

Minor Source Modeling Protocol Form

4/5/2011

Purpose of Form

This form has been developed to identify the main components of a dispersion modeling analysis protocol for minor sources. This form includes the site and emissions data provided by the source. The DAQ is providing preferred meteorological data and background data for use in the modeling analysis. A written modeling protocol is sometimes preferred in cases where complicated modeling methods and options are used and need agency approval. Written protocols may be submitted instead of this form, if desired. An example of a written modeling protocol can be viewed [at http://www.airquality.utah.gov/example_protocol](http://www.airquality.utah.gov/example_protocol).

Sources that trigger PSD requirements should include this form, but also need to include additional modeling protocols for the far field (Class I increment and AQRV) analyses. Copies of the far field modeling protocol are forwarded to all Federal Land Managers for their comments prior to performing any modeling. The Utah Modeling Guideline contains more information on the far field modeling requirements:

http://www.airquality.utah.gov/Planning/Modeling/NSR_Permit_Modeling/Modeling-Guidelines-PDF/UMG2008_121708_final.pdf.

Disclaimer

Approval of this protocol does not guarantee that additional modeling analysis will not be necessary. Changes in emission characteristics, changes in federal standards, or the identification of previously unidentified site characteristics can result in additional modeling analysis.

General Information

Company Name: _____

Company Contact info: _____

Modeling Contact info: _____

Date: _____

Source Location (UTM Zone 12): UTME(m) _____

UTMN(m) _____

Datum: (circle one) NAD-27/NAD-83

Source Classification: PSD___ Major:___ Minor___

Proposed Project Description: _____

Criteria Pollutants

List current plant-wide allowable/PTE level and the proposed change in emissions (TPY):

NOx ____/____ PM10 ____/____ PM2.5 ____/____
 SO2 ____/____ VOCs ____/____ CO ____/____

Summary of Analyses required as part of a Complete NOI (check applicable boxes)					
Modeling Analysis Type	Pollutant				
	NOx	PM10	PM2.5	SO2	CO
Preconstruction Monitoring					
NAAQS					
PSD Class II Increment					na
PSD Class I Increment					
PSD Deposition					
PSD Visibility (Haze)					
PSD Visibility (Plume Blight)					

Near field Dispersion Model and Version Date: _____

Use of PVMRM (Yes/No) or OLM (Yes/No): In stack NO2/NOx ratio=0.5 (default), or _____
 (please provide vendor data or stack test data if applicant wants to use a non-default value).

Are there any EPA non-default model options used (Yes/No) : _____

If Yes, then list all non-guideline model options that need approval:

Meteorological Data

AERMOD with AERMET

Surface Monitor Location: _____ Upper Air Data: _____

Period Covered: ____/____/20__ to ____/____/20__

Background Concentrations for Modeling Domain (in ug/m3)

NO2 1-Hour _____ Annual _____ Monitor Location _____

SO2 1-Hour _____ 3-Hour _____ Monitor Location _____
 24-Hour _____ Annual _____

PM10 24-Hour _____ Monitor Location _____

PM2.5 - 24-Hour _____ Annual _____ Monitor Location _____

CO 1-Hour _____ 8-Hour _____ Monitor Location _____

O3 1-Hour (98%) _____ Monitor Location _____