

**Minutes  
Joint Public Hearing  
of the  
Kentucky Natural Resources and Environmental Protection Cabinet  
Division for Air Quality  
and the  
Louisville Metro Air Pollution Control Board  
June 18, 2003**

A joint public hearing of the Kentucky Natural Resources and Environmental Protection Cabinet, Division for Air Quality, (DAQ) and the Louisville Metro Air Pollution Control Board (Board) was called to order June 18, 2003, at 9:02 a.m. in the Board Room of the Louisville Metro Air Pollution Control District, 850 Barret Avenue, Louisville, Kentucky, by Board Chairman Joseph Vibbert. Serving as Co-Chairman of the public hearing was Mr. Martin Luther, DAQ.

**General Statement, Rules, and Purpose**

The chairman read the opening announcement, rules, and purpose of the joint hearing of the Kentucky Natural Resources and Environmental Protection Cabinet, Division for Air Quality, and the Louisville Metro Air Pollution Control Board, which was to receive comments on the proposed request to modify the EPA-approved plan to maintain the 1-hour ozone standard through 2012 in the Kentucky portion of the Louisville maintenance area and to establish revised regional mobile source budgets for 2012, based on the use of MOBILE6, for transportation conformity purposes. The Louisville maintenance area includes Jefferson and portions of Bullitt and Oldham Counties, Kentucky, and Clark and Floyd Counties, Indiana. The Chairman also announced that written comments regarding portions of Bullitt and Oldham Counties that are given to Mr. Luther before the close of the public hearing would also be considered by the DAQ.

**1. Kentucky Portion of the Louisville 1-Hour Ozone Maintenance Area: Maintenance Plan and Motor Vehicle Emission Budgets Revision (2003 Update)**

Mr. Luther, on behalf of the Division for Air Quality, thanked the District staff members for their help and assistance in preparing this revision to the Kentucky State Implementation Plan (SIP).

Mr. Trout explained that when the Louisville area was redesignated to attainment of the 1-hour ozone National Ambient Air Quality Standard (1-hour ozone standard), the projected mobile source emissions for the Louisville maintenance area took into account credit for reductions from the federal Tier 2/Sulfur Program. Due to potential inaccuracies involved with using interim approximations based on national defaults and differing baselines to simulate emission factors that would result from proposed changes in MOBILE to be incorporated in MOBILE6, the U.S. Environmental Protection Agency (EPA) established a policy that required MOBILE5-based motor vehicle emission budgets (MVEBs) that relied on Tier 2/Sulfur Program credits to be revised and resubmitted using MOBILE6 within one year after the EPA releases MOBILE6 or, alternatively, within two years following the release of MOBILE6 provided that transportation conformity is not determined without adequate MOBILE6-based MVEBs during the second year. The DAQ, District, and the Kentuckiana Regional Planning and Development

Agency (KIPDA) committed to revising and resubmitting the MVEBs using MOBILE6 within these time periods. This would also include revising the mobile source emissions in the maintenance plan and demonstrating that the maintenance plan continued to show that anthropogenic emissions of volatile organic compounds (VOC) and oxides of nitrogen (NO<sub>x</sub>) during the maintenance plan period would not increase beyond the level of emissions during 1999, the base year for the maintenance plan.

The MOBILE model is developed by the EPA to establish emission factors used in estimating on-road mobile source emissions. The EPA periodically releases new versions of the MOBILE model to incorporate newer information. Local Information, such as the types and ages of vehicles, the number of miles driven on the various roadway types (freeways, arterials, local streets, and freeway entrance and exit ramps), and the speeds of those vehicles on those roadways, is used to override the default data developed by the EPA.

The transportation planning process, including demonstrating conformity of the transportation plan with the MVEBs in the SIP, involves many agencies, including the Kentucky and Indiana transportation departments, the EPA Regions 4 and 5, Federal Highway Administration Regions 4 and 5, KIPDA, the DAQ, and the District. Over the course of the last year, these transportation planning partners have worked together closely to ensure acceptability of the assumptions and methodologies used to develop the revised mobile source emission estimates and MVEBs. Mr. Trout said that Gary Flispart, of the District, and Randy Simon, of KIPDA, deserve special recognition for their efforts to develop the revised mobile source emission estimates.

With respect to the maintenance plan, the requirement is to show that the projected future emissions will not be greater than the actual emissions in 1999. The difference between the projected emissions and the 1999 baseline emissions is defined as a "safety margin." Any projected safety margin may be allocated for additional industrial or area growth, MVEBs, or reserved for air quality improvement. With respect to VOCs, all of the safety margin for the Louisville area is proposed for allocation to the MVEBs. Because the future mobile source emission estimates are significantly less when derived from MOBILE6 than the estimates derived from MOBILE5b, the revised safety margin allocated to the MVEBs could accommodate more than a doubling of mobile source VOC emissions and nearly a tripling of mobile source NO<sub>x</sub> emissions.

Mr. Trout said during the written comment period, comments were received from the EPA regarding two issues and from River Fields, Inc. regarding two issues.

The EPA's first issue involved a stationary source in Bullitt County for which additional VOC emission reductions were to be made. The EPA commented that if credible evidence of VOC emission reductions from Publishers Printing is available, then the planning assumption for Bullitt County point source emissions should be revised. Mr. Trout indicated that, at this time, the DAQ does not have quality-assured information regarding the magnitude of VOC emission reductions that would justify a change in the control strategy assumption for this stationary source. However, these reductions would actually enhance the viability of the maintenance plan,

because the future actual emissions would be less than originally predicted.

The EPA's second issue was a request that the text of the final document be revised to clearly identify 1) the MVEBs and the year for which they are established, 2) that the new budgets are a revision to the previously approved budgets, and 3) a breakdown, by State, for the safety margins that are being allocated to the MVEBs. Mr. Trout said that the DAQ and the District agree with the EPA's comments and will make these requested editing changes to the final document that will be formally submitted to the EPA.

The first issue raised by River Fields involved differentiating peak and off-peak travel volumes and speeds. River Fields stated that the national planning assumption reflected in MOBILE6's default input differentiates between peak and off-peak travel volumes and speeds when estimating emissions. This default planning assumption was not used in the establishment of the pending budget; instead, the District's modeling assumption was that travel volumes are constant every hour of the day on every type of road. There is no justification presented for this deviation which will affect the emission estimation. If this deviation from the data table in the MOBILE6 model is based on actual local and regional data, then the data must be presented. River Fields indicated that this deficiency requires that the proposed revision not be approved.

Mr. Trout said that the DAQ and the District disagree. This issue involves work done by KIPDA; KIPDA also disagrees. While the comment did not specify the regulatory requirement for differentiating between peak and off-peak travel volumes and speeds, it is noted that this is a requirement of the conformity program that applies to Serious and above 1-hour ozone nonattainment areas. Because Louisville had been a Moderate 1-hour ozone nonattainment area before redesignation, this requirement does not apply. Additionally, the EPA's MOBILE6 November 2002 technical guidance document states specifically: "Development of an estimate for the vehicle miles traveled (VMT) by hour of day is optional."

Mr. Trout stated that the transportation conformity process requires consultation with many agencies, including the EPA and the Federal Highway Administration, agencies with key roles in the approval process. The methodologies used in developing the revised mobile source emissions inventory and budgets have been reviewed in detail and accepted by all of the transportation conformity process partners. While all the transportation conformity process partners would agree that using more refined data, if available, is preferable, the fact is that complete hour-by-hour data needed to develop peak and off-peak travel volumes and speeds are not available for the Louisville area.

Mr. Trout explained, however, that by not providing hour-by-hour data and thus not overriding the default data, the national default data are actually assumed when the MOBILE6 model is run. Therefore, the national default hourly variations were used in developing the overall emission factors for the Louisville area.

The second issue raised by River Fields involves the fleet makeup used for the future-year predictions. The national planning assumption reflected in MOBILE6's default input reflects an increasing sale and usage of sport-utility vehicles (SUVs) and mini-vans. This default planning

assumption was not used in establishing the pending budget; in fact, the actual ratio used in the District's modeling reverses the national planning assumption. There is no justification presented for this variance. River Fields indicated that this deficiency requires that the proposed revision not be approved.

Mr. Trout stated that the DAQ and the District disagree. The EPA guidance specifically indicates an expectation that local agencies develop local distributions for VMT mix by vehicle class and model year age distributions for SIP analysis. Further, the EPA guidance specifies that it is acceptable to use the same VMT mix for base and target years when using local VMT mix in the absence of local sales forecast data. For the Louisville area, a vehicle database was compiled using Vehicle Emissions Testing (VET) data for 1999. These data are an accurate accounting of the vehicles actually registered in Jefferson County. When MOBILE defaults are examined, it is clear that the national default VMT mix in MOBILE6 is not accurate for Jefferson County in 1999 and the movement from cars to SUVs in the default tables more reflects past trends than predicts future ones. Further, Mr. Trout pointed out that the methodology used for predicting future VMT mix has been approved twice by the EPA, first in the 2001 Attainment Redesignation Request and then in the 2002 SIP Conformity Determination.

Mr. Trout indicated that even though the District disagreed with the comment, the District reran the MOBILE6 model for 2012 reducing the automobile VMT fraction from 56% to 5% and increasing the SUV VMT fraction from 22% to 74%. This extreme modeled shift in the fleet makeup resulted in a 0.53 ton-per-summer-day (tpsd) increase in VOC emissions and a 2.70 tpsd increase in NO<sub>x</sub> emissions. Mr. Trout pointed out that a safety margin of 26.83 tpsd of VOC and 72.25 tpsd of NO<sub>x</sub> is included in the motor vehicle emission budgets (MVEBs). Thus, even this remodeled extreme fleet makeup shift has an insignificant effect on the approvability of the proposed MVEBs. He explained that, unless the predicted future-year mobile source emissions are nearly the same as the base year mobile source emissions, the magnitude of the allowable MVEBs is established primarily by the level of mobile source emissions that occurred in 1999, the base year of the maintenance plan; these base-year emissions were derived from actual fleet makeup data.

Mr. Trout said that the District intends, pending evaluation of any comments made at today's Public Hearing, to recommend that the Board recommend to the Kentucky Natural Resources and Environmental Protection Cabinet that the request to modify the Kentucky portion of the Louisville 1-hour ozone maintenance plan and the revised regional motor vehicle emission budgets, as proposed with the minor editing changes as requested by the EPA, be formally submitted to the EPA.

## **Statements**

Leslie Barras, Associate Director of River Fields, stated that as Mr. Trout indicated, River Fields had submitted very detailed comments on the action pending before the Board today. The proposed changes would revise the area's motor vehicle emission budget out to 2012. This is an important step in determining whether this region meets the clean air requirements for transportation-related emissions. Ms. Barras said that River Fields hired Smart Mobility to

perform an extensive analysis of the MOBILE model input and output data. She indicated that computer models are supposed to be simulations of what is happening in the real world and that the EPA guidance has strongly encouraged communities like ours to go out and collect local data to put into the model. Last year there was a significant discussion regarding the appropriateness of collecting new data regarding actual speeds on the roadways in the Louisville area. There is a bigger policy issue of why the agencies are not going out to collect these data. Ms. Barras stated that we should not be relying on 1999 vehicle registration data to make important decisions to set tailpipe emission budgets out to the year 2012. She said that River Fields believes that developing data using the latest planning assumptions is required. The EPA, in developing the MOBILE6 model, has made planning assumptions about the types of vehicles on the road now and over the next 10 years that were not used by the District. To improve the quality of the MOBILE modeling, the responsible agencies should collect new data.

Meme Sweets Runyon, Executive Director of River Fields explained that the Ohio River Corridor Master Plan set 15 goals that were important for this entire community, one of which was clean air and water. Recent news articles highlighted problems with the air quality in Louisville. The gravest community health issue is the effects of air pollution. The decisions that the Board makes today regarding future mobile source emissions are important to hundreds of thousands of people. Ms. Runyon said that she speaks as a mother of a 15-year-old son who was very healthy until two years ago, when he developed acute asthma. There is no asthma on either side of their family.

Ms. Runyon said that River Fields believes that the decisions that the Board makes should not be to meet the lowest standards but rather to meet the highest standards. She expressed concern regarding the information from the West Jefferson County Community Task Force that Jefferson County has nationally-significant high levels of air toxics from vehicles. Within a month Kentucky will tell the EPA that the Louisville area does not meet the 8-hour ozone standard. Jefferson County also does not meet the fine particulate standard. The District's response to the technical issues raised by River Fields' written comments is that the modeling meets the EPA minimum standards and that there is sufficient safety margin to accommodate moderate increases in the projected mobile source emissions.

Ms. Runyon said that the agencies should start collecting data that would accurately represent the conditions in the Louisville area. Because controlling air pollution is important to the health of the citizens of the Louisville area, the Board should make decisions based upon data that are current and accurate. The use of 1999 data for fleet makeup is not acceptable to predict emissions for the next ten years.

W. Ed Parker, Take Back Kentucky, said that automobiles are not responsible for ozone. The EPA and air pollution control agencies should be focusing on industrial emissions and air pollution from airports. Mr. Parker stated that pollution credits from the VET test are sold to industry so that they don't have to meet pollution standards. He suggested that source testing would identify the true air pollution sources, such as airports and industries.

Mr. Barr said that he has two vehicles that have easily passed the VET test for the last ten

years. The Board should be controlling the emissions from industry, not testing automobiles.

Mr. Trout noted that the District has changed the planning assumption for mobile sources. The projected 2005, 2008, and 2012 mobile source emissions in the revised maintenance plan and the projected 2012 mobile source emissions in the revised motor vehicle emission budgets do not reflect any emission reduction credit from the VET Program. The inspection/maintenance program in Clark and Floyd Counties, Indiana, will most likely end after 2006, so the planning assumption for mobile sources likewise was changed to reflect no projected emission reduction credit from the Indiana program.

The Chairman provided one last opportunity for the submittal of written comments to Mr. Luther regarding portions of Bullitt and Oldham Counties.

### **Adjournment**

The public hearing adjourned at 9:45 a.m.

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Joseph D. Vibbert  
Chairman

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Jonathan L. Trout  
Secretary-Treasurer