



# *Albuquerque/Bernalillo County Air Quality Control Board*

**New Board Member Orientation  
March 30, 2009**

Glen L. Dennis, Division Manager  
Louis Jaramillo, Quality Assurance Supervisor  
Gina Ortega, Customer Service Supervisor  
Vehicle Pollution Management Division  
Albuquerque Environmental Health Department



# *VPMD Headquarters 1500 Broadway Blvd NE*





# *Motor Vehicle Emission Control Programs*

## ◆ **Inspection and Maintenance**

*- identify and repair excessive polluters (test 250,000 per year)*

## ◆ **Oxyfuel (Oxygenated Fuel)**

*- provide cleaner burning gasoline during winter pollution season*

## ◆ **Smoking Vehicles**

*- citizens report/ police cite gross polluters*

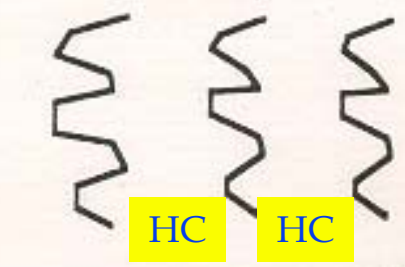
*Combined CO reduction of more than 1/3*

*- shifted focus in 2004 to ozone precursors (especially HC)*



# *Tailpipe test 1982-83, 1989-2004* *added OBDII & gas cap test in 2004*

## • Evaporative Emissions



## • Refueling Losses



CO, HC, NO<sub>x</sub>

## • Exhaust Emissions

particulates



# *Emission testing in Albuquerque a brief history*

- ◆ **1977 Clean Air Act Amendments**
  - *Bernalillo County designated CO nonattainment area*
- ◆ **1982-83 centralized emission testing**
  - *dynamometer - 2 facilities, 8 lanes – annual test*
- ◆ **1985-88 Federal Highway Funding Sanctions**
- ◆ **1989 Decentralized BAR84 idle test (biennial)**
  - *SIP also included mandatory Oxyfuel (2%) and “No-Burn”*
- ◆ **1996 BAR90 two-speed test (2500 rpm)**
- ◆ **2004 BAR97 two-speed w/ OBDII & gas cap**



# *Inspector Training/Certification*

*(200 new, 400 recertify per year)*



2 days classroom



1 to 3 days practical testing



# *Quality Assurance*

*monthly visits to over 130 stations*

## ◆ **Materials audits**

*- Calibration gas, filters, sample probes, condition*

## ◆ **Gas audits (CO, CO<sub>2</sub>, & HC at 4 levels)**

*- average deviation < 2%, allow 5%, lock-out at 7%*

## ◆ **Covert audits (fraud investigation)**

*- assure passing cars pass and failing cars fail*

## ◆ **Retest/Referee Bay (free retests)**

*- find honest inspector mistakes – refund, retest, retrain*

*- consumer protection – repair effectiveness*



# *Quarterly Gas Audits*







# *Emission Testing Changes in 2004*

- ◆ **1996 - newer receive quick new OBDII test**
  - *On-Board Diagnostic, trouble codes, detects pending failures*
- ◆ **1975 to 1985 vehicles tested every year**
  - *newer "marginal pass" vehicles issued one year certificate*
- ◆ **Gas caps pressure tested for vapor leaks**
- ◆ **Commuter vehicles >4 years old require test**
- ◆ **New vehicles exempted for up to 4 years**
- ◆ **Alternative fuel and hybrids exempted**



# *Current Program Status*

## *130 Air Care Stations*



- ◆ 1/2 Test Only or “On-Demand” (oil change, car wash)
- ◆ 1/4 Dealerships (used cars) & 1/4 repair shops
- ◆ Average cost is \$20



# *Future Considerations*

- ◆ Extend & simplify exemption for new vehicles  
(EPA recommends 5 year)
- ◆ Commuter vehicle testing enforcement  
(revisit employer based program)
- ◆ 'Horseless Carriage' collector car exemption  
(rolling 35 year window, 75's in 2010)
- ◆ Diesel testing of '98 and newer with OBDII  
(older diesels tested at VPMD at title change)



# *Winter Oxygenated Fuels Program*

*Nov. - Feb. (2.7% O<sub>2</sub> = 8% etOH)*

*>99% compliance, 10% ethanol*



PetroSpec GS-1000 analyzer  
(etOH, MTBE, ETBE, TAME)



*Smoking Vehicle Complaints*  
*764-1110 or Air-Care (247-2273)*  
*or [www.cabq.gov/aircare](http://www.cabq.gov/aircare)*



[Gdennis@cabq.gov](mailto:Gdennis@cabq.gov)