

Public Meeting to Consider the ARB/Railroad Statewide Agreement

**October 27, 2005
2:00 P.M.**

California Environmental Protection Agency



Air Resources Board

5 Part Presentation

- 1. Policy Discussion**
- 2. Statewide Strategy**
- 3. Legal Considerations**
- 4. Overview of June Agreement**
- 5. Summary and Recommendations**

Policy Overview

- **Statewide strategy is essential**
- **Federal preemption matters**
- **Agreement important interim step to protect public health now**

California Rail Lines



ARB Responsibility

**“It is the intent of the State Legislature that the state board act as expeditiously as is feasible to reduce ... emissions from diesel vehicles, marine vessels and other mobile sources which significantly contribute to air pollution problems”
(H&SC 43013(h))**

Statewide Impact

- **RR emissions affect attainment in several districts**
- **Localized risks affect all communities where rail exists**
- **17 of 32 largest rail yards are outside South Coast**
- **>70% of locomotive emissions are also outside South Coast**

ARB'S COMPREHENSIVE PLAN TO REDUCE RAILROAD EMISSIONS

Locomotive/Rail Yard Strategy

- **Integrated effort**
 - Mutual agreements with railroads
 - State regulations
 - Incentive programs
 - U.S. EPA rulemaking for Tier 3 locomotives
- **Also part of Governor's Goods Movement Action Plan**

Overall Emissions Goal

- **90% reduction in diesel PM and NOx by 2020**
- **To be secured through MOU #3**

POLICY DEBATE

ARB as “Obstructionist”

- If we would just get out of the way...
- Districts or ports or the Legislature could accomplish much more

The Legal Reality

- Federal preemption is sweeping and applies to all state and local entities
- Work-around theories are unproven
- Actual case law is not favorable
- If litigated, high risk of failure

ARB Should Back Locals

- **Traditionally, locals allowed to be more stringent than State**
- **ARB and air districts both authorized to regulate non-vehicular mobile sources**
- **ARB should support SCAQMD, POLA proposals**

The Practical Reality

- **Someone must lead**
- **ARB handles other statewide sources (cars, fuels, consumer products)**
- **Competing regulations don't work**
- **Patchwork controls not sufficient**

ARB Took Wrong Side on Bills

- **ARB should support legislation to achieve greater locomotive emission reductions**
- **It's what communities want**
- **June Agreement caused bills to fail**

The Legislative Reality

- Administration opposed bills affecting railroads because:
 - Are likely preempted by federal law
 - Invite litigation and delay
 - Jeopardize existing emission reductions
 - Duplicate state regulations for diesel sources
 - Foster confrontation not cooperation

ARB Ignored Available Controls

- Europeans are doing better
- ARB should require aftertreatment
- ARB should require alt fuel and/or electrification
- ARB should regulate out-of-state fuel purchases

The Technology Reality

- No retrofit kits are durability tested or commercially available
- Electricity and natural gas limited options
- European PM filter experience is shallow
- Railroads will fund studies (\$5M) but won't commit to unproven technology

ARB Misused Voluntary Option

- Some elements of the Agreement could have been mandated
- Therefore, ARB should have done regulations instead

The Timing Reality

- Most important elements are preempted (e.g. idling controls)
- Rest included for completeness and expediency
- Regulations far more time consuming

Staff's Judgment – a Negotiated Agreement is the Most Effective Approach

- **Reduces emissions immediately, while technology continues to develop**
- **Provides for community involvement in yard-specific solutions**
- **Coordinates all rail related activities through single agreement**
- **Set the stage for future reductions**

Conclusions

- Agreement is right policy approach
- Walking away isn't an option
- No effective alternative exists
- Supporting interim steps is key to achieving long term strategy



Statewide Strategy for Rail

Statewide Goods Movement Strategy

- **Railroad strategies**
- **On-road truck measures**
- **Carl Moyer Program**
- **Goods Movement Action Plan (cleaner fuels, port measures, cargo handling, vessel standards, SECA designation, cold ironing, etc.)**

Statewide Railroad Strategies

- 1998 South Coast basin NOx MOU
- 2004 clean diesel fuel for captive locomotives
- 2005 risk reduction agreement (idling, etc.)
- 2005 cargo handling rule
- 2007 national “Tier 3” locomotive standards
- Tbd - agreement for accelerated locomotive turnover in California

1998 MOU for South Coast Basin

- Requires accelerated turn-over to Tier 2 locomotives by 2010
- Achieves 65% NOx reduction in SCAQMD
- Cuts NOx by 20 TPD elsewhere in CA

Additional Near Term Measures

- **2004 Intrastate Locomotive Fuel Rule**
- **2005 Risk Reduction MOU**
- **2005 Proposed Cargo Handling Rule**

Full Control by 2020

- **To Accomplish Requires:**
 - **Effective Federal Tier 3 Locomotive Rule**
 - **Agreement to Accelerate Tier 3 Use in California**

Tier 3 U.S. EPA Rulemaking

- Locomotive and marine engines
- Aftertreatment for new engines
- More stringent rebuilds for existing
- To be proposed in 2006
- Goes final in 2007
- Implemented ~2012

Once Rule is Done

- **ARB will make every effort to accelerate introduction of advanced technology in California**
 - **Via a third Agreement with railroads**
 - **Goal is an overall 90% reduction in both PM and NOx**



Federal Preemption

Federal Preemption

- **Federal Clean Air Act**
- **Interstate Commerce Termination Act of 1995**
- **Commerce Clause of U.S. Constitution**
- **Locomotive Boiler Inspection Act**

Federal Clean Air Act §209(e)(1)

- Express preemption prohibiting state and local subdivisions from adopting/enforcing requirements relating to the control of emissions from new locomotives or engines.
- Final U.S. EPA Rule:
 - “New” means freshly manufactured or remanufactured.
 - Preemption covers 133% percent of useful life.

Federal Clean Air Act, Con't

- **Preemption prohibits any state or local action that affects the design or manufacture of the locomotive or engine.**
 - **Element 1: Idling Reduction Devices likely preempted.**
 - **Element 3: Visibility Control Measures may be preempted**

Interstate Commerce Commission Termination Act

- Congress deregulated railroads to ensure their economic viability
- Created Surface Transportation Board (STB) with broad, exclusive jurisdiction over interstate railroads
- Preempts state and local rules and regulations that affect transportation by rail carriers and remedies provided with respect to railroad operations and facilities.
 - “Transportation” has been broadly defined to include rail yards and locomotives.

ICCTA, Con't

- **STB and Federal Appellate Courts have interpreted ICCTA preemption broadly as it affects rail operations/management.**
- **Almost all regulations that directly affect economic viability of railroads, including environmental regulations, have been found to be preempted.**

Dormant Commerce Clause

- **Commerce Clause of U.S. Constitution grants Congress the power to regulate Interstate Commerce**
 - **By enacting ICCTA Congress effectively preempted state and local governments from directly regulating railroads and rail yard facilities.**
 - **Laws that conflict with ICCTA would likely be preempted by federal law, and Dormant Commerce Clause would likely not apply.**

Federal Locomotive Boiler Act

- Requires “parts and appurtenances” on locomotives to meet regulations set by federal Department of Transportation.
- Preempts state regulations affecting parts and equipment on locomotives, likely including idling-reduction devices

OTHER LEGAL ISSUES

Does Agreement Violate CEQA?

- CEQA requires public agencies to consider environmental implications of their actions
- CEQA Guidelines exempts from review projects with no potential for causing a significant adverse effect on the environment.
- Agreement has only positive effects.
- Therefore, no CEQA review is required.

Does Agreement Violate the Administrative Procedure Act (APA)?

- APA defines procedures state agencies must follow in adopting regulations
- Does not apply in this case:
 - MOU is not a regulation as defined in Gov't Code §11342.600
 - ARB not mandating standards or prescriptive requirements
 - Railroads voluntarily agreed to meet obligations



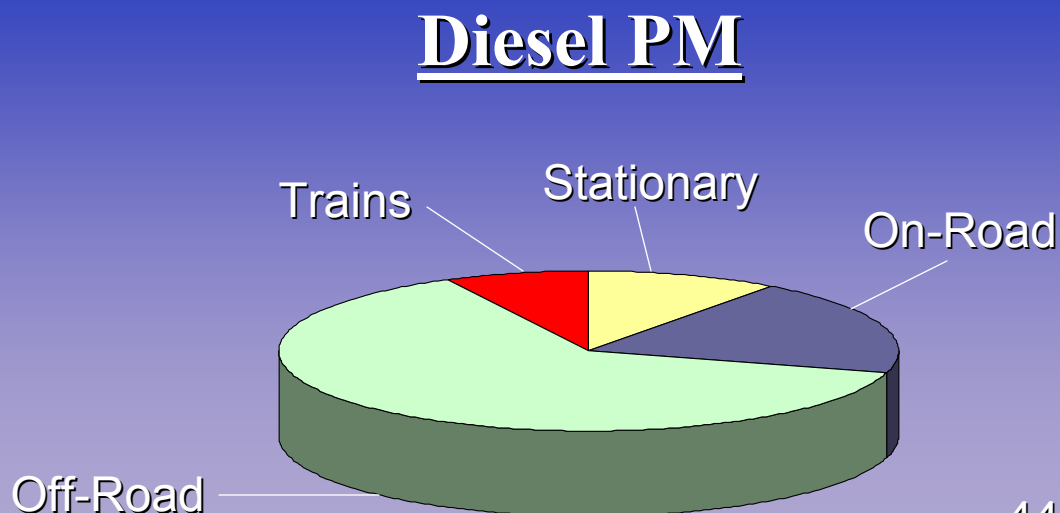
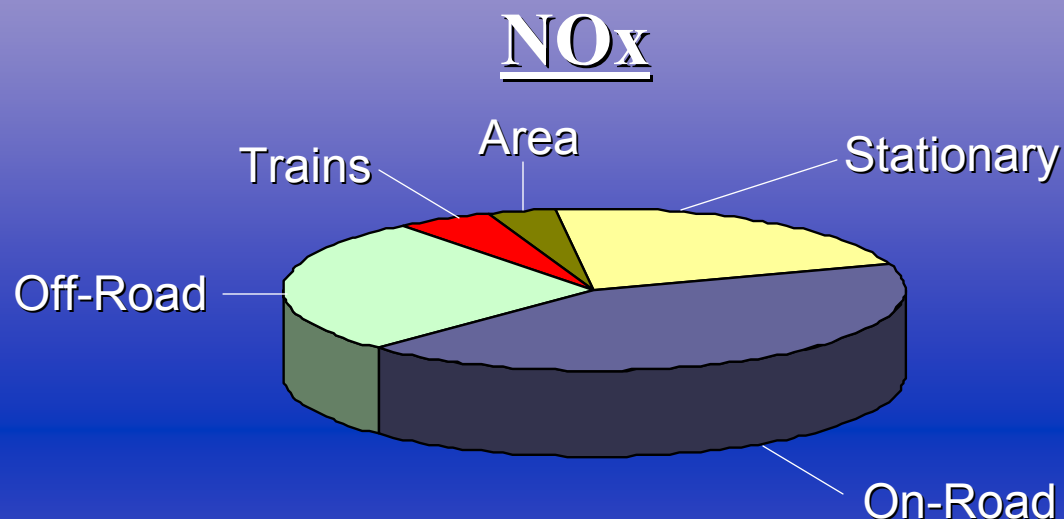
Agreement Overview

Need for the Agreement

- **Locomotive emissions significant statewide source of NOx and PM**
- **Localized risk at major rail yards**
- **Large emission reductions are needed**

Statewide 2005 Locomotive Inventory

AIR BASIN	NOx	PM
Mojave Desert	38	1
South Coast	32	1
San Joaquin	25	1
Sacramento	20	0.5
Bay Area	14	0.5
Salton Sea	9	0.5
Rest of the State	23	0.5
Statewide Total	160	5
% of Statewide Mobile Sources	6%	4%



Rail Yard Impacts

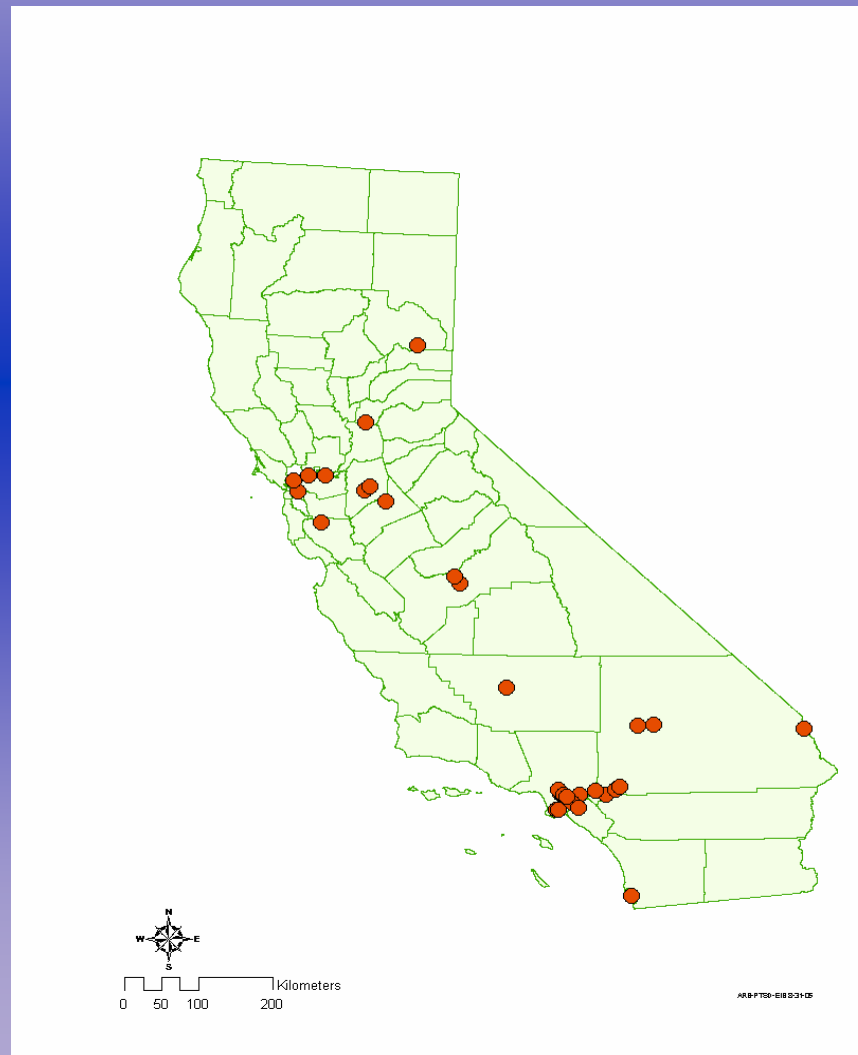
- Risks are elevated near major rail facilities
- Roseville study
 - High risks in nearby neighborhoods
 - Elevated risk several miles away
- Other major rail yards need analysis and mitigation



The Agreement

- On June 24, 2005, the Executive Officer entered into a statewide pollution control agreement with UP and BNSF to reduce locomotive emissions in California

Rail Yards Covered by the Agreement



Emission Benefits at Rail Yards

- Reduces locomotive diesel PM by 20% near rail yards
 - 10% due to idling restrictions
 - 3% due to fewer smoking locomotives
 - 7% due to cleaner diesel fuel
- Additional benefits through:
 - Near-term: mitigation measures
 - Long-term: advanced technologies

SPECIFIC ELEMENTS OF THE AGREEMENT

Specific Elements

- Limit non-essential idling
- Install anti-idling devices
- Use ultra-low sulfur diesel fuel
- Identify and repair smoking locomotives
- Conduct health risk assessments
- Design risk mitigation measures
- Evaluate future control technologies

Specific Elements, Con't

- Provides for community involvement
- Binding on railroads
 - Process to remedy performance problems
 - Penalties for failure to implement
- Evaluates remote sensing technology to identify high polluting locomotives

Community Involvement

- **System to report idling and smoking locomotives**
- **Identify measures to reduce rail yard impacts**
- **Periodic progress reports to community**
- **Discuss findings of health risk assessments**
- **Meetings to discuss new locomotive emission reduction technologies**

Locomotive Idling Restrictions

➤ Requirements:

- Install idle-reduction devices on California based locomotives
- Limit idling of all other locomotives
- Train railroad personnel

➤ Benefit:

- 10% reduction in rail yard diesel PM

Use of Ultra-Low Sulfur Diesel Fuel

➤ Requirement:

- Use ultra-low (15 ppm) sulfur diesel fuel in all in-state locomotives
 - At least 80% by 2007

➤ Benefit:

- 7% reduction in rail yard diesel PM

Visible Emission Reduction and Repair Program

➤ Requirements:

- Inspection and repair program
- Annual visible emission inspections
- Train railroad personnel
- Smoking locomotives repaired within 96 hours
- 99% of locomotives must meet smoke limitations

➤ Benefit:

- 3% reduction in diesel PM emissions near railyards

Health Risk Assessments

➤ Requirements:

- ARB develops guidelines
- Railroads provide data
- ARB performs risk assessment
- Discuss results with communities and local air districts
- Finished in 30 months

Rail Yard Mitigation

➤ Requirements:

- Railroads develop plans to mitigate risks at individual rail yards
 - Update to address risk assessment findings
 - Update annually thereafter
- Discuss with affected communities and local air districts

Evaluation of Future Technologies

➤ Requirements:

- Railroads provide \$3.5 million to:
 - Continue evaluation of diesel particulate traps
 - Evaluate hybrid, multiple engine, and alternative fueled locomotives
 - Evaluate retrofit potential for line haul locomotives and/or diesel rail yard equipment
- Semi-annual meetings with communities to discuss ongoing efforts

Enforcement Provisions

- **ARB/District enforce idling provisions**
- **Local smoke, nuisance authority maintained**
- **Penalties up to \$40,000 per month**
- **Mechanisms to ensure accountability**

Release Clause

- Railroads may opt out of individual elements if:
 - More stringent federal rules adopted
 - Overlapping state/local rules adopted
- May opt out partially or fully
- Other elements remain in force
- Intended to promote uniform approach

REACTION TO THE AGREEMENT

Process Complaint

- Numerous parties objected to being excluded from the negotiation process
- In response, the Board:
 - Approved Resolution 05-40 regarding future agreements
 - Directed staff to hold 2 public consultation meetings
 - Scheduled today's hearing

Public Consultation Meetings

- **August 10, 2005 in Sacramento**
- **August 31, 2005 in City of Commerce**
- **Over 350 attendees**
 - **Community members, elected officials, environmentalists, local air districts, businesses**

Staff Response to Comments

- Written staff report
- Written response to legal issues
- Individual meetings with stakeholders
- Today's presentation



Summary & Recommendations

Summary

- Agreement provides significant and immediate statewide emission reductions (20%)
- Railroads unlikely to renegotiate
- Regulatory strategy is legally vulnerable
 - At best, emission benefits would be delayed
 - At worst, preemption would preclude all benefits

Recommendation

- **Support the Agreement as one part of a comprehensive strategy**
- **Direct staff to:**
 - **Clarify terms in the Agreement**
 - **Report back in 6 months and annually thereafter**
 - **Redouble efforts to work with communities, local air districts, and other interested stakeholders**