# **Update on EPA Action**



Presented at NESCAUM Stage II Vapor Recovery Meeting

Manchester, NH May 1, 2007





Clean Air Act (CAA) section 202(a)(6) says that the EPA Administrator may by rule waive Stage II gasoline vapor recovery requirements in serious, and above areas after such time as the administrator determines that ORVR is in widespread use throughout the motor vehicle fleet



#### **OTR** situation

- The Ozone Transport Region (OTR) is a special case
- CAA section 184(b)(2) applies special requirements to the OTR.
- All OTR must have Stage II or comparable measures.
- This section still applies even when widespread use is declared.



## ORVR phase in

- ORVR on 40% of new 1998 automobiles
- ORVR on 100% of new 2000 automobiles
- By 2006, ORVR is on 100% of light duty trucks, and medium duty vehicles through the 6001 – 8500 lb range.



# Some EPA History

In 2001, NESCAUM wrote a letter to EPA asking for clarification on several Stage II issues.

 Since then, EPA has been in close contact regarding Stage II issues.



#### Some EPA efforts

- Optical scanning emission tests of service stations
- Review of literature for ORVR/Stage II incompatibility data.
- Review of other service station emission tests, State of Florida, Costco



## EPA efforts continued

- Stage II vapor Recovery Systems Issue Paper, August 2004
- Public comment meeting in RTP, NC,
  September 20, 2004
- Stage II Vapor Recovery Systems-Options Paper, February 2006



## **EPA Efforts -continued**

- July 7, 2005 guidance on Installation of Storage Tank Vapor Pressure Management Systems on Service Stations having Stage II Vapor Recovery Systems
- December 12, 2006 guidance "Removal of Stage II Vapor Recovery in Situations Where Widespread Use of Onboard Refueling Vapor Recovery is Demonstrated"



# December 12, 2006 memo

- Covers:
- Initial fueling of new vehicles at automobile plants
- Refueling of rental cars at rental car facilities
- Refueling of flexible fuel vehicles at E85 dispensing pumps



- Widespread use determinations will likely be State by State or region by region
- EPA will supply the criterion for is what widespread use
- States will determine when the criterion for widespread use applies in their state.
- State will then submit a SIP revision removing Stage II



## Widespread use criterion

- Possible criteria listed in February 7, 2006 Options Paper include
- a. % of vehicles with ORVR
- b. % of vehicle miles traveled with ORVR
- c. ORVR emissions equal Stage II emissions
- c2 equivalent emissions between ORVR alone and Stage II + ORVR (including incompatibility factor)
- d. % of gasoline sold to vehicles with ORVR



## **Preferred Options**

- EPA's preferred option is c2
- However, this is the most difficult option to determine
- EPA might be willing to accept a surrogate for c2.
- EPA did this in the December 12, 2007 guidance memo.



## Other considerations

- Incremental costs of maintaining Stage II equipment rises as ORVR becomes more widespread and Stage II captures less and less gasoline vapors.
- Between 90% and 100% ORVR penetration, incremental costs per ton of gasoline captured can rise sharply, becoming very high around 99% penetration.



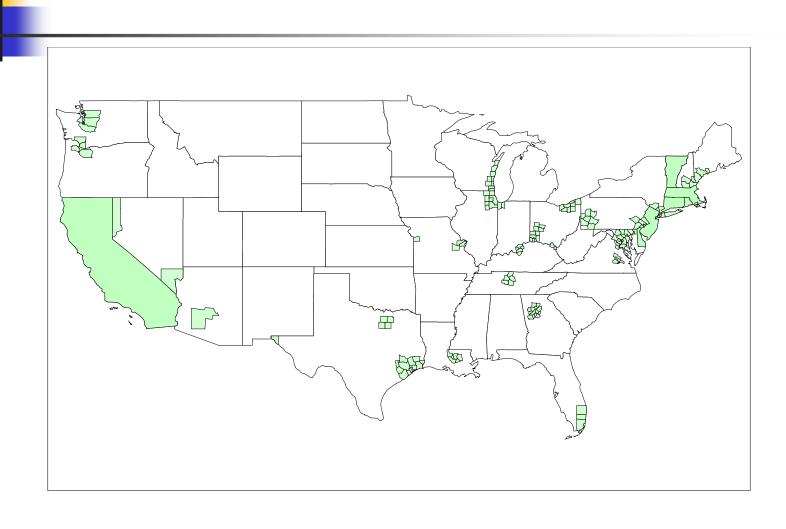
- States should consider technology to end Stage II/ORVR incompatibility
- They should not expect SIP credit except above what they have already claimed for Stage II. (i.e., no double counting)
- States which want to keep Stage II may face opposition from some service station industry segments.



#### **EPA Possible Actions**

- In order for States to remove Stage II in SIP, they must show that this will not harm attainment of ozone standard (no backsliding)
- When States submit SIPs removing Stage II, EPA can approve. This will constitute removal of Stage II "by rule" as the CAA requires.

# Stage II Vapor Recovery Areas – 2006 (some 275 counties)





- Dripless nozzle tests planned for Fort Benning, Georgia in cooperation with Department of Defense.
- Six nozzle manufacturers have agreed to participate.
- Investigation into emissions saved by use of non-permeable hoses at service stations.