

Air Quality Permitting Application Form 6.0: Emission Points

INSTRUCTIONS:

Section 6.5: Controlled Emission Point (without combustion)

IMPORTANT: Do NOT use pencil to fill out the application. Please type responses or print using black ink. If you have any questions, feel free to contact the Nebraska Department of Water, Energy, and Environment (DWEE) via DWEE.AirQuality@nebraska.gov or the Air Quality Permitting Section at (402) 471-2186.

Complete the information on the top of each page. Enter the name of the company/facility as it is known in Nebraska. The facility name on every page of the application should be identical. Enter the date the form was completed. Enter the DWEE Facility Identification (FID) number assigned by the Nebraska Department of Water, Energy, and Environment. If this is a new facility, leave this space blank. Enter the Emission Point Identification Number. Each place where emissions are emitted into atmosphere from your facility should be labeled with an individual identification number.

Form 6.0, Section 6.5 should be used for an emission point that is controlled by a piece of control equipment that **does not** combust fuel. Examples of control equipment that do not combust fuel include baghouses, scrubbers, electrostatic precipitators, cyclones, etc. This form can be used if one or more emission units are controlled by the control device and then vented into the atmosphere through a single emission point. There is room on this form to provide information on up to eight emission units that are routed through the control device and emitted to the atmosphere via a single emission point. If more than eight emission units are routed through a single controlled emission point, multiple Section 6.5 forms must be completed in order for all emission units to be identified. However, each Section 6.5 form should have identical emission point identification numbers if multiple units are routed to the same emission point. This form can also be used if both combustion units and non-combustion units are controlled by the same piece of control equipment. If the emissions routed through this emission point are controlled by a control device that is a combustion device (e.g., a thermal oxidization system), Section 6.6 should be completed in lieu of Section 6.5. If the emissions are not controlled by a control device, Section 6.4 should be completed.

General Information

- 1) Enter the control equipment identification number assigned to the control device that controls the emissions exiting the emission point identified on the top of the page.
- 2) Enter the date the control equipment was installed at the facility. Include a month, day, and year. If the unit is new, select the new unit box.
- 3) Enter the name of the control equipment and provide brief description of the unit's purpose.

4) Unit Information

Enter ALL of the emission units whose emissions will be or are controlled and then emitted from the emission point ID identified at the top of the page. Each emissions unit should be entered on its own line and all information requested should be completed. Include the unit ID number, unit type, unit name, maximum capacity (be sure to include appropriate units), and the installation date. You should include a month, day, and year of installation if known. If this is a new unit, select the box under the "New Unit" column. Attach the manufacturer's information for each emission unit as part of the application (**Step 9 Manufacturer's Information**).

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4) Unit Information (continued)

If more than eight (8) emission units will be controlled and then emitted through the emission point, then multiple Section 6.5 forms should be completed for the emission point in order for all emission units to be accounted for.

5) Stack Information

- a) If this emission point does not have a “stack” through which the point’s emissions exhaust, select the N/A box.
- b) Enter the height of the stack in feet.
- c) Enter the inside diameter (in feet) of the top of the stack where the emissions are discharged.
- d) Select whether the stack discharges horizontally, vertically, or vertically but a rain cap is utilized by selecting the appropriate box.
- e) Enter the velocity in meters per second of the gas as it discharges from the top of the stack.
- f) Enter the exit temperature (Kelvin) of the gas exiting the top of the stack.

6) Control Information

- a) Enter the types of pollutants the control equipment controls (i.e., reduces). If multiple pollutants are controlled, indicate each pollutant controlled in line with its respective control efficiency.
- b) Enter the control efficiency of the control equipment for each pollutant being controlled. This is the percentage of the pollutant that is controlled by the control equipment.
- c) If more than six pollutants will be controlled by the control equipment, attach additional pages so that all the controlled pollutants are accounted for in the application.
- d) If the control device associated with the emission point is a baghouse, enter the control equipment identification number and provide air flow rate in dry standard cubic feet per minute (dscf/min) and the grain loading in terms of grains per dry standard cubic foot (grains/dscf).

7) Controlled Unit Fuel Information

Enough space is provided in the “Fuel Information” section for information on two different combustion emission units whose emissions are routed through the controlled emission point. If more than two emission units that contribute emissions to the emission point combust fuel, additional pages of this form need to be completed to account for all emission units that combust fuel. If a combustion unit combusts more than one type of fuel, additional pages should be used in order to account for all fuel types combusted in each unit. Attach the manufacturer’s information for each emission unit as part of the application (**Step 9 Manufacturer’s Information**).

- a) Indicate whether or not combustion units contribute to the emissions exhausted through the emission point identified at the beginning of the section.
- b) Enter the emission unit ID number of the combustion unit.
- c) Enter the maximum rated capacity of the combustion unit in units of million British thermal units per hour (MMBtu/hr).
- d) Enter the name of the combustion unit or provide brief description of the unit’s purpose.
- e) Enter the type/grade of fuel that is combusted in the combustion unit (examples: No. 2 fuel oil, coal, natural gas).

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7) Controlled Unit Fuel Information (continued)

- f) Enter the maximum fuel capacity of this unit. If this unit was operating continuously (8,760 hours per year), how much fuel would it consume? If enough fuel will not be produced or collected (example: biogas from an anaerobic treatment system) for the unit to be capable of operating year-round, enter the total amount of fuel that will be produced/collected. Be sure to indicate this amount is all that will be produced/collected and not the maximum fuel capacity by attaching additional information to the form. Be sure to include the appropriate units (i.e., MMscf/year, tons/year, gallons/year, etc.)
- g) Enter the heat content of the fuel being combusted. Be sure to include the appropriate units (i.e., MMBtu/MMscf, MMBtu/ton, MMBtu/gallon, etc.).
- h) For fuel specifications, enter the percent sulfur by weight that is contained in the fuel. Enter N/A if the fuel type contains negligible amounts of sulfur. If combusting coal or used oil, enter the maximum ash content as a weight percent.
- i) Enter any current operating limits that apply to the fuel type or any operating limitations that are being requested with this permitting action. Typically for combustion units, this limit may be an hourly restriction on the combustion of a certain fuel type (hours/year) or a specific fuel amount that the unit can combust each year. Be sure to include the appropriate units. If there are no operating limits or none are being requested., select the N/A box.
- j) If you are completing this form for the purpose of obtaining an operating permit, indicate the amount of fuel used for the past five years. Be sure to include appropriate units. If this is a new source (i.e., obtaining its initial operating permit), provide the fuel usage for the past year.

8) Potential to Emit (PTE) Calculations

PTE calculations are required to be submitted with this application. If there are questions on calculating the potential emissions associated with the emission point, contact the Department. The Department may be able assist you in calculating the potential emissions. Calculation spreadsheets are also available on the Department's website. Be sure the potential emission calculations are attached and select the box to indicate it has been done.

9) Manufacturer Specifications

Attach the manufacturer specifications for each controlled emission point (without combustion) emission unit listed under **General Information** and for any control device listed under **4) Unit Information** and **7) Controlled Unit Fuel Information** (in accordance with step 9). Select the box to indicate it has been done.

10) Actual Emissions Calculations

Actual emissions calculations are required to be submitted with this application if you are applying for an operating permit (initial or renewal). If there are questions on calculating the actual emissions associated with the emission point, contact the Department. The Department may be able to assist you in calculating the actual emissions. Calculation spreadsheets are also available on the Department's website. Be sure the actual emission calculations are attached and select the box to indicate it has been done.

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11) Additional Information

Please include any additional information associated with the emission point you feel should be submitted with this application. Only select the “YES” box if information is being included that is not required elsewhere in the application.