

# Proposed Amendments to Certification and Test Procedures for Gasoline Vapor Recovery and Cargo Tanks



California Environmental Protection Agency

 **Air Resources Board**

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# Today's Presentation

- Program History and Benefits
- Proposed Regulatory Amendments
- Future Program Priorities

# California's Gasoline Distribution System

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Bulk Plants / Terminals



Cargo Tanks

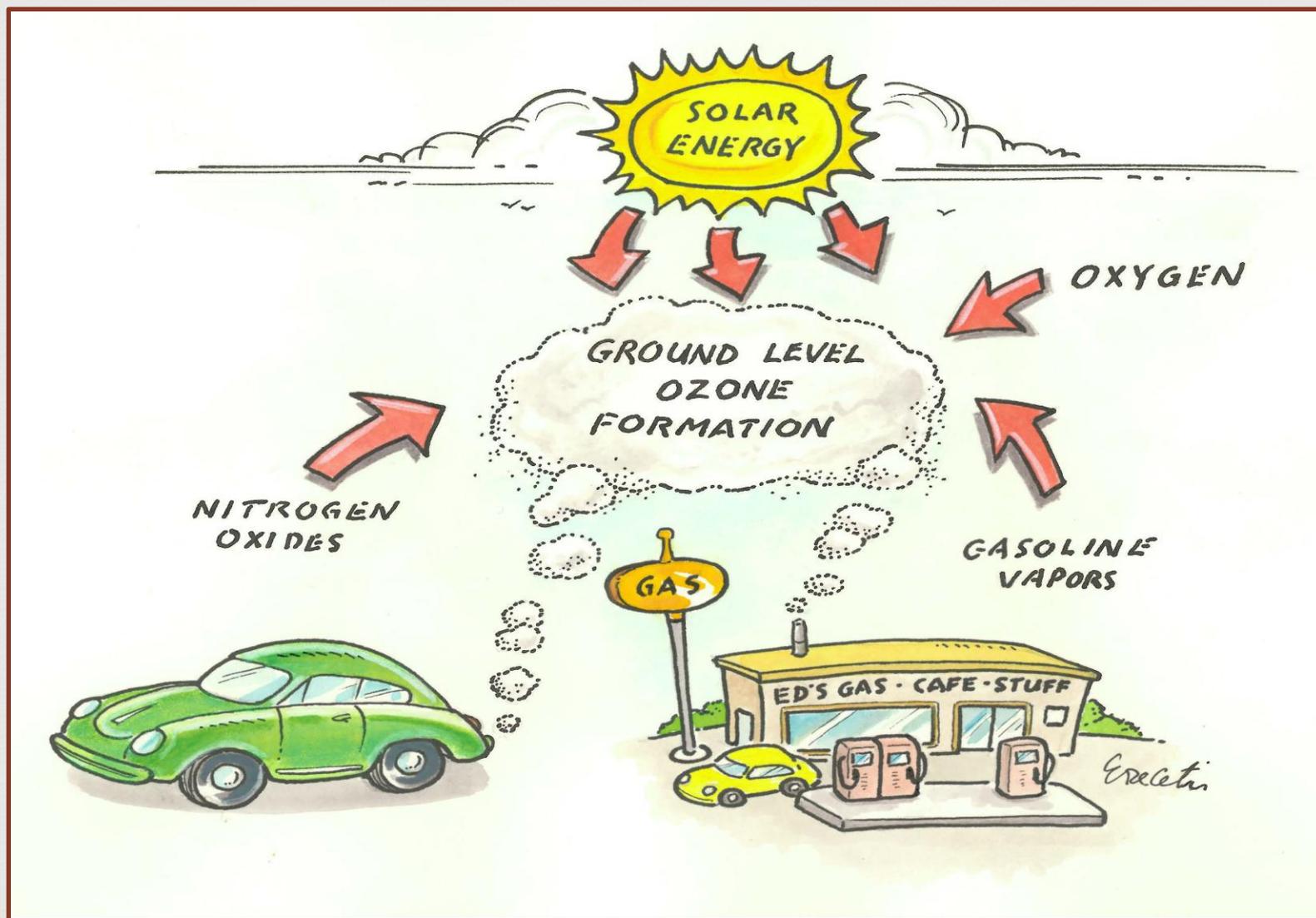
Gas Stations



Dispensing to Vehicles



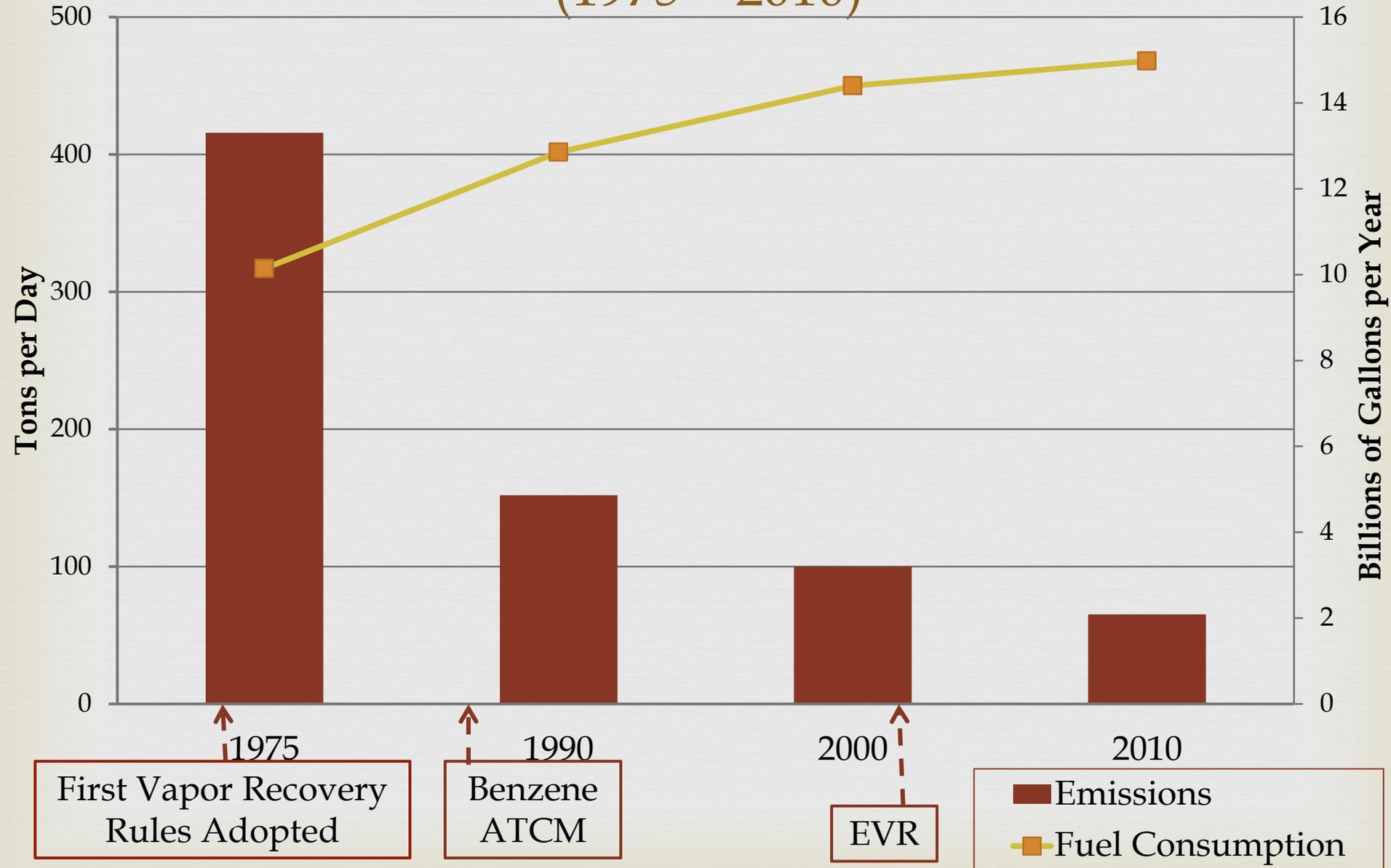
# Why Control Gasoline Vapors? Regional Ozone Levels



# Why Control Gasoline Vapors? Benzene Exposure

Fueling Vehicle without  
Phase II Control

# Gasoline Throughput and Emissions (1975 - 2010)



# Success Through Collaboration

## ARB

- Establish performance standards
- Develop test procedures
- Certify new equipment and control technologies
- Quantify emissions and reductions

## Air Districts

- Implement and enforce rules
- Permit and inspect gas stations
- Provide data to ARB

## Industry

- Develop innovative control technologies
- Install, operate, and maintain control systems

# Regulatory Structure

## Statutes and Regulations

- Requires ARB to control emissions from gasoline marketing
- Establishes performance standards for vapor control equipment
- References 6 certification procedures and 37 test procedures

## Certification Procedures

- Specifies applicable performance standards for certified systems
- Defines the process for certifying vapor recovery systems
- Refers to test procedures that must be used during certification

## Test Procedures

- Identifies procedures for determining compliance with various performance criteria

# PROPOSED REGULATORY AMENDMENTS



# Regulatory Proposal

- Amend Cargo Tank Certification and Test Procedures
- Amend Test Procedures used by ARB staff during certification of vapor recovery systems for aboveground storage tanks (AST)



# Cargo Tank Amendments

- Allows for a single leak decay test that complies with both California and Federal requirements
- Eliminates requirements that are outdated and unnecessary
- Retains requirements for annual testing and certification of all cargo tanks

# AST Test Procedure Amendments

- Makes the test procedure, originally written for underground tanks, more representative for ASTs
- Improves test equipment specifications and calibration procedures
- Adds flexibility for field configuration of test equipment
- Test procedures are used by ARB staff, so changes will not impact gas station operators

# Summary of Proposal

- Primarily administrative and technical changes
- Retains all current performance standards
- Harmonizes California and Federal cargo tank requirements, simplifying compliance
- Reconciles cargo tank regulations with the way the program is currently implemented
- Corrects technical deficiencies and improves test procedures

# FUTURE PROGRAM PRIORITIES



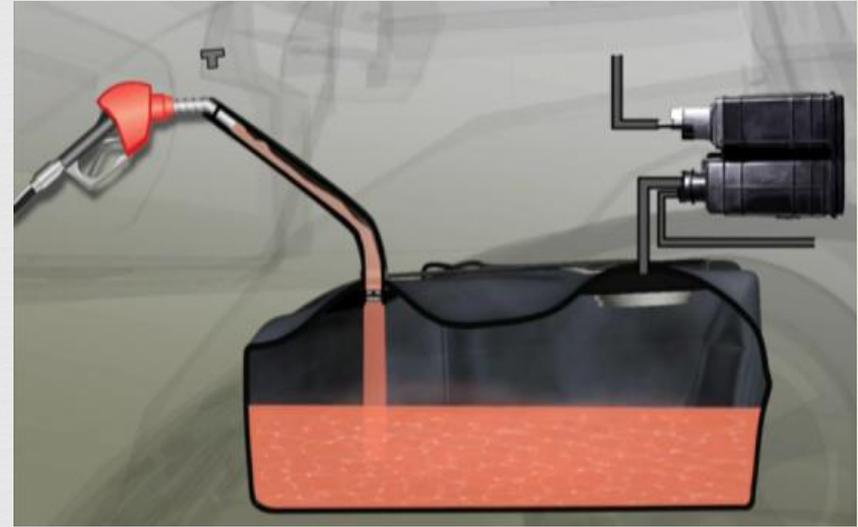
# Near-Term Program Improvements

- Assess performance of vapor recovery controls
- Improve and enhance capability of in-station diagnostic (ISD) systems
- Review and revise field test procedures

# Terminology: ISD and ORVR



ISD monitors vapor recovery system performance, like on-board diagnostics for vehicles



ORVR is a vehicle-based vapor recovery system, equivalent to equipment on the gas station



# Assess In-Use Performance

- Develop and utilize various tools to identify and correct systems not performing as certified
- Focus on achieving performance similar to certification standards
- Review equipment warranty requirements
- Track ORVR penetration and emission reductions from Phase II

# Improve ISD Systems

- Address ISD pressure alarms
  - Reduce unnecessary alarms and associated response costs
- Develop additional diagnostic and compliance testing capabilities
  - Potential to reduce troubleshooting and testing costs
  - Potential for remote data access and improved inspection process

# Review and Revise Field Test Procedures

- Review and improve field compliance test procedures where practical
- Reduce testing time, station down time, and associated costs
- Industry survey to prioritize tests needing revision

# Conclusion

- Today's proposal improves program effectiveness
- Vapor recovery program remains necessary to achieve emission reductions
  - Reduced gasoline consumption would further our goal of continued emission reductions
- Staff will continue to look for opportunities to improve program effectiveness