

**WRITTEN COMMENTS OF THE
MANUFACTURERS OF EMISSION CONTROLS ASSOCIATION
ON THE U.S. ENVIRONMENTAL PROTECTION AGENCY'S PROPOSAL
CONCERNING WIDESPREAD USE FOR ONBOARD REFUELING VAPOR
RECOVERY AND STAGE II WAIVER
DOCKET ID NO. EPA-HQ-OAR-2010-1076**

September 13, 2011

The Manufacturers of Emission Controls Association (MECA) is pleased to provide comments in support of the U.S. EPA's request for public comments on their proposal covering widespread use for onboard refueling vapor recovery and stage II waiver (Docket ID No. EPA-HQ-OAR-2010-1076).

MECA is a non-profit association of the world's leading manufacturers of emission control technology for motor vehicles. Our members have decades of experience and a proven track record in developing and manufacturing emission control technology for a wide variety of on-road and non-road vehicles and equipment. A number of our members have extensive experience in the development, manufacture, and application of evaporative emission control technologies for light-duty gasoline vehicles, including the carbon adsorbent materials and carbon-containing canisters used in vehicles equipped with onboard refueling vapor recovery (ORVR) systems.

MECA supports EPA's determination that widespread use of onboard refueling vapor recovery (ORVR) will occur in the middle of the 2013 calendar year (June 30, 2013). MECA agrees with EPA's proposal that ORVR coverage of more than 75% by 2013 is substantial enough to be viewed as "widespread".

The U. S. EPA has had a sustained focus on reducing evaporative emissions for forty years. In 1996, EPA began implementing its "enhanced evaporative" emission control program by requiring multi-day diurnal controls, aggressive purge strategies, and in-use verification and compliance programs. As a result of EPA's Enhanced Evaporative Program the carbon canisters used on vehicles were increased in capacity, engines were recalibrated, and the quality of evaporative emissions control systems was improved by automakers. In 1998, EPA began comprehensively requiring Onboard Refueling Vapor Recovery (ORVR) to augment and eventually replace less-efficient Stage II vapor recovery equipment required in areas of ozone non-attainment. The automakers responded by adapting the diurnal canister and fuel tank for refueling vapor recovery. The technology is now proven and well-established by U.S. manufacturers and automakers and parts suppliers that export to the United States.

ORVR systems are designed to capture hydrocarbons dispersed in the vapor of the fuel tank that are displaced during refueling. Although the heart of the system is the carbon canister, there are also a small number of other valves and components incorporated into the fuel system that prevent the escape of vapor through the fuel filler pipe and prevent liquid gasoline from exiting the fuel tank when tipped beyond horizontal. The displaced vapor is directed into the carbon canister and trapped. During engine operation, fresh air is purged through the canister to

regenerate the carbon so that it is ready for subsequent fueling or diurnal events. The purged vapors are consumed in the combustion process. Today, all new passenger vehicles manufactured in North America are equipped with ORVR systems.

ORVR systems have been shown to be highly effective at reducing refueling hydrocarbon emissions (approximately 98% refueling hydrocarbon emissions reduction using ORVR compared to approximately 60% refueling emissions reduction associated with Stage II vapor recovery technologies). The high overall emissions reduction efficiency of ORVR systems is achieved with only a small incremental cost of \$10 to \$15 compared to vehicle enhanced evaporative emission technologies that do not include ORVR capabilities. Evaporative gasoline vapor emissions are captured by the vehicle's carbon canister then combusted by the engine while the vehicle is in-use, so the emissions control results in a net energy use reduction. The economic savings are accumulated by the vehicle owner. Each year, an average vehicle owner will recover about 17 liters of fuel from refueling and diurnal events, if their vehicle has an ORVR canister. This represents an energy savings of 0.7%. Five liters per year of this fuel is recovered during refueling events alone and results in a payback time of only two years in decreased fuel purchases for the ORVR system. When supported by EPA's certification-level durability requirements and in-use compliance programs, carbon canisters have been shown to last the lifetime of the vehicle, with no normal maintenance or replacement and with little or no deterioration in performance.

MECA supports EPA's proposal to waive certain requirements for Stage II gasoline vapor recovery at service stations as of June 30, 2013. This would allow many areas now requiring Stage II equipment at service stations to remove, or decommission, their Stage II systems. States that choose to remove the Stage II vapor recovery requirements will still need to ensure that removal of the program does not interfere with attainment and maintenance of the National Air Quality Standard (NAAQS). EPA has estimated that the national cost savings for facilities decommissioning Stage II vapor recovery systems based on this proposed rule to be over \$88 million annually.

In closing, MECA supports EPA's proposal to determine that ORVR widespread use will occur at the mid-point of the 2013 calendar year, June 30, 2013 and provide a waiver of the CAA section 182(b)(3) Stage II requirement for "Serious", "Severe" and "Extreme" ozone nonattainment areas. MECA believes that ORVR coverage will be widespread by 2013 to control motor vehicle refueling emissions throughout the motor vehicle fleet. ORVR technology has a proven record of performance and durability on passenger vehicles operating in the U.S.

Contact Person:

Dr. Joseph Kubsh
Executive Director
Manufacturers of Emission Controls Association
2020 14th Street North, Suite 220
Arlington, VA 22201
Tel.: (202) 296-4797
E-mail: jkubsh@meca.org