



**Minnesota Pollution
Control Agency**

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

ME-01-R

Continuous Monitors (MR), Data Acquisition Systems (DA)
and Continuous Monitor Systems (CM)

Supplemental Information for Title V Reissuance
Air Quality Permit Program

Doc Type: Permit Application

Instructions on Page 3

- 1) AQ Facility ID No. (first 8 digits of permit number): _____
- 2) Facility Name: _____

To complete this form, you will need the colored sheet(s) labeled

- *Facility Description: Continuous Monitors (MR)*
- *Facility Description: Data Acquisition Systems (DA)*
- *Facility Description: Continuous Monitoring Systems (CM)*

- 3) Review the information on the colored sheets labeled "Facility Description: Continuous Monitors (MR)," "Facility Description: Data Acquisition Systems (DA)," and "Facility Description: Continuous Monitoring Systems (CM)."

If there is no information listed below the column headings on any of the sheets, that means that the Minnesota Pollution Control Agency (MPCA) does not have any continuous monitoring information on record for your facility. For the purposes of this form, a continuous monitor (MR) is considered a continuous monitor system (CM) only if it is associated with a data acquisition system (DA). If you manually record data collected by a monitor (e.g. if you daily read and record pressure drop in a log book), it is not considered a continuous monitor or monitor system for this form. Continuous monitors and continuous monitor systems include continuous emission monitors, continuous opacity monitors, and continuous parameter monitors.

If nothing is listed and you do not have continuous monitors or monitoring systems, answer **Yes** to this question. If nothing is listed but you do have continuous monitors or continuous monitoring systems, skip to Question 6 below.

If there is information listed below the column headings on the colored sheet(s), is the information complete and accurate (i.e., is every monitor and/or system listed still in use, and is every monitor and/or system in use listed)?

- ☐ Yes – The "Facility Description: Continuous Monitors (MR)," "Facility Description: Data Acquisition Systems (DA)," and "Facility Description: Continuous Monitoring Systems (CM)" forms are complete and accurate. No changes are necessary. Done with this form. Return this page with your application.
- ☐ No – Go to Question 4.

- 4) Are there changes to be made that are administrative in nature (e.g., typographical errors, incorrect dates, other errors)?
[Note: This does not include replacing listed monitors or systems with new ones.]

- ☐ Yes – Using a red pen, make those changes on the colored sheets. Go to Question 5.
- ☐ No – Go to Question 5.

- 5) Are there monitors or systems listed that are no longer in use at the facility?

- ☐ Yes – Using a red pen, draw a line on the colored sheet through the equipment that is no longer in use. Indicate the date it was removed. Go to Question 6.
- ☐ No – Go to Question 6.

- 6) Are there continuous monitors or systems in use that are not listed (either additional equipment, or equipment that replaced something you crossed out for Question 5)?

- ☐ Yes – Complete the appropriate portion of the table on the next page for each continuous monitor or continuous monitoring system that is not currently listed on the colored sheets. Return this form (pages 1, 2, and 3) and the colored sheets labeled "Facility Description: Continuous Monitors (MR)," "Facility Description: Data Acquisition Systems (DA)," and "Facility Description: Continuous Monitoring Systems (CM)" with your application.
- ☐ No – Done with this form. Return this page and the colored sheets labeled "Facility Description: Continuous Monitors (CM)," "Facility Description: Data Acquisition Systems (DA)," and "Facility Description: Continuous Monitoring Systems (CM)" with your application.

Table A. Data Acquisition System (DA)

A1) DAS ID No.	A2) Primary or Backup? (P or B)	A3) Description	A4) Manufacturer	A5) Model No.	A6) Serial No.	A7) Data Storage Medium	A8) Installation Date

Table B: Continuous Monitors (MR)

B1) Mon- itor ID No.	B2) Moni- tored Item ID No.	B3) Monitor Description	B4) Manufacturer	B5) Model No.	B6) Serial No.	B7) Parameter(s) Monitored	B8) Span Value (PPM)	B9) System Full-Scale Value (PPM)	B10) Bypass Capa- bility? (Y/N)	B11) Optical Path Length Ratio (opacity monitors only)	B12) Installation Date

Table C. Continuous Monitoring Systems (CM)

C1) CMS ID No.	C2) Monitor ID No.	C3) DAS ID No.	C4) Description	C5) Parameter(s) Monitored	C6) Month/Year Installed	C7) Certification Date	C8) Certification Basis

Instructions For Adding Continuous Monitoring Equipment to the List

For the purposes of this form, monitoring equipment is not considered “continuous” unless it is associated with a data acquisition system. Do not include on this form non-continuous monitors (such as pressure drop gauges where the pressure drop is read by an operator and manually recorded)

Table A. Data Acquisition Systems (DA)

- A1) DAS ID No.** – Number the data acquisitions systems sequentially beginning with the next number after the last one listed on the colored sheet(s) labeled “Facility Description: Data Acquisition System (DA),” or beginning with “001” if this is the first. Even if you are replacing old equipment, do not reuse numbers.
- A2) Primary or Backup?** – Indicate whether this is a primary system or a backup system.
- A3) Description** – Provide a descriptive title for the data acquisition system.
- A4) Manufacturer** – Enter the manufacturer of the data acquisition system.
- A5) Model No.** – Enter the model number of the data acquisition system.
- A6) Serial No.** – Enter the serial number of the data acquisition system.
- A7) Data Storage Medium** – Indicate in what form the data is stored (electronic, paper tape, or other means).
- A8) Installation Date** – Enter the date that the data acquisition system was installed.

Table B. Continuous Monitors (MR)

- B1) Monitor ID No.** – Number the continuous monitors sequentially beginning with the next number after the last one listed on the colored sheet(s) labeled “Facility Description: Continuous Monitors (MR),” or beginning with “001” if this is the first. Even if you are replacing old equipment, do not reuse numbers.
- B2) Monitored Item ID No.** – Fill in this box with the emission source (i.e. EU, GP, TK, SV) ID number or pollution control equipment ID number that corresponds to the continuous monitor listed in this row. Be sure to use the same number as is used to identify the unit on other forms in this package.
- If the same continuous monitor serves multiple emission sources or control equipment, you must fill out a separate row of the table for each emission source or control equipment. For example, if the continuous monitor monitors two emission units, you would complete two rows in the table, listing the same MR ID number in each of the two rows. One row would have the emission unit ID number of one of the emission units, while the other row would have the emission unit ID number of the second emission unit.
- B3) Monitor Description** – Provide a descriptive title for the continuous monitor.
- B4) Manufacturer** – Enter the manufacturer of the continuous monitor.
- B5) Model No.** – Enter the model number of the continuous monitor.
- B6) Serial No.** – Enter the serial number of the continuous monitor.
- B7) Parameter(s) Monitored** – Indicate which parameter is monitored (e.g., sulfur dioxide [SO₂], nitrogen oxides [NO_x], flow, steam, etc.). If more than one parameter is monitored (e.g., a SO₂ and NO_x monitor), fill out a separate row of the table for each parameter. Each of the two rows would list the same MR ID number, similar to the situation where one monitor monitors two separate emission units (item B2, above).
- B8) Span Value (CEMS and COMS only)**
- For gas monitors (**CEMS**), span value means the upper limit of a gas concentration measurement range (in ppm). Span value is specified for certain New Source Performance Standard (NSPS) affected source categories in the applicable subpart of the regulations. When span values are not specified, calculate your span value by multiplying the gas concentration in ppm that corresponds approximately to your proposed emission limit by 1.5 and enter the result in this column.
- For opacity monitors (**COMS**), the span value is the opacity value at which the COMS is set to produce the maximum data display output (measured in percent opacity) as specified in the applicable regulation. In order to determine the actual span value for a particular COMS, you must refer to the rule or regulation that requires the installation of the COMS. In cases where there is no span value specified in the regulation, a span value equivalent to 1.5 multiplied by the emission limit is appropriate.
- B9) System Full-Scale Value** – Full-Scale means the highest measurement that the monitor can read for a particular parameter.

- B10) Bypass Capability** – Indicate whether or not there is a capability to bypass the monitor. For example, do you have an “emergency” stack that allows you to vent the flue gases before they reach the monitor? Indicate yes or no.
- B11) Optical Path Length Ratio (opacity monitors only)** – Optical Path Length Ratio means the emission outlet path length (inside diameter of the stack at its exit) divided by the monitor path length. For single pass monitors, the monitor path length is equal to the inside diameter of the stack at the location of the monitor. For double pass monitoring systems monitor path length is equal to twice the inside diameter of the stack at the location of the monitor.
- B12) Installation Date** – Enter the installation date of the monitor.

Table C. Continuous Monitoring Systems (CM)

- C1) Continuous Monitoring System (CM) ID No.** – Number the continuous monitoring systems sequentially beginning with the next number after the last one listed on the colored sheet(s) labeled “Facility Description: Continuous Monitoring Systems (CM)” or beginning with “001” if this is the first. Even if you are replacing old systems, do not reuse numbers.
- C2) Monitor ID No.** – Fill in this box with the associated continuous monitor, from Table B or from the sheet labeled “Facility Description: Continuous Monitors (MR).”
- If multiple continuous monitors are served by the same continuous monitoring system, you must fill out a separate row of the table for each individual monitor. For example, if the system consists of MR 003 and MR004, you would complete two rows in the table, listing the same CM ID number in each of the two rows. One row would have MR003 as the monitor ID number, while the other row would have MR004 as the monitor ID number.
- C3) DAS ID No.** – Fill in this box with the associated data acquisition system number, from Table A or from the sheet labeled “Facility Description: Data Acquisition Systems (DA).”
- C4) Description** – Provide a descriptive title for the continuous monitoring system.
- C5) Parameter(s) Monitored** – Indicate which parameter is monitored (e.g., SO₂, NO_x, flow, steam, etc.). If more than one parameter is monitored (e.g., a SO₂ and NO_x monitor), fill out a separate row of the table for each parameter. Each of the two rows would list the same CM ID number, similar to the situation where one system consists of two separate monitors (item C2, above).
- C6) Month/Year Installed** – Enter the date the continuous monitoring system was installed.
- C7) Certification Date** – If your continuous monitoring system has been certified by the MPCA, you will have received a letter of certification from the MPCA. Supply the test date found on the MPCA letter indicating certification. If your continuous monitoring system has not been certified as of the date of this permit application, write in “NA.”
- C8) Certification Basis** – Enter the regulation under which the continuous monitoring system was certified:
- 40 CFR 60 (New Source Performance Standards)
 - 40 CFR 64 (Compliance Assurance Monitoring)
 - 40 CFR 75 (Acid Rain program)
 - Other (describe)