

Memorandum

November 12, 2014

To: MWAQC TAC

From: Mohamed A. Khan

Mobile Sources Control Program
MD Department of the Environment

Subject: **MDE's experience with MOVES2014**

- MOVES2014 (July) Installation: With MOVES2010b on the same PC
 - Issues with Database Conversion Tool through MOVES GUI
 - MOVES2014 Input Tables and MySQL Databases (see attached spreadsheet)
 - Test Runs – 2011 Daily - Baltimore County - Local and Default Inputs – OK
 - Issues with ZEV_AVFT Excel table. Run time error; EPA was contacted; Fixed in the October Release of the MOVES2014 model.
 - MOVES2014 (Oct) Installation: same issues as the previous ones
 - Test Runs – 2011 and 2018 Daily - Baltimore Area - Local Inputs – OK
 - Batch and Distributed Processing Issues with Windows 7– Most Critical for MDE. Involved EPA – MDE's IT – MDOT consultants..... Not resolved yet.
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Maryland Department of the Environment (MDE)
Air and Radiation Management Administration (ARMA)
Mobile Sources Control Program (MSCP)

MOVES2014 Input Tables and MySQL Databases

No.	MOVES Table Name	Responsibility	Differences between MOVES2014 and MOVES2010b
1	Source Type Population	Air Agency	No Change
2	I/M Coverage	Air Agency	No Change
3	Age Distribution	Air Agency	No Change
4	Fuel Data	Air Agency	In four tables: Fuel Formulation (Diff), Fuel Supply(Diff), Fuel Usage Fractions (New), and AVFT (Diff)
5	Meteorology	Air Agency	No Change
6	MySQL Databases	Air Agency	Early NLEV (Diff), Stage II, Cal-LEViii (New)
7	Retrofit Data	Joint	New in MOVES2014
8	Vehicle Type VMT	Transportation	With four tables: VMT and Month VMT Fractions (Diff), Day and Hour VMT Fractions
9	Hotelling	Transportation	New in MOVES2014
10	Starts	Transportation	New in MOVES2014
11	Road Type Distribution	Transportation	No Change
12	Ramp Fraction	Transportation	No Change
13	Avg. Speed Distribution	Transportation	No Change

Modeling Strategy:

- 1) Create or use one full set of above tables and databases for modeling each County
- 2) Create the most comprehensive set (Annual) and use it for all modes - annual, summer daily and winter daily runs
- 3) Utilize the distributed and batch processing features of MOVES to cut down on run time using multiple computers
- 4) Perform Cal-LEV iii modeling in two separate MOVES runs. Please use EPA's guide on Cal-LEV iii modeling.