

SECTION 2.0 – PERMIT BY RULE: Asphalt Plants

FACILITY NAME: _____

DATE _____

NDEQ Facility ID# _____

NOTE: YOU MUST ALSO FILL OUT SECTION 1.0 IN ITS ENTIRETY

NOTE: If you are already covered by the Asphalt Plant Permit-by-Rule and are applying for a relocation, you need only complete and submit Section 2.0-Permit by Rule: Asphalt Plants, Part 2.5: Relocation: Asphalt Plants. The relocation notice must be submitted to the Department at least 20 days prior to the relocation.

PART 2.1: NOTICE OF INTENT: Asphalt Plants

IMPORTANT: PLEASE READ THE INSTRUCTIONS ACCOMPANYING THIS SECTION

Please do **NOT** use pencil. You may type responses or Use black ink.

Boundaries and Location

You are required to define your boundaries in order to prohibit access so that the public cannot come in contact with air emissions that may be harmful to human health. For Asphalt Plants, this is the distance from the nearest residence the plant must be. The Department will review the distance from the nearest public access point that you provide and evaluate whether or not that distance is sufficient. If the distance provided is unsatisfactory, you will be contacted.

001.05

By applying to be covered by this Permit-by-Rule, you are indicating that the source is (will be) located in an attainment area and a minimum of five (5) miles (will) exist between the source and Weeping Water, NE. Is this statement correct?

YES NO

001.06

NOTE: If you answered NO to the question on Boundaries and Location, you do not qualify for the Permit-by-Rule and you must apply for a permit

Applicability

The Permit-by-Rule for Hot Mix Asphalt Plants defines a Hot Mix Asphalt Plant as a facility that is comprised of any combination of the following: generators; heaters; dryers; systems for screening, handling, storing, and weighting hot aggregate; systems for loading, transferring, and storing aggregate materials; systems for mixing hot mix asphalt; and associated emission control systems. Does this definition describe your facility?

YES NO

011

NOTE: If you answered NO to the question on Applicability, you do not fit the description of the facility covered by this Permit-by-Rule.

Asphalt Plant Information

What type of Hot Mix Asphalt Plant is your facility? Batch Mix Plant Drum Mix Plant

Rated Capacity: _____ tons/hour Operating Schedule: _____ hr/day _____ day/wk _____ wk/yr

What maximum production capacity will you operate? _____ Tons/Hour _____ Tons/Month _____ Tons/Year

Operating Conditions and Limits

Please confirm that your Asphalt Plant will operate within one of the established limits listed below:

Option One – Batch Mix Plants:

250,000 tons of asphalt produced per calendar month **AND**
400,000 tons of asphalt produced per 12-consecutive months

YES NO N/A

011.03A

Option Two – Drum Mix Plants:

500,000 tons of asphalt produced per calendar month **AND**
850,000 tons of asphalt produced per 12-consecutive months

YES NO N/A

011.03B

NOTE: Mark N/A to the question if you are not that type of facility.

NOTE: One of the Operating Conditions and Limits questions must be answered YES in order to qualify for the Permit-by-Rule.

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Electrical Generation

Please list the generator(s) associated with the Hot Mix Asphalt Plant:

Generator Identification Number	Rated Capacity (MMBtu/hr)	Type of Fuel(s) Burned	Fuel Consumption (gal/hr)
_____	_____	_____	_____
_____	_____	_____	_____

Attach Additional Pages if Needed. Clearly indicate that an Additional Page for this information has been included.

Generator Fuel Sulfur Content

Please confirm that your chosen fuel will have the following characteristics:

If diesel fuel is used, the sulfur content will be less than 0.5%

YES NO N/A

011.06B

If another fuel, other than diesel is used, the sulfur content will be less than 1.0%

YES NO N/A

011.06B

NOTE: Mark N/A to the question that does not apply to your facility.

NOTE: One of the Fuel Sulfur Content questions must be answered YES in order to qualify for the Permit-by-Rule.

Generator Fuel/Operating Hours Limits

Choose one of the following options to indicate how you will comply with this requirement:

Option One: Limiting based on Fuel Amount

You will not combust more than 75,000 gallons of diesel fuel per calendar month and 250,000 gallons of diesel fuel per consecutive twelve (12) months

YES NO N/A

011.04

Option Two: Limiting based on Operating Time

The maximum amount of time the generator(s) will be permitted to be in operation is shown below:

$$75,000 \frac{\text{gallons}}{\text{month}} \times \frac{1}{\boxed{}} = \boxed{}$$

Max. Operating Hours per Month

Total Generator Fuel Intake (gal/hr)

$$250,000 \frac{\text{gallons}}{\text{year}} \times \frac{1}{\boxed{}} = \boxed{}$$

Max. Operating Hours per Year

Total Generator Fuel Intake (gal/hr)

YES NO N/A

011.04

NOTE: Mark N/A to the question(s) if you are not choosing that option or if you are not going to use diesel fuel

NOTE: If you answered NO to the question on Operating Conditions and Limits, you do not qualify for the Permit-by-Rule and you must apply for a permit

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Control Equipment

Please List the Air Emissions Control Equipment associated with the Hot Mix Asphalt Plant:

Control Equipment
Identification Number

Type of Control Equipment

Control Efficiency (%)

Attach Additional Pages if Needed. Clearly indicate that an Additional Page for this information has been included.

Please confirm that your Control Equipment is (will be) operated in the following ways:

All emissions control technology shall be properly installed, maintained, and operated whenever associated equipment is in operation.

YES NO

011.08

Manufacturer's instructions for all control equipment shall be kept on site and readily available to Department representatives.

YES NO

011.08

The Fabric Filter(s)/Baghouse(s) Conditions:

- Each fabric filter/baghouse shall be equipped with an operational pressure differential indicator. Each pressure differential indicator will be installed, calibrated, operated, and properly maintained according to manufacturer's recommendations
- Dust collector filter bags will be inspected and/or replaced according to the manufacturer's recommendations or more frequently as indicated by pressure differential readings
- Daily observations shall be done to ensure that the fabric dust collector is functioning properly.

YES NO N/A

011.08A

Daily observations of all Control Equipment shall include:

- Determination whether there are visible emissions from the stack
- Determination whether there are leaks or noise emanating from the unit
- Obtaining pressure differential readings (if applicable)
- Other indications that may necessitate corrective action

If correction action is needed, it will be taken immediately.

YES NO N/A

011.08A

NOTE: Mark N/A to the question concerning Fabric Filter(s)/Baghouse(s) if you will not be using that type of Control Device.

NOTE: If you answered NO to the questions on Control Equipment, you do not qualify for the Permit-by-Rule and you must apply for a permit

Storage Pile and Haul Road Emissions

Storage piles and haul road moisture content will be maintained at a level that will ensure particulate matter does not become airborne in such quantities and concentrations that it remains visible in the air beyond your property line (See Title 129, Chapter 32, Sections 001 and 002).

YES NO

011.06A

Please briefly describe how you will control the storage pile and haul road moisture content:

Attach Additional Pages if Needed. Clearly indicate that an Additional Page for this information has been included.

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Particulate Matter

Please confirm that you will do the following:

Particulate matter shall not be allowed to become airborne in such quantities and concentrations that it remains visible in the air beyond your property line. Daily observations will occur in order to ensure compliance.

YES NO

011.10

Daily Observations of Particulate Emissions shall include:

- Determination whether particulate matter is becoming airborne in such quantities and concentrations that it remains visible in the air beyond the property line
- Assurance that Storage Pile and Haul Road moisture content is adequate.
- Other indications that may necessitate corrective action

If correction action is needed, it will be taken immediately.

YES NO

011.10A

NOTE: If you answered NO to the questions on Particulate Matter, you do not qualify for the Permit-by-Rule and you must apply for a permit

New Source Performance Standard (NSPS) Applicability

Was your Asphalt Plant constructed, reconstructed, or modified after June 11, 1973? YES NO

If YES, please confirm the following: You shall comply with the provisions of Title 129, Chapter 18, Section 001.21 for Hot Mix Asphalt Facilities (asphalt concrete plants)-Subpart I. You will maintain records and provide appropriate notifications required under Title 129, Chapter 18, Section 001.21 – General Provisions.

YES NO N/A

011.12F4

NOTE: Mark N/A to the question if you are not subject to the NSPS

Note: If the Asphalt Plant has been constructed, reconstructed, or modified after June 11, 1973 you are required to comply with the NSPS

Relocation

Temporary sources are required to provide notification of their relocation.

Please confirm that you will do the following:

Notice will be provided to the NDEQ on Part 2.5 Relocation Notice – Asphalt Plants, at least 20 days prior to any change in location.

YES NO N/A

005.01

If the facility is located within Lancaster County or the City of Omaha, notice will be provided to the Lincoln Lancaster County Health Department or the Omaha Air Quality Control Program respectively on Part 2.5 Relocation Notice – Asphalt Plants, at least 20 days prior to any change in location.

YES NO N/A

005.01

NOTE: Mark N/A to the question if this is not a temporary source.

NOTE: If you answered NO to the questions on Relocation then you do not qualify for the Permit-by-Rule and you must apply for a permit.

Startup Notification

Notice will be provided to the Department of the actual date of startup within 15 calendar days after such date.

YES NO N/A

11.11

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Record Keeping	
Please confirm that you will do the following:	
<p>You will keep the appropriate records for a minimum of five years.</p> <p style="text-align: right;"><input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p style="text-align: right;">001.07</p>	<p>You will provide the Department personnel access to, or copies of, the required records.</p> <p style="text-align: right;"><input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p style="text-align: right;">011.13</p>
<p>Records will be updated at least monthly no later than 15 days after the end of the month.</p> <p style="text-align: right;"><input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p style="text-align: right;">011.12A, 011.12E</p>	<p>Manufacturer's instructions for all equipment shall be kept on site and readily available to Department representatives.</p> <p style="text-align: right;"><input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p style="text-align: right;">011.08</p>
You are required to keep the following records.	
Please confirm that you will keep the following records:	
<p>Records demonstrating that the asphalt production restrictions (lbs/hr, tons/month, and tons/year) has not been exceeded</p> <p style="text-align: right;"><input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p style="text-align: right;">011.12A, 011.12D</p>	<p>Records demonstrating that storage pile moisture content and haul road moisture content requirements have been maintained at a level that assures compliance with Title 129, Chapter 32, Sections <u>001</u> and <u>002</u></p> <p style="text-align: right;"><input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p style="text-align: right;">011.12B</p>
<p>Records indicating the quantity of diesel fuel combusted in the generators or the hours of generator operation</p> <p style="text-align: right;"><input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p style="text-align: right;">011.12C</p>	<p>Records indicating the sulfur content of fuel used in the generator and main burner</p> <p style="text-align: right;"><input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p style="text-align: right;">011.12E</p>
<p>Records documenting when routine visual inspections of control equipment were performed with a description including pressure differential readings and any atypical observations</p> <p style="text-align: right;"><input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p style="text-align: right;">011.12F1</p>	<p>Records documenting when routine maintenance, including bag replacement, and preventative actions were performed with a description of the maintenance and or preventive action performed</p> <p style="text-align: right;"><input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p style="text-align: right;">011.12F2</p>
<p>Records documenting equipment failures, malfunctions, or other variations, including time of occurrence, remedial action taken, and when corrections were made</p> <p style="text-align: right;"><input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p style="text-align: right;">011.12F3</p>	<p>Records documenting routine observations of particulate matter emissions taken at least once per day and the condition of the particulate emissions</p> <p style="text-align: right;"><input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p style="text-align: right;">011.12G</p>
<p>NOTE: If you answered NO to the questions on Record Keeping or did not check all of the boxes regarding the types of records you must keep, then you do not qualify for the Permit-by-Rule and you must apply for a permit.</p>	

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PART 2.2: AIR EMISSIONS TESTING: Asphalt Plants

IMPORTANT: PLEASE READ THE INSTRUCTIONS ACCOMPANYING THIS SECTION

In order to be covered by Title 129, Chapter 42, Air Emissions Testing MUST be conducted on your unit.

Has Air Emissions Testing been conducted on your Asphalt Plant (the unit you (will) operate)? YES NO

Has Air Emissions Testing been submitted to the Department in the past? YES NO

Date Submitted _____

If Testing has been Performed (you answered YES to at least one of the questions above) fill out the information below:

Testing Company Information			
1) Testing Company Name:			
2) Mailing Address:	3) City:	4) State:	5) Zip Code:
6) Phone:		7) Email Address or Website:	
8) EPA Methods Used:			
Please provide a copy of the <u>COMPLETE</u> air emissions test results including results, calculation sheets, field data sheets, analytical data, and equipment calibrations. If you have previously submitted the complete air emissions test results, you do not have to resubmit.			

<p>9) Does your Asphalt Plant Emissions Test Results verify that the plant has an opacity of visible emissions from the stack not $\geq 20\%$ as evaluated by Method 9 in Appendix A of 40 CFR Part 60?</p> <p style="text-align: center;"><input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p style="text-align: right;">011.09</p>	<p>10) Does your Asphalt Plant Emissions Test Results verify that the PM emissions from the plant are ≤ 0.04 grains per dry standard cubic foot of exhaust gas?</p> <p style="text-align: center;"><input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p style="text-align: right;">011.07</p>
NOTE: If you answered NO to questions above, you do not qualify for the Permit-by-Rule and you must apply for a permit.	

11) If Testing has NOT been performed:

Do you acknowledge that you must perform air emissions testing on your Asphalt Plant within 60 days after reaching maximum operating capacity but not later than 180 days after the start-up of operation? YES NO

Do you understand that these test results must prove that your Asphalt Plant has an opacity $\leq 20\%$ and emits PM ≤ 0.04 grains/scf? (011.15) YES NO

NOTE: If you answered NO to the questions above, you do not qualify for the Permit-by-Rule and must apply for a permit.

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PART 2.3: DIAGRAM: Asphalt Plants

Please provide a diagram of the planned/existing Asphalt Plant in the space below or on a separate, attached sheet(s). If a separate, attached sheet(s) is (are) used (e.g., engineering diagrams, surveyor's drawing, etc), it (they) should be clearly marked as being a replacement(s) for Part 2.3. Also clearly indicate that a separate, attached sheet(s) was submitted in the space below.

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PART 2.4: COMPUTER PROGRAM: Asphalt Plants

Instructions for the Asphalt Program accompany the Program itself.

Background Information: The asphalt computer program was designed to provide both portable asphalt plant operators and air quality analysts the ability to derive emission rates and to assess potential ambient air impacts from portable asphalt plants. The program was intended to expedite the review of portable asphalt plant relocations while meeting the requirements of the Permit-By-Rule. The program has several purposes in the Permit-by-Rule Program. First, the program will allow hourly production limits and hourly generator combustion limits to be established. The outputs of the program will be able to be inserted into a second program used by the NDEQ to determine if the emissions caused by the asphalt plant will comply with the National Ambient Air Quality Standards (NAAQS).

Part 2.4: Computer Program: This program is set up in a step-by-step manner so that the owner/operator will provide the needed documents and information that must be submitted with the Asphalt Plant Permit-by-Rule application. The Asphalt program is contained on the CD provided in the Permit-by-Rule, Asphalt Plant Packet. If you are unable to obtain the program via the CD, please contact the Department of Environmental Quality via the Construction Permit Hotline at 877-834-0474 or via the Air Quality Permitting Section at 402-471-2189. First: Fill in the following tables. These tables contain most of the inputs needed for the Asphalt Program. The worksheet titled "Input Specifics" describes what information is needed here. If you do not have Microsoft Excel, please contact the Department to determine how you should proceed.

Section One Inputs

Asphalt Process Rate (tons/hour)	
Empty weight of Loadin Truck (tons)	
Maximum capacity of Loadin Truck (tons)	
Empty weight of Loader (tons)	
Maximum capacity of Loader (tons)	
Empty weight of Loadout Truck (tons)	
Maximum capacity of Loadout Truck (tons)	
Distance Loadin Truck travels from entrance to exit (feet)	
Distance Loader travels from storage piles to plant (one way in feet)	
Distance Loadout Truck travels from entrance to exit (feet)	

Section Two Inputs

Storage Pile Occupancy (acres)	
Storage Pile Moisture Content (%)	
Storage Material on site (tons)	

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Section Three Inputs

Control device to be installed on the dryer (fabric filter, venturi scrubber, or no control device)	
Heat input rating of the Dryer (MMBtu/hour)	
Type of fuel used in the Dryer	
Sulfur Level of the fuel oil (maximum level in percent)	
Rating of the Electrical Generator (MMBtu/hr or horsepower)	
Heat input rating of hot oil heater (MMBtu/hr)	

Section Four Inputs

Acreage of Hot Asphalt Plant (acres)	
Distance from Plant Site to nearest Public Access Point (feet)	
Longitude of plant site	
Latitude of plant site	

Use the Asphalt spreadsheet to calculate your potential emissions. You must print out and submit copies of the worksheets titled “All Manual Inputs” and “Results Summary” with your Permit-by-Rule Notice of Intent. Thorough instructions on how to use the program itself are included with the program on worksheets titled “Instructions” and “Input Specifics”. If possible, the Department would like you to also submit an electronic copy of the entire Asphalt Excel Workbook. You may use either a floppy disk or compact disc to store the files. If you wish to email the files, please contact the Department of Environmental Quality via the Construction Permit Hotline at 877-834-0474 or via the Air Quality Permitting Section at 402-471-2189.

Once the Department receives the completed permit-by-rule application containing Part 2.4, the NDEQ modeler will determine a pound per hour production limitation and whether or not National Ambient Air Quality Standards (NAAQS) are violated based on the asphalt plant’s proposed location. The determinations will be included in the response memo that the facility will receive once a decision has been made concerning whether or not the facility is able to be covered under Title 129, Chapter 42.

Temporary (portable) sources that have been approved coverage under Title 129, Chapter 42 may use the Permit-by-rule program to apply for relocation. The source only needs to submit ONLY the completed Part 2.5: Relocation: Asphalt Plants form and wait for a decision from the Department which will indicate a pound per hour operation limitation and whether or not NAAQS will be violated at the proposed plant site.