

INSTRUCTIONS:

Sections 3.1, 3.2, 3.3, 3.4, 3.5, and 3.6: Emission Summaries for Criteria Pollutants, Hazardous Air Pollutants (HAPs) and Greenhouse Gases (GHGs)

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 legal name of the company/facility. The facility name on every page of the application should be identical. Enter the date that the form was completed. Enter the Facility Identification number (FID#) assigned by the Nebraska Department of Environment and Energy.

This form should be completed in its entirety so that all emission points, control equipment, and emission units are accounted for. If additional space is needed, attach multiple copies of this form or a separate summary document.

Section 3.1: Criteria Pollutant Emissions Summary in pounds per hour (lb/hr)

Complete the following Criteria Pollutant Emissions Summary Table so that **all** emission points, control equipment, and emission units are accounted for. Use multiple Section 3.1 forms, if needed, so that all emission points, control equipment, and emission units are included. Below is an example 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.

If assistance is needed to calculate the lb/hr emissions from each emission point, contact NDEE.AirQuality@nebraska.gov or the Air Quality Permitting Section at (402) 471-2186.

Emission Point ID#	PM (lb/hr)	PM ₁₀ (lb/hr)	PM _{2.5} (lb/hr)	NO _x (lb/hr)	SO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
EP-001	1.00	0.50	0.25	0	0	0	0
EP-002	1.00	1.00	1.00	0	0	0	0
EP-003	1.25	1.00	0.75	0	0	0	0
EP-004	1.50	1.50	1.50	0	0	0	0
EP-005	0.75	0.50	0.25	2.00	0.25	1.25	1.00
EP-006	0	0	0	12.00	4.00	10.00	3.00
EP-007	0	0	0	0	0	0	16
Total	5.50	4.50	3.75	14.00	4.25	11.25	20.00

Section 3.2: Section 3.1: Criteria Pollutant Emissions Summary in tons per year (tpy)

Complete this form in the same manner as form 3.1. To obtain tpy emission rates, multiply the lb/hr values by the number of hours each emission unit is operational and divide the total by 2000 lb/ton.

Note 8760 hours/yr is the default hours of operation rate for all emission units. If a different rate is

more appropriate, include a separate page that includes the maximum number of hours per year the unit is operational and an explanation as to why this number is more appropriate.

Section 3.3: Hazardous Air Pollutant (HAP) Emissions summary

Section 3.3 pertains to HAP emissions. In the far-left column of the table, identify all emission units capable of emitting HAPs. Across the top of the table, list the HAPs expected to be emitted from the facility. In the bottom row, sum the total amount of the individual HAP emitted from the facility. In the far-right column, sum the total HAPs emitted from each emission point. Below is a sample of how this table should be completed. ***Note*** If the total amount of any individual HAP exceeds 2.5 tpy individual or 10 tpy aggregate (State thresholds), or if the total combined amount of HAPs exceeds 10 tpy individual or 25 tpy aggregate (Federal thresholds), the requirements of [Title 129, Chapter 13](#) need to be reviewed for applicability to this permitting action.

Hazardous Air Pollutants →	Acetaldehyde (ton/yr)	Hexane (ton/yr)	Methanol (ton/yr)	Ethanol (ton/yr)	TOTAL HAP (ton/yr)
Emission Point ID# ↓					
EP 1	1.00	0.25	.75	2.00	4.00
EP 2	2.00	0.00	0.00	0.00	2.00
EP 3	0.25	0.25	0.00	0.00	0.50
EP 4	0.50	0.50	0.00	0.00	1.00
TOTAL HAPs	3.75	1.00	0.75	2.00	7.50

In this example, this facility would be subject to the requirements of Title 129 Chapter 13 because potential HAP emissions exceed 2.50 tpy of acetaldehyde.

Sections 3.4 and 3.5: Greenhouse Gas (GHG) Emission Summary (lb/hr and tpy)

Effective January 2, 2011, the NDEE is evaluating potential emissions of GHGs for permit applicability. Complete this form in the same manner as Sections 3.1 and 3.2.

Section 3.6: Greenhouse Gas (GHG) Emission Summary in Carbon Dioxide Equivalents (CO₂e)

In addition to permitting GHGs on a mass basis (lb/hr, tpy) greenhouse gas emissions are measured on a Carbon dioxide equivalency basis (CO₂e). To obtain equivalent CO₂e take each total from form Section 3.5 and multiply it by the associated emission factor on this form. Then total the CO₂e emissions.