



Request for Public Input

Draft Railyard Commitments to Reduce Diesel Soot or Particulate Matter (PM)

UP Commerce Railyard

BNSF Hobart Railyard

UP ICTF/Dolores Railyards

June 7, 2010

California Environmental Protection Agency

 **Air Resources Board**



Board Direction

Develop Railyard Commitments That:

- Further reduce diesel PM emissions and health risks
- Include verifiable and enforceable provisions
- Trigger ARB rulemaking if railroads fail to comply
- Use incentives to accelerate progress
- Ensure transparent process



Understanding of Community Priorities

- Reduce railyard health risks
- Change operations to cut exposure
- Use advanced technology
- Compare to regulatory approach
- Site air monitor near railyards
- Hold ARB accountable
- Make improvements outside the yard

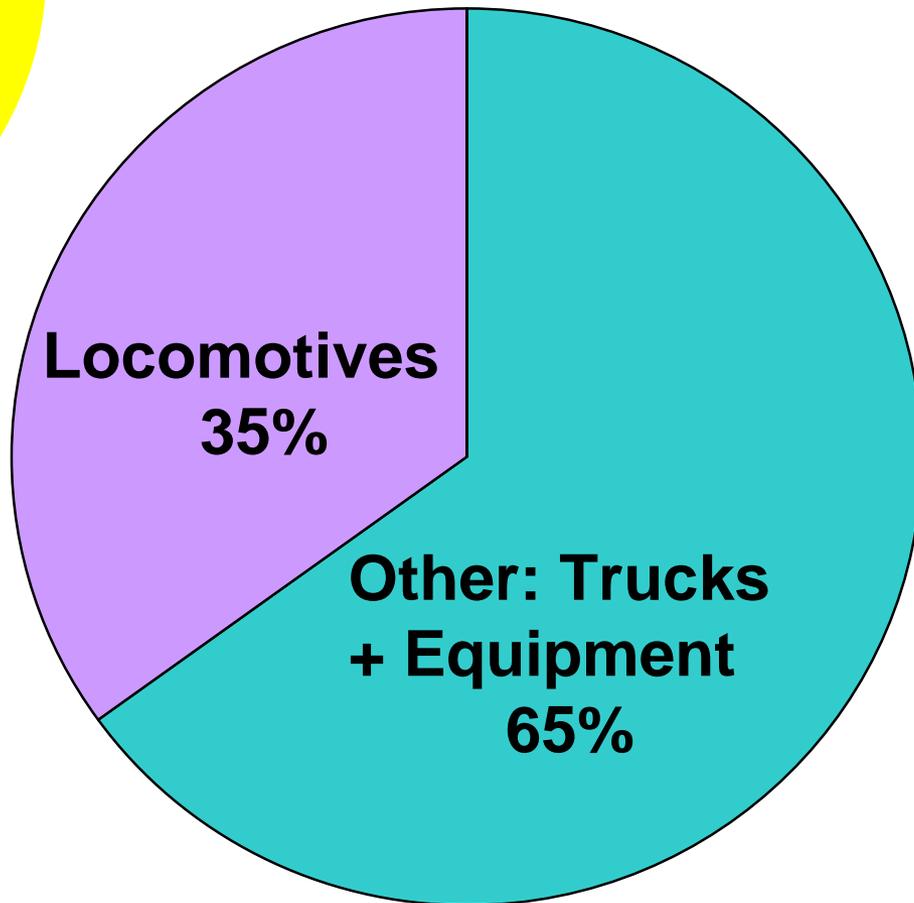
Basis for Draft Commitments



Diesel PM Sources in the Yard

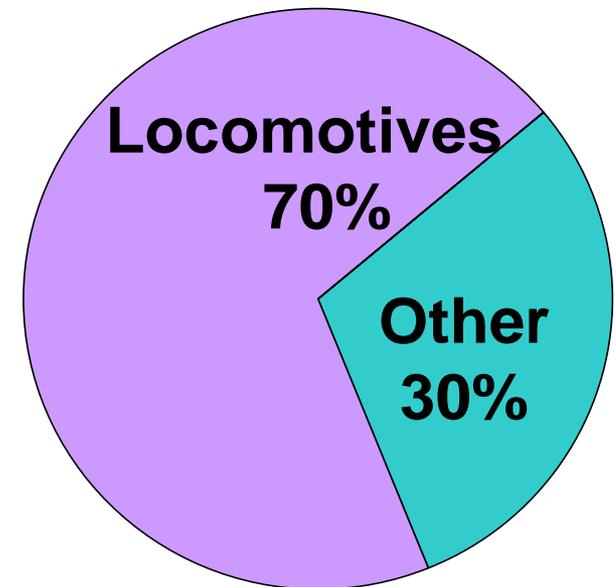
(Average for the 3 Railyards)

2005



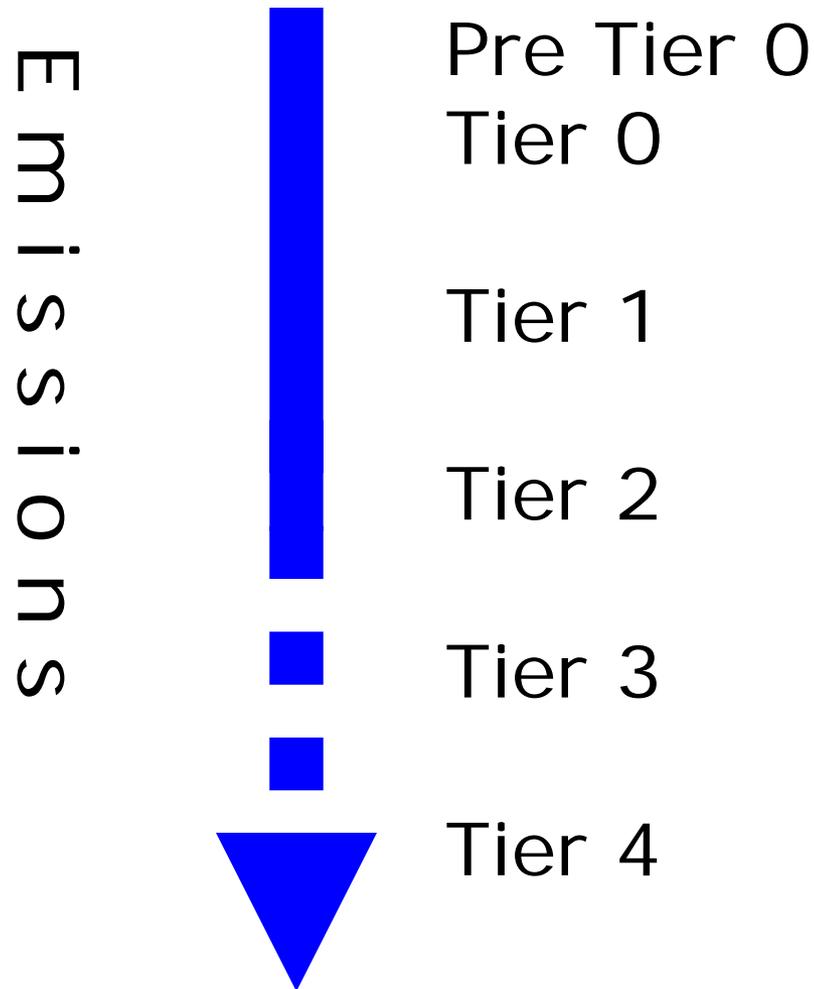
2020

(w/o commitments)



“Tiers” of Cleaner Locomotives

(U.S. EPA Emission Standards)



ARB Analysis of Feasible Reductions

(See “Basis for Commitments” Document)

With yard-specific data, ARB staff:

1. Assessed technology changes expected under existing regulations/agreements *(including PM benefits not required)*
2. Evaluated accelerated technology upgrades and other strategies to further reduce emissions
3. Calculated the resulting emissions
4. Set the draft performance standard *(% emission reduction from 2005 levels)*

Potential Strategies Included in ARB Calculations (1)

- All trucks have PM controls
- All cargo equipment has PM controls
- All routine yard locomotives upgraded to low-emission models
 - ✓ 10 at Commerce + 12 at ICTF/Dolores
 - 8-10 at Hobart (in progress)
- Line haul locomotives upgraded to Tier 3 average emission levels

Potential Strategies Included in ARB Calculations (2)

- Low-emission yard locomotives retrofit with PM filters or replaced with Tier 4 units
- Use of Tier 4 line hauls accelerated
- Mix of operational changes employed
 - Electric yard equipment
 - Reduced equipment operating hours
 - Stationary collection system
 - Relocation of operations within yard

Regulation versus Commitments

Diesel PM Reductions (tons per year) in 2020

- Reductions from regulating non-preempted locomotives (*none at these yards*) = 0

Railyards	Regulation: Cargo Equipment	Commitments: Locomotives + Cargo Equipment
Commerce	<0.5	1.4
Hobart	<0.6	2.1
ICTF/ Dolores	<0.4	1.4

Draft Railyard Commitments





Summary of Draft Commitments

Railroad Obligations

- Comply with enforceable emission reductions through 2011-2020 (despite growth)
- Submit comprehensive documentation at specified intervals
 - Emission inventories, emission reduction plans
- Assess operational changes
- Help test advanced technology
- Hold annual public meetings

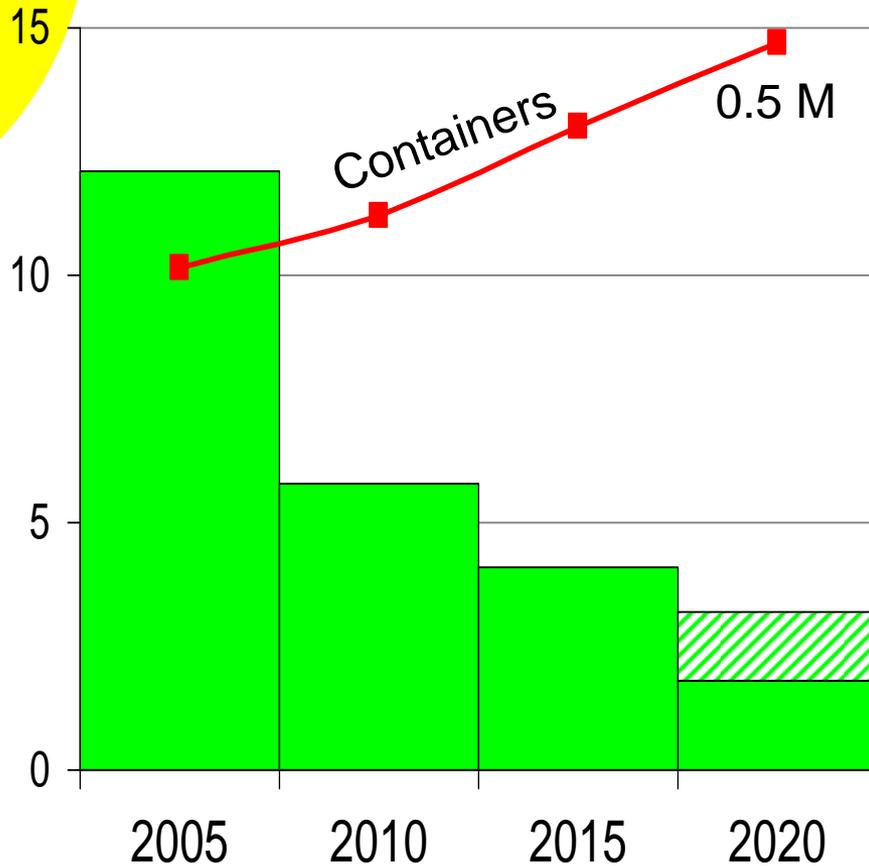
Railyard Operational Changes to be Assessed *(by Dec 2012)*

	Commerce	Hobart	ICTF/ Dolores
Truck gate	Done	✓	✓
Relocate	✓	✓	✓
-Yard tractors	✓	N/A	✓
-Maintenance	✓		✓
Electric			
-Cranes	✓	✓	✓
-Refrig units	N/A	✓	✓
Collection system	✓	N/A	✓

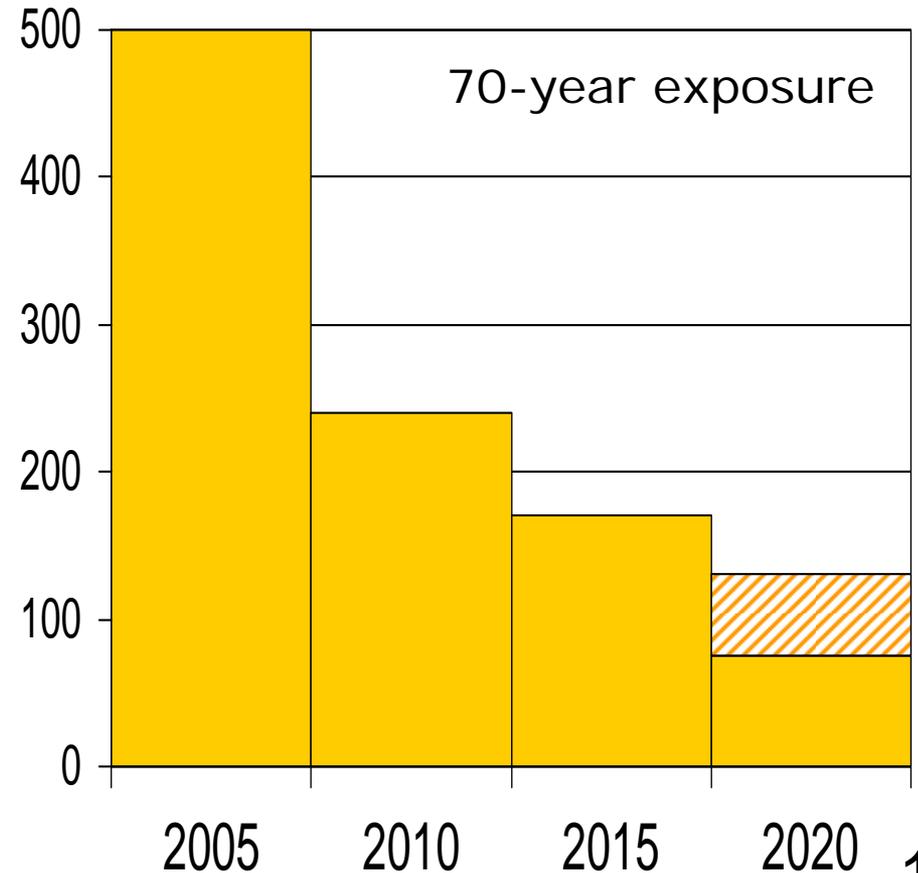
Reducing Diesel PM & Cancer Risk

UP Commerce Railyard Commitments

Maximum Emissions
(tons per year)



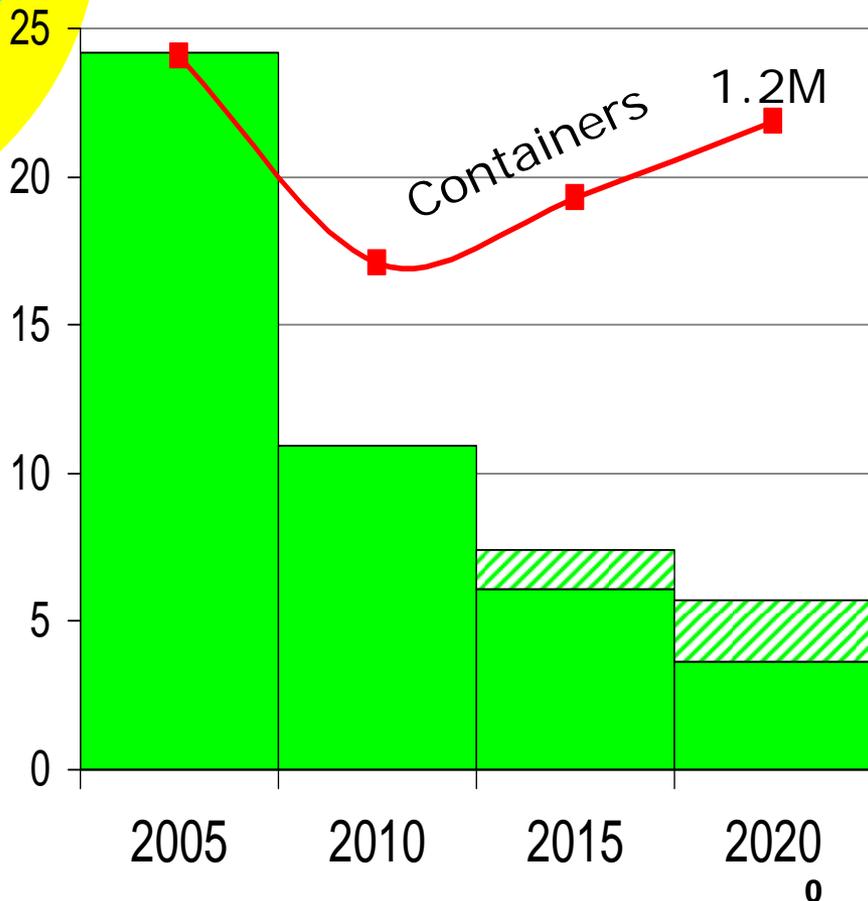
Maximum Cancer Risk
(in a million)



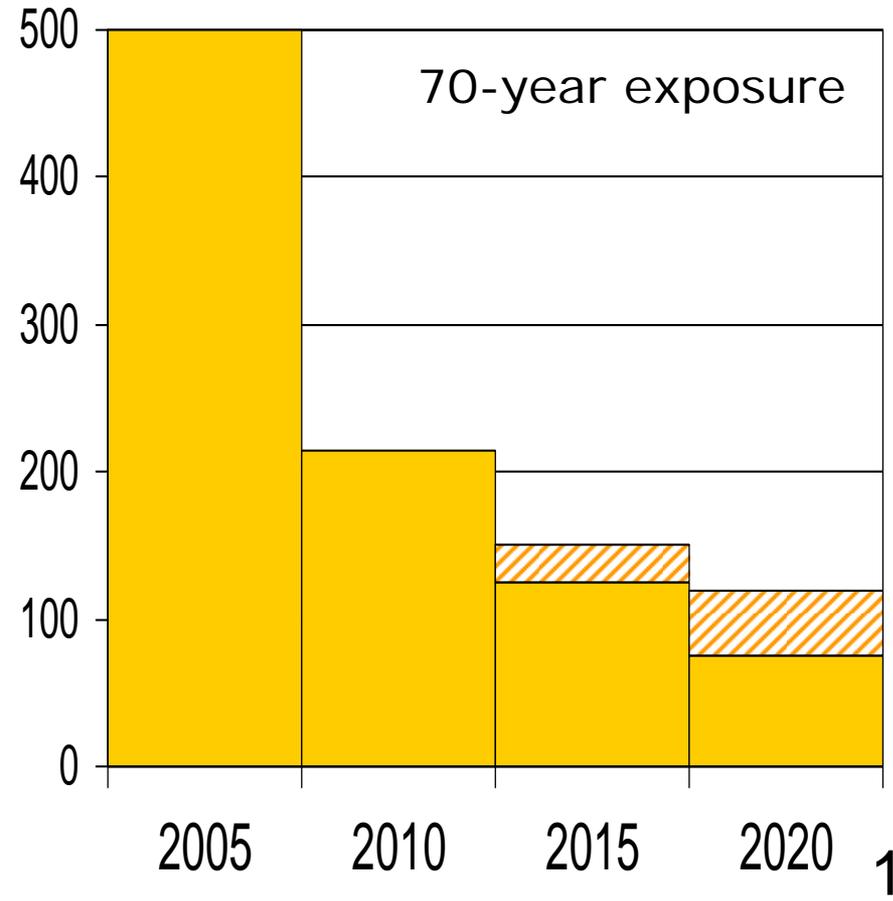
Reducing Diesel PM & Cancer Risk

BNSF Hobart Railyard Commitments

Maximum Emissions
(tons per year)



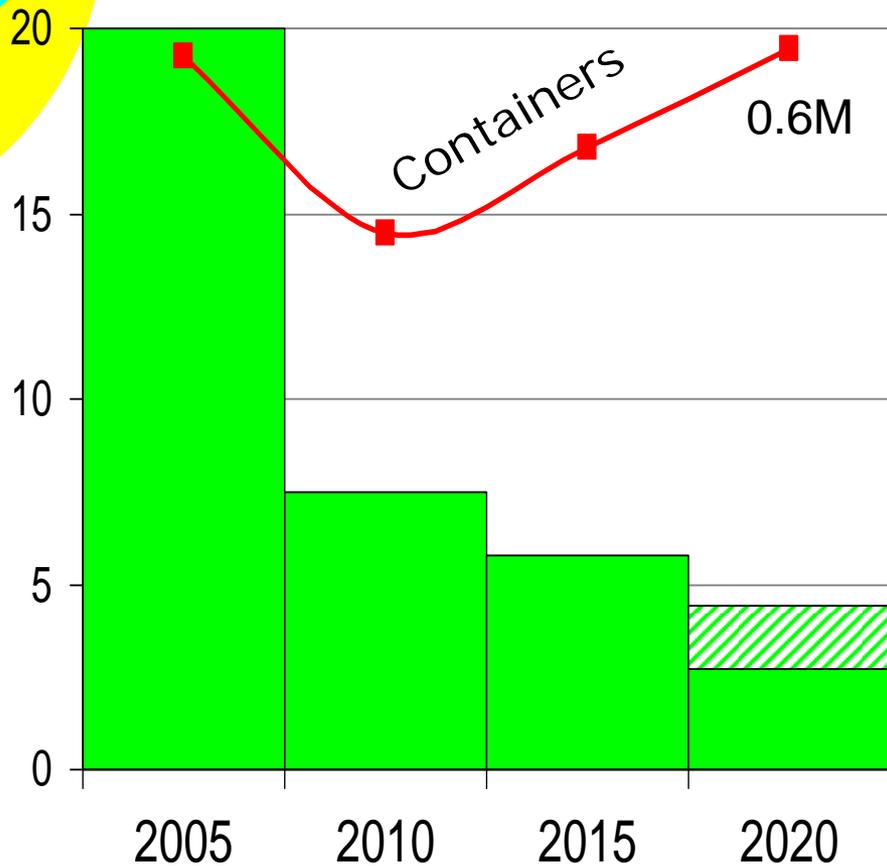
Maximum Cancer Risk
(in a million)



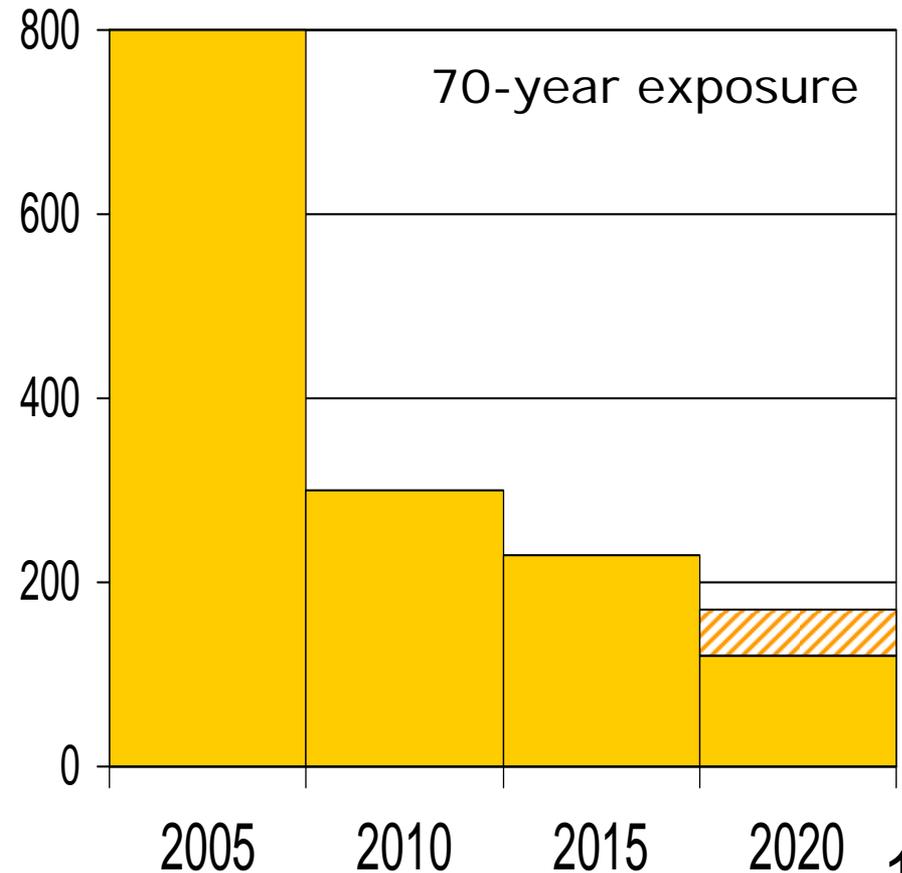
Reducing Diesel PM & Cancer Risk

UP ICTF/Dolores Railyards Commitments

Maximum Emissions
(tons per year)



Maximum Cancer Risk
(in a million)



Summary of Draft Commitments

ARB Obligations

- Prepare health risk assessments
- Independently verify railroad compliance for each railyard
- Pursue regulations if railroads fail to meet commitments
- Provide documents to the public
- Collaborate with South Coast AQMD to add air quality monitor near UP Commerce/BNSF Hobart Railyards

Independent ARB Verification to Assess Compliance

- Inspections inside the railyards
- Unannounced field surveys
- Photo-tracking of locomotives
- Cross-checks of railroad data





Ongoing Public Participation

- Review documents on ARB website:
 - Railyard inventories, risk estimates, emission reduction plans, operational changes, ARB letters to railroads
- Comment on plans and compliance
- Participate in annual meetings
- Raise any concerns to ARB staff/Board



Next Steps

2010

- Jun 15: Staff proposal
- Jun 24: Board hearing
- Oct 15: Emission inventory
- Nov 1: Draft emission reduction plan
Updated health risk estimate
- Nov-Dec: Community meeting/input on
plan and risk estimates

2011

- Jan 15: Final emission reduction plan

Summary

The draft commitments would:

- Set maximum emissions, despite growth
- Reduce health risk 85% from 2005-2020
- Lead to use of advanced technology and operational improvements
- Assure enforceability and transparency
- Provide greater benefits than regulation