

December 14, 2006

VIA FEDERAL EXPRESS

Mr. Joseph Cassmassi
Planning and Rules Manager
Planning, Rule Development, and Area Sources
SCAQMD
21865 Copley Drive
Diamond Bar, CA 91765-4182

Re: EMA Comments on the Draft 2007 AQMP

Dear Mr. Cassmassi:

Enclosed please find the comments of the Engine Manufacturers Association (“EMA”), as prepared by our emissions inventory consultant – Air Improvement Resources, Inc. (“AIR”) – relating to the draft 2007 air quality management plan (“AQMP”) for the South Coast Air Quality Management District (“SCAQMD”). As set forth in more detail in the enclosed comments prepared by AIR, we believe that the draft AQMP significantly overstates the underlying NOx emissions inventories attributable to heavy-duty on-highway (“HDOH”) trucks. The principal reasons for this overstatement are as follows:

1. The emissions inventory model relied upon in the AQMP (EMFAC 2007) fails to account for the significant NOx reductions that will result from the ARB’s recently-adopted anti-idling regulations.
2. The emissions inventory model relied upon in the AQMP (EMFAC 2007) utilizes the unreasonably pessimistic assumption that only 33% of HDOH truck owners and operators will respond to and correct the emissions-related malfunctions that may be signaled by activated onboard diagnostic system MIL lights.
3. The emissions inventory model relied upon in the AQMD (EMFAC 2007) utilizes unreasonably pessimistic assumptions regarding the deterioration, malmaintenance and malfunction rates for the emission control systems (SCR-based systems for the control of NOx, and regenerating PM filters for the control of PM) that will be utilized in 2010 and later model year HDOH trucks. In particular, the EMFAC 2007 model assumes that approximately 90% of 2010 and later model year HDOH trucks will experience failed NOx aftertreatment systems within or immediately after their statutorily-defined useful lives (435,000 miles). Such assumptions

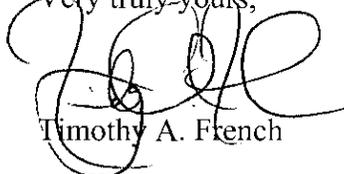
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are inherently unreasonable, and result in improperly overstated estimates of future NOx emission from HDOH trucks.

All of the foregoing points (along with other comments) are discussed in greater detail in the enclosed AIR submission. The net result and conclusion from these comments is that the NOx emission inventories that are ascribed to HDOH trucks in the draft 2007 AQMP are significantly overstated, and that, as a consequence, the SCAQMD is closer to attainment of the requisite NAAQS than is postulated in the draft 2007 AQMP.

Thank you in advance for your careful review and response to EMA's (and AIR's) comments. If you have any questions regarding this submission, please do not hesitate to contact me.

Very truly yours,



Timothy A. French

TAF:jb

Encl.

cc: Tom Darlington (by FedEx; w/encl.)

NGEDOCS: 1355457.1

Comments on Heavy Duty Inventories and Heavy-Duty Measures in Draft 2007 AQMP

AIR, Inc.

December 14, 2006

Introduction

The 2007 AQMP recently released by the South Coast Air Quality Management District (SCAQMD) shows attainment of the federal PM_{2.5} standard by 2014 and attainment of the federal 8-hour ozone by 2021. SCAQMD's ozone modeling for 2021 shows that the maximum NO_x and VOC carrying capacity in the Basin is 238 tpd for NO_x and 304 tpd for VOC. Without currently unidentified "Long-Term" measures, SCAQMD projects NO_x and VOC inventories of 278 tpd and 439 tpd in 2021, which are 40 tpd NO_x and 135 tpd VOC above the carrying capacities. Attainment is projected only when additional controls reduce the gap between the current known controls and the carrying capacities.

SCAQMD also indicates that the current inventory modeling does not reflect several control measures adopted by the ARB, so the inventory shortfalls above may be smaller than indicated.

Heavy-duty diesel vehicles do contribute to the current and future NO_x inventory, and the 2007 AQMP reflects some recent changes in modeling of heavy-duty diesel inventories. This document provides comments on the heavy-duty inventories in the 2007 AQMP, and the impact of potential changes in those inventories.

Comments

SCAQMD has relied on the EMFAC2007 model in estimating heavy-duty diesel NO_x inventories in the future. There are three problems with this model in its current state, which result in the model overpredicting future NO_x inventories:

1. The model does not include the effects of recently adopted ARB anti-idling regulations for new trucks, nor does it include the effects of ARB's ban on idling from in-use trucks.
2. The model assumes only a 33% effectiveness for heavy-duty onboard diagnostics.
3. The model assumes that no fleets in California will follow recommended service intervals for sensors controlling the NO_x aftertreatment system on 2010 and later trucks. This assumption results in a second assumption that greater than 90% of the NO_x aftertreatment systems fail at about 500,000 miles.

The ARB intends to release corrections to the model to account for both the new vehicle and in-use vehicles idling regulations. Once this is done, the NOx shortfall in 2020 relative to the carrying capacity will be significantly reduced from 40 tpd.

In addition, AIR believes that ARB is significantly overestimating future HD truck NOx emissions because of the 2nd and 3rd assumptions noted above. AIR further believes that the 2010+ trucks certified to very low NOx and PM standards will perform better than ARB assumes, and that in those instances where onboard diagnostic systems indicate a problem, significantly more than 33% of the truck owners will take corrective action. AIR and EMA have met with ARB staff on this issue, and EMA has submitted detailed comments to the ARB on ARB's deterioration assumptions. ARB is in the process of responding to those comments.

The SCAQMD has identified a control measure under State and Federal Jurisdiction – ONRD-11 (Enhanced Inspection and In-Use Emissions Tracking of heavy-Duty Vehicles) - that could achieve NOx reductions of about 16.7 tpd. This is clearly aimed at the NOx deterioration rates of 2010+ trucks in ARB's EMFAC2007 model (i.e., assumptions 2 and 3 above). This measure has been included in estimating the 40 tpd shortfall in 2010 for NOx emissions. However, we are unsure that the emissions from heavy-duty trucks, with ONRD-11, properly account for all of the benefit of the 2010+ NOx standards. Consequently, the NOx shortfall relative to the carrying capacity could be further reduced from the 40 tpd level after the idle programs are accounted for.

In summary, due to existing controls programs not currently accounted for in the EMFAC2007 model, and also due to lower deterioration for 2010+ HD trucks than is being assumed by ARB, the amount of NOx that needs to be addressed by long-term measures may be much lower than SCAQMD is currently estimating.

The heavy duty on-highway (HDOH) inventory used to develop the 2007 AQMP inventories reflects several changes implemented by the ARB in estimating those HDOH inventories. One was a change in the zero mile levels and speed correction factors; a second was the change in deterioration rates; and a third was a change in the idle emission rates. Most of those changes, with the exception of the speed correction factors, increased the HDOH NOx inventory. These issues are discussed further below.

1. The revised idle NOx inventory reflects neither the recently adopted NOx idle requirements for heavy-duty diesel trucks, nor the ARB's anti-idling rules. If those were input into the model, the idle NOx emissions in the 2007 AQMP would be much lower.

2. The revised HDOH NOx inventory reflects substantial increases in NOx deterioration rates for technologies that have not yet been put in service, and that are unreasonably pessimistic.