



## 22-25-1 FDM Documentation of Air Quality Impacts in WisDOT Environmental Documents *August 15, 2023*

Documentation of air quality analyses in a project's NEPA or WEPA document discloses the project's potential air quality impacts. In nonattainment and maintenance areas for any given national ambient air quality standard (NAAQS), documentation of analyses must demonstrate compliance with the transportation conformity requirements of the Clean Air Act and the transportation conformity regulations. In all areas of the State, documentation of analyses should also take into consideration the Federal Highway Administration's (FHWA's) Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents dated January 18, 2023.

[https://www.fhwa.dot.gov/environment/air\\_quality/air\\_toxics/policy\\_and\\_guidance/msat/index.cfm](https://www.fhwa.dot.gov/environment/air_quality/air_toxics/policy_and_guidance/msat/index.cfm)

The level of detail of the documentation is dependent upon several factors, including but not limited to:

- a) The nature of the project (e.g., whether the project is a non-exempt project)
- b) The type of document being prepared
- c) The analyses needed to satisfy conformity requirements
- d) When necessary, the analysis needed to meet NEPA's analytical requirements using MOVES3, or EPA's latest emissions model

This section is written assuming nonattainment and maintenance areas are within Metropolitan Planning Organization (MPO) boundaries. Within MPO boundaries, the MPO and FHWA are responsible for making transportation conformity determinations and demonstrating transportation conformity through the Regional Transportation Plan (RTP) and Transportation Improvement Program (TIP). If a project is outside an MPO boundary, WisDOT is the lead transportation agency and assumes MPO transportation planning responsibilities. A project level transportation conformity analysis may be required.

The AASHTO Practitioner's Handbook: Addressing Air Quality Issues in the NEPA Process for Highway Projects published in June 2017 provides practical tips on documenting and presenting air quality analyses in a NEPA document. The Handbook can be found at: <https://environment.transportation.org>. Page 10 of the Handbook identifies key air quality issues to be considered in a NEPA document.

## FDM 22-25-2 WisDOT Environmental Document Types and Requirements

*August 15, 2023*

This section describes how to document air quality analysis in each environmental document type. In addition to the information in this section, if the project may require an air quality analysis, discuss with the Region Environmental Coordinator (REC), Bureau of Technical Services (BTS) Environmental Process and Document Section (EPDS) Liaison and BTS Environmental Services Section (ESS) Air Quality Specialist.

### 2.1 Documentation for Projects in Attainment Areas

For projects in attainment areas, the air quality analysis is limited to a MSAT analysis as appropriate, i.e., only if certain threshold criteria are met. Refer to [FDM 22-15](#) for guidance on how to consider MSAT impacts in NEPA documents.

### 2.2 Documentation for Projects in Nonattainment Areas

In nonattainment and maintenance areas, the air quality analyses are not limited to MSATs. The analyses must be broadened to include consideration of ozone and particulate matter, the two criteria pollutants of concern to Wisconsin.

#### 2.2.1 Environmental Impact Statement (EIS)

The air quality discussion is included in Section 3, Existing Conditions, Environmental Impacts and Measures to Mitigate Adverse Impacts of the EIS. This discussion should begin with an overview of the Clean Air Act of 1970. Areas designated nonattainment and maintenance for ozone and particulate matter (PM<sub>2.5</sub>) in the project area must be identified.

For projects located within an MPO boundary, and in areas designated nonattainment or maintenance for ozone and PM<sub>2.5</sub>, evidence of transportation conformity with the approved regional transportation plan (RTP) and transportation improvement program (TIP) must be demonstrated for each alternative. For a new, non-exempt

project that is not included in a currently conforming RTP and TIP (or a project approved in the NEPA process that was included but has changed in design concept and scope), it is necessary for the respective Metropolitan Planning Organization (MPO) to amend the RTP and TIP to include the project. To meet Clean Air Act transportation conformity requirements, the MPO and FHWA must make a new transportation conformity determination on the amended RTP and TIP.

For projects located in a rural nonattainment area, WisDOT is responsible for transportation conformity analysis. Contact the REC, EPDS liaison, or ESS Air Quality Specialist for assistance.

Potential for PM<sub>2.5</sub> hot-spot impacts must be evaluated, as appropriate. Potential for mobile source air toxics (MSATs) must also be analyzed, as appropriate. Mitigation of adverse impacts to air quality agreed upon during the inter-agency air quality consultation process, as well as potential construction-related air quality impact mitigation strategies should be identified and discussed

### **2.2.1.1 Exempt project in a nonattainment or maintenance area**

If the proposed project is in a nonattainment or maintenance area and is exempt under the Clean Air Act (CAA) Conformity Rule at 40 CFR 93.126 and 40 CFR 93.128, no analysis for ozone or PM<sub>2.5</sub> is required. The following standard language should be used in the EIS or qualifying EA:

As the lead Federal agency for air quality, the United States Environmental Protection Agency (USEPA) has established National Ambient Air Quality Standards (NAAQS) for six common air pollutants: carbon monoxide (CO), lead (Pb), ozone (O<sub>3</sub>), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), and particulate matter (PM). These standards have been adopted by the Wisconsin Department of Natural Resources (WDNR), the lead air quality agency for the State of Wisconsin. Mobile sources are significant contributors to four of the six criteria pollutants: CO, O<sub>3</sub>, PM, and NO<sub>2</sub>. Of particular concern to Wisconsin are ozone (O<sub>3</sub>) and particulate matter (PM<sub>2.5</sub>).

The proposed (insert project name) transportation project is to (insert major deficiency that the project is meant to address) by constructing (insert major elements of the project). The project is located within (county name) County which is in nonattainment of the NAAQS for (name pollutant or pollutants). However, under 40 CFR 93.126 and 40 CFR 93.148 this project is exempt from the requirement to determine conformity.

In addition, this project has not been linked with any specific mobile source air toxic (MSAT) concerns. As such, this project will not result in changes in traffic volumes, vehicle mix, basic project location, or any other factor that would cause a meaningful increase in MSAT impacts of the project from that of the no-build alternative.

Moreover, EPA regulations for vehicle engines and fuels will cause overall MSAT emissions to decline significantly over the next several decades. Based on regulations now in effect, an analysis of national trends with EPA's MOVES3 (or latest emissions model) forecasts a combined reduction of over 76 percent in the total annual emission rate for the priority MSATs from 2020 to 2060 while even if vehicle-miles of travel are projected to increase by over 31 percent (Updated Interim Guidance on Mobile Source Air Toxic in NEPA Documents, Federal Highway Administration, January 18, 2023). This will both reduce the background level of MSAT as well as the possibility of even minor MSAT emissions from the project.

The standard language above has been modified to make it Wisconsin specific from the original version included in Appendix A of the FHWA Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents.

### **2.2.1.2 Non-exempt project in a nonattainment or maintenance area**

If the proposed project is within the boundaries of an MPO nonattainment or maintenance area and not exempt under the Clean Air Act (CAA) Transportation Conformity Rule at 40 CFR 93.126, the proposed project must be included in the MPO's conforming, fiscally constrained long-range transportation plan and TIP. Additionally, if the proposed project is within a PM<sub>2.5</sub> nonattainment or maintenance area, interagency consultation will need to be conducted to determine whether a hot spot analysis is required. Contact your REC and the BTS Air Quality Specialist for assistance.

If the proposed project is not within MPO boundaries, contact your REC and the BTS Air Quality Specialist to begin interagency consultation to determine whether the project is regionally significant and if a project level analysis is required.

If the proposed project is in a nonattainment or maintenance area and is not exempt under the Clean Air Act (CAA) Conformity Rule at 40 CFR 93.126 and has higher potential for MSAT Effects, a more rigorous assessment of impacts may be required.

Projects that fall into this category may:

- Create or significantly alter a major intermodal freight facility that has the potential to concentrate high levels of diesel particulate matter in a single location, involving a significant number of diesel vehicles for new projects or accommodating with a significant increase in the number of diesel vehicles for expansion projects; or
- Create new capacity or add significant capacity to urban highways such as interstates, urban arterials, or urban collector-distributor routes with traffic volumes where the AADT is projected to be in the range of 140,000 to 150,000 or greater by the design year;

and also

- Be proposed to be in proximity to populated areas.

FHWA determined 140,000 – 150,000 AADT would result in emissions significantly lower than the Clean Air Act definition of a major hazardous air pollutant (HAP) source, i.e., 25 tons/yr. for all HAPs or 10 tons/yr. for any single HAP. Variations in conditions such as congestion or vehicle mix could warrant a different range for AADT; if this range does not seem appropriate for your project, contact your REC and BTS-EPDS or BTS-ESS.

If you think your project may fall into this category, contact your REC. Your REC will contact the appropriate BTS-EPDS Liaison and BTS-ESS Air Quality Specialist. You may also review FHWA's Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents and [FDM 22-15](#).

[https://www.fhwa.dot.gov/ENVIRonment/air\\_quality/air\\_toxics/policy\\_and\\_guidance/msat/](https://www.fhwa.dot.gov/ENVIRonment/air_quality/air_toxics/policy_and_guidance/msat/)

### **2.2.2 Environmental Assessment (EA)**

WisDOT EAs are prepared using the ER and EA Template and Factor Sheets. Guidance documents are available for the ER and EA Template and each Factor Sheet.

<https://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrcs/environment/formsandtools.aspx>

Every EA must include the Air Quality Factor Sheet. For EAs that have no meaningful impact on traffic volumes or vehicle mix, and thus have “no meaningful potential MSAT effects,” document the basis for that determination in the EA, similar to EISs. The Air Quality Factor Sheet includes language to document those situations.

The Air Quality Factor Sheet and guidance language is intended to be self-explanatory. Guidance includes links and references to resources that will assist the document preparer in completing the factor sheet appropriately for each project. If the document preparer has questions on the Air Quality Factor Sheet, discuss with your REC. If necessary, your REC will contact the appropriate BTS-EPDS Liaison or BTS-ESS Air Quality Specialist.

### **2.2.3 Environmental Report (ER)**

WisDOT ERs are prepared using the Environmental Report (ER) and Environmental Assessment (EA) Template and Factor Sheets. Guidance documents are available for the ER and EA Template and each Factor Sheet.

<https://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrcs/environment/formsandtools.aspx>

Every ER for a proposed project in a nonattainment or maintenance area for Ozone or PM<sub>2.5</sub> is required to include the Air Quality Factor Sheet.

The Air Quality Factor Sheet and guidance language is intended to be self-explanatory. Guidance includes links and references to resources that will assist the document preparer in completing the factor sheet appropriately for each project. If the document preparer has questions on the Air Quality Factor Sheet, discuss with your REC. If necessary, your REC will contact the appropriate BTS-EPDS Liaison or BTS-ESS Air Quality Specialist.

### **2.2.4 Categorical Exclusion Checklist (CEC)**

The Air Quality Section on the CEC template guides the document preparer through regional and project level conformity requirements. If the document preparer has questions regarding the Air Quality Section of the CEC Checklist, discuss questions with your REC. If necessary, your REC will contact the appropriate BTS-EPDS Liaison or BTS-ESS Air Quality Specialist.