

INSTRUCTIONS:

Sections 2.1, 2.2, and 2.3: Emission Point and Air Dispersion Modeling Information

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 Environment and Energy via NDEE.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 that the form was completed. Enter the Facility Identification (FID#) number assigned by the Nebraska Department of Environment and Energy.

This form should be completed in its entirety whether or not air quality dispersion modeling is required for the project going through the permitting process. Consult the “Atmospheric Dispersion Modeling Guidance for Permits” guidance document. This document can be found on the Department’s website. The guidance document also contains information on the proper procedure for conducting and submitting modeling information to the Department. Contact the Department if there are any questions on whether or not modeling is required.

The guidance document referenced above includes information on how to determine if a source is a point source, area source, or volume source and information on how to determine some of the information requested in Sections 2.2 and 2.3.

Section 2.1: Emission Point Summary

Complete the following Emission Point Summary Table so that **all** emission points, control equipment, and emission units are accounted for. Use multiple Section 2.1 forms, if needed, so that all emission points, control equipment, and emission units are included. Below is a sample of how this form should be completed. If a separate summary document is used as a replacement for this Section, be sure to identify the separate summary document with the title of this Section and attach it to this form.

Emission Point ID#	Control Equipment ID#	Emission Unit ID#	Source Classification Code (SCC)	Emission Source/Process Description
EP-001	CE-001	EU-001	30200501	Rail Dump Pit
EP-001	CE-001	EU-002	30200501	Truck Dump Pit
EP-001	CE-001	EU-003	30200502	Conveyor #1
EP-001	CE-001	EU-004	30200502	Elevator #1
EP-002	CE-002	EU-005	30200502	Conveyor #2
EP-002	CE-002	EU-006	30200507	Corn Storage Silo #1
EP-002	CE-002	EU-007	30200507	Corn Storage Silo #2
EP-002	CE-002	EU-008	30200502	Conveyor #3

Section 2.2: Air Dispersion Modeling Point Source Information

- 1) Enter the emission point identification number. Each place where pollutants are emitted into the atmosphere from your facility should be assigned an individual identification number. These identification numbers should be the same as the identification numbers used throughout the entire air quality construction permit application package. If the numbers differ, an explanation should be provided.
- 2) Enter the description of the emission point (e.g. Hammermill Baghouse #1). These descriptions should be the same as the descriptions used throughout the entire air quality construction permit application package. If the descriptions differ, an explanation should be provided.
- 3) Enter the UTM X coordinate of the emission point in meters.
- 4) Enter the UTM Y coordinate of the emission point in meters.
- 5) Enter the elevation of the emission point in units of meters.
- 6) Enter the height of the stack (from the ground elevation) in units of meters.
- 7) Enter the exit temperature of the gas exiting the top of the stack in degrees Kelvin.
- 8) Enter the exit velocity of the gas exiting the top of the stack in meters/second.
- 9) Enter the inside diameter of the stack where the pollutants are emitted from in meters.
- 10) Enter the flow rate (actual cubic feet per meter) of the gas exiting the top of the stack in cubic meters/second.

Section 2.3: Air Dispersion Modeling Area and Volume Source Information

Area Source Information

- 1) Enter the emission point identification number. Each place where pollutants are emitted into the atmosphere from your facility should be assigned an individual identification number. These identification numbers should be the same as the identification numbers used throughout the entire air quality construction permit application package. If the numbers differ, explanation should be provided.
- 2) Enter the description of the emission point (e.g. Grain Pile Fugitive Emissions). These descriptions should be the same as the descriptions used throughout the entire air quality construction permit application package. If the descriptions differ, explanation should be provided.
- 3) Enter the UTM X coordinate of the source in meters.
- 4) Enter the UTM Y coordinate of the source in meters.
- 5) Enter the ground elevation of the emission point in units of meters.
- 6) Enter the X length (east – west direction) of the emission source in meters.
- 7) Enter the Y length (north – south direction) of the emission source in meters.
- 8) Enter the height in which the emissions are released in meters.
- 9) Enter the angle of orientation between 180 and –180 degrees.
- 10) Enter the initial vertical dimension of the area source plume in meters.

Section 2.3: Air Dispersion Modeling Area and Volume Source Information (continued)

Volume Source Information

- 1) Enter the emission point identification number. Each place where pollutants are emitted into the atmosphere from your facility should be assigned an individual identification number. These identification numbers should be the same as the identification numbers used throughout the entire air quality construction permit application package. If the numbers differ, explanation should be provided.
- 2) Enter the description of the emission point (e.g. Grain Storage Bin Vents). These descriptions should be the same as the descriptions used throughout the entire air quality construction permit application package. If the descriptions differ, explanation should be provided.
- 3) Enter the UTM X coordinate of the center of the volume source in meters.
- 4) Enter the UTM Y coordinate of the center of the volume source in meters.
- 5) Enter the ground elevation of the emission point in units of meters.
- 6) Enter the initial lateral dimension of the volume source in meters.
- 7) Enter the initial vertical dimension of the volume source in meters.
- 8) Enter the height in which the emissions are released into the atmosphere in meters.

Note: The Universal Transverse Mercator (UTM) coordinate system is a grid-based method of specifying locations on the earth's surface. These are mapping coordinates similar to Latitude and Longitude. UTM coordinates may be obtained from UTM grid maps, Google Earth, and a number of other sources. Geographic (Latitude/Longitude) to UTM coordinate converters are available via the Internet.