



**Minnesota Pollution
Control Agency**

520 Lafayette Road
St. Paul, MN 55155-4194

Hot Mix Asphalt Plants Compliance Audit

Minnesota Standards of Performance
Environmental Audits

Minnesota Pollution Control Agency (MPCA) compliance audit checklists are designed to assist businesses and MPCA staff with the interpretation of Minnesota's environmental laws and rules. Because the laws and rules are numerous and often complicated, this checklist cannot be a complete guide to all your compliance obligations. If you have questions about the checklist, your obligations, or its conditions that you discover as you complete this evaluation, please contact:

Small Business Environmental Assistance Program (SBEAP)

651-282-6143 or 1-800-657-3938

<http://www.pca.state.mn.us/programs/sbap-sectors.html>

Date of Audit: _____

Company Name: _____

Authorized
Representative Name: _____ Title: _____

Standards of Performance for Existing Hot Mix Asphalt (HMA)

Subject to Minn. R. 70011.0905

No owner or operator of an *existing* HMA plant can discharge into the atmosphere any gases which contain particulate matter in excess of the limits allowed by parts 7011.0700 to 7011.0735, Table 1 and Table 2 below. In addition to the particulate matter you cannot exceed opacity's that are greater than 20 percent (see the Performance Testing audit/check list for further details).

- ☐ **YES** We have performed emissions testing and do not exceed either the particulate or opacity limits.
- ☐ **NO** We have either not performed emissions testing as required or we have conducted testing and we *do* exceed the particulate or opacity limits as stated above. *This is a deviation and must be recorded on the DRF-2 form.*
- ☐ **YES** We are aware that should we replace or make major modifications to either our asphalt dryer or our pollution control system that we are required to *re-test* the dryer for both particulates and opacity.

Industrial process equipment

"Industrial process equipment" means any equipment, apparatus, or device embracing chemical, industrial, or manufacturing facilities such as ovens, mixing kettles, heating and reheating furnaces, kilns, stills, **dryers**, roasters, and equipment used in connection therewith, and all other methods or forms of manufacturing or processing that may emit any air contaminant such as smoke, odor, particulate matter, or gaseous matter. Industrial process equipment is an affected facility. An emission facility may consist of more than one unit of industrial process equipment.

- ☐ **YES** Our HMA plant does have a dryer as described by the industrial process equipment definition provided above.
- ☐ **NO** Our HMA plant does not have a dryer as described by the industrial process equipment definition provided above.

Process weight.

"Process weight" means the total weight in a given time period of all materials introduced into any industrial process equipment that may cause any emission of particulate matter. Solid fuels charged are considered as part of the process weight, but liquid and gaseous fuels and combustion air are not. For a cyclical or batch operation, the process weight per hour is derived by dividing the total process weight by the number of hours in one complete operation from the beginning of any given process to the completion thereof, excluding any time during which the equipment is idle. For a continuous operation, the process weight per hour is derived by dividing the process weight for a typical period of time.

7011.0730 Table 1

Process Weight Rate (pounds/hour)	Emission Rate (pounds/hour)
50	0.08
100	0.55
500	1.53
1,000	2.25
5,000	6.34
10,000	9.73
20,000	14.99
60,000	29.60
80,000	31.19
120,000	33.28
160,000	34.85
200,000	36.11
400,000	40.35
1,000,000	46.72

Interpolation of the data in this part for the process weight rates up to 60,000 pounds/hour shall be accomplished by the use of the equation:

$$E = 3.59P^{0.62}$$

<

P = 30 tons/hour

Interpolation and extrapolation of the data for process weight rates in excess of 60,000 pounds/hour shall be accomplished by use of the equation:

$$E = 17.31P^{0.16}$$

P > 30 tons/hour

where:

E = emissions in pounds per hour;

P = process weight rate in tons per hour.

7011.0735 Table 2.

Source Gas Volume, DSCFM ^a	Concentration GR/DSCF ^b
7,000	0.100
or less	
8,000	0.096
9,000	0.092
10,000	0.089
20,000	0.071
30,000	0.062
40,000	0.057
50,000	0.053
60,000	0.050
80,000	0.045
100,000	0.042
120,000	0.040
140,000	0.038
160,000	0.036
180,000	0.035
200,000	0.034
300,000	0.030
400,000	0.027
500,000	0.025
600,000	0.024
800,000	0.021
1,000,000	0.020

or more

^aDry standard cubic feet per minute

^bGrains per dry standard cubic foot