MOBILE6
-Input and Modeling Guidance
-SIP and Conformity Policy

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MOBILE6 Guidance

- Two separate guidance/policy documents:
- How do I use MOBILE6?
  - Input assumptions
  - Data sources
- When do I use MOBILE6?
  - SIPs
  - Conformity

Using MOBILE6

- M6 has improved input and output structure to make it more flexible and user friendly
- States will need to modify pre- and post-processing systems to account for these changes
- New input options create potential needs for new data

MOBILE6 Input Options

- MOBILE6 offers significant new input options
- Some inputs are completely new, e.g.:
  - Natural gas vehicle fractions
  - VMT by facility
  - Fuel sulfur content
  - Hot soak activity
- Some inputs are not new but have changed or become more important, e.g.:
  - Humidity
  - Registration distribution
  - VMT fractions
  - Speeds

Input Guidance

- In the past, we have provided guidance in the User Guide and in Volume 4 of Inventory Guidance

- Current M6 User Guide contains instructions for using M6, but no guidance on appropriate input assumptions
  - Chap. 5 contains useful information for converting M5 input assumptions to M6

- We are preparing draft guidance for release soon

Input Guidance

- Until new guidance is released, M5 guidance still applies

- Many new input options add flexibility in certain kinds of analysis, but will not be required in general

- Some input options will need to be used eventually, but it will take time for states to develop data

Guidance Examples

- New environmental input options:
  - hourly temperatures
  - humidity
  - cloud cover, peak sun, sunrise/sunset
- Hourly temps are optional
  - model takes required min/max temps and creates a daily temp profile
  - hourly temps are an option for modelers looking at specific episodes who want more control over temp profile

Guidance Examples

- Local humidity input will be required
  - M6 assumes A/C usage based on local temperature and humidity
  - therefore, humidity has a much more important effect than in M5 and local input is important
- Cloud cover, peak sun, and sunrise/sunset are optional
  - these also affect A/C usage, but effect is smaller than humidity
  - M6 defaults are worst-case conditions
  - these are an option for modelers looking at specific episodes who want more control over these conditions

Guidance examples

- New vehicle types:
  - M6 has 16 vehicle categories compared to 5 in M5, not accounting for diesel vs. gasoline split
  - These new categories are further breakdown of light duty and heavy duty truck categories
  - Local data is ideal, but unlikely to be available immediately
- Proposed guidance:
  - In the near-term, states can use national defaults where local information is not available
  - EPA will work with other agencies and states to develop tools needed to derive local data

Input Guidance Summary

- We plan to release draft input guidance in May
- M6 User Guide Chapter 5 will help states get started
- Until we release new guidance, follow M5 guidance
- Most new input options are for special cases
- Some will require new data in the long run, but we will provide interim options such as national defaults that can be used near-term.

Proposed M6 SIP and Conformity Policy

- EPA has prepared proposed draft MOBILE6 SIP and conformity document
  - Currently under review within EPA
  - Will release draft version to state and local agencies
  - Final version will be released when M6 is released to public
- Proposed policy focuses on how to incorporate M6 into SIP and conformity activities
- Proposed policy is designed to give states sufficient time for an orderly transition from M5 to M6

Who doesn't have to consider use of M6 in the short term?

- States who have already submitted M5-based SIPs
- States who are about to submit M5-based SIPs soon after release of M6
- States subject to 10/15/01 consent decree deadline

When should M6 be used in SIPs?

- We propose that states use MOBILE6 for new SIPs
  - Meets CAA requirement that SIPs be based on most current available information
  - Could improve transition for future conformity determinations
- We propose that states who have not yet started or who are in the very early stages of SIP development use MOBILE6

What about M5-based SIPs that include Tier 2 benefits?

- EPA provided interim estimates of Tier 2 benefits that could be applied to M5 emission factors

- States that rely on those estimates in their SIPs already committed to revise and resubmit motor vehicle budgets 1-2 years after final release of M6

When must M6 be used for new conformity analyses?

- In general, transportation conformity rule requires use of most recent estimates and models

- Rule allows for a grace period from 3 to 24 months

When must M6 be used for new conformity analyses? (cont'd)

- EPA and DOT are proposing the maximum 24 month grace period before M6 is required for new analyses

  – Gives time for states to evaluate effects of M6 on future determinations

  – Gives time for states to determine need to update SIPs and budgets with MOBILE6

- States that update budgets with M6 earlier must use M6 earlier for conformity

If you want to update SIP using M6, what does it need to include?

- Updated SIP continues to demonstrate attainment/maintenance with new level of estimated emissions
  - There are multiple options for how this could be done
- EPA will work with states on a case-by-case basis to determine exactly what documentation is needed
  - States should consult with EPA early and often

Summary of Preliminary Proposal for SIP and Conformity Policy

- Don't need to revise SIP:
  - Already or about to submit
  - Ozone areas subject to 10/15/01 deadline
- Need to update SIP in 1-2 years:
  - SIPs that include Tier 2 benefits
- Conformity grace period
  - 2 Years
- EPA and states will need to assess the full implications of M6 on air quality in the context of changes in both base and future year emissions