



**Minnesota Pollution
Control Agency**

520 Lafayette Road North
St. Paul, MN 55155-4194

NM-TP

**Test Plan for Opacity Emissions Testing at Crushing,
Screening, and Conveying Sources –
Nonmetallic Mineral Processing General Permit**

Air Quality Permit Program

Instructions on Page 4

Instructions

Performance tests must be completed according to the standards outlined in 40 CFR Part 60 subp. OOO and Minn. R. 7017.2000-2060. Pretest requirements include submittal test notification and a complete test plan, scheduling of a pretest meeting, and receipt of test plan approval from the Minnesota Pollution Control Agency (MPCA).

The MPCA will accept performance test results for units that have been tested to show compliance with 40 CFR Part 60 Subpart OOO in another state, provided that the testing met all stipulations of the standard and followed proper test methodology. The facility must provide documentation of the review and acceptance of the test results by another regulatory authority. Failure to provide such documentation will result in the MPCA requesting to review the test results and validate compliance status. If the facility is unable to supply previous test results, additional testing will be necessary. The MPCA retains the right to require performance testing at any given time.

One complete test report (one hardcopy) shall be submitted within 45 days after the date of the test. A copy of the microfiche or CD report shall be submitted within 105 days after the date of the test.

Please send completed copies of the test plans (*do not include the instructions*), hardcopy reports, and microfiche or compact disc (CDs) submittals to:

Minnesota Pollution Control Agency
Air Quality Compliance Tracking Coordinator
520 Lafayette Road North
St Paul, MN 55155-4194

Part 1. General Information

A1) Company Information

Company name: _____

AQ file no.: _____ AQ permit no.: _____

A2) Site information:

Site name: _____

Address/Location: _____

City: _____ State: _____ Zip: _____

B) Site Company Contact Information:

Name: _____ Title: _____

Cell Phone: _____ Office Phone: _____

Email address: _____ Fax: _____

C) Testing Company Contact Information:

Test Company: _____ Phone: _____

Contact Name: _____ Title: _____

Address: _____ Fax: _____

City: _____ State: _____ ZIP Code: _____

E-mail address: _____

D) Does the submission include the following information if applicable:

Enclose a simple drawing or description of the unit(s) being tested. Include dimensions and flow diagram of the process.

- ☐ Yes ☐ No Emission Units
☐ Yes ☐ No Sampling Port Locations
☐ Yes ☐ No Associated control equipment layouts
☐ Yes ☐ No Flow diagrams of emission units to be tested

E) Date of and reason for emission testing:

1. Test date	2. Reason for testing

Part 2. Testing Requirements

A) Description of pollutant to be tested

1) Emission unit tested	2) Limitation basis of pollutant tested	3) Pollutant tested	4) Applicable emission limit

Part 3. Operating Conditions

Table A. Emission Unit(s)

Process equipment		Rates	
1) Equipment Description	2) Parameter being monitoring during test	3) Throughput during test	4) Maximum Rated capacity and condition

Table B. Control Equipment

Control equipment		Rates	
1) Control Equipment Description	2) Parameter operating during test	3) Operating rate during test	4) Operating capacity and conditions

Table C. Rationale for Worst Case Condition

1) Equipment Description	2) Normal operating rates	3) Rationale for worst case

(See note in Part 3 of Instructions)

Part 4. Test Methods

A) Test description for each pollutant

Method	a) Number of test runs	b) Run time	c) Sample volume
EPA Method 9, as amended			NA

B) Alternative, equivalent or deviated test methods:

(Please summarize the reasons for the proposal and explain why it is necessary or acceptable.)

Comments: _____

C) Non-reference test method

Method	Number of test runs	Run time	Sample volume

Statement of the detection limit and degree of accuracy at the expected emission rate under test conditions for this method:

Please note: Sampling times and rates will be increased if necessary to ensure that the detection limit for each pollutant is below the applicable emission limit, using the equation in Minn. R. 7017.2045, subp. 6.

Part 5. Schedule

Mobilization date	Testing date(s)	Demobilization date

Part 6. Maintenance

Date of last maintenance work done before this test: _____

Description of maintenance work done before this test: _____

Form NM-TP Instructions

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Minnesota Pollution Control Agency
Air Quality Compliance Tracking Coordinator
520 Lafayette Road North
St Paul, MN 55155-4194

Part 1. General Information for the Performance Test Plan

Please provide the following information for all performance test plans:

- A1) The company name:
- 1) Please include Minnesota Pollution Control Agency-assigned Air Quality File No. (AQ File No. xxxx)
File numbers can be found at the following Web site: www.pca.state.mn.us/publications/air-aqfilenumbers.xls.
 - 2) Please include Minnesota Pollution Control Agency-assigned Air Quality Permit No. (xxxxxxx-xxx)
- A2) The site name and address being tested or description of site location.
- B) Site being tested contact information:
- 1) Name and title of the site contact person
 - 2) Complete address if different from the site being tested
 - 3) Phone and fax numbers and the e-mail address
- C) Testing company contact information:
- 1) Testing company name
 - 2) Name and title of testing company contact person
 - 3) Testing company address
 - 4) Testing company phone, fax numbers and the e-mail address
- D) Emission units to be tested and associated control equipment layouts, flow diagram of process, sampling port locations, and diagrams. Please list all units, and include manufacturer and unique identification number required by the Facility permit, on the attached Table A.
- 1) A simplified drawing or description of unit with dimensions and flow diagram of process
- E) The reason the emission units are being tested:
- 1) Test Date: date proposed for testing. Please use mm/dd/yyyy format.
 - 2) Reason for Testing: add necessary explanations (*Examples: permit compliance test, retest, enforcement action*).

Part 2. Testing Requirements

A)

- Column 1) Designator of the emission Unit being tested (*Example: Jaw Crusher*)
- Column 2) Rule citation for Limitation Basis of the pollutant (*Example: 40 CFR Pt. 60.672(c)*)
- Note: Do not cite the Minnesota Performance Test Rule**
- Column 3) Pollutant to be tested (*Example: Opacity*)
- Column 4) The actual emission limit (*Example: ≤ 15%*)

Part 3. Operating Conditions

Note: Minn. R. 7017.2025 states that a performance test must be conducted at worst case conditions. Typically, unless otherwise defined, worst case conditions are considered to be 90 percent of the maximum design capacity. If the projected test rate and the maximum design capacity vary greatly, an explanation why the maximum design capacity will not be met is recommended (for instance: due to bottlenecks, product being processed, material availability, etc.). Facilities should also take into account the types of materials processed when accounting to worst case conditions and test accordingly. Failure to meet these terms may result in an operating limit being set on a unit.

Table A. Emission Unit(s)

- | | |
|-----------|--|
| Column 1) | Designator of the emission Unit being tested (<i>example: Jaw Crusher</i>) |
| Column 2) | The processing parameter that will be measured at the time of the test (<i>Example: sand throughput</i>) |
| Column 3) | The rate the emission unit intends to achieve during the test |
| Column 4) | The maximum design capacity of the unit |

Table B. Control Equipment

- | | |
|-----------|---|
| Column 1) | Description of pollution control equipment if applicable. Include water application rate, if this is used during test.
Note: <i>If water is used to achieve compliance during the performance test, water application will be required during routine Facility operation.</i> |
| Column 2) | The parameter that will be measured at the time of the test to exhibit operation of control equipment (Example: inches water column) |
| Column 3) | The rate the facility intends to achieve during the test |
| Column 4) | Rate or range the control equipment is capable of running at or typically runs at based on manufacturer's specifications, previous testing, knowledge of operation, etc. |

Table C. Rationale for Worst Case Condition

- | | |
|-----------|--|
| Column 1) | Designator of the emission Unit being tested (<i>Example: Jaw Crusher</i>) |
| Column 2) | Provide the rate or range that the unit is typically operated at on a routine basis |
| Column 3) | Provide rationale of why the tested rate is considered worst case. Consider the Note above when explaining this rationale particularly if the unit will not be tested at < 90% of the maximum design capacity of the unit. |

Part 4. Test Methods

- A) The following is a description of the methods, number of test runs, length of test runs, and sampling rate of each pollutant:
- 1) EPA Method 9, as amended by Minn. R. 7017.2060 and 40 CFR Pt. 60.675 for visual determination of opacity. If this is an initial compliance test subject to NSPS regulations, then three one-hour runs of opacity are required. Stipulations in the NSPS exist to reduce the test time from 3 hours to 1 hour if 10% opacity is not exceeded during run 1.
 - a) # of Test Runs:
 - b) Run Time: One (1) hour of observations
 - c) Sample Volume: Not applicable (*please use N/A*)
 - 2) Other Methods (Use this space if other test methods will be completed.)
 - a) # of Test Runs:-
 - b) Run Time:-
 - c) Sample Volume:-
- B) If any alternative or equivalent methods or if any deviation from the test method are proposed, include a summary of the reasons for the proposal and an explanation as to why the proposal is necessary or acceptable. If it is not applicable, indicate N/A on Items B and C in Part 4.
- C) For a non-reference test method, include a statement of the detection limit and the degree of accuracy of that method at the expected emission rate and under the conditions of the performance test.

Please note: Sampling times and rates will be increased if necessary to ensure that the detection limit for each pollutant is below the applicable emission limit, using the equation in Minn. R. 7017.2045, subp. 6.

Part 5. Test Schedule:

- A) Provide the proposed schedule for the dates surrounding the test

Part 6. Maintenance:

- A) Provide the date and description of any maintenance performed prior to the test that may have an effect on test results