for approval. The owner or operator must operate according to the plan as submitted during the review and approval process, operate according to the approved plan at all times after approval, and address any deficiency identified by the Secretary within 60 days following disapproval of a plan. The owner or operator may request approval to revise the plan and may operate according to the revised plan unless and until the revision is disapproved by the Secretary. The Secretary may change the approval status of the plan upon 90-days written notice based upon the semiannual report or other information. The plan must include the following:
      i. A means of communicating to scrap purchasers and scrap providers the need to obtain or provide motor vehicle scrap from which mercury switches have been removed and the need to ensure the proper management of the mercury switches removed from the scrap as required under the rules implementing subtitle C of the Resource Conservation and Recovery Act (RCRA). The plan must include documentation of direction to appropriate staff to communicate to suppliers throughout the scrap supply chain the need to promote the removal of mercury switches from end-of-life vehicle. Upon the request of the Secretary, the owner or operator must provide examples of materials that are used for outreach to suppliers, such as letters, contract language, policies for purchasing agents, and scrap inspection protocols;
      ii. Provisions for obtaining assurance from scrap providers that motor vehicle scrap provided to the facility meet the scrap specification;
      iii. Provisions for periodic inspections or other means of corroboration to ensure that scrap providers and dismantlers are implementing appropriate steps to minimize the presence of mercury switches in motor vehicle scrap and that the mercury switches removed are being properly managed, including the minimum frequency such means of corroboration will be implemented; and
      iv. Provisions for taking corrective actions (e.g., actions resulting in scrap providers removing a higher percentage of mercury switches or other mercury-containing components) if needed, based on the results of procedures implemented in paragraph (b) (iii) above.
2. **Option for approved mercury programs** – The owner or operator must certify in the notification of compliance status that the facility participates in and purchases motor vehicle scrap only from scrap providers who participate in a program for removal of mercury switches that has been approved by the Secretary based on the criteria in paragraphs (2)(a) through (2)(c) below. If the facility purchases motor vehicle scrap from a broker, the owner or operator must certify that all scrap received from that broker was obtained from other scrap providers who

participate in a program for the removal of mercury switches that has been approved by the Secretary based on the criteria in paragraphs (2)(a) through (c) below. The National mercury Switch Recovery Program and the State of Maine Mercury Switch Removal Program are EPA-approved programs under paragraph (2) unless and until the Secretary disapproves the program (in part or in whole) under paragraph (2)(c).

a. The program includes outreach that informs the dismantlers of the need for removal of mercury switches and provides training and guidance for removing mercury switches;
b. The program has a goal to remove at least 80 percent of mercury switches from motor vehicle scrap the scrap provider processes. Although a program approved under paragraph (2) of this section may require only the removal of convenience light switch mechanisms, the Secretary will credit all documented and verifiable mercury-containing components removed from motor vehicle scrap (e.g., sensors in anti-locking brake systems, security systems, active ride control, and other applications) when evaluating progress towards the 80 percent goal; and
c. The program sponsor agrees to submit progress reports to the Secretary no less frequently than once every year that provide the number of mercury switches removed or the weight of mercury recovered from the switches, the estimated number of vehicles processed, an estimate of the percent of mercury switches recovered, and certification that the recovered mercury switches were recycled at facilities with permits as required under the rules implementing subtitle C of RCRA. The progress reports must be based on a database that includes data for each program participant; however, data may be aggregated at the State level for progress reports that will be publicly available. The Secretary may change the approval status of a program or portion of a program (e.g., at the State level) following 90-day notice based on the progress reports or on other information;
d. The owner or operator must develop and maintain onsite a plan demonstrating the manner through which the facility is participating in the EPA-approved program;
e. The plan must include facility-specific implementation elements, corporate-wide policies, and/or efforts coordinated by a trade association as appropriate for each facility;
f. The owner or operator must provide in the plan documentation of direction to appropriate staff to communicate to suppliers throughout the scrap supply chain the need to promote the removal of mercury switches from end-of-life vehicles. Upon the request of the Secretary , the owner or operator must provide examples of materials that are used for outreach to suppliers, such as letters, contract language, policies for purchasing agents, and scrap inspection protocols; and
g. The owner or operator must conduct periodic inspections or other means of corroboration to ensure that scrap providers are aware of the need for and are implementing appropriate steps to minimize the presence of mercury in scrap from end-of-life vehicles.

3. **Option for specialty metal scrap** – The owner or operator must certify in the notification of compliance status and maintain records of documentation that the only materials from motor vehicles in the scrap are materials recovered for the specialty alloy (including, but not limited to, chromium, nickel, molybdenum, or other alloys) con (such as certain exhaust systems) and based on the nature of the scrap and purchase specifications, that the type of scrap is not reasonably expected to contain mercury switches.
4. **Scrap the does not contain motor vehicle scrap** – For scrap not subject to the requirements in paragraphs (1) through (3) of this permit condition, the owner or operator must certify in the

notification of compliance status and maintain records of documentation that this scrap does not contain motor vehicle scrap.

10.5 Management practices for binder formulations

In accordance with ARSD 74:36:08:105, as referenced to 40 CFR § 63.10886, for each furfuryl alcohol warm box mold or core making line, the owner or operator must use a binder chemical formulation that does not use methanol as a specific ingredient of the catalyst formulation. This requirement does not apply to the resin portion of the binder system.

10.6 Notification of compliance status

In accordance with ARSD 74:36:08:105, as referenced to 40 CFR § 63.10890(c), the owner or operator must submit a notification of compliance status within 90 days of the issuance of this permit for the pollution prevention management practices for metallic scrap in permit conditions 10.2 and 10.3, binder formulations in permit condition 10.5, and mercury in permit condition 10.4. The notification must include the following compliance certifications, as applicable:

1. "This facility has prepared, and will operate by, written material specifications for metallic scrap according to permit condition 10.2" and/or "This facility has prepared, and will operate by, written material specifications for general iron and steel scrap according to permit condition 10.3."
2. "This facility has prepared, and will operate by, written material specifications for the removal of mercury switches and a site-specific plan implementing the material specifications according to permit condition 10.4 paragraph (1)" and/or "This facility participates in and purchases motor vehicle scrap only from scrap providers who participate in a program for removal of mercury switches that has been approved by the Secretary according to permit condition 10.4 paragraph (2) and has prepared a plan for participation in the EPA-approved program according to permit condition 10.4 paragraph (2)(d)" and/or "The only materials from motor vehicles in the scrap charged to a metal melting furnace at this facility are materials recovered for their specialty alloy content in accordance with permit condition 10.4 paragraph (3) which are not reasonably expected to contain mercury switches" and/or "This facility compiles with the requirements for scrap that does not contain motor vehicle scrap in accordance with permit condition 10.4 paragraph (4)."
3. "This facility complies with the no methanol requirement for the catalyst portion of each binder chemical formulation for a furfuryl alcohol warm box mold or core making line according to permit condition 10.5."

10.7 Recordkeeping requirements

In accordance with ARSD 74:36:08:105, as referenced to 40 CFR §§ 63.10890(d) and (e), the owner or operator must maintain files of all information (including all reports and notifications) for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche. The records must include the following information:

1. Records supporting the notification of compliance status;
2. Records of written materials specifications according to permit condition 10.1 and records that demonstrate compliance with the requirements for restricted metallic scrap in permit condition 10.2 and/or for the use of general scrap in permit condition 10.3 and for mercury in permit condition 10.4 paragraphs (1) through (3), as applicable;
3. Records documenting compliance with permit condition 10.4 paragraph (4) for scrap that does not contain motor vehicle scrap;
4. If the facility is subject to the requirements for a site-specific plan for mercury switch removal under permit condition 10.4 paragraph (1), the owner or operator must:
    a. Maintain records of the number of mercury switches removed or the weight of mercury recovered from the switches and properly managed, the estimated number of vehicles processed, and an estimate of the percent of mercury switches recovered; and
    b. Submit semiannual reports of the number of mercury switches removed or the weight of mercury recovered from the switches and properly managed, the estimated number of vehicles processed, an estimate of the percent of mercury switches recovered, and a certification that the recovered mercury switches were recycled at RCRA-permitted facilities. The semiannual reports must include a certification that the owner or operator has conducted periodic inspections or taken other means of corroboration as required under permit condition 10.4 paragraph (1)(b). The owner or operator must identify which option in permit condition 10.4 applies to each scrap provider, contract, or shipment. The owner or operator may include this information in the semiannual compliance reports required under permit condition 10.8;
5. If the facility is subject to the option for approved mercury programs under permit condition 10.4, paragraph (2), the owner or operator must maintain records identifying each scrap provider and documenting the scrap provider's participation in an approved mercury switch removal program. If the owner or operator purchases motor vehicle scrap from a broker, the owner or operator must maintain records identifying each broker and documentation that all scrap provided by the broker was obtained from other scrap providers who participate in an approved mercury switch removal program;
6. Records documenting use of binder chemical formulation that does not contain methanol as a specific ingredient of the catalyst formulation for each furfuryl alcohol warm box mold or core making line as required by permit condition 10.5. These records must be the material Safety Data Sheet (provided that it contains appropriate information), a certified product data sheet, or a manufacturer's hazardous air pollutant data sheet;
7. Records of the annual quantity and composition of each hazardous air pollutant-containing chemical binder or coating material used to make molds and cores. These records must be copies of purchasing records, material Safety Data Sheets, or other documentation that provides information on the binder or coating materials used; and
8. Records of metal melt production for each calendar year.

10.8 Semiannual compliance report

In accordance with ARSD 74:36:08:105, as referenced to 40 CFR § 63.10890(f), the owner or operator must submit semiannual compliance reports to the Secretary. The reports must clearly identify any deviation from the pollution prevention management practices in permit condition 10.2, 10.3, 10.4, and 10.5 and the corrective action taken. If the facility is subject to a site-specific

plan for mercury switch removal under permit condition 10.4 paragraph (1), the information required in permit condition 10.7 paragraph (4) may be included in the semiannual compliance report. The semiannual reports shall cover the period from January 1 through June 30, and July 1 through December 31 of each year. The semiannual reports must be postmarked or delivered no later than July 31 or January 31.

10.9 Reclassification as a large foundry

In accordance with ARSD 74:36:08:105, as referenced to 40 CFR § 63.10890(h), following the initial determination for an existing affected source as a small foundry, if the annual metal melt production exceeds 20,000 tons during the preceding year, the owner or operator must comply with the requirements for large foundries no later than 2 years after the date of the foundry's notification that the annual metal melt production exceeded 20,000 tons.

10.10 Initial notification of large foundry applicability

In accordance with ARSD 74:36:08:105, as referenced to 40 CFR § 63.10890(b), the owner or operator must submit an initial notification of applicability if the annual metal melt production exceeds 20,000 tons per year. The initial notification shall be submitted not later than 120 days after the owner or operator becomes aware its operations are considered a large foundry. The initial notification must contain the following information:

1. The name and address of the owner or operator;
2. The address (e.g., physical location) of the affected source;
3. An identification of the relevant standard (e.g., 40 CFR Part 63 Subpart ZZZZZ) and the compliance date;
4. A brief description of the nature, size, design, and method of operation of the source and an identification of the types of emission points within the affected source subject to the relevant standard and types of hazardous air pollutants emitted;
5. A statement of whether the affected source is a major source or an area source; and
6. A statement that the affected source is now classified as a large foundry.