



**Minnesota Pollution
Control Agency**

520 Lafayette Road
St. Paul, MN 55155-4194

Hot Mix Asphalt Plants Compliance Audit

Compliance with Ambient Air Quality Standards

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: _____

Minn. R. 7011.0903 - Compliance with Ambient Air Quality Standards

Subject to Minn. R. 7011.0903, no hot mix asphalt (HMA) plant owner or operator can burn any fuel in excess of 0.7 percent sulfur unless: a.) you are authorized by a part 70, state or general permit; or b) you have demonstrated compliance with all ambient air quality standards.

Modeling of Emissions from High Sulfur Content Fuels

Prior to the use of each asphalt dryer fuel with a sulfur content greater than 0.70 percent, the owner or operator of a HMA plant must perform air dispersion modeling to determine whether burning that fuel would comply with the ambient air quality standard for sulfur dioxides (maximum one hour concentration not to be exceeded more than once per year) in part 7009.0080. The owner or operator must model sulfur dioxide emissions using the most recent version of U.S. Environmental Protection Agency's (EPA) screen model described in *SCREEN3 Model User's Guide, EPA-454/B-95-004, United States Environmental Protection Agency, Office of Air Quality Planning and Standards, September 1995*, which is incorporated by reference and is subject to frequent change. This publication and copies of the SCREEN3 Model are available from the MPCA's Resource Center through the Minitex interlibrary loan system, through the National Technical Information Service (NTIS), Springfield, VA, (703) 487-4650, or may be downloaded from the Support Center for Regulatory Air Models (SCRAM) Bulletin Board System (BBS). The SCRAM BBS may be accessed at 919- 541-5742. You can locate this SCREEN3 Model at: http://www.epa.gov/scram001/dispersion_screening.htm#screen3.

A. You are currently burning or plan to burn a waste oil that exceeds 0.7 percent sulfur.

- ☐ **YES** We have already conducted a SCREEN3 dispersion model to determine compliance with the ambient air quality standard for sulfur dioxide.
- ☐ **YES** We do ensure ongoing compliance with the 0.7 percent sulfur limit by requiring a fuel analysis that includes the sulfur content for each delivery of waste oil.

NOTE: You do not need to require a fuel analysis for "other" fuels including natural gas, No. 1 or No. 2 fuel oil, methane, butane, propane, gasoline, diesel fuel or kerosene.

B. You are currently burning or plan to burn a waste oil in excess of 0.7 percent sulfur at your HMA plant and the SCREEN3 model shows sulfur dioxide emissions to exceed the ambient standard.

- ☐ **YES** We did take corrective actions that may have included a HMA plant relocation or the installation of a control equipment exhaust stack extension. Also, we continue to analyze each waste oil shipment and keep all fuel analysis on hand. The SCREEN3 model results including sulfur content, the site modeled, all model output files and all supporting calculations have been retained for future reference.
- ☐ **NO** Corrective action(s) were not required; however, we continue to analyze each waste oil shipment and keep all fuel analysis on hand. The SCREEN3 model results including sulfur content, the site modeled, all model output files and all supporting calculations have been retained for future reference.

NOTE: The EPA SCREEN3 Model and User's Guide, EPA0454/B-95-004, as well as assistance, are available from the MPCA upon request. You can locate this SCREEN3 Model at: http://www.epa.gov/scram001/dispersion_screening.htm#screen3.

Records Required

A. For any fuel used in the dryer burner, except natural gas, methane, butane, propane, gasoline, kerosene, diesel fuel, and No. 1 and No. 2 fuel oil, the owner or operator of a hot mix asphalt plant must keep a record of a vendor certification or fuel analysis which shows the sulfur content of the fuel.

- ☐ **YES** We do burn fuel(s) other than those listed above (i.e. waste oil) and do keep records, which show the sulfur, content.
- ☐ **YES** We do burn fuel(s) other than those listed above (i.e. waste oil) but do not keep records, which show the sulfur content. This is a deviation and must be recorded on the DRF-2 form.
- ☐ **NO** We do not burn fuel(s) other than those listed above (i.e. waste oil) but do keep records, which show the sulfur content.

B. The owner or operator of a hot mix asphalt plant that has done modeling shall keep a record of the modeling results. The record shall include:

- (1) the sulfur content of the fuel modeled;
- (2) the site modeled;
- (3) model output files; and
- (4) supporting calculations.

The owner or operator must maintain the records required by this subpart for a minimum of five years from the date the record was made.

- ☐ **YES** We have conducted modeling and do maintain the records required by this subpart for a minimum of five years from the date the modeling was completed.
- ☐ **NO** We have conducted modeling but do not maintain the records required by this subpart for a minimum of five years from the date the modeling was completed. *This is a deviation and must be recorded on the DRF-2 form.*

Hot Mix Asphalt Plants with Registration Permits

If the commissioner finds that a HMA plant that has applied for or has been issued a registration permit needs source-specific permit conditions to prevent violation of any ambient air quality standard, the MPCA shall require the owner or operator of the HMA plant to apply for and obtain a part 70, state, or general permit. The owner or operator of a HMA plant shall submit the required permit application within 120 days of the MPCA's written request.

- ☐ **YES** We have submitted the required permit application. This checklist is complete.
- ☐ **NO** We have not submitted the required permit application. *This is a deviation and must be recorded on the DRF-2 form.* This checklist is complete.