

VISTAS BART CALPUFF Modeling Protocol RECORD OF REVISIONS

As of 9 March 2006

Revision Number	Date	Description of Changes
--	Dec. 22, 2005	None -- Original Document
1	Jan. 23, 2006	Corrected the text on page 5 to state that the 98 th percentile value is calculated for the Class I area rather than at a specific receptor in the Class I area
2	Mar. 9, 2006	<ol style="list-style-type: none"> 1. Made minor changes to subheadings on pages 36, 40, and 43 to use consistent terminology for initial modeling. 2. Made changes to indicate that ALM is not to be used for the initial modeling -- Deleted parenthetical comment at the top of page 43 concerning "Background ammonia concentration" and revised the text after "Ammonia Limiting Method (ALM)" in the lower third of the page. 3. Expanded discussion of "Natural background light extinction" on page 43 to explain how the EPA default haze conditions values can be used to provide the input needed for applying Method 6 in CALPOST. 4. Added mention on page 46 of the ammonia limiting method as one of the refinements included in the finer grid modeling approach and explained that monthly-average diurnal profiles of NH₃ concentrations from 2002 CMAQ modeling will be used as input. 5. Changed CALPUFF model options on page 42 to recommend using Pasquill-Gifford (P-G) dispersion coefficients instead of turbulence-based dispersion coefficients such as EPA has recently approved for use in AERMOD. This change is made in response to instructions from EPA Region IV that using AERMOD-like dispersion coefficients in CALPUFF would be a non-guideline model application. 6. Added a footnote to page S-3 to indicate that P-G dispersion coefficients are to be used instead of turbulence-based coefficients. A comment was added on page 19 concerning the same point. 7. Throughout the document, changed the number of the current VISTAS version of CALPUFF to 5.754.

UNRESOLVED ISSUES as of 9 March 2006

1. Do EGUs need to model SO₂ and NO_x, as well as PM? If EGUs model PM only, use threshold value less than 0.5 dv (since 0.5 dv set for SO₂+NO_x+PM)?
2. NH₃ data for Ammonia Limiting Method for 4 km modeling for 2001 and 2003. NH₃ data has been developed for 2002.
3. EPA may accept definition of natural background as either 20% best days or annual average.
4. Methods to interpret CALPUFF outputs using alternative IMPROVE equation. Components necessary to apply alternative IMPROVE equation will be posted this spring on the VIEWS website operated by Cooperative Institute for Research in the Atmosphere.