Draft

MOVES2010 MODEL TESTING WORK PROGRAM

I. Test Model using Default Values: 2005 and 2030

- Apply MOVES2010 at 'county' level using national default data
- Execute the model for 3 jurisdictions (District of Columbia, Montgomery, and Fairfax) to obtain:
    Daily: VOC, NOx for ozone season, CO for winter season
    Annual: PM 2.5, precursor NOx, CO2
- Comparison charts with Mobile 6.2 and MOVES 2009 and document results
    (Work to be completed by mid-February)

II. Develop Local Inputs as follows using revised EPA 'importers' where necessary

A. County Level

   DEP Staff
- Fuel characteristics: To be prepared by Air Agency staff.
- Met data: To be developed by DEP staff based on guidance from MOVES Task force.
- I/M programs: Pending development by Air Agency staff

   DTP Staff
- Vehicle age distribution 0-30 years: 2005 and 2030 data available for use
- Vehicle population by MOVES vehicle types: 2005 and 2030 data available for use.
- VMT by HPMS vehicle types: Annual VMT 2005 and 2030 data available for use; Conversion factors from annual to daily under preparation.
- VMT fractions by vehicle type by MOVES road types: 2005 and 2030 data available for use.
- Vehicle hours of travel by 16 speed bins by vehicle type and facility type – data under development.
    (Work to be completed by February end)

B. Custom Domain
    Using inputs listed above
    (work to be completed by mid-March)

III. Test Model using Local Data

 A. County Level for years 2005 and 2030

- Execute MOVES2010 apply County Data Manager (CDM) option using local inputs for all jurisdictions for ozone day
- Execute MOVES2010 apply County Data Manager (CDM) option using local inputs for all jurisdictions for Annual PM2.5, NOx, and CO2

- Execute MOVES2010 apply County Data Manager (CDM) option using local inputs for all jurisdictions for Winter CO
- Document and present results to MOVES Task Force

B. Using Custom Domain
   Same as above
(Work to be completed by May end)

IV. Analysis of MOVES Emissions Approach vs. MOVES Emissions Rate and Post-Processor Approach

- Staff will execute the MOVES model and develop rates for the jurisdictions in each of the non-attainment areas, and using the rates and VMT from the jurisdictions to calculate emissions inventories for ozone season and annual for criteria pollutants.
- Staff will execute the MOVES and develop emissions inventories for the same analysis years and for the same pollutants using the built in processor within MOVES.
- The two inventories will be compared for consistency.
(Work to be completed by mid-july)

V. Finalize Model

Finalize modeling approach and inputs and prepare Mobile Source inventories on a production basis first for the 2010 CLRP and FY 2011-2016 TIP as a test case for the above years 2005 and 2030, and for model years 2002 and 2009 (if needed for SIP development).
(Recommendations by October end)

Note:

1) Coordinate with DEP to obtain local fuel, meterology, and I&M program inputs in line with the proposed schedule for 2005 and 2030.
2) See attached time line for proposed schedule.

MOVES 2010 Model Testing Work Program

Task Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
I. Test Model Using Defaults												
II. Develop Local Inputs&Finalize Model Aproach												
A. County Level												
B. Custom Domain Level												
III. Test Model Using Local Data (2005 & 2030)												
A. County Level												
B.Custom Domain Level												
IV. Emission Rate Approach&Inventory Apporach												
V. Final Recommendations												

* Fuel, Methodology, and I/M data will be developed by DEP staff