Mr. Tom Helms  
Group Leader  
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US EPA Office of Air Quality Planning and Standards  
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USEPA Mailroom  
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Mr. Gregory Green  
Director  
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Dear Mr. Helms and Mr. Green:

I am writing on behalf of the NESCAUM States to draw your attention to their continued concern regarding the future of Stage II vapor recovery programs, the effect of on-board refueling vapor recovery (ORVR) programs on Stage II systems and the need for more effective collaboration between EPA and the states. Stage II vapor recovery programs represent an important VOC and air toxic control measure in our region and elsewhere. As you are aware, NESCAUM, our member states and EPA have been discussing these issues for well over one year, yet a host of issues related to motor vehicle vapor recovery have yet to be resolved. The following discussion summarizes the issues that NESCAUM has identified as requiring EPA’s attention.

**Phase-out of Stage II in Moderate Areas and, in the OTR, Marginal and Attainment Areas**

Clean Air Act (CAA) Section 202 (a) (6) states, with respect to ORVR requirements, “The requirements of Section 7511a (b) (3) of this title (relating to Stage II gasoline vapor recovery) for areas classified under Section 7511 of this title as moderate for ozone shall not apply after promulgation of such standards...” We interpret this to indicate that states with Stage II programs in Moderate ozone nonattainment areas, as well as Marginal and attainment areas in the Ozone Transport Region (OTR), may begin to phase out those programs. Northeast states are beginning to feel pressure to repeal their Stage II programs, as in the state of Maine, which is under legislative order to report an appropriate date for the repeal of Stage II no later than April 1, 2002. Given this situation, EPA must issue guidance as to how these states may begin the process of phasing out their Stage II programs.
Special Stage II Phase-out Requirements for the OTR

OTAQ staff have suggested that states in the OTR might have different Stage II phase-out requirements. However, the northeast states have not been offered any specifics in this regard. Inasmuch as this may be linked to the previous issue, the NESCAUM states request that EPA explain exactly how the phase-out of Stage II programs in the OTR might differ from other areas of the country.

Definition of “Widespread Use” Under Section 202(a)(6)

According to CAA Section 202(a)(6), the EPA Administrator may repeal the federal requirement mandating Stage II vapor recovery programs upon determination that vehicles equipped with ORVR systems are in “widespread use.” The CAA does not stipulate the timeframe in which this decision must be made, nor does it provide guidance on how such a determination will be made.

In response to NESCAUM’s February 10, 2001, written request for guidance on these issues, EPA implied that because “significant fleet penetration [of ORVR equipped vehicles] will probably not take place for several more years,” such guidance would not be provided before then. This was reaffirmed in a June 6, 2001 conference call where OTAQ staff informed the NESCAUM states that such guidance would not be issued for six years.

The NESCAUM states do not find this time scale acceptable. EPA’s apparent refusal to provide states timely guidance on “widespread use,” as requested, severely limits states’ abilities to determine the future role of Stage II programs in ozone attainment activities, which includes an analysis of the relative costs/benefits of retaining, enhancing or repealing those programs. This delay creates an atmosphere of uncertainty that negatively impacts the private sector, which must be afforded adequate lead-time to ensure a sufficient return on investment for any modifications required of Stage II systems.

This issue extends beyond current ozone nonattainment status. Since Section 202(a)(6) was adopted in 1990, the ozone NAAQS has been revised. As a result, states are beginning to reassess their local ozone SIPs to ensure efficient and cost-effective compliance with the new standard. In this context, states are, again, frustrated by EPA’s seeming indifference to the need for this key piece of Stage II program guidance. States now demand that EPA promptly provide the requested guidance on how it will implement the “widespread use” language contained in Section 202(a)(6) of the CAA.

Furthermore, deferring the development of guidance on “widespread use” hampers states’ abilities to deal with the critical issue of determining what will be required as an alternative to CARB certification of Stage II equipment. Under the EVR program, CARB adopted new protocols and procedures by which it certifies Stage I and II systems. As a result of California law, Stage II systems certified under the previous (April ’96) certification procedures are “decertified” for purposes of installation, operation and
maintenance by CARB. If states can phase-out their Stage II programs in the near-term, it is possible that the lack of a CARB certification program will not create a significant problem. However, if states are required to maintain their Stage II programs indefinitely, it is likely that significant resources will be needed to develop an alternative system to CARB certification. At this point in time, states cannot truly determine the extent of this issue until they understand when phase-out of Stage II programs could occur.

**States’ Preferred Option for Determining “Widespread Use”**

With regard to the definition of “widespread use,” it is suggested, in your April 9, 2001 letter, that such a determination would be based on “the percentage of the automobile fleet equipped with ORVR.” Later, at the June Stage II/EVR Workgroup meeting, OTAQ staff suggested that “widespread use” would occur when ORVR achieves emissions reductions on a one-to-one basis when compared to Stage II. These are vastly different methods to determine “widespread use,” with substantively different implications for air quality planners.

It is the states’ strong desire that EPA provide them guidance under Section 202 (a) (6) that will provide states the greatest flexibility to comply with the requirements of the CAA in the most efficient and cost-effective manner possible. To that end, the states urge EPA to allow states to substitute local Stage II programs based on a state’s ability to document one-for-one equivalency.

**States’ Preferred Option for Determining One-For-One Equivalency**

States urge EPA to adopt a policy for demonstrating one-for-one equivalency based on a state’s Stage II program effectiveness, as claimed in its ozone SIP. Such an approach would provide states a local baseline for judging equivalency and establish a reasonable starting point for developing a consistent methodology for determining the air quality benefits of different approaches to program effectiveness and new program enhancements.

For example, Massachusetts currently claims a Stage II effectiveness of 84% in its ozone SIP. This value is calculated using the following assumptions:

- the minimum designed control efficiency of Stage II systems is 95%;
- 99% of all gasoline is dispensed at Stage II-equipped facilities; and
- 90% of Stage II systems are operating at 95% control efficiency at any one time.
If the assumptions for calculating program effectiveness were to be revised, as below, to reflect likely changes that will occur with the widespread introduction of ORVR equipped vehicles, the 84% program effectiveness number would remain the same. Under such a scenario, it would be argued that the standard of one-for-one equivalency has been satisfied.

- the design efficiency of installed ORVR systems is 95%;
- motor vehicles’ onboard diagnostics system and inspection/maintenance programs ensure that 99% of all installed ORVR systems are operating at 95% control efficiency at any one time; and
- 90% of all gasoline dispensed in Massachusetts is dispensed to ORVR equipped vehicles.

In states where Stage II programs are not statewide or throughput requirements are such that a small percentage of total gasoline dispensed is subject to Stage II controls, this approach can be used to calculate additional VOC emission reductions. These would accrue as program effectiveness increases proportionally with the growth of total gasoline dispensed that is subject to vapor controls (i.e., is dispensed to ORVR equipped vehicles).

**Stage II System Efficiency Effects of ORVR/Vacuum Assist Incompatibility**

In the background document for its proposed Enhanced Vapor Recovery program, CARB predicts that, as a result of ORVR/vacuum assist system incompatibility, “up to 35% efficiency loss could occur [in assist system control efficiency] based on theoretical calculations.” In the NESCAUM region, a majority of installed Stage II systems are vacuum assist systems and a higher percentage of the region’s total volume of gasoline is dispensed through assist systems.

Given the above, states are concerned with the potential public health threat that might result as a consequence of ORVR incompatibility. States urge EPA to immediately undertake a detailed study to quantify and document the potential emissions attributable to ORVR incompatibility. If ORVR incompatibility is determined to be a significant source of emissions, NESCAUM recommends that the States/EPA workgroup work together to develop strategies that will hold public health harmless. Such a finding must also not result in any penalty to the program effectiveness of Stage II programs currently claimed in state ozone SIPs.

Commenting on this issue in its April 9, 2001 letter, EPA stated “At this time, EPA does not intend to penalize States with reduction of credits in their SIPS for this situation.” “At this time” does not provide states comfort regarding how EPA might address this issue in the future. It is our position that, if ORVR incompatibility proves to be a significant source of emissions, those emissions should be considered “new” and not the result of any shortcomings in current Stage II system designs or Stage II regulation already duly adopted into states’ SIPs. If, in the future, a state chooses to adopt controls designed to limit emissions attributed to ORVR incompatibility, states should receive full SIP credit for those incremental reductions.
Vapor recovery programs need immediate federal attention. It is imperative that the Agency establish a process to work with the states in resolving the issues highlighted in this letter. In order to accomplish this goal, EPA must assign appropriate resources to this effort. We would like to set up a meeting of state and EPA officials to develop a clear sense of the issues and options and to chart a path forward. If NESCAUM can be of assistance either in clarifying the issues we have identified or in any other capacity, please contact me.

Sincerely,

Jason Grumet
Executive Director

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