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

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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

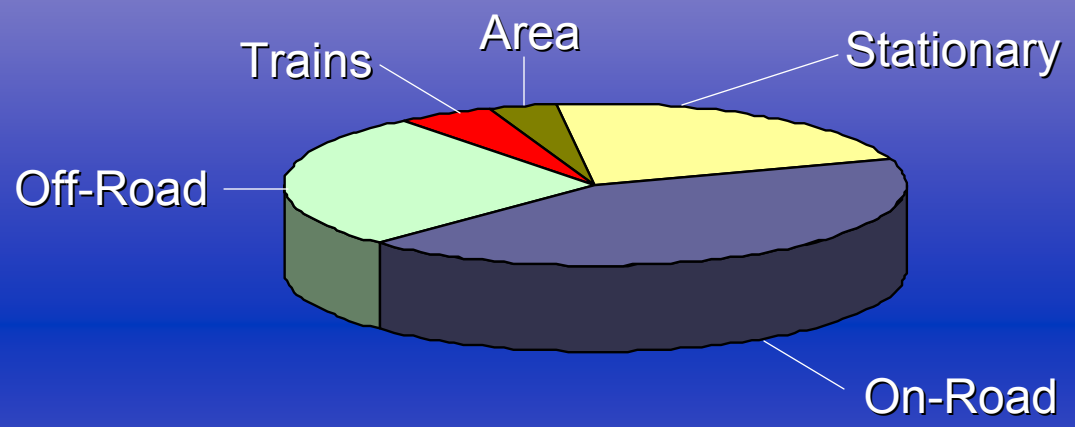
Need for the Agreement

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

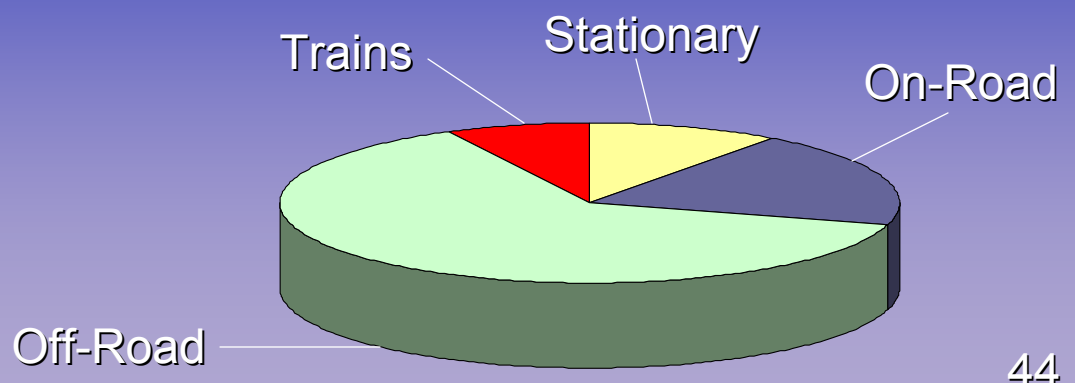
Statewide 2005 Locomotive Inventory

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%

NOx



Diesel PM



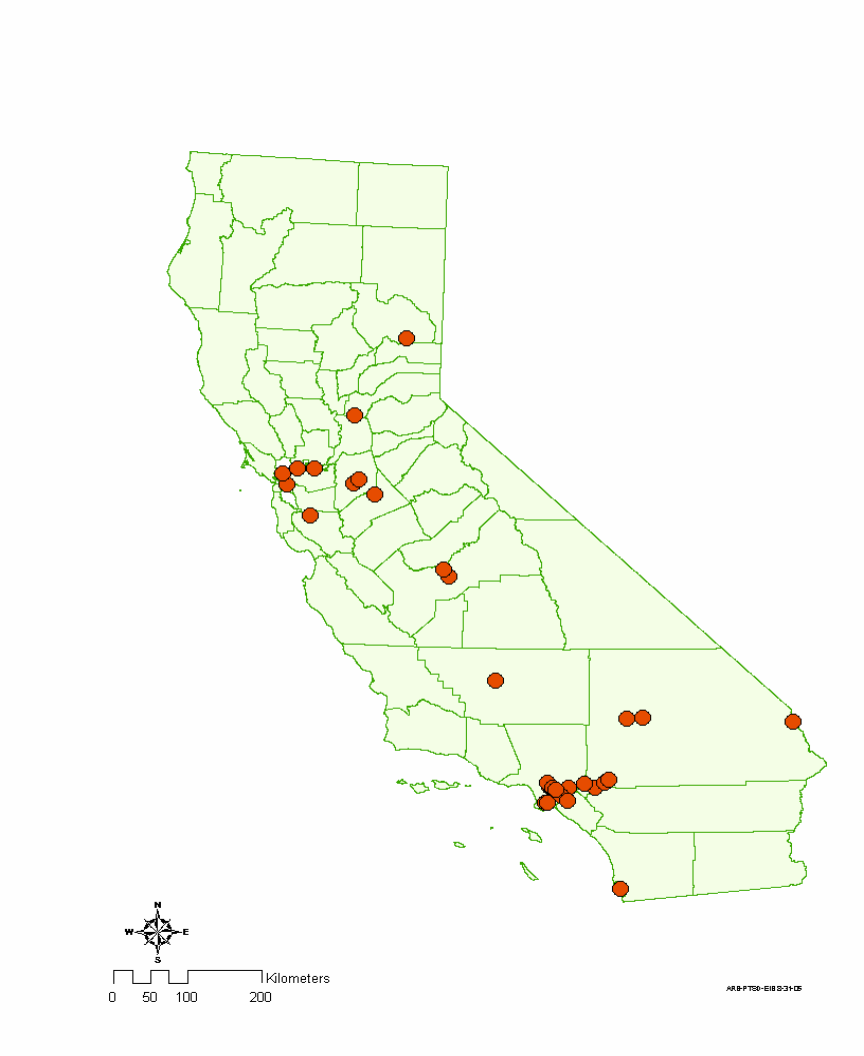
Rail Yard Impacts

- 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