



Item #13

## MEMORANDUM

**Date:** March 19, 2003

**To:** Transportation Planning Board

**From:** Ronald F. Kirby *RFK*  
Director, Department of  
Transportation Planning

**Re:** Additional Information on Mobile Emissions  
Requirements for the Region's State Implementation  
Plans (SIPs)

A memorandum dated March 13, 2003 included as Item 13 in the mailout packet for the March 19 TPB meeting provided updated information on Transportation Control Measures (TCMs), Reasonably Available Control Measures (RACMs), the Round 6.3 Versus Round 6.2 Forecasts, and new estimates of the VOC and NOx impacts of Transportation Emissions Reduction Measures (TERMs) using EPA's Mobile 6 model. This memorandum provides additional information on the likely impacts of the Round 6.3 forecasts on emissions estimates for 2005, as well as on the status of responses received to the TPB's heavy duty vehicle fleet survey.

All of the emissions estimates presented to date to the TPB and MWAQC have been developed with COG's Round 6.2 forecasts of employment, population, and households for the Washington region. At the request of the state air agencies, some technical corrections will be made to the mobile emissions estimates over the next two months to reflect certain revisions to their input parameters for Inspection and Maintenance (I&M) programs, Anti-Tampering Programs (ATP), and Diesel Sales Fractions (DSF). These technical corrections are expected to result in only minor adjustments to the current estimates, and should not cause any delays in the overall work schedule (attached).

(1) Likely Impacts of Round 6.3 Forecasts in 2005

At its March 12, 2003 meeting, COG's Metropolitan Development Policy Committee (MDC) approved the jurisdictional totals for the new Round 6.3 forecasts for use by the TPB in the air quality conformity analyses for the 2003 CLRP and FY2004-2009 TIP. (These jurisdictional totals were provided as Attachment A to the March 13, 2003 memorandum to the Board). The traffic analysis zone (TAZ) level data for these Round 6.3 forecasts are expected to be available within the next month.

In order to assess the implications of the new Round 6.3 forecasts for mobile emissions, COG/TPB staff has conducted a "sensitivity analysis" for the attainment year 2005. In addition, MWAQC staff has developed revised estimates for the other emissions categories using the Round 6.3 forecasts. Since the Round 6.3 forecasts provide higher estimates of employment, population, and households for 2005 than Round 6.2, as shown in Table 1, some increases in emissions were anticipated. Table 2 provides estimates of the new emissions levels using Round 6.3 compared to Round 6.2. As expected, the emissions levels did increase for area, non-road, and on-road mobile sources as a result of using Round 6.3

Table 1  
 Round 6.3 Versus Round 6.2 in 2005  
 (Thousands)

	Round 6.3	Change from Round 6.2	Percent Change
Employment	3,078.3	+5.1	0.2%
Population	4,974.5	+183.2	3.8%
Households	1,872.7	+58.4	3.2%

Table 2  
 Changes in Emissions Estimates from Round 6.3 to Round 6.2

2A. Controlled 2005 VOC Emissions (tons per day)

	Round 6.2	Draft Round 6.3	Difference	%Change
Point	17.6	17.6	+0.0	0.00%
Area	166.8	170.2	+3.4	2.04%
Non-road	72.6	74.4	+1.8	2.48%
On-road	95.3	96.7	+1.4	1.47%
Totals	352.3	358.9	+ 6.6	1.87%

2B. Controlled 2005 NOx Emissions (tons per day)

	Round 6.2	Draft Round 6.3	Difference	%Change
Point	110.2	110.2	+0.0	0.00%
Area	59.1	60.5	+1.4	2.37%
Non-road	81.6	82.7	+1.1	1.35%
On-road	235.6	237.0	+1.4	0.59%
Totals	486.5	490.4	+3.9	0.80%

These increases in estimated emissions due to Round 6.3 will have implications for both the 2003 and 2005 rate of progress requirements and for comparisons with the 2005 modeled attainment inventory. This latter inventory, as reported in Table 8-3 on page 8-14 of the February 3, 2000 State Implementation Plan (SIP) Revision Phase II Attainment Plan is as follows:

Table 3  
2005 Modeled Attainment Inventory  
(Tons per day)

	VOC	NOx
Point	15.6	171.1
Area	153.8	54.3
Non-road	66.8	71.9
Mobile	123.5	196.8
Totals	359.7	515.3

(2) Heavy Duty Fleet Survey

The attached memorandum from Jane Posey reports on the survey forms received to date in response to the TPB's heavy duty vehicle fleet survey. Complete tabulations of these results will be available for the TPB's next meeting on April 16, 2002.

Attachment

**Schedule to Develop Severe Area SIP  
MWAQC 12/4/02**

<b>Month</b>	<b>SIP Schedule</b>	<b>State Action: Deadlines</b>	<b>TPB Conformity</b>
November 2002 <b>FR Notice of Proposed Reclassification</b>	<b>TAC:</b> Draft MOB6 budgets and attainment inventory for 2005; Identify control measures; RACM analysis; develop severe area RACT, threshold and offset rules		
December 2002*	<b>TAC:</b> Analysis of 1990 baseline; Identification of control measures <b>MWAQC:</b> Review mobile inventory for 2005; RACM analysis		TPB Reviews Draft Solicitation Document
January 2003* <b>FR Final Notice of Reclassification</b>	<b>Staff/TAC:</b> Develop target inventory for 1996 & 1999. <b>MWAQC:</b> Preliminary shortfall analysis for 2005	<b>States:</b> Final stationary source inventory 2005; list of shortfall measures;	TPB Reviews Draft Solicitation Document
February *	<b>Staff/TAC:</b> Develop target inventory for 2002, calculate ROP; review reduction measures; <b>MWAQC:</b> Draft ROP for 2002, 2005	<b>States:</b> Schedule for Title I modifications	TPB releases Final Solicitation Document
March*	<b>Staff/TAC:</b> Develop shortfall analysis, shortfall measures and contingency measures <b>MWAQC:</b> Briefing on shortfall package & contingency measures	<b>States:</b> provide evidence for: Title I modifications; OTC rulemakings; shortfall package & contingency measures (funding, regulations, MOU's)	Deadlines for Electronic Submission of CMS, CLRP and TIP data by Implementing Agencies. Also deadline to submit TERM analyses and status reports.
April	<b>Staff:</b> Draft Severe Area SIP Prepared		CLP and TIP Project Submissions Released for Public Comment and Inter-Agency Review
May*	<b>TAC and MWAQC:</b> approve Draft SIP for public hearing; notice of public hearings		TPB Reviews Public Comments, Approves project submissions for incorporation in Conformity Analysis for CLRP and TIP
June	Public Hearings		
July*	Respond to public comment; <b>TAC and MWAQC:</b> approve draft Severe Area SIP; States submit SIP to EPA		TPB briefed on Draft Conformity Determination, CLRP and TIP
September*			TPB releases draft conformity determination, 2003 CLRP, FY2004 TIP
October	EPA determines mobile budgets adequate for conformity		TPB approves conformity analysis; 2003 CLRP & FY04 TIP
December*			
January 2004			FHWA/DOT approve 2003 CLRP & FY2004 TIP
March 2004 <b>Deadline for SIP to EPA</b>			

\*MWAQC meeting (meeting dates may vary from schedule)



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**MEMORANDUM**

*District of Columbia*

*Bowie*

*College Park*

*Frederick County*

*Gaithersburg*

*Greenbelt*

*Montgomery County*

*Prince George's County*

*Rockville*

*Takoma Park*

*Alexandria*

*Arlington County*

*Fairfax*

*Fairfax County*

*Falls Church*

*Loudoun County*

*Manassas*

*Prince William County*

March 18, 2003

**TO:** Transportation Planning Board

**FROM:** Jane A. Posey *JP*  
Transportation Engineer

**SUBJECT:** Heavy Duty Vehicle Fleet Survey

Staff distributed the heavy duty vehicle fleet inventory request that the TPB approved at its January 15, 2003 meeting. To date, staff has received completed survey forms from the following jurisdictions / agencies:

Fairfax County  
City of Fairfax  
VDOT  
Loudoun County  
City of Rockville  
Montgomery County  
City of Alexandria  
City of Gaithersburg  
District of Columbia  
City of Takoma Park  
Town of Vienna  
MDOT-MTA  
MDOT-SHA  
WMATA  
Georgetown University  
City of Greenbelt  
Prince William County