

# Work Type Definition and Submittal Requirements

## 5.2 Air Quality Analysis

### Work Type Definition

Page 1 details the work type definition. In order to become *pre-qualified* for this work type, please see the “Work Type Submittal Requirements” on pages 2-3.

#### **I. Description**

A. This work type is focused on a quantitative air quality analysis required during the National Environmental Policy Act (NEPA) process, primarily addressing localized emissions of carbon monoxide (CO). These analyses are performed for highway projects to ensure that violations of the National Ambient Air Quality Standards (NAAQS) will not occur as a result of the proposed project. A qualitative or quantitative Mobile Source Air Toxic analysis (MSAT) may be required as determined by the most recent version of the “FHWA Interim Guidance on Air Toxic Analysis in NEPA Documents.”

#### **II. Standards and Specifications**

**Standards and specifications required for a project under this work type must include the following:**

- A. The analysis must comply with all project specific requirements and must include sufficient level of detail, as dictated by the project scope, size, geographic location, background conditions, and anticipated impacts. See Highway Project Development Process Manual, Air Quality Section, located at the following link:  
<http://dotapp7.dot.state.mn.us/edms/download?docId=647184>
- B. Also see “Provided by Consultant” section below.

#### **III. Provided By Mn/DOT**

**Information to be supplied by Mn/DOT for a project may include the following:**

- A. Information sufficient to perform a completed Air Quality Analysis

#### **IV. Provided by Consultant**

**Deliverables to be supplied by the consultant for a project may include the following:**

- A. A completed Air Quality Analysis.
- B. United States Environmental Protection Agency (USEPA) approved computer model input and output files, and calculated current and projected receptor CO concentrations, based on traffic volumes, meteorological conditions, signal timing and layout geometrics. Output examples may also include a qualitative or quantitative MSAT analysis.

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#### Work Type Submittal Requirements

*A consultant firm becomes pre-qualified based on the qualifications of the personnel that are employed by the firm.*

Key Personnel Requirements	
Minimum Number of Staff:	<ul style="list-style-type: none"> <li>• At least one qualified air quality analyst</li> </ul>
Professional Certification/Licensure:	<ul style="list-style-type: none"> <li>• None required</li> </ul>
Work Type Submittal Requirements*	
<p><b>I. Resume and Relevant Project Experience Form (Form PQ1)</b></p> <p><i>Submit in Word format</i></p>	<p>A. Complete Parts 1, 1A, 2 and 3 of Form PQ1.</p> <p><b><u>Part 1:</u></b> Fill out general information and names of personnel.</p> <p><b><u>Part 1A:</u></b> Experience of personnel must show the following:</p> <ul style="list-style-type: none"> <li>• Work associated with Air Quality principles and modeling techniques.</li> <li>• Research and documentation that demonstrates knowledge of air pollution meteorology, air quality analysis, dispersion modeling, engineering principles, and MSAT analysis.</li> <li>• At least one year of experience in the use of current United States Environmental Protection Agency (USEPA), and Federal Highway Administration (FHWA) accepted computer models (i.e., mobile source emissions model and dispersion model) in the assessment of impacts of construction projects on the ambient air quality, using comparative analysis to the NAAQS, including mitigation measures as required by the Clean Air Acts Amendments of 1990.</li> <li>• Must provide evidence of completion of the USEPA two day hands on MOVES (Motor Vehicle Emission Simulator) model training course or the USEPA three day MOVES Quantitative PM Hot-spot Analysis Training Course.</li> <li>• Each person submitted for pre-qualification must provide at least two (maximum of five) projects completed within the last five years, in which the qualifying staff member completed an air quality modeling analysis.</li> </ul> <p><b><u>Part 2:</u></b> Project examples listed must correlate to those described below in “Project Example Requirements.”</p> <p><b><u>Part 3:</u></b> Provide a list of pertinent USEPA approved air quality</p>

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<p><b>II. Project Example Requirements</b></p> <p><i>Submit in PDF format</i></p>	<p>prediction software used.</p> <p>A. For each qualifying staff member submit at least one air quality analysis that they have conducted and completed, which was approved by FHWA, USEPA or MPCA in the last five years.</p> <p><u>This project must be one of the projects submitted under the requirements of Part 1A, (above).</u></p> <p>Project example documentation must include the air quality analysis section of the approved EIS or EA, accompanying electronic modeling files, and a copy of the document signature page.</p>
<p style="text-align: center;"><b>*Work Type Submittal Instructions:</b></p> <p>Create a CD or flash drive that includes the following individual files or folders in this order:</p> <p>I. Resume and Relevant Project Experience Form (Form PQ1)</p> <p>II. Project Example Requirements (this should be a folder that includes individual files clearly named according to Part 2 of the PQ1)</p> <p style="text-align: center;"><b>Each file should be saved in the format identified above.</b></p> <p style="text-align: center;"><b>Submit 5 copies of the CD or flash drive.</b></p>	

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