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| Minnesota Pollution Control Agency (MPCA), 520 Lafayette Road North, St. Paul, MN 55155-4194 | CAP-GI-05A  Pollution control equipment information  Air Quality Permit Program  Doc Type: Permit Application |

## Instructions on page 2

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **1a)** AQ Facility ID number: | | | |  | | | **1b)** Agency Interest ID number: | | |  | |
| **2)** Facility name: | | |  | | | | | | | | |
|  | | | | | | | | | | | |
| **3a)** | **3b)** | | | **3c)** | **3d)** | | **3e)** | **3f)** | | **3g)** | |
| **Control equip. ID number** | **CE type code** | | | **Description** | **Manufacturer** | | **Model number** | **Pollutants controlled** | | **Control efficiency** | |
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Form CAP-GI-05A instructions

If you have previously received an air emissions permit from the Minnesota Pollution Control Agency (MPCA) or have filed an annual emissions inventory, contact the MPCA at 651-296-6300 or 1-800-657-3864 prior to filling out this form. Ask for a printout of the MPCA's most recent information entered in the permitting and inventory database. Start with (and edit) this information when filling out the Capped Application form.

**1a) AQ Facility ID number** – Fill in your Air Quality (AQ) Facility Number as indicated on Form CAP-GI-01, item 1a.

**1b) Agency interest ID number** – Fill in your agency interest ID number. This is an ID number assigned to your facility through the Tempo database. If you don’t know this number, leave this line blank.

**2) Facility name** – Enter your facility name as indicated on Form CAP-GI-01, item 2.

**3a) Control equipment (CE) ID number** – Assign a Control Equipment ID number to each piece of pollution control equipment (e.g., fabric filter or afterburner) or pollution control practice (e.g., dust suppression by water spray). Number the pollution control equipment/practices at your facility sequentially (001, 002, 003, etc). The assigned number will be used in other forms to identify control equipment that is described in this form. This ID number is unique to this piece of equipment and must be used consistently throughout the application.

**3b) CE ID code** – Fill in the appropriate Control Equipment (CE) Type Code from Table CAP-GI-05A.1 at the end of these instructions. The type-code for the control equipment must be entered correctly, since this will be the primary means of recording and identifying the type of air pollution control equipment at this facility.

**3c) Description** – Fill in the appropriate control equipment or control practice description. This description must correspond with the Control Equipment Type Code in the second column (Item 3b).

**3d) Manufacturer** – Fill in the name of the pollution control equipment manufacturer. Pollution control practices such as dust suppression by water spray or chemical oxidation may not use control equipment. In these cases, fill N/A for items 3d and 3e.

**3e) Model number** – Fill in the manufacturer's model number for the pollution control equipment. If no control equipment is used, fill in NA.

**3f) Pollutants controlled** – Fill in the pollutants controlled. The pollutants identified in this column should match one or more of the pollutants listed in Table CAP-GI-05A.1. List each pollutant in a column filling in each box with only one pollutant. For example, if a wet scrubber is used to control particulate matter and Particulate Matter less than 10 um in size (PM10) emissions from an emissions unit at your facility, list Particulate Matter (PM) in the first row and PM10 in the second. It is not necessary to repeat the other information in the other columns (i.e., equipment manufacturer's name, equipment model number, etc.).

**3g) Control efficiency** – Fill in the control efficiency using the values provided in Table CAP-GI-05A.1. These values are taken from Minn. R. 7007.0070 [Listed Control Equipment and Control Equipment Efficiencies]. Under Minn. R. 7011.0070, subp. 2, the owner may use an alternative control or capture efficiency if it has been verified by a performance test approved by the commissioner. The request for an alternative control efficiency or capture efficiency or both must include the verification or approval letter and the required operating parameters in the application.

Total enclosure is defined in Minnesota Rules as “an enclosure that completely surrounds emissions from an emissions unit such that all emissions are captured and discharged through ductwork to control equipment”.

Hoods and other devices do not completely surround the emissions from an emission unit and therefore do not capture all of the pollutants emitted. An example of a hood is a three-sided spray booth because the enclosure does not completely surround the emissions. You may only take credit for controls that capture emissions through a hood if the hood is certified and maintained as described in Minn. R. 7011.0072.

Fill out form CAP-HE-01 for each hood that is associated with control equipment listed on this from.

Table CAP-GI-05A.1

| **Control equipment type code** | **Pollutant controlled** | **Equipment type** (see Minn. R. 7011.0070 for further descriptions) | **Assumed efficiency using a total enclosure** | **Assumed efficiency using a certified hood** |
| --- | --- | --- | --- | --- |
| 007 | PM, PM10 | Centrifugal collector (cyclone) ‑ high efficiency | PM – 90%  PM10 – 78% | PM – 72%  PM10 – 62% |
| 008 | PM, PM10 | Centrifugal collector (cyclone) ‑ medium efficiency | PM – 80  PM10 – 60% | PM – 64  PM10 – 48% |
| 009 | PM, PM10 | Centrifugal collector (cyclone) ‑ low efficiency | PM – 25  PM10 – 25% | PM – 20  PM10 – 20% |
| 076 | PM, PM10 | Multiple cyclone without fly ash reinjection | PM – 90  PM10 – 72% | PM – 72  PM10 – 58% |
| 057, 085 | PM, PM10 | Wet cyclone separator or cyclonic scrubbers | PM – 84  PM10 – 84% | PM – 84  PM10 – 84% |
| 012 | PM10 | Electrostatic precipitator used for boiler fly ash control | PM10 – 40% | NA |
| 012 | PM, PM10 | Electrostatic precipitator used for other applications | PM – 98  PM10 – 94% | PM – 78  PM10 – 75% |
| 016 | PM, PM10 | Fabric filter (T>250 °F), high temp. | PM – 99  PM10 – 93% | PM – 79  PM10 – 74% |
| 017 | PM, PM10 | Fabric filter (180 °F <T<250 °F), med. Temp. | PM – 99  PM10 – 93% | PM – 79  PM10 – 74% |
| 018 | PM, PM10 | Fabric filter (T<180 °F), low temp. | PM – 99  PM10 – 93% | PM – 79  PM10 – 74% |
| 052 | PM, PM10 | Spray tower | PM – 85  PM10 – 84% | PM – 68  PM10 – 68% |
| 053 | PM, PM10 | Venturi scrubber | PM – 94  PM10 – 84% | PM – 76  PM10 – 68% |
| 055 | PM, PM10 | Impingement plate scrubber | PM – 77  PM10 – 77% | PM – 62  PM10 – 62% |
| 056, 113 | PM, PM10 | Mechanically aided separator | PM – 64  PM10 – 5% | PM – 52  PM10 – 4% |
| 058 | PM, PM10 | Wall or panel filter | PM – 85  PM10 – 85% | PM – 68  PM10 – 68% |
| 101 | PM, PM10 | HEPA filter or ULPA filter | PM – 99.98  PM10 – 99.98% | PM – 80  PM10 – 80% |
| 503 | PM, PM10 | Charged filter | PM – 94  PM10 – 84% | PM – 76  PM10 – 68% |
| 517 | PM, PM10 | Condensation scrubber | PM – 94  PM10 – 84% | PM – 76  PM10 – 68% |
| 019, 020, 109, 116, 509 | VOC, CO, PM10, PM | Catalytic afterburner | VOC – 94  PM – 62  PM10 – 62  CO – 94% | VOC – 76  PM – 50  PM10 – 50  CO – 76% |
| 021, 022, 131, 133, 510 | VOC, CO, PM10, PM | Thermal afterburner | VOC – 97  PM – 62  PM10 – 62  CO – 97% | VOC – 78  PM – 50  PM10 – 50  CO – 78% |
| 023 | VOC | Flaring or direct combustor | VOC – 98  PM – 61  PM10 – 61  CO – 98% | VOC – 79  PM – 50  PM10 – 50  CO – 79% |

For each pollution control equipment unit, submit a copy of the portion of the manufacturer’s specification or test plan with the appropriate operating parameters highlighted. See the instructions for the required operating parameters for each type of control equipment.