

# Overview of Proposed Revisions to Appendix W

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# Regulatory Revisions to Appendix W: Schedule

- Proposed Rulemaking, “Revision to the Guideline on Air Quality Models”, **July 29, 2015**
  - Proposes updates to current EPA-preferred models to address input and science issues
  - Incorporates new analytical techniques to address ozone and secondary PM<sub>2.5</sub>
  - Updates for conducting individual source and cumulative impact analysis for NAAQS pollutants
- EPA will accept public comments on the proposal for 90 days through **October 27, 2015**
  - Public comment #1 = “Lot of work. Good job folks at OAQPS.”
- Final Rulemaking, “Revision to the Guideline on Air Quality Models”, **Spring 2016**



# Setting the Foundation: Sections 1-3

- **Section 1: Introduction**
  - Purpose and Applicability of the Guideline
- **Section 2: Overview of Model Use**
  - Suitability of Models (Several factors)
  - Sophistication of Air Quality Models (Screening/Refined)
- **Section 3: Preferred & Alternative Air Quality Models**
  - Preferred models: Conditions for Appendix A models
  - Alternative models: Conditions and their approval
  - Role of Model Clearinghouse



# Identifying Modeling Approaches: Sections 4-6

- **Section 4: Models for “inert pollutants”**
  - AERSCREEN as screening model
  - AERMOD Modeling System as preferred model
  - Multi-tiered approach for NO<sub>2</sub>
- **Section 5: Models for O<sub>3</sub> & Secondary PM<sub>2.5</sub>**
  - No preferred model or technique
  - Recommends two-tiered approach with detailed guidance
- **Section 6: Modeling for AQRVs & Other Govt Programs**
  - Role of FLMs, FLAG & AQRVs (visibility & deposition)
  - BOEM & OCS air quality modeling
  - FAA and use of AEDT for air quality assessments



# Proposed Updates to AERMOD Modeling System: Preamble

- EPA updated regulatory version from v14134 to v15181 (June 30, 2015) to address several bug fixes.
- In the NPRM, EPA has proposed to incorporate specific updates to the regulatory version that are the subject of public review and comment and then would be codified as part of the final rule action, as appropriate.
  - These options have thus remained “beta” in v15181 to allow for public testing & evaluation



# Long-Range Transport Assessments: Section 4

- EPA proposing that Appendix W no longer contain language requiring use of CALPUFF or other Lagrangian puff model for LRT assessments.
- For NAAQS demonstrations: Near-field modeling is sufficient to address whether a source will cause or contribute to a NAAQS violation so EPA does not consider a LRT assessment beyond 50 km necessary for inert pollutants.
- EPA recognizes that LRT assessments may be necessary in limited situations for PSD increment and proposes a screening approach where CALPUFF or other appropriate model/tool may be used.



# How to Inform & Apply Models: Sections 7-9

- Section 7: General Modeling Considerations
  - Recommendations for dispersion modeling
- Section 8: Model Input Data
  - Modeling Domain & Source Data
  - Background Concentrations
  - Meteorological Input Data
- Section 9: Regulatory Application of Models
  - Modeling Protocol
  - Multi-stage approach to demonstrating compliance
  - Use of Measured Data in lieu of Model Estimates <sup>7</sup>