FDM 22-30-1 General

March 15, 1996

The general concept of air pollution analysis treats the evaluation of pollutant concentrations downwind of the source, whether it is a point, area, or line source. In general, this concentration will be the sum of the local pollution contributed by the source plus whatever pollution is present in the area due to other sources. The pollution from other sources is known as the background level. The total pollution levels represent the net effect of background and project related emissions.

The background level is as important as the source emitted pollution level in determining and controlling the amount of pollutants that can be safely emitted. When the background is high, only a relatively small amount of pollutant can be emitted by a source before air quality standards are exceeded.

Contact the Department of Natural Resources (DNR) Bureau of Air Management for site monitored CO data or for data acceptable to DNR for use in the analysis. After the existing CO background data has been provided, the following procedure should be followed to adjust the CO data for the future years of analysis.

One hour CO Background = 2nd highest one hour CO concentration in ppm from site monitored data	X	Emf for year of study / Emf for year of CO data	X	VMT for year of study ** / VMT for year of CO data
8 hour CO Background = 2nd highest 8 hour CO concentration in ppm from site monitored data	X	Emf for year of study / Emf for year of CO data	X	VMT for year of study ** / VMT for year of CO data

** if available

Determining a monitored background concentration may have a significant effect on the review of the air quality analysis for those projects where NAAQS is exceeded using the predetermined background. For projects involving a "Construction or Modification and New Operation Permit," the monitored background (if lower) may be the difference between receiving approval for the project and receiving conditional approval where traffic studies, ongoing air quality monitoring, traffic control plans, or restrictions on date open to traffic may be required in conjunction with approval for the project.

If any WisDOT Region Office feels that it has such a project where on site monitoring may be helpful, the Bureau of Environmental and Data Analysis (BEDA) should be contacted.