

Enhanced Vapor Recovery Program

Unanswered Questions Plague CARB's Efforts



by Wolf H. Koch, PhD

REPORTING ON THE CURRENT STATE OF AFFAIRS in Stage II vapor recovery has become almost a career. Since 1996, there have been about a dozen CARB workshops and almost as many meetings of the California Air Pollution Control Officers Association (CAPCOA) Vapor Recovery Committee. Even so, the latest CARB meeting posed many more questions than it answered.

CARB hosted a meeting for non-California regulators on July 13-14 in Los Angeles. The objective of the meeting was to inform non-California regulators of changes resulting from CARB's Enhanced Vapor Recovery (EVR) program. The attendees came from industry, US EPA, 18 states and most petroleum marketing trade organizations.

It appears that much confusion exists over the new EVR rules among regulatory agencies outside of California.

Most states expressed the position that they were going to take a wait-and-see posture and continue requiring the currently certified equipment. It was pointed out that most of the states and the US EPA require CARB cer-

tified equipment and that most states do not have California's four-year grandfathering provision following decertification of equipment. (California allows the use of decertified equipment for a period of up to four years.) As a result, the states may be in violation of their own rules and EPA requirements when CARB decertifies current equipment in April 2003.

EPA requirements

Stage I and Stage II vapor recovery are required by US EPA rules for most ozone non-attainment areas. However, it was noted at the meeting that the 1990 Clean Air Act Amendment (CAAA) addressed implementation requirements for Stage II only. The applicable EPA guidance document specifies that states must require Stage II as part of their State Implementation Plans (SIP's) and install equipment which is certified by CARB or by the individual state using an equivalent test procedure. Only Missouri has its own testing requirements, but mandates an initial CARB certification.

Since the 1990 CAAA is applicable only to Stage II processes, no certification requirements exist for Stage I equipment outside California. The planned decertification in April 2001 of current Stage I equipment should impact only those states which specifically require CARB certified Stage I equipment. None of the representatives from the 18 states present discussed such a requirement.

Since the US EPA specifically requires Stage II systems to be certified, the situation with regard to California's EVR program is somewhat different. If current equipment is decertified in April 2003, most states will be out of compliance with their own SIP and EPA requirements. Although the meeting was attended by an EPA representative, he was there to talk about onboard refueling vapor recovery (ORVR) vehicle issues. This EPA official promised to take

the decertification issue to the appropriate EPA office for clarification. A timely resolution of this issue is of great importance to vapor recovery equipment suppliers.

Potential impact of EVR

Much depends on the EPA's interpretation of what constitutes a certified Stage II system. Should the EPA determine that currently certified systems will continue to meet its requirements, there may be little incentive for some manufacturers to certify equipment under the new EVR requirements for the California market only.

Several state representatives suggested that CARB change its decertification requirement. Specifically, New Jersey requested that decertification occur at the end of the grandfathering period. CARB attorneys countered that other states should adopt California's grandfathering provisions. Missouri formally requested that EPA redefine what constitutes a "certified system."

Other issues and developments

The following additional issues and developments were discussed during the July 13-14 CARB meeting:

■ CARB staff reported that as of mid-July, no new Stage I equipment certifications were in progress. They agreed that the April 2001 deadline for certified equipment is very optimistic—even if certification testing starts immediately—and are considering postponing the deadline date. They also agreed that recertified Stage I equipment will be needed before starting Stage II certification testing for EVR. While both systems could be tested together, the risk of failure would increase. None of the equipment suppliers would talk about pending certification plans.

■ Under the new EVR guidelines, CARB will no longer issue “approval letters”—only system certifications or changes to those certifications will be issued.

■ API has retained outside consultants to review CARB’s cost estimates for EVR and to project the costs that the oil industry will face. API also requested that CARB publish a realistic time schedule for future certification activities—taking a project from initial application for testing to the issuance of an Executive Order.

■ The California Independent Oil Marketers Association (CIOMA) expressed concern that there would be problems in rural areas with the new warranty provisions requiring that installers of the equipment be certified. In rural areas, certified installers may not be available. CIOMA also requested information on the need for in-station diagnostics (ISD) and how they are to be integrated with other station functions. CIOMA also asked for clarification of the requirement for “certified replacement parts” for existing stations during the grandfathering period.

■ Future certification testing will be performed by CARB or outside contractors, not the applicant. Inspection and maintenance requirements will be specified in future Executive Orders. However, recurring testing may be required as part of the local permitting process.

■ It was requested that CARB provide a better notification mechanism for equipment recalls. CARB stated that it will post recalls on its web site but that it has no obligation to notify agencies such as Underwriters Laboratories (UL) Inc.

■ A Stage I manufacturer stated that the new requirements for swivels on drop tubes makes little sense and that the swivel should be located on the tank truck, thus eliminating much

redundant equipment.

■ After extensive questioning, CARB agreed that EVR requirements are specific to underground tank systems. With many aboveground storage tank (AST) systems being installed, there will be a need for integrating the EVR requirements with AST test procedures.

■ US EPA made a short presentation, claiming that ORVR canisters are designed for a 25-year life, but acknowledging that none have been tested and that no testing is currently planned. Missouri requested data on canister degradation with time. API noted that while everyone expects a repeal of Stage II requirements with increases in ORVR vehicles, no repeal date has been part of the official rule making.

■ CARB is considering establishing a licensing program for service station technicians through the California Water Board. The program would cover Stage II equipment.

■ CARB will establish a Virtual Forum on their web site by September for posting and answering questions. API offered to assist in the effort.

■ Several state representatives suggested that CARB get out of the certification business and turn the process over to outside organizations such as UL.

Uncertain future

The future of vapor recovery in the US might not be determined by CARB as part of its quest to satisfy a court settlement for not complying with its own SIP, but by the US EPA in determining what constitutes a certified Stage II vapor recovery system. If the EVR program becomes limited to California, equipment suppliers may determine that the high cost of recertifying equipment is not economical in such a limited market. The result might be a requirement without equipment to meet it. We are already seeing the first phase of this phe-

nomenon. As of July, no manufacturer had started Stage I equipment certifications, making it nearly impossible to meet the April 2001 deadline for decertifying current systems. Could this be an omen of things to come?

In past articles in *PE&T*, I have stated that the EVR provisions appear to have been motivated by political concerns and a need to satisfy last year’s court settlement agreement. It has been and continues to be my view that CARB overlooked the obvious by not immediately fixing what is wrong with existing vapor recovery systems. Instead, CARB promised the California public a new and improved vapor recovery package to be implemented over the next eight years. As I see it, the new standards will not improve vapor recovery efficiency unless they are accompanied by additional enforcement. With proper enforcement and relatively minor modifications to accommodate ORVR vehicle systems, the vapor recovery equipment certified under the pre-EVR program can meet applicable requirements. ■

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