



**Minnesota Pollution
Control Agency**

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

CAP-HE-01

Capped Permit Hood Evaluation and Certification

Air Quality Permit Program

- 1) AQ Facility ID No. (if known): _____
- 2) Facility name: _____
- 3) Evaluation - The following information is required for a hood evaluation under Minn. R. 7011.0072, subp. 3. This information must be provided for each hood for which the applicant wants to claim a control efficiency for pollutant-collecting hoods as described in the instructions for form CAP-GI-05A by having the design of the hood evaluated by qualified personnel. Make copies of the first page of this form and fill out for each hood that you have listed on form CAP-GI-05A.

The hood evaluation must be completed by a testing company as defined by Minn. R. 7011.0060, subp. 4a.
 - 3a) Emission unit no. (s) _____
 - 3b) Drawing of recommended and actual hood dimensions -- Attach drawing to form.
 - 3c) Design capture velocity:
Recommended capture velocity: _____
Edition of the manual referenced: _____
Page nos.: _____
Additional justification: _____
 - 3d) Actual capture velocity: _____
 - 3e) Minimum recommended air flow into hood: _____
 - 3f) Actual air flow into hood: _____
 - 3g) Recommended hood face velocity or slot velocity: _____
 - 3h) Actual hood face velocity or slot velocity: _____
 - 3i) Recommended plenum and duct velocity (if applicable): _____
 - 3j) Actual plenum and duct velocity (if applicable): _____
 - 3k) Fan rotation speed (determined through testing): _____
 - 3l) Fan power draw (determined through testing): _____
 - 3m) Show the capture velocity test plan on a drawing or sketch. Attach plan to form. _____

4) Certification

I certify under penalty of law that the hood(s) listed below has (have) been evaluated under my direction or supervision by qualified personnel and that, to the best of my knowledge and belief, the (each) hood conforms to the design and operating practices recommended in "*Industrial Ventilation - A Manual of Recommended Practice, American Conference of Governmental Industrial Hygienists.*"

Emission Unit ID(s)	Control Equipment ID	Pollutant(s) Controlled

Responsible official certifying this capped permit submittal:

Mr./Ms.: _____

Title: _____

Signature: _____ Date: _____

Telephone: _____ Fax: _____

Form CAP-GI-05A Instructions

If the hood exists at the time of application, this form must be included with the application. If the hood does not yet exist at the time of application, this form shall be submitted within 30 days after startup.

The contents of the evaluation are defined under Minn. R. 7011.0072, subp. 3. This evaluation must be completed by a testing company (as defined in Minn. R. 7011.0060, subp. 4a). Make copies of the first page of this form and fill out for each hood that you have listed on form CAP-GI-05A.

- 1) AQ Facility ID No. -- Fill in your Air Quality (AQ) Facility ID Number, as indicated on Form CAP-GI-01, item 1a. If you do not have this information, leave it blank.
- 2) Facility Name -- Enter your facility name, as indicated on Form CAP-GI-01, item 2.
- 3a) Emission Unit No(s). -- Fill in the emission unit number(s) for the emission unit(s) served by this hood.
- 3b) Drawing of Recommended and Actual Hood Dimensions. -- Provide a sketch of the shape and dimensions of the hood as recommended by the Manual, including numerical dimensions and a sketch of the hood as constructed and installed. Indicate on the sketch of the recommended hood if a dimension is a minimum or maximum.
- 3c) Design Capture Velocity -- Fill in the capture velocity used to design this collection hood, including units. Fill in the edition number of the Manual you use. Preferably this should be the latest edition, but some recent older editions may have the same design recommendations for many emission units. Fill in the page numbers of the Manual you used to evaluate this hood. If necessary, provide any additional justification for the design capture velocity used.
- 3d) Actual Capture Velocity -- Fill in the actual capture velocity as determined by testing, including units.
- 3e) Minimum Recommended Air Flow into Hood -- Fill in the minimum air flow recommended by the Manual. In many cases this must be calculated using the capture velocity. Include the units.
- 3f) Actual Air Flow into Hood -- Fill in the actual air flow for this hood. This can be based on the design for this hood or on testing. Include the units.
- 3g) Recommended Hood Face Velocity or Slot Velocity -- If the Manual recommends a hood face velocity, fill it in. Otherwise, fill in NA.
- 3h) Actual Hood Face Velocity or Slot Velocity -- Fill in the actual face or slot velocity. Include units.
- 3i) Recommended Plenum and Duct Velocity (if applicable) -- "Plenum velocity" most commonly refers to the case in which the air enters the hood through slots and then passes through a duct of constant cross-sectional area before entering the transition to the smaller duct that leads to the control device. The duct immediately behind the slots is the "plenum." If the Manual recommends a plenum and/or velocity, fill it in. Include the units. Otherwise, fill in NA.
- 3j) Actual Plenum and Duct Velocity (if applicable) -- Fill in the actual plenum and/or velocity if applicable. Include the units.
- 3k) Fan Rotation Speed (determined through testing) -- Fill in the actual fan rotation speed, including the units.
- 3l) Fan Power Draw (determined through testing) -- Fill in the actual fan power draw, including the units.
- 3m) Show the capture velocity test plan on a drawing or sketch. On a separate sheet, provide this information.
- 4) Certification -- For each hood to be certified, fill in the ID number(s) of the emission unit(s) served by that hood and the ID number(s) of the control equipment. This certification is required under Minn. R. 7011.0072, subp. 2. The certification must be signed by a responsible official as defined in Minn. R. 7007.0100, subp. 22.