

National Capital Region Transportation Planning Board

777 North Capitol Street, N.E., Suite 300, Washington, D.C. 20002-4290 (202) 962-3310 Fax: (202) 962-3202 TDD: (202) 962-3213

TPB Technical Committee
February 2, 2007
Item # 5

MEMORANDUM

January 17, 2007

TO: Transportation Planning Board

FROM: Ronald F. Kirby
Director, Department of
Transportation Planning

RE: Letters Sent/Received Since the December 20th TPB Meeting

The attached letters were sent/received since the December 20th TPB meeting. The letters will be reviewed under Agenda #5 of the January 17th TPB agenda.

Attachments

Metropolitan Washington Air Quality Committee

Suite 300, 777 North Capitol Street, N.E. Washington , D.C. 20002-4239 202-962-3358 Fax: 202-962-3203

January 12, 2007

Honorable Catherine Hudgins, Chair
National Capital Region Transportation Planning Board
777 North Capitol Street, NE
Washington, D.C. 20002

Dear Chair Hudgins:

This letter responds to a letter from TPB dated December 20, 2006 regarding mobile source measures proposed for inclusion in the SIP. In the letter, TPB asked for the opportunity to review and comment upon any local government or state transportation measures proposed for the new 8-hour ozone SIPs. The purpose of TPB's review would be to ensure a consistent analytical approach, and to prevent any possibility of double-counting emissions benefits among SIPs and air quality conformity assessment activities.

State and local government transportation measures were included in the 1-hour ozone SIPs and are being proposed for the 8-hour ozone SIPs. The proposals include the TCMs and vehicle-, fuel- and maintenance-based measures transmitted in a TPB letter dated November 7, 2006, as well as a number of mobile source measures advanced by local governments in the region. The remainder of this letter focuses on the measures advanced by local governments.

The Washington DC-MD-VA region's 1-hour ozone SIPs included a bundle of local voluntary measures, among them some mobile source measures (see Attachment 1). In developing the control strategy for the 8-hour ozone SIPs, local jurisdictions are building upon the efforts from the past SIP to include an updated local voluntary bundle. A list of the programs that were identified and are being considered for inclusion in the SIP is also found in Attachment 1. Local jurisdictions are proposing inclusion of low-emission vehicle purchases, diesel retrofits, use of low-VOC paints, purchase of wind energy, and a variety of episodic code orange and code red programs. In addition, LED traffic signal retrofits are being examined as a possible local voluntary measure.

In response to TPB's request, we will transmit proposed mobile measures to DTP staff for review. We appreciate your assistance in identifying inconsistencies in methodology or duplication of measures. The schedule for adopting the 8-hour ozone SIPs calls for a draft SIP to be approved by MWAQC for public comment in March. To this end, we accept your offer and ask that the Technical Committees of TPB and MWAQC collaborate closely to review and reach agreement on the handling of local mobile measures in the SIPs by mid-February.

We look forward to our continuing close technical and policy working relationship as we move towards completion of the draft SIPs to meet EPA's new 8-hour ozone standard.

Sincerely,



Nancy Floreen, Chair
Metropolitan Washington Air Quality Committee

DRAFT (January 12, 2007)
Attachment 1. Summary of Potential Voluntary Measures Commitments (2002-2009)
Washington, DC-MD-VA Ozone Nonattainment Area

Jurisdiction	Commitments in 1-hour Ozone SIP	New Additional Commitments for 8-hour Ozone SIP (a)	2005 Emission Reduction Credited in 1-hour Ozone SIP (tpd)	Possible New 2009 Emission Reduction for 8-hour Ozone SIP (tpd)
Regional Wind Power Purchase Program (kWh/year)				
Montgomery County (b)	28,000,000	23,809,091		
Prince George's County		7,611,601		
Arlington County		2,340,000		
Fairfax County		5,800,000		
District of Columbia		16,500		
<i>Total</i>	28,000,000	39,577,192	0.05 NOx	0.07 NOx
Clean Energy Rewards Program (MWh/year)				
Montgomery County		31,900		
<i>Total</i>		31,900	No Credit	No Credit
Renewable Portfolio Standards (kWh/year)				
District of Columbia	-	-	-	-
<i>Total</i>	-	-	-	-
LED Traffic Signal Retrofits (# of intersections)				
VDOT	0	864		
MDOT	0	15		
District of Columbia	0	-		
Montgomery County	0	250		
Arlington County	0	271		
City of Alexandria	0	239		
City of Falls Church	0	818		
<i>Total</i>		-	0	-
Building Efficiency/Energy Performance Contracting (kWh/year savings)				
Fairfax County	0	6,630,675		
Arlington County	0	1,500,000		
City of Greenbelt	0	230,000		
Montgomery County	0	-		
City of Falls Church	0	-		
City of Alexandria	0	-		
Calvert County	0	-		
<i>Total</i>	0	8,360,675	No Credit	No Credit
Diesel Retrofits (# of vehicles)				
Fairfax County School Bus	1,329	Complete		
Fairfax County Class 8 Trucks	0	113		
Fairfax County Fire Equipment	0	50		
Fairfax County DOT (DPF)	148	95		
Fairfax County DOT (idling)		95		
Montgomery County	0	253		
Loudoun County	0	237		
<i>Total</i>			No Credit	-
Low-Emission Vehicle Purchases (# of vehicles)				
Arlington County	0	69		
Fairfax County	32	65		
Montgomery County	5	176		
Prince George's County	3	8		
M-NCPPC Prince George's	0	23		
Loudoun County	0	25		
District of Columbia	0	678		
City of Alexandria	0	55		
City of Greenbelt	0	7		
City of Falls Church	0	7		
<i>Total</i>	40	1113	No Credit	-
Low-VOC Paint (# of gallons per ozone season day)				
Prince George's County	5			
M-NCPPC Prince George's	15			
Fairfax County	40			
MDOT	502.5			
Arlington County		0.63		
City of Alexandria		1.75		
City of Greenbelt		0.20		
Calvert County		1.25		
<i>Total</i>	562.5	3.20	0.166 VOC	0.0009 VOC
Enhanced Enforcement (solvent machine replacement/idling)				
Montgomery County		0 18 units	0	0.003-0.09 VOC
Loudoun County		No Idling Policy		
TOTAL				
NOx			0.2 (a)	0.07
VOC			3.2 (a)	0.09

(a) Total for 1-hour ozone SIP includes several programs not proposed for expansion in the 8-hour ozone SIP. These measures include Reformulated Consumer Products, Auxiliary Power Units for Locomotives, Gas Can Replacements, and Remote Sensing programs.

(b) 24,000 MWh in FY07 and 19,000 MWh in FY08.

National Capital Region Transportation Planning Board

777 North Capitol Street, N.E., Suite 300, Washington, D.C. 20002-4290 (202) 962-3310 Fax: (202) 962-3202

December 20, 2006

The Honorable Phil Mendelson
Chairman
Metropolitan Washington Air Quality Committee
777 North Capitol Street, NE
Washington, DC 20002 – 4239

Dear Chairman Mendelson:

The TPB has been working cooperatively with MWAQC over the past year to meet all requirements for development and submission of 8-hour ozone State Implementation Plans (SIPs) to the Environmental Protection Agency (EPA) in Spring 2007. A recent product of these work efforts was my November 7, 2006 letter to you (Attachment A) transmitting draft mobile source budgets for 2008 and 2009, which were derived by subtracting from the mobile source inventories for each year the emissions benefits from SIP-committed Transportation Control Measures (TCMs) and vehicle technology based measures. Once these mobile source emissions budgets are established in the SIPs and approved by EPA, they will be used by the TPB in demonstrating conformity of the Constrained Long Range Plan (CLRP) and Transportation Improvement Program (TIP) for the region.

At its November 8, 2006 meeting the COG Board passed a resolution (Attachment B) encouraging its member governments to adopt additional measures to reduce air pollution and assist in addressing the 8-hour health standards. The resolution asks for commitment letters from agencies by December 31, 2006. In Table 1, attached to the resolution, a number of transportation measures are included as examples. Since the same or similar transportation measures may be advanced to either SIP or air quality conformity activities, there is a need for continuing coordination between MWAQC and the TPB to ensure consistent and appropriate treatment of such measures.

The purposes of this letter are: (1) to review the ways in which emissions benefits of transportation measures may be credited in the SIP and the air quality conformity process, and (2) to offer TPB's review and comment on any transportation measures that may be submitted through the COG Board resolution or other initiative.

Transportation Measures in the SIP

As noted in my letter of November 7, 2006, there are two distinct categories of transportation measures that may be included for emissions credit in the SIP:

1. TCM (Transportation Control Measure): a demand-based measure which is a legally enforceable commitment in a SIP.
2. Vehicle-Based Measure: a vehicle technology-, fuel-, or maintenance-based measure which is also a commitment in a SIP.

According to EPA's Conformity Rule, TCMs are demand-based measures "specifically identified and committed to in the applicable implementation plan – for the purpose of reducing emissions or concentrations of air pollutants from transportation sources." Regarding vehicle-based measures, EPA's conformity rule states that "vehicle technology-based, fuel-based and maintenance-based measures which control the emissions from vehicles under fixed traffic conditions are not TCMs". Nevertheless, once such measures are advanced as SIP commitment measures, they too become legally enforceable.

TCMs have a special status in the transportation conformity process in that in order to make a conformity determination the TPB must find that the CLRP and / or TIP "provides for timely completion or implementation of all TCMs in the applicable implementation plan". An ineffective TCM included in the SIP could preclude the TPB from making a conformity determination even if all other SIP and conformity requirements are met. It is therefore recommended that demand-based measures should be "hard-wired" into the new SIP as TCMs only if it is absolutely certain that they will be implemented.

MWAQC is also planning to include in the SIP an aggregation of voluntary measures as a "voluntary bundle," for which emissions credit may or may not be taken. In this context, EPA staff has indicated that any transportation measure in a SIP with a quantified emissions benefit would represent an emissions credit and therefore also would be considered as a SIP commitment (either a TCM or a vehicle-based measure).

Transportation Measures in the Conformity Process

In demonstrating conformity of the CLRP and TIP to the mobile budgets in the SIP, the TPB estimates emissions for rate of progress, attainment, and future milestone years, taking credit for Transportation Emissions Reduction Measures (TERMs) included in the CLRP and TIP. These TERMS include the TCMs and vehicle based measures in the SIP, as well as a number of other measures such as telecommuting, transit improvements, ridesharing, guaranteed ride home, and additional vehicle-related measures such as bus replacements to which the TPB has made commitments over the past decade.

Review and Comment

As noted in the above discussions, demand-based and vehicle-based transportation measures are currently included in both the SIP and the air quality conformity process. Measures included in the SIP are incorporated into the mobile emissions budgets.

Additional measures not included in the SIP are used by the TPB in the conformity process. It is clear that vigilant bookkeeping is a necessity to keep track of these different categories of transportation measures. To this end, TPB offers to review and comment upon any transportation measures received through the COG Board resolution or other initiatives. We believe that this review will help to ensure a consistent analytical approach and to guard against any possibility of double-counting emissions benefits among SIP and air quality conformity assessment activities.

The TPB looks forward to continuing the close technical and policy working relationships with MWAQC as we move forward in meeting remaining requirements for SIP planning.

Sincerely,

A handwritten signature in black ink, appearing to read "M. Knapp", with a long horizontal line extending to the right.

Michael Knapp
Chair, National Capital Region
Transportation Planning Board

Attachments (A - B)

cc: COG Board Members

Attachment A

National Capital Region Transportation Planning Board

777 North Capitol Street, N.E., Suite 300, Washington, D.C. 20002-4290 (202) 962-3310 Fax: (202) 962-3202

November 7, 2006

The Honorable Phil Mendelson
Chairman
Metropolitan Washington Air Quality Committee
777 North Capitol Street, NE
Washington, DC 20002 – 4239

Dear Chairman Mendelson:

The National Capital Region Transportation Planning Board (TPB) is pleased to transmit to the Metropolitan Washington Air Quality Committee (MWAQC) the attached table of mobile source emissions data prepared for use in the development of the 8-hour ozone state air quality implementation plan (SIP). Building upon the TPB's July 12, 2006 transmittal of mobile source emissions inventory results, this table incorporates estimates of emissions benefits of transportation measure commitments which are in the region's 'severe area 1-hour ozone SIP' to yield draft 2008 and 2009 mobile emissions budgets for volatile organic compounds (VOC) and nitrogen oxide (NOx) emissions.

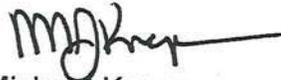
These data are being formally transmitted by the TPB to MWAQC today because the 2008 and 2009 estimates of 'mobile emissions inventories less SIP-committed measures' represent the basis for establishing new motor vehicle emissions budgets in the SIP. These new emissions budgets will, in turn, be used by the TPB in future air quality conformity determinations. Reviewing the data in the table, the TPB's July 12, 2006 transmittal of the primary emissions inventory data provides the starting point for the forecast emissions levels. Emissions benefits for the transportation control measures (TCM)s and the Vehicle Technology measures in the table reflect estimates prepared by TPB staff as part of the air quality conformity assessment of the 2006 Constrained Long Range Plan (CLRP) and the FY2007 – 12 Transportation Improvement Program (TIP), which was adopted by the TPB on October 18, 2006. Subtraction of the SIP-committed measures from the base inventory levels yields the draft mobile budgets.

According to EPA's conformity regulations the motor vehicle emissions budget represents "... that portion of the total allowable emissions defined in the submitted or approved control strategy implementation plan.....allocated to highway and transit vehicle use and emissions." The regulations state further that EPA will not find a

submitted motor vehicle emissions budget to be adequate for transportation conformity purposes unless "The motor vehicle emissions budget(s), when considered together with all other emissions sources, is consistent with applicable requirements for reasonable further progress, attainment, or maintenance..." and "... is consistent with and clearly related to the emissions inventory and the control measures in the submitted control strategy implementation plan revision...". The TPB believes that the attached 2008 and 2009 motor vehicle emissions estimates, in conjunction with the emissions benefits from the SIP-committed measures, provide the basis for establishing motor vehicle emissions budgets that will comply with these EPA regulations.

The TPB looks forward to continuing the close technical and policy working relationships with MWAQC as we move forward in meeting remaining requirements for SIP planning.

Sincerely,

A handwritten signature in black ink, appearing to read "M. Knapp", with a long horizontal stroke extending to the right.

Michael Knapp
Chair, National Capital Region
Transportation Planning Board

**Summary Table - Calculation Of
Mobile Source Emissions Budgets For the 8-Hour Ozone SIP**

	2008		2009	
	VOC	NOx	VOC	NOx
	Tons/day			
Mobile Source Inventory	70.98	160.30	66.68	146.53
TCMs	0.11	0.25	0.10	0.22
Vehicle Technology Based Measures	0.08	0.24	0.08	0.23
Net	70.79	159.81	66.50	146.08
 Draft Mobile Source Budgets	 70.8	 159.8	 66.5	 146.1

**METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS
777 North Capitol Street, NE
Washington, D.C. 20002**

**RESOLUTION TO ENCOURAGE ADOPTION OF MEASURES TO REDUCE AIR POLLUTION BY
COG MEMBER GOVERNMENTS**

WHEREAS, the Metropolitan Washington region does not meet the National Ambient Air Quality Standards (NAAQS) for ozone and fine particles; and

WHEREAS, the local jurisdictions in the Metropolitan Washington Council of Governments (COG) who participate with the states of Maryland, Virginia and the District on the Metropolitan Washington Air Quality Committee (MWAQC) are developing a regional plan to improve the air and meet federal health standards by reducing emissions that cause pollution; and

WHEREAS, the Washington, DC-MD-VA metropolitan region is classified as a moderate nonattainment area for the 8-hour ozone standard and is required to submit a revision to the region's state implementation plan (SIP) by June 15, 2007; and

WHEREAS, the states have committed to adopt and implement control measures beyond those explicitly required by the Clean Air Act to attain the eight-hour National Ambient Air Quality Standards; and

WHEREAS, MWAQC has investigated a broad range of measures for attainment, including short-term measures to attain the 8-hour ozone standard in 2009 and long-term approaches that go beyond traditional control measures; and

WHEREAS, MWAQC identified innovative approaches to reduce emissions through public policy initiatives such as purchase of wind power and environmental performance contracting; and

WHEREAS, the measures adopted by local jurisdictions have the potential to provide additional emission reductions necessary to meet the 8-hour ozone National Ambient Air Quality Standard, and to reduce eight-hour ozone levels which have been shown to produce detrimental human health effects.

**NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE
METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS THAT:**

1. COG encourages members to adopt programs to reduce harmful emissions causing air pollution such as purchasing wind energy, retrofitting diesel school and transit buses, purchasing low emissions vehicles, energy efficiency measures, and others listed in Table 1.
2. COG encourages members to submit letters committing to these programs to the appropriate state air agency by December 31, 2006, so the programs being adopted may be included in the regional air quality plan to be submitted to the states and EPA.
3. The Chair of the Board of Directors shall expeditiously transmit this resolution to the lead elected officials of all member jurisdictions.

Table 1
Measures That Reduce Harmful Air Emissions
For Consideration by COG Member Governments

- School Bus and Other Diesel Engine Retrofits
- Wind Energy Purchases
- Renewable Portfolio Standards
- LED Traffic Signal Retrofits
- Alternative Vehicle Purchases
- Low-VOC Paints
- Energy Performance Contracting (e.g., building efficiency, solar photovoltaics for schools)
- Airports Voluntary Emission Reduction Agreements
- U.S. Green Building Council's Guidelines for Energy and Design Standards (e.g., LEEDs, Green Building Codes) or other nationally recognized Green Building standards
- Tree Planting and Urban Heat Island Mitigation
- Enhanced Enforcement – Idling (e.g., trucks and buses)
- Cash for Clunkers Lawn and Garden Equipment Programs
- Best Practices in Production and Application of Traffic Markings, Asphalt, and Pesticides
- Environmental Performance Contracting (e.g., construction, landscaping)
- Additional transportation measures such as, but not limited to smart growth and transit-oriented development, expansion of the transit system to new locations; expanded Commuter Choice and telecommuting programs; and enhanced bicycle and pedestrian access to transit stations