

Potential Problems Running NMIM2005

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There are several problems that NMIM2005 users may encounter that have been identified that are not addressed in the NMIM instructions. The instructions below describe how to avoid these problems when running NMIM2005. They involve 1) Fleet, 2) Retrofit, and 3) lockup and opening a RunSpec.

FLEET BUG

If one MOBILE6 vehicle class is included in a fleet, all the MOBILE6 vehicle classes in the associated NMIM vehicle class must also be included in the Fleet Information File.

A fleet is described in the Fleet Information File and consists of one or more of the 28 MOBILE6 vehicle classes. NMIM output is grouped into twelve vehicle classes. The relationship between these two sets of vehicle classes is shown Table 1 below.

If one MOBILE6 vehicle class is included in a fleet, all the MOBILE6 vehicle classes in the associated NMIM vehicle class must also be included in the Fleet Information File. NMIM will not execute if this requirement is not fulfilled. The number of vehicles and VMT may be set to zero as appropriate. For example, if your fleet consists only of HDDV8b trucks in model years 1990, 2000, 2001, and 2002, you must also include one line of HDDV8a trucks, setting the number of vehicles and VMT to zero, and choosing any model year earlier than the calendar year of the emissions simulation. It is not necessary to match model years with the HDDV8b trucks. The following Fleet Information File illustrates this example.

Example Fleet Information File:

```
vehicle class, model year, number of vehicles, annual mileage
HDDV8b,1999,700,100000
HDDV8b,2000,500,100000
HDDV8b,2001,300,100000
HDDV8b,2002,100,100000
HDDV8a,1995,000,00000
```

Adding this additional line with the number of vehicles set to zero will not affect the results, but is required in order for NMIM to model this vehicle class.

Table 1. Crosswalk between NMIM and MOBILE6 vehicle classes.

NMIM	M6	NMIM	M6
-----	-----	-----	-----
LDGV	LDGV	LDDV	LDDV
LDGT1	LDGT1	LDDT	LDDT12
LDGT1	LDGT2	LDDT	LDDT34
LDGT2	LDGT3	2BHDDV	HDDV2B
LDGT2	LDGT4		
		LHDDV	HDDV3
HDGV	HDGB	LHDDV	HDDV4
HDGV	HDGV2B	LHDDV	HDDV5
HDGV	HDGV3		
HDGV	HDGV4	MHDDV	HDDV6
HDGV	HDGV5	MHDDV	HDDV7
HDGV	HDGV6		
HDGV	HDGV7	HHDDV	HDDV8A
HDGV	HDGV8A	HHDDV	HDDV8B
HDGV	HDGV8B		
		BUSES	HDDBS
MC	MC	BUSES	HDDBT

RETROFIT BUG

For each MOBILE6 vehicle class specified in the Retrofit Parameter File, the corresponding NMIM vehicle class (see Table 1 above) must also be specified in NMIM's Vehicles/Equipment, Onroad selection screen.

This is true even if a Fleet Information File is being used to define the vehicle classes. In this case, to make the selection, the "Perform Onroad Fleet Modeling" check box must first be unchecked; otherwise NMIM's Vehicles/Equipment, Onroad selection screen is grayed out. After making the appropriate NMIM vehicle selection, re-check the "Perform Onroad Fleet Modeling" check box. NMIM's vehicle selection screen will again be grayed out, but the selections you made will remain.

To avoid this problem, always make the Vehicles/Equipment, Onroad selections for output before you make any selections in the Fleet or Diesel Retrofit screens.

LOCKUP AFTER HITTING EXECUTE FROM THE GUI

If, first thing after starting the Master GUI, you open a RunSpec in which localhost and a County Database are specified using the Advanced Features, the NMIM program will lock up when you try to execute any NMIM runspec. The symptom is that the blue progress bar does not start across the bottom of the GUI. Instead, it remains gray. This is true even if you load another RunSpec or create a new RunSpec without closing NMIM. The effect occurs when the first thing you do (that affects the Advanced Features County Database Server) is to load a RunSpec in which localhost and a County Database are specified. This effect cannot be undone without closing and reopening NMIM.

Since it is very desirable to specify the county database in all your RunSpecs, and since the drop-down menu does not function without specifying localhost, a work-around is desirable. Any one of the following three work-arounds is effective. You need only to do one.

1) After opening the NMIM Master GUI, but before opening the RunSpec you are interested in, go to Advanced Features and type in localhost for County Database Server. Then open the RunSpec. Strangely enough, this solves the problem. Opening subsequent RunSpecs will not cause this problem to recur. It is associated only with the very first RunSpec opened after starting the GUI.

2) Edit your RunSpec with a text editor and change countydb server="localhost" to countydb server=". Since "localhost" is optional, your RunSpec will work OK without it, you will prevent future problems with this RunSpec. Altering all of your RunSpecs will prevent this problem.

3) Edit your RunSpec using the GUI. To do this, first remove localhost from County Database Server, then go to any other screen (Pollutants, for example), then return to Advanced Features and select your database from the drop down menu. Then save the RunSpec. This procedure will eliminate localhost from the County Database Server.

If you have questions regarding these instructions, you can contact us at:

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