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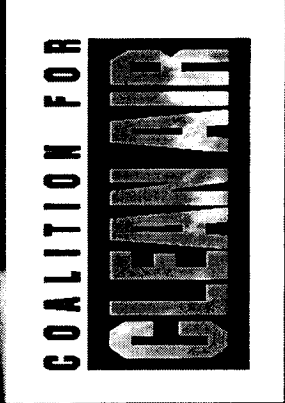
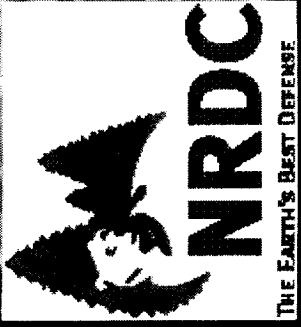
Appeal of Long Beach Harbor Commissioners' Certification of FEIS/FEIR For The Pier J Expansion Project

September 14, 2004

Natural Resources Defense Council

Coalition For Clean Air

California Earth Corps



OUTLINE

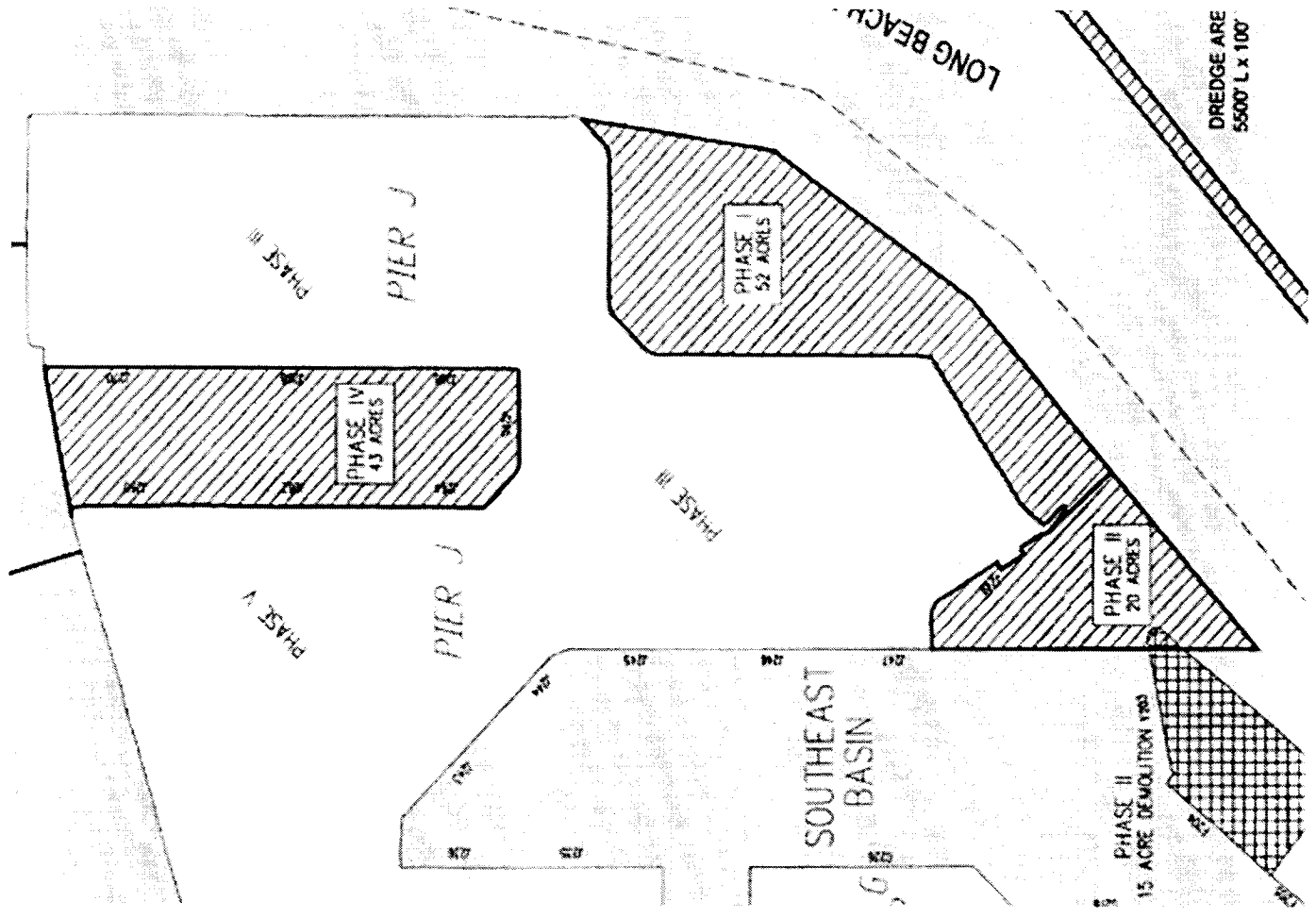
- Why should we care about the Pier J Final EIS/EIR?
- Why should we care about Port operations?
- Why the Appeal?
- What can the City Council do?

Why Should We Care About The Pier J Final EIS/EIR?

- This is the 1st project since the City pledged to support a “no net increase” policy
- This EIR will be a model for all future projects

Pier J Expansion Project

- Dredge > 10 million cubic yards of soil from sea bottom
- Add 115-acres to create 385-acre "mega terminal"
- 5 Phases -- from 2007 to 2015



**EIS/EIR Table 1.5.1-2
115-Acre Landfill Alternative Year 2015**

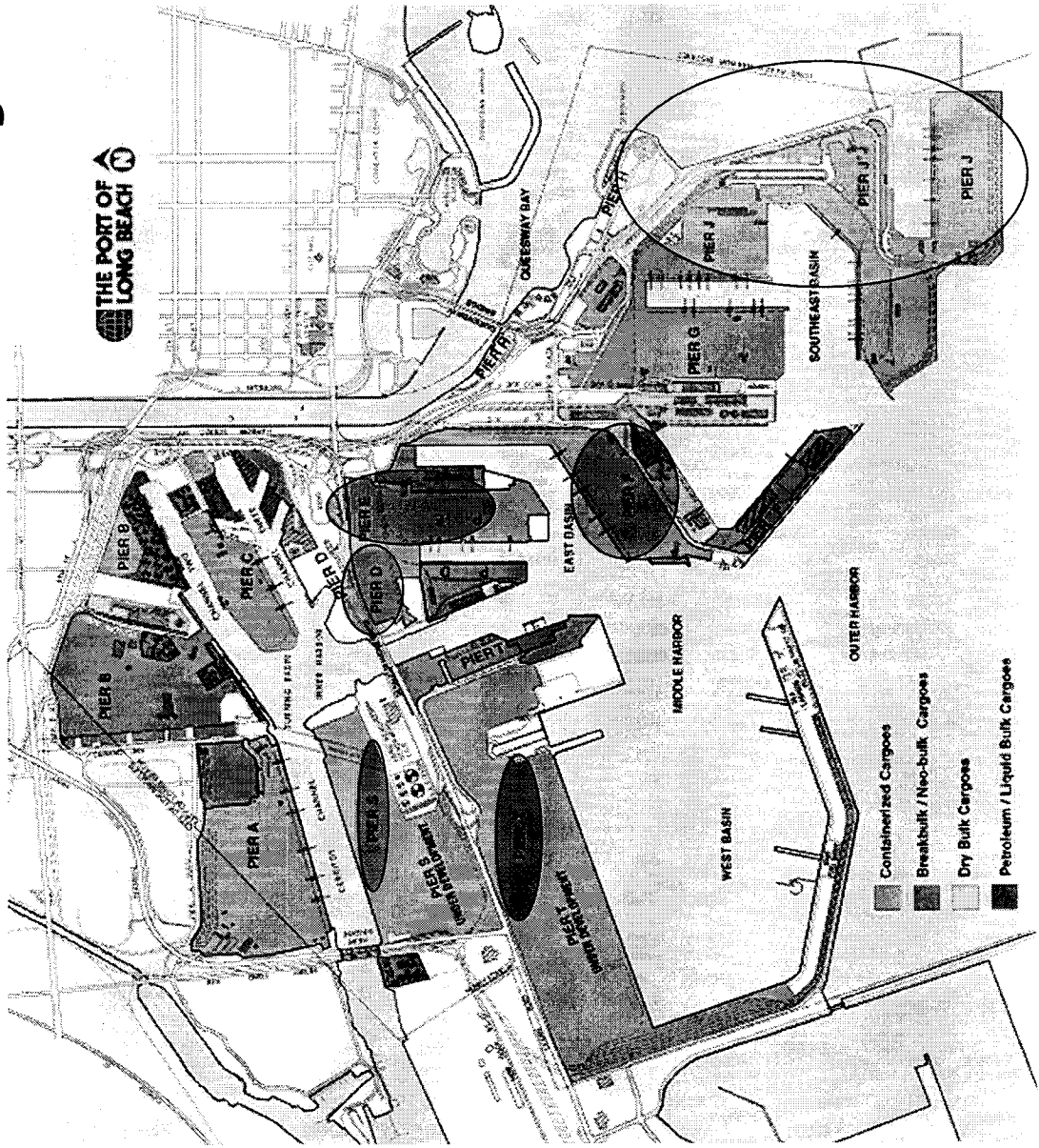
	Future without Project	Future with Project
Acres	270	385
Cargo containers (teu)	1,409,039	1,974,938
Truck trips/day	4,089	5,332
Ships/year	310	435
Trains/day	3	5
Employees (operations)	540	770

(1.5 M per yr)

Pier J Is The First Project Since The City's No Net Increase Pledge

- Port concedes that the air quality impacts created by this project already exceed significance thresholds for nearly all air pollutant emissions
- Project as written will not further the City's commitment to achieve a "no net increase"
- Best way to further a no net increase policy:
 - Require appropriate mitigation on a project by project basis
 - If emissions from each individual project are not mitigated, we will not achieve a no net increase

Pier J Final EIS/EIR Will Be The Model For All Future Projects



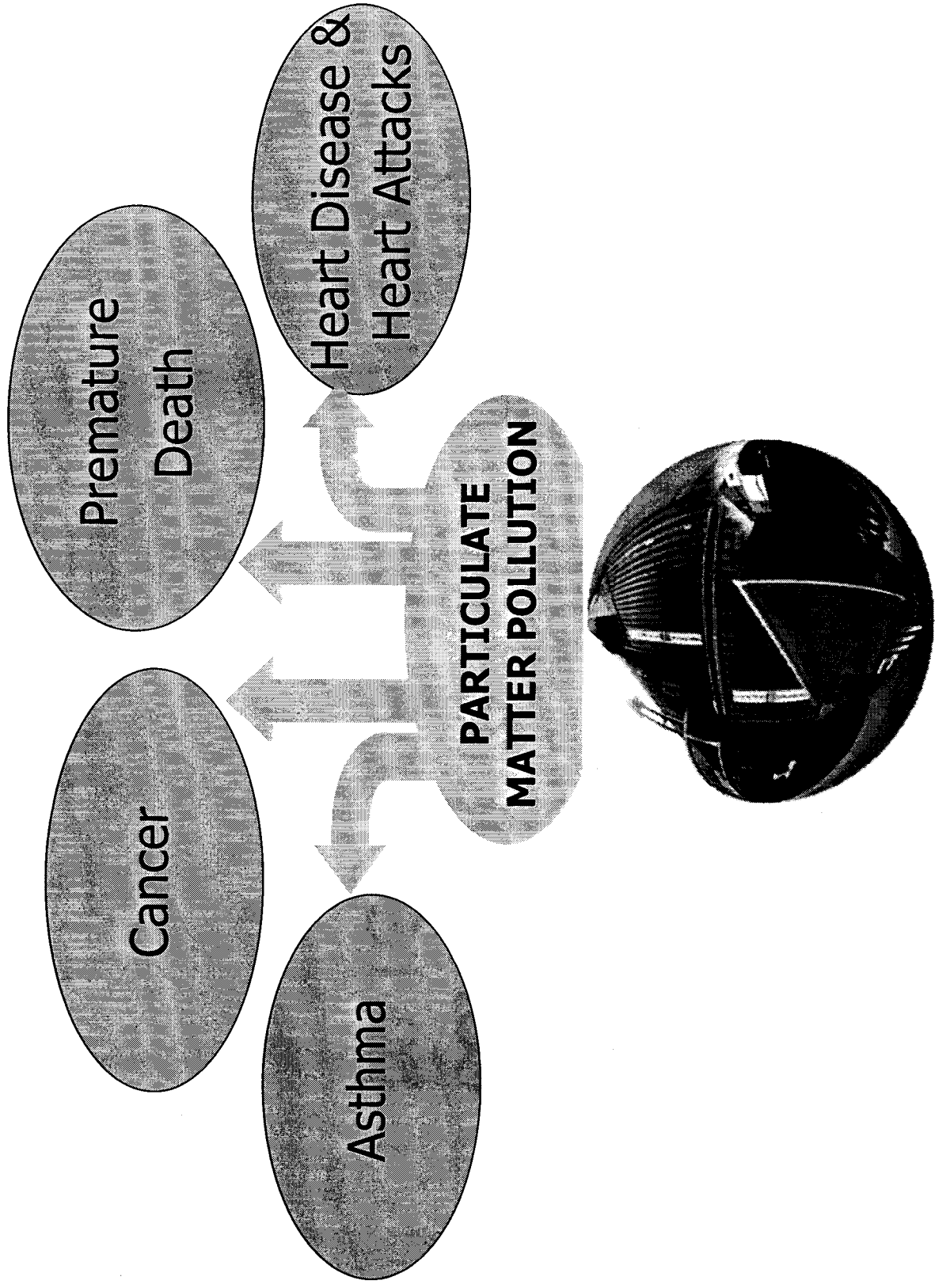
- Future Expansion
- Pier J

- Containerized Cargoes
- Breakbulk / Neo-bulk Cargoes
- Dry Bulk Cargoes
- Petroleum / Liquid Bulk Cargoes

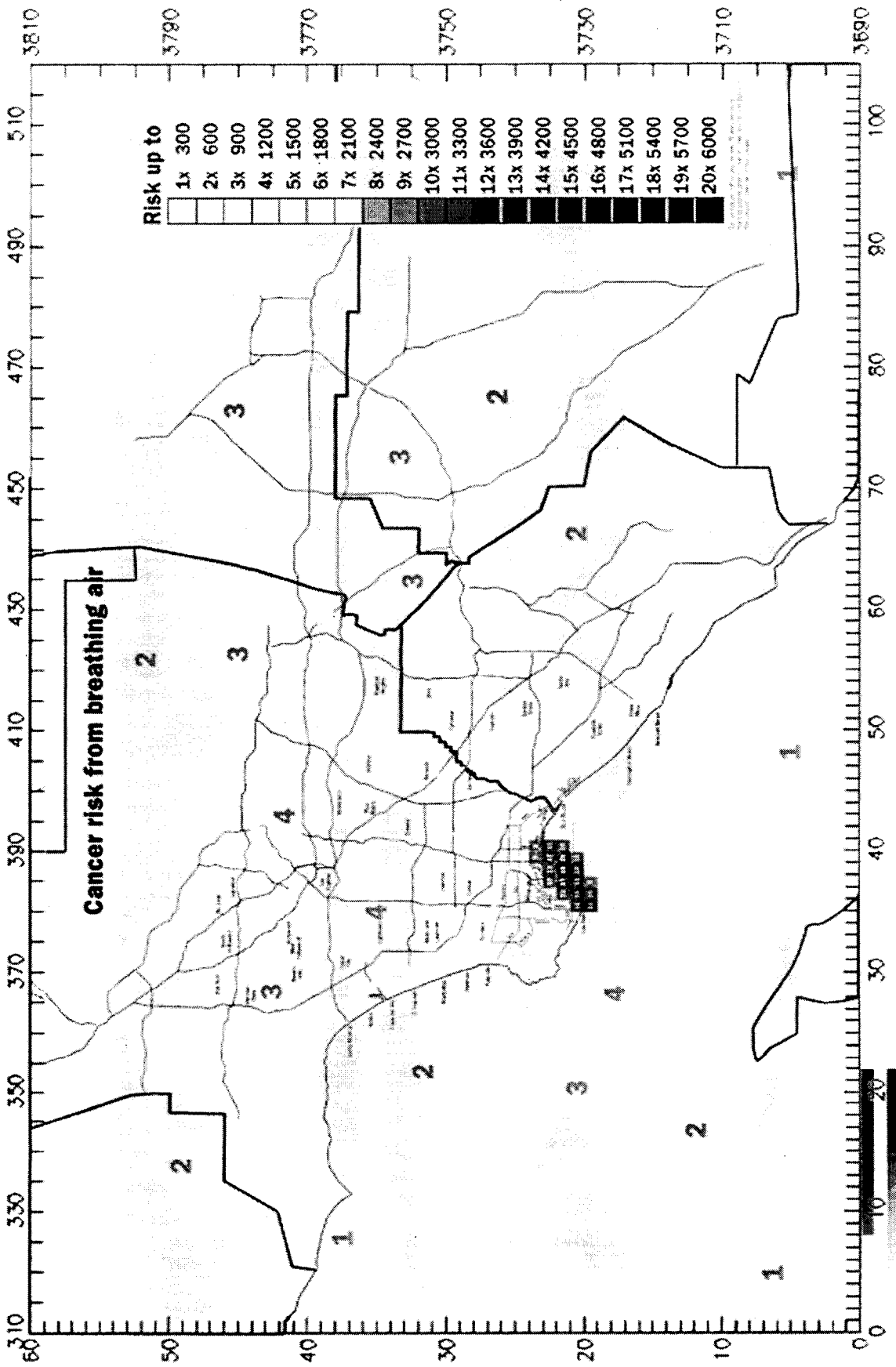
Why We Should Care About Port Operations?

**Port pollution
contributes significantly
to regional air pollution**

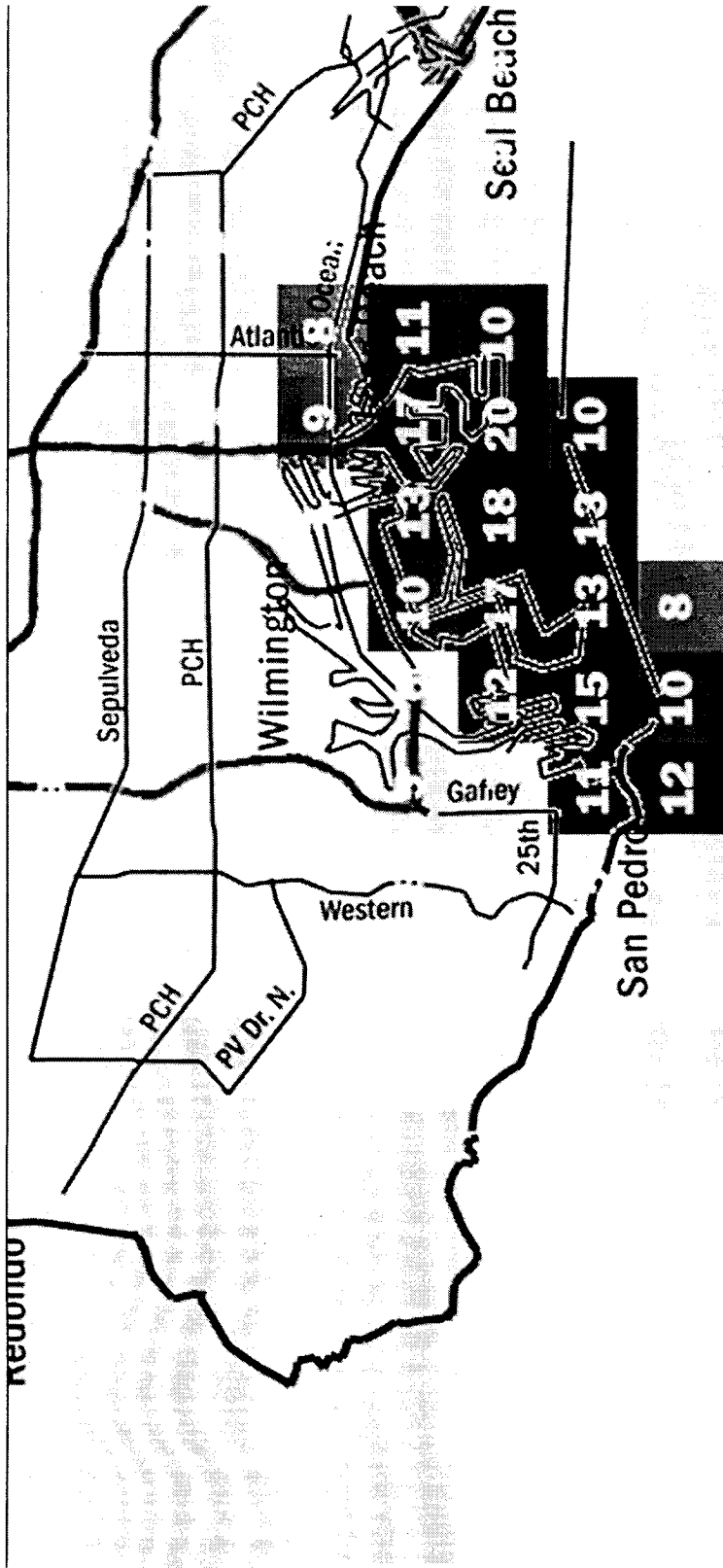
HEALTH EFFECTS OF DIESEL PARTICULATE MATTER



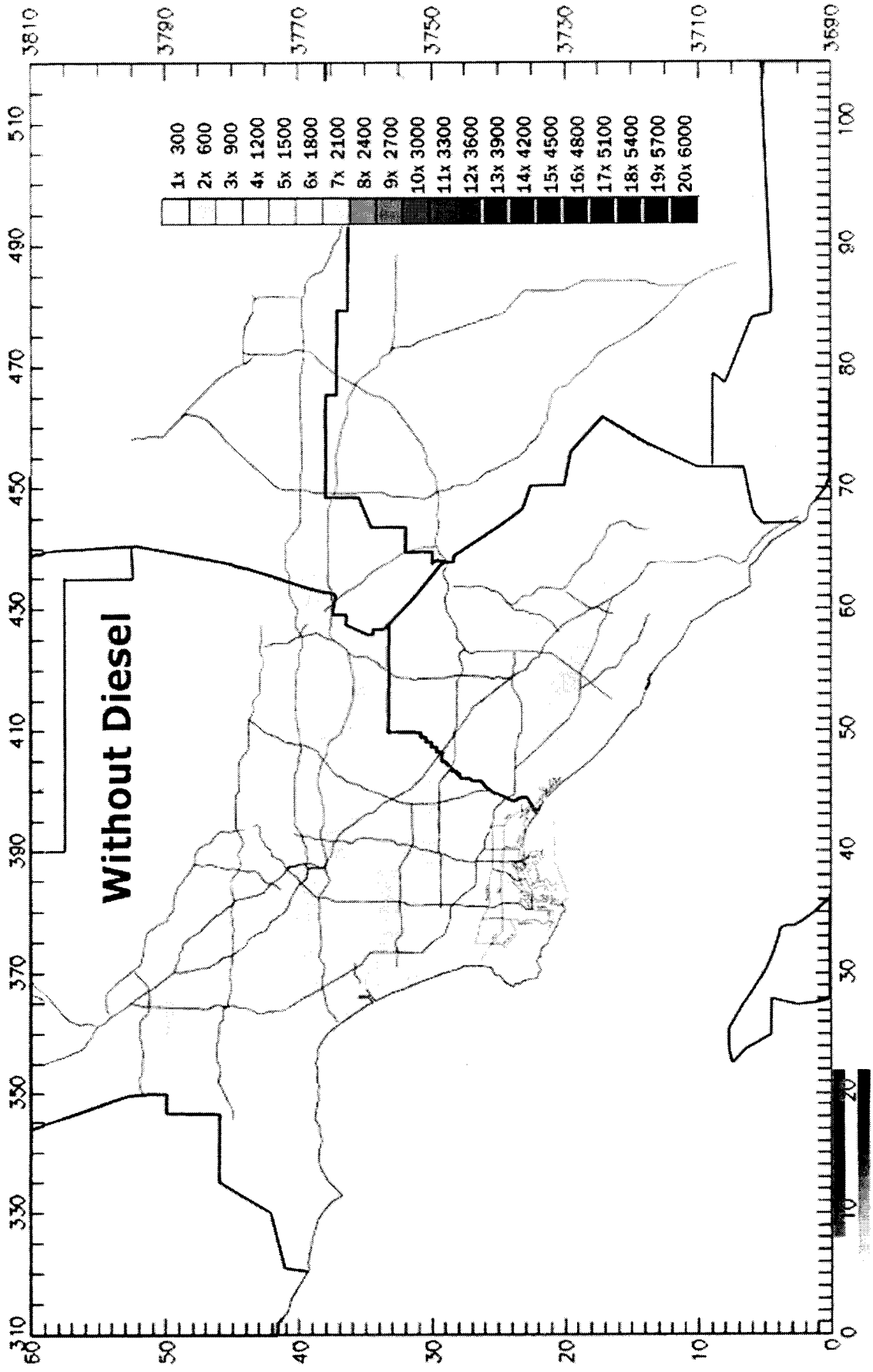
Cancer Risk In South Coast From All Emission Sources



Harbor Area Detailed



Cancer Risk Excluding Diesel



Startling Health Impact Statistics

- Diesel particulate is responsible for over 70% of the cancer risk from air pollution
- This year, the number of diesel-related premature deaths will exceed the number of homicides in California
 - ~3,000 premature deaths
 - ~2,700 cases of chronic bronchitis
 - ~4,400 hospital emissions for cardiovascular and respiratory illnesses

Cost of health impacts = \$21.5 billion per year

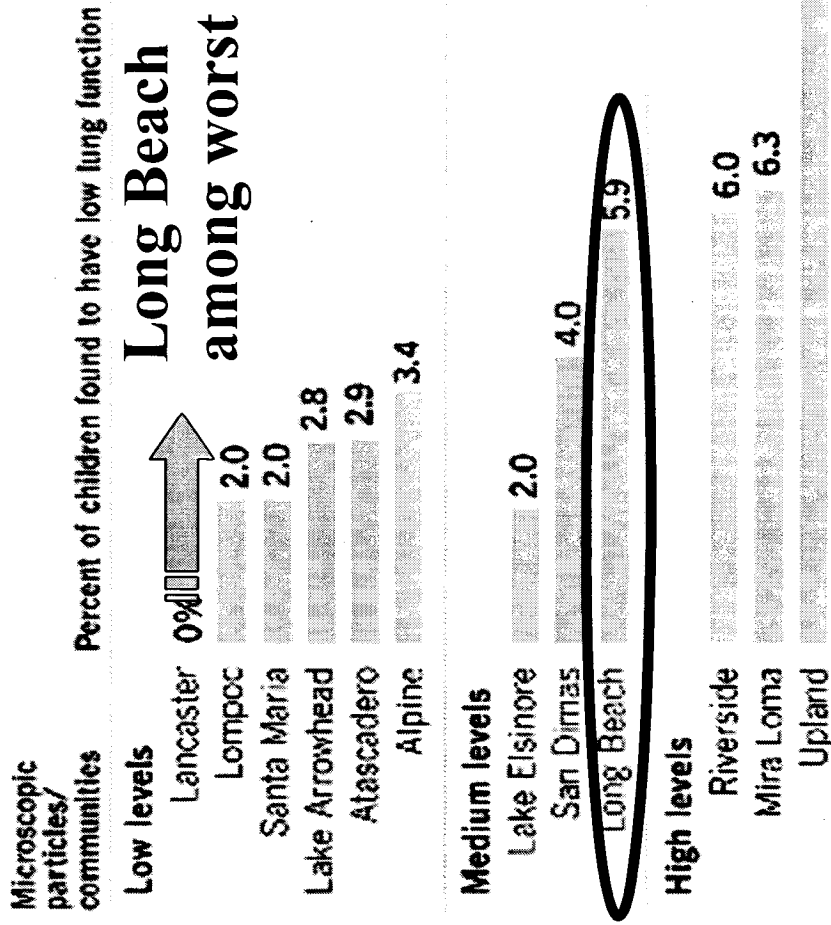
Health Effects of NOx



- NOx causes a wide variety of health & environmental impacts
- NOx is a precursor to smog
- NOx causes respiratory problems:
 - exposure can lead to significant decreases in lung function growth among children
 - NOx has been linked to increased risk of lung cancer
- It may also cause birth defects

New Study: Low Lung Function due to Air Pollution USC, Keck School of Medicine

- Examined 1,800 So. CA children in 12 communities over 10 yrs



- Significant lung function loss due to slowed lung growth and high asthmatic rates
- Study links both PM and NO₂ emissions to port communities

Source: Department of Preventive Medicine, USC

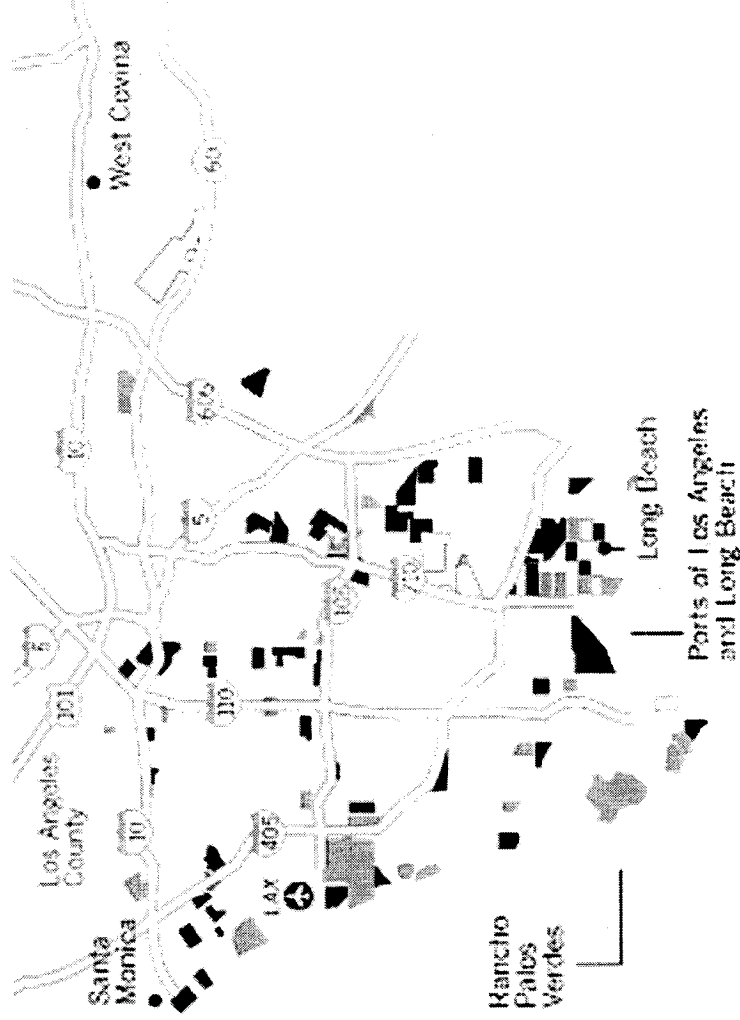
Los Angeles Times

New Cancer Cluster Study

USC, School of Medicine, Professor T. M. Mack

- Examines cancer clusters throughout LA county over 25 year period
- Both LA and LB port communities identified having high cancer rates

Cases of throat cancer**



Maps show census tracts at high risk, adjusted for social class.

Small cell carcinoma of the lung and bronchus *Oropharyngeal carcinoma

Source: *Cancers in the Urban Environment*, by Thomas M. Mack

Los Angeles Times

■ Males at high risk ■ Females at high risk □ Both at high risk

Why Appeal?

Why the Appeal?

- Preliminary Thoughts -

- We do not oppose the Project itself
- We do not oppose Port expansion if it's done in an environmentally sound manner
- We simply want the Port to:
 - Analyze all significant impacts of the Project as it is required by the law
 - Adopt sufficient mitigation measures to protect the community

Economic growth and protecting the health of Long Beach residents can walk hand-in-hand

Why the Appeal?

- Legal Analysis -

1. EIR grossly underestimates environmental and health impacts of the Project
2. EIR fails to analyze and adopt sufficient mitigation measures

RESULT = Port approved the Project w/o full knowledge of the impacts of the Project and w/o adopting feasible mitigation.

This violates CEQA

I. EIR Grossly Underestimates Project Impacts



- A. Improperly uses a 2015 baseline
- B. Improperly reduces emissions by 75% based on state pollution control rules that have not been adopted
- C. Relies on improper assumptions to calculate emissions impacts
- D. Virtually ignores the adverse impacts created during the Project's early phases

A. EIR Improperly Uses A 2015 Baseline

What is a “Baseline”?

- Baseline = environmental condition at the project site at the time of the NOP. It is a “snap shot” of level of activity at a project site at the time the project is first proposed
- Baseline is used to determine whether project impacts are significant
- If the baseline is incorrect, a project’s impacts may be severely underestimated

Port's 2015 Baseline

- Here, Port uses a future 2015 baseline – arguing that this baseline accounts for “anticipated growth” that will occur even w/o the Project.
 - “However, “[a]n EIR must focus on impacts to the existing environment, not hypothetical situations.”
(*Save Our Peninsula v. Monterey County* (2001) 87 Cal.App.4th 99,121-22).
- Courts invalidate EIRs when future conditions are used as the baseline because:
 - Where an agency utilized future conditions as the baseline, as opposed to present conditions, the court asserted that the EIR misled the public “as to the reality of the impacts and subvert[ed] full consideration of the actual environmental impacts which would result.” (*EPIC v. County of El Dorado* (1982) 131 Cal. App. 3d

Use of “2015 Future w/o Project” Baseline Minimizes Project Impacts

**Table 1.5.1-2
115-Acre Landfill Alternative Year 2015**

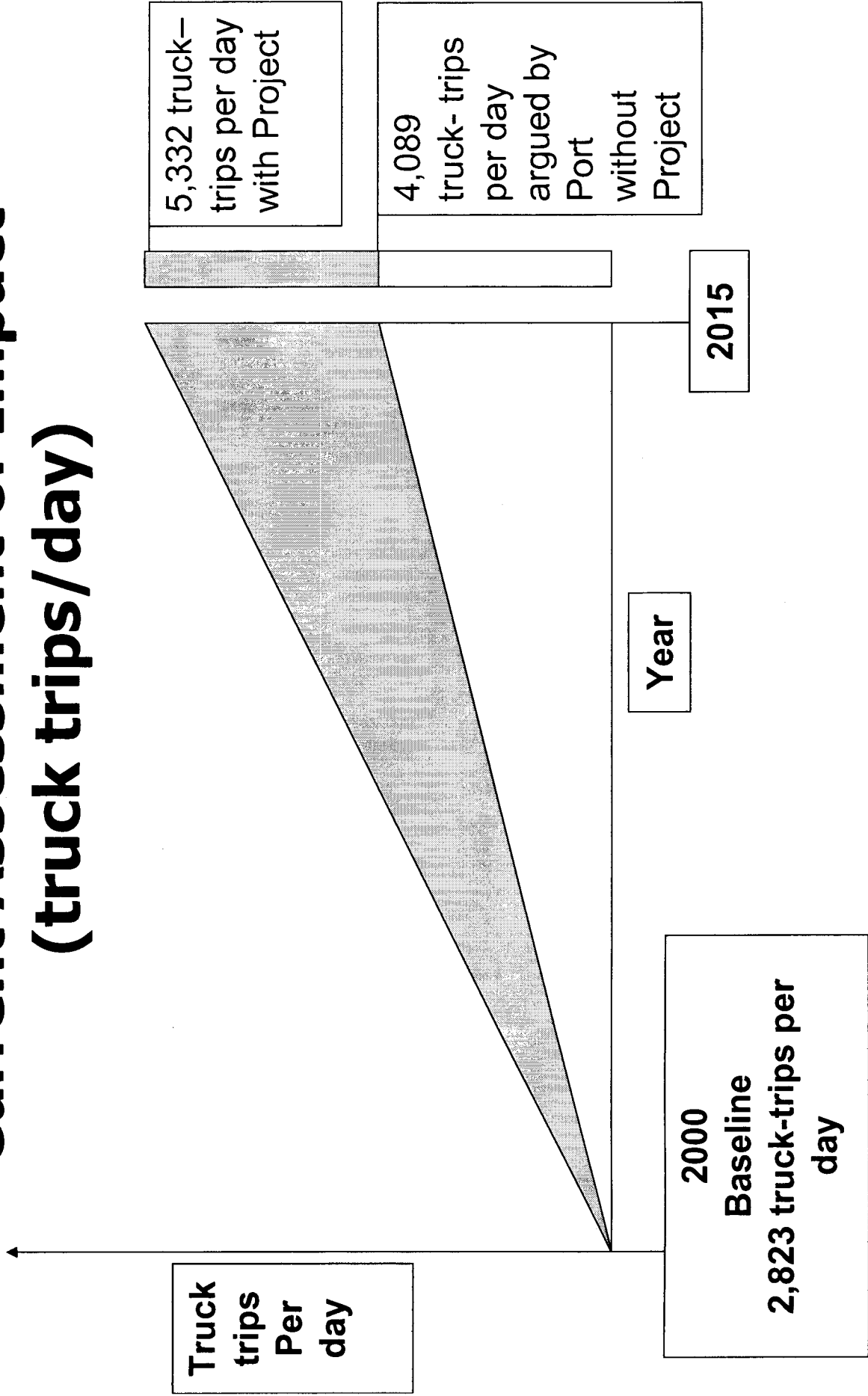
	Future w/o Project	Future with Project
Acres	270	385
Cargo containers (teu)	1,409,039	1,974,938
Truck trips/day	4,089	5,332 (1.5 M per yr)
Ships/year	310	435
Trains/day	3	5
Employees (operations)	540	770

- Under Port’s inflated baseline:
 - Ship calls increase by only 125 per year
 - Truck trips increase by only 1243 per day
- Assumes growth that has not been subject to any environmental review or Port approval

EIR fails to provide any information about
2000 existing truck, ship, and yard
equipment activity at terminal

- Only information is about traffic impacts

Current Assessment of Impact (truck trips/day)



Source: EIS/EIR at Section 10 Response to Comments, pg. 49.

B. EIR Grossly Overestimates Emissions Reductions That May Be Realized At The Project

- To minimize the environmental and health risks from the Project the Port slashes emissions by 75% based on CARB's 2000 "goals"

Port's minimization of impacts through fictitious emissions reductions is wholly improper

Port May Not Slash Emissions By 75% Based On CARB's 2000 Diesel Plan

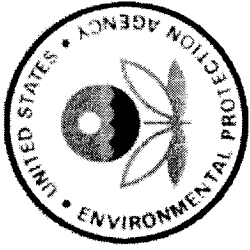
- CARB's 2000 Diesel Plan is NOT an adopted rule or regulation; merely a "goal"
- Since plan's inception, CARB has not adopted ANY rules that would translate into emissions reductions at the Port
- CARB concedes that between 2000 and 2010, PM emissions will decrease by only about 20 percent if the Plan is not implemented in full

AQMD Questions Application of 75% Reduction



"AQMD staff remains concerned that operational emissions are underestimated for on-road vehicles . . . The 75 percent reduction is *not appropriate* for the overall fleet emission factor . . . [A]pplication of the 75 percent reduction *should not be used* as it inappropriately accounts for future federal emission standards into the overall vehicle fleet."

- AQMD Comments to FEIS/R (July 30, 2004)



EPA Raises Similar Concerns

“[EPA] [is] concerned with the project’s potential air quality impacts and potential underestimation of the project’s air pollutant emissions.”

“[U]nless substantiated, the air quality analysis should not assume a 75 percent reduction rate as currently presented.”

- EPA Comments to RDEIS/R Oct. 8, 2003

C. Port Relies On Improper Assumptions To Calculate Emissions

Example 1: Ship Emissions Improperly Calculated

- Port uses 1999 emissions estimates to understate emissions from ships that will call on Pier J
- Using the 2004 Environ report commissioned by POLB to analyze cold-ironing, emissions from the Port's estimated 125 ship calls per year would result in 10,129.66 pounds per day of NOx and 1,171.48 pounds per day of PM10.
- This is 724% and 1811% higher, respectively, than the EIR estimates
 - EIR on page 3-13 estimates marine emissions of NOx and PM at 1399.37 and 64.67 pounds per day, respectively

Example 2: Off-Site Truck Emissions Improperly Calculated

- EIR uses average California truck emissions data (and not data for older port trucks)
 - EIR assumes each trip is 15 miles each way when in fact trucks travel as far as Riverside, and the distance even to downtown L.A. from the Port is 24.5 miles
- EIR only counts a single one-way trip for each truck, thereby excluding emissions generated from a full round-trip

Example 3: Yard Tractor Emissions Improperly Calculated

- Port assumes only 11 yard tractors will serve the additional 115 acres and work only 4 hrs/day (EIR Appendix A, Table A.2-1.)
- **BUT** if the Port's assumption of 1243 truck trips per day is accurate, the 11 yard hostlers would have to unload 113 containers in 4 hrs – or 2.1 minutes per container!
 - Typical terminal = 1 yard hostler for every 2 acres. Thus, 62 yard hostlers can be expected for this facility
- By 2015, assuming longer gate hours, yard tractors will work two 8 hr shifts. Under these revised assumptions, projected emissions increase by over 1400%
- Port assumes that the addition of the first 52 and 75 acres will require *no yard hostlers* to move the containers (Appendix A, Tables A.4-1, A.6-1.)

D. EIR Virtually Ignores Impacts Created During Project's Early Phases

- Port analyzes environmental impacts only in the years 2007 and 2015
- Adverse impacts will begin before 2015
 - Phases I-IV complete 2007, 2009, 2010, 2014
 - Final EIS/EIR fails to evaluate impacts of all phases of project

Summary Of Phases For Alternatives

115-Acre Landfill Alternative	75-Acre Landfill Alternative	52-Acre Landfill Alternative
Phase 1 (2007) -Dredge Channel -52-Acre Fill -Terminal Improvements	Phase 1 (2006) -Dredge Channel -Pier F Demolition -20-Acre Fill -Dredge Berths	Phase 1 (2007) -Dredge Channel -52-Acre Fill -Terminal Improvements
Phase 2 (2009) -Pier F. Demolition -20-Acre Fill -Dredge Berths -Terminal Improvements	Phase 2 (2006) -Terminal Improvements	
Phase 3 (2010) -Terminal Improvements	Phase 3 (2010) -43-Acre Fill -Terminal Improvements	
Phase 4 (2014) -43-Acre Fill -Terminal Improvements	Phase 4 (2011) -Gate Construction	
Phase 5 (2015) -Gate Construction		

- Port has not analyzed the impacts of the phases in yellow

- The real impact of phases 2-5 cannot be determined

RESULT = Port ignores the greater risk posed to the public from various phases of project

Example of Improper Phase Analysis

Table 1.5.1-2

115-Acre Landfill Alternative Year 2015

	Future Without Project	Future With Project
Acres	270	385
Cargo containers (twenty-foot equivalent units)	1,409,039	1,974,938
Truck trips/day	4,089	5,332
Ships/year	310	435
Trains/day	3	5
Employees (operations)	540	770

EIR pg. 1-10.

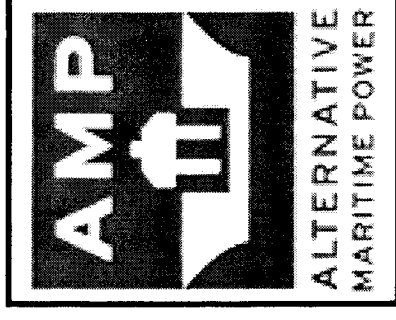
Table 1.5.3-2

52-Acre Landfill Alternative Year 2007

	Future Without Project	Future With Project
Acres	270	322
Cargo containers (twenty-foot equivalent units)	1,409,039	1,680,409
Truck trips/day	4,089	4,872
Ships/year	310	370
Trains/day	3	4
Employees (operations)	540	644

EIR pg. 1-16.

II. EIS Fails To Consider & Adopt Sufficient Mitigation



- A. CEQA requires consideration and adoption of all feasible measures
- B. Port's measures appear promising at first glance, but will result in minimal emissions reductions. Further, more effective feasible measures exist

A. CEQA's Mitigation Mandate

- An agency “should not approve a project . . . if there are feasible . . . mitigation measures available” that would substantially lessen the project’s significant effects
 - CEQA Guidelines § 15021
- An EIR must identify mitigation for each significant effect described in the EIR
- If several mitigation measures are available, EIR should discuss each measure and the reasons for selecting that measure
- EIR must respond to suggested mitigation unless “facially infeasible”

**B. Port's Mitigation Measures
Look Good On The Surface
But Will Result In Minimal
Emissions Reductions
Plus
More Effective Feasible
Measures Exist**

Port's Cold Ironing Mitigation Measure Is Ineffective

A ship will not be required to "plug in" unless:

1. A new wharf is built; AND
2. An agreement exists between shipping operator and Port; AND
3. Ship makes 6 or more visits to the Port each year; AND
4. Ship consumes a certain amount of power while at berth each year

RESULT = A ship may NEVER cold iron

Port's Response:

- Requiring 80% cold ironing is not cost effective
- Port cannot unilaterally impose cold ironing requirements on existing leases
- Retrofitting existing facilities would require the Port to shut down terminal operations for 2 years

Our Response:

- China Shipping will cold iron 70% of it ships
- Port of LA RFP includes 80% cold ironing goal that bidders are exceeding
- PoLB's own study on cold ironing shows it's cost effective, even using deflated measure of cost-effectiveness
- Port can impose cold ironing requirements upon lease renewal
- No evidence that 2 yr terminal shut-down would be required to retrofit existing wharves

The Port Should:



- Require electrification of all existing Pier J wharves
- Require 80% of all ships to plug-in

Proposal That Ships Use Alternative Fuel Is Ineffective

- Permits operators to choose among various "alt. fuels," one of which contains a sulfur content of 20,000 ppm
- Current ships use 27,000 ppm fuel
- Only requires use of cleaner fuel while at berth

Port's Response:

- Marine distillate fuels have an avg. sulfur content of 3,000 – 10,000 ppm.
- Many vessels currently use fuel of 45,000 ppm
- Port lacks authority to regulate sulfur content of marine fuels used in main propulsion engines

Our Response:

- Average Marine Fuel Sulfur Content
 - US EPA: International average 27,000 ppm
 - CARB: Bunker fuel used by ships visiting the Ports of LA and LB approx. 28,000 ppm
- Regarding Hotelling:
 - Diesel-powered auxiliary engines on many ocean-going ships (already) use lighter “distillate” diesel fuel
- No legal restriction preventing Port from requiring LSD while at berth *and* maneuvering

Sources: *Final Regulatory Support Document: Control of Emissions from Compression-Ignition Marine Diesel Engines at or Above 30 Liters per Cylinder, January 2003, p. 1-9; Proposed 2003 State and Federal Strategy for the California State Implementation Plan, August 25, 2003, p. II-G-2.*

Marine Fuel Emission Reductions

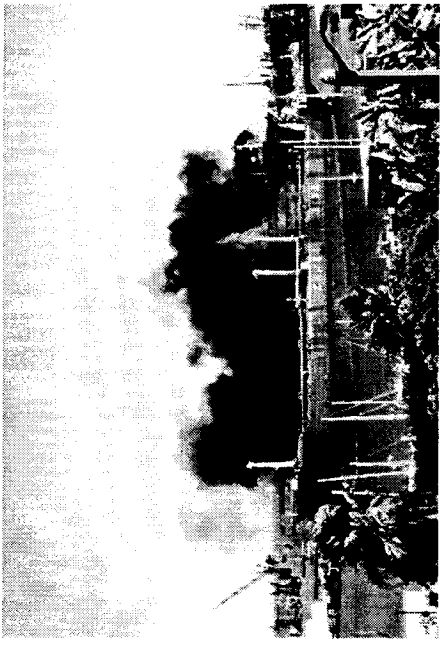
(As compared to 27,000 ppm sulfur content)

Sulfur Content (Fuel Type)	NOx	PM	SOx
15,000 ppm (HFO)	0%	18%	44%
3,000 ppm (MGO)	10%	63%	89%
150 ppm (CARB On-Road Diesel)	16%	72%	99%

Source: Draft Table created by ARB outlining the approximate emission reductions that result from the use of various grades of low sulfur marine fuels

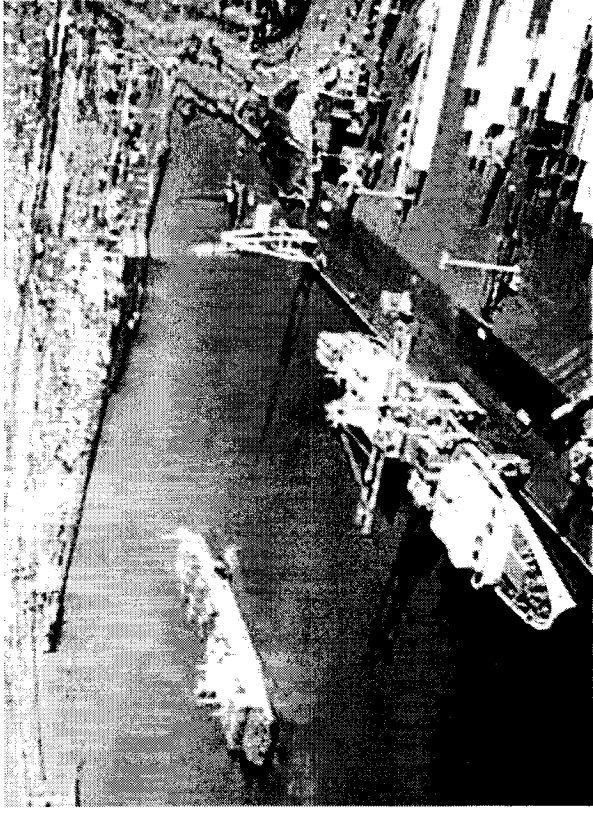
The Port Should:

- Require use of cleaner diesel fuels (2,000 ppm or lower) at berth (if not using electric power) and while maneuvering in CA coastal waters
 - Discrepancies in MDO sulfur content highlight that the Port should simply mandate 2,000 ppm



Requiring Lower Sulfur Content Marine Fuel Is Feasible

- New oceangoing vessel - OOCL Long Beach - built to run on lower sulfur fuel
- PoLA shipping line using 2,000 ppm sulfur dockside
- 4 major marine distillate grades with <2,000 ppm sulfur available *today* in US
- EU Examples:



- By 2010, all ships must use <1,000 ppm sulfur distillates at berth
- >95% of EU ports now supply <2,000 ppm sulfur distillates

**Proposal To Allow Operators To Use
“Exhaust Gas Treatment Technologies”
*Instead Of Clean Fuels Is Ineffective***

- While some exhaust gas treatment technologies result in significant NOx reductions, PM reductions are minimal

DPFs, DOCs, and Emulsified
fuels require lower sulfur levels
than will be used at Pier J

Port's Response:

- DPF and DOC controls work to reduce PM
- Use of emulsified fuel also can reduce PM

Our Response:

- No cited cases where DPFs and DOCs have been used on large ocean going vessels
- Very low sulfur fuels must be used w/the pollutions controls to be effective
 - > 15 ppm will plug DPF and cause engine shut-off
 - > 500 ppm used w/DOC will increase PM
 - Emulsified fuels > 500 ppm also increase PM

Proposal That Construction Equipment Use Alternative Fuel is Ineffective

- Port would permit use of low sulfur diesel fuel or "alternative diesel fuel"
- **BUT** such fuels must be used with pollution controls to obtain significant emissions reductions
 - LSD fuel + control = 85% PM reduction
 - Emulsified diesel + control = 50% PM reduction

Port's Response:

- No DPFs and only a few DOCs are verified for use
- Port lacks authority over construction equipment

Our Response:

- Verification is not required for use
- DPFs and DOCs are effective in practice
 - Thousands of DOCs installed on construction equipment in CA, NY and Boston
 - DPFs used on construction equipment by Cities of Fresno and Sacramento. Liebherr Corp. has installed filters in excavators, wheel loaders and mobile cranes since 1998
 - 5,000 active traps sold by Deutz for forklifts between 1994-2000
- Port can require these measures through lease requirements

The Port Should:

- Require use of alternative fuels
- If alternative fuel engine unavailable:
 - Use diesel particulate filter plus LSD or diesel oxidation catalyst plus emulsified diesel

Port's Mitigation Measure For Yard Equipment Is Ineffective

- Port has now stated that diesel equipment must meet EPA 2013 emissions standards by 2007.
 - This is a strong standard, **BUT** standard only applies to purchase of "new" equipment (not existing); AND
 - EIR does not make clear that these standards will take effect in 2007.

**Result = the continued use of polluting
equipment when the first phase opens
in 2007**

Yard Equipment

- EIS/EIR must clarify that all yard equipment used on 115 acres and all new yard equipment for Pier J starting in 2007 must meet EPA 2013 Tier IV standards – or run on the cleanest fuels -- alternative fuels (natural gas or propane)
- All existing yard equipment used on Pier J starting in 2007 must be retrofit with DPFs and LSD or DOCs with emulsified diesel fuel
- All yard equipment >10 yrs old must be retired and replaced with newest cleanest equipment meeting first point above

THIS IS FEASIBLE

Many of these measures are being implemented at China Shipping Terminal and will be required at PoLA Berths 206-209

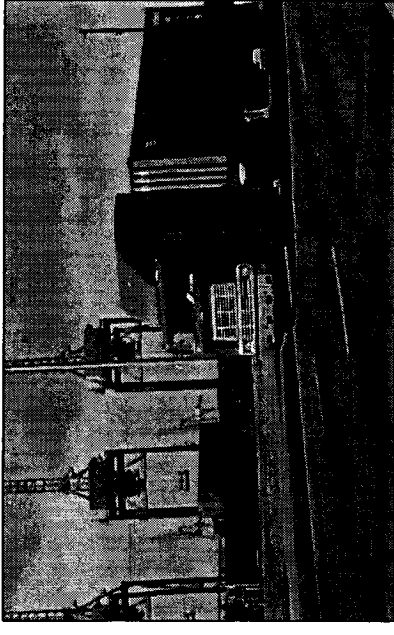
Port's Mitigation Measures For Locomotive Emissions Are Ineffective

- Port contends that it is replacing switcher engines w/EPA Tier 2 engines
 - **BUT** hybrid switchers and switchers that run on alt. fuels are significantly cleaner
 - Hybrids > 50% reduction in emissions than Tier 2 traditional diesel replacements
 - Alt. fuel engines and hybrids cost < \$12,000/ton NOx removed

The Port Should:

- Replace diesel switcher locomotives be replaced with switchers that utilize alternative fuels, or with diesel hybrid switchers
- Implement idling restrictions and require installation of automatic engine shut-off equipment to limit idling
 - Idling controls pay for themselves w/in several years due to fuel savings (\$2k-3k per ton NOx reduced)
 - RR already installing idling controls: Burlington Northern Santa Fe, Union Pacific

On-Road Trucks



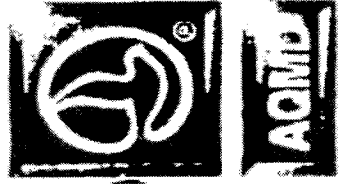
- Require >75% of cargo be shipped by on-dock rail
- Contribute % of lease fees to Gateway Cities program to incentivize replacement of older dirtier trucks w/cleaner trucks
 - Despite Port's contentions, to date, it has not contributed any money to the GWC truck modernization program

Tugboats

- Require tugboats servicing Pier J terminal to use existing electrification capabilities
- Require use of cleaner diesel fuels (15ppm or lower)

**Governmental Agencies Agree that
Adopted Mitigation in EIR is
Insufficient**

AQMD urged Port to consider over 20 mitigation measures for trucks, ships and train idling



South Coast
Air Quality Management District

Provide minimum buffer zone of 300 meters between truck traffic and sensitive receptors;

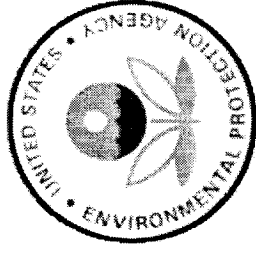
FAXED Restrict truck idling; Restrict operation to "clean" trucks;

Dr. Richard [redacted] Provide electrical hook-ups for trucks that need to cool their load; Director of Planning

The Port of Long Beach Require the use of land-based power when berthed;

P.O. Box 1000
Long Beach, CA 90801-0570

EPA also urged Port to consider additional mitigation



EPA Comments to RDEIS/R Oct. 8, 2003

Recommendation: Because of potential adverse effects on low-income and minority communities, the FEIS/R should address the feasibility of implementing additional air quality-related mitigation to reduce emissions of DPM and other pollutants from construction and operations at POLB.

Recommendation: The FEIS should address the feasibility of additional mitigation to reduce emissions from marine vessels, tugboats, trucks, trains and other source categories from operation of this project.

Recommendation: The FEIS should identify if additional mitigation may be feasible to reduce the project's cumulative air quality impacts, including potential health risks to low-income and minority communities.



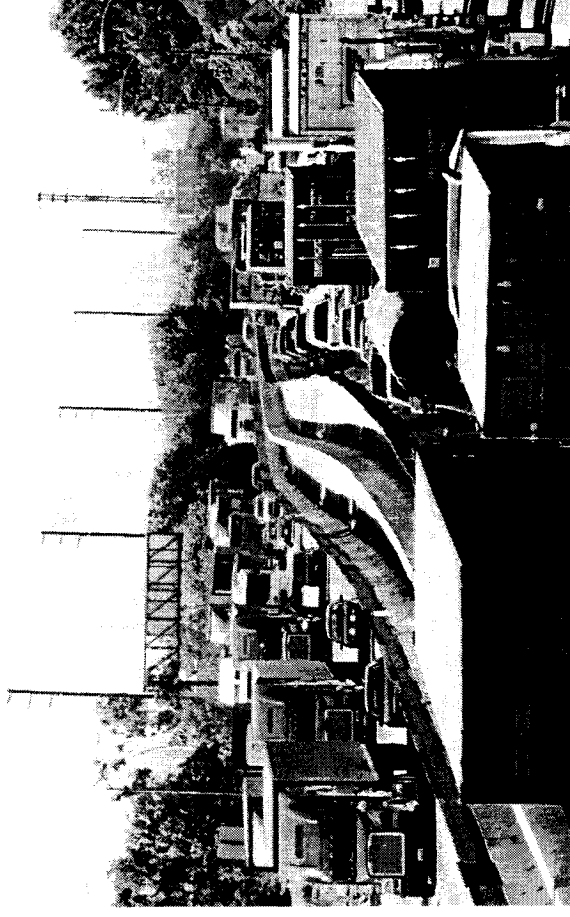
III. Health Risk Assessment is Fatally Flawed

A. HRA Improperly Finds No Significant Risk From the Project

1. HRA excludes chromium from risk assessment, although listed as toxic air contaminant by ARB
2. HRA severely underestimates diesel emission rates
3. HRA fails to include any risk analysis associated with operation of the Long Beach Intermodal Container Transfer Facility
4. HRA assumes a 30 mile per hour travel speed for trucks in 2015 (instead of 15) to evaluate health impacts on nearby receptors along the freeway segment

A. HRA Improperly Finds No Significant Risk from the Project - continued

5. HRA fails to look at cumulative impacts of Pier J, 710 Freeway, and other Port projects combined
6. HRA underestimates the health impacts of diesel PM from the 710 freeway



What Can The City Council Do?

City Council's Authority

- City Council cannot direct the Port to approve or disapprove a Project
- City Council CAN enforce the Port's obligations under CEQA and require the Port to analyze all impacts and consider and adopt sufficient mitigation

The City Council Should:

1. Require Port to revise Final EIS/EIR to cure deficiencies
2. Require Port to analyze and adopt all feasible mitigation measures
3. Require Port to circulate Revised Final EIS/EIR and allow public comment
4. Require Port to reconsider Project at a public hearing given revised Final EIS/EIR
5. Provide specific instructions to City Attorney on deficiencies in EIR

Conclusion

- We can simultaneously accommodate growth and further a no net increase policy.
- Pier J is our opportunity to demonstrate this is possible.
- Due to the deficiencies in the Final EIS/EIR the Port was unable to approve the project w/full knowledge of the Project's impacts.
- We need to create a model for future Port projects!



5

FILED
WITH CITY COUNCIL

SEP 14 2004

CITY CLERK