Screening Update: Plans for Appendix W Update

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- Workgroup composed of OAQPS staff
- Codify AERSCREEN as recommended screening model
 - Replace SCREEN3
 - Revise screening text in Appendix W as appropriate including discussion of MAKEMET
- In conjunction with near-road workgroup, determine feasibility of replacing CAL3QHC as an EPA preferred model for near-road modeling

AERSCREEN as EPA recommended screening model

- AQMG released a clarification memo on April 11, 2010 recommending AERSCREEN as screening model
- SCREEN3 has been recommended screening model

"With respect to a screening version of AERMOD, a tool called AERSCREEN is being developed with a beta version expected to be publicly available in Fall 2005. SCREEN3 is the current screening model in the Guideline, and since SCREEN3 has been successfully applied for a number of years, we believe that SCREEN3 produces an acceptable degree of conservatism for regulatory applications and may be used until AERSCREEN or a similar technique becomes available and tested for general application. "

Appendix W Preamble Part IV, Section C, paragraph 7 pg. 68221

Screening and the NAAQS

- Provide scaling factors of AERSCREEN output for comparisons against various NAAQS (single-source only)
 - Conservative estimate is to use the maximum 1-hour, 8-hour, and 24-hour estimates from AERSCREEN as a design value
 - Using ambient data, can a reasonable relationship be drawn between maximum concentrations and design value concentrations
 - Analyses would provide a reasonable relationship between maximum AERSCREEN output and NAAQS metrics

AERSCREEN updates

- Current version 11126
- Add fumigation options (inversion breakup; coastal)
- Multi-source capability, if feasible
- Bug fixes and miscellaneous changes (enhancements, portability across OS)

Multi-source screening

- May be useful in context of proposed data requirements rule for future modeling of modeled attainment areas.
- Perform analyses and provide possible guidance on multi-source screening
 - What does it mean to perform multi-source screening?
 - Do results make sense?

Timeline

- Spring Fall 2014
 - Determine appropriate sections of Appendix W to update and edit as appropriate
 - AERSCREEN modifications
 - Develop scaling factors for NAAQS
 - Multi-source screening efforts
 - Coordinate with near-road group on CALQ3HC replacement

Questions?