



## EPA's Proposed New Standard

# Clearing the Air on the Ozone Standard

**O**n November 27, the EPA proposed new standards for ozone and particulates. The current EPA efforts are the result of litigation by various health groups, forcing the Agency to re-examine scientific data on air pollution. As it stands now, the new ozone standard would be reduced from the current maximum allowable concentration of 0.12 parts per million (ppm) over a one-hour period to 0.08 ppm over an eight-hour period.

The EPA expects to finalize its new standards by early summer, following the public comment period. It is unlikely that opposition by API, automakers and the National Association of Manufacturers will prevent new rules from being adopted; however, most probably the final rules will be changed significantly and implementation requirements will be at least five to six years away.

While changing the *particulate* standards will have little effect on service stations, the tougher *ozone* standards will affect service stations and the petroleum industry in 28 states. The API projects that the number of non-attainment areas will increase from the current 75 to more than 300 under the new standard. Non-attainment areas today are required to implement Stage II vapor recovery and/or use reformulated gasoline (RFG). Metropolitan areas currently in attainment may be forced out of attainment in such places as Cleveland, Salt Lake City, Detroit and Tulsa.

Counting the cost—The EPA's total cost estimates for compliance range

between \$6.5 and \$8.5 billion annually. By contrast, the API projects between \$5.5 and \$14 billion for the Chicago area and \$43 billion for San Francisco, based on a study of selective regional implementation costs.

While there is significant controversy on the final outcome of the public comment period, some additional control implementation will most likely be required in the future. Since there is time to reflect on the best and most cost-effective solutions, let's not have the consumer pay for multiple control systems, which when working together are less effective than when applied individually.

ited to pressure/vacuum (P/V) valves at the station vent for uncontrolled stations and those stations equipped with balance systems. An additional emission reduction of 0.8 pounds VOC per 1000 gallons is attainable at a relatively low cost.

The table shown below summarizes costs for various VOC reduction strategies. The General Accounting Office recently published a comparison of various estimates (GAO Report RCED-96-121). I have supplemented the data with my own estimates for reducing VOCs with Stage II, ORVR or the addition of P/V valves. The cost range for ORVR reflects the after-tax effect for

business vehicles. API and Radian cost projections for Stage II probably reflect the use of balance systems, while the cost projections from Sierra and myself are for assisted systems.

The cost data show that when compared to ultra-low emissions vehicles (ULEV), the other strategies appear cost effective. However, ORVR and P/V valves at station vents certainly provide the

lowest cost options for reducing VOCs, and should be considered first in developing the strategies to meet the proposed lower ozone standards.

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Estimator	Control Measure				P/V Valves <sup>4</sup>
	Phase I & II RFG <sup>1</sup>	Stage II	ULEV <sup>2</sup>	ORVR <sup>3</sup>	
<b>EPA</b>	\$6,200				
<b>API</b>	\$7,400	\$2,800	\$300,000		
<b>Radian</b>	\$14,700	\$2,800			
<b>Sierra Research</b>	\$6,100	\$3,300	\$73,000		
<b>Author's Estimates</b>		\$3,400		\$650-950	\$350

<sup>1</sup> Reformulated Gasoline      <sup>3</sup> On board refueling vapor recovery  
<sup>2</sup> Ultra-low emissions vehicle      <sup>4</sup> Pressure/Vacuum valves at station vent

By the time the new standards are implemented, all new cars and light trucks will be equipped with ORVR devices and many of the vehicle fleets will have already installed ORVR. Therefore, new Stage II requirements would provide little additional benefit in reducing volatile organic compounds (VOC). Both Stage II and ORVR will reduce the same VOCs by about 8.4 pounds per 1000 gallons dispensed. As the vehicle fleet becomes mostly ORVR equipped, new control requirements at the service station should be lim-