Community Groups

Coalition For A Safe Environment
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March 22, 2010

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State of California
Department of Transportation (DOT)
Ronald Kosinski
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Re: Gerald Desmond Bridge Replacement Project
Draft Environmental Impact Report (DEIR)/Environmental Assessment (EA)
SCH No. 200210141
07-LA-710

Su: Request To Revise the DEIR to Address Deficiencies

The Coalition For A Safe Environment (CFASE) wishes to request the Port of Long Beach Board of Harbor Commissioners (POLB BOHC), City of Long Beach (COLB) and State of California Department of Transportation (DOT) revise the proposed DEIR to address deficiencies of the Draft EIR.

CSE-1 The Draft Environmental Impact Report (DEIR)/ Environmental Assessment (EA) for non-compliance and in violation of California Department of Transportation (Caltrans) in accordance with Section 6005 of the Safe, Accountable, Flexible, and Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) of 2005 (23 United States Code [U.S.C.] 327[a][2][A]), the National Environmental Policy Act of 1969 (NEPA) (42 U.S.C. 4321 *et seq.*); the Council on Environmental Quality (CEQ) *Guidance for Environmental Justice Under NEPA* (CEQ, 1997) Regulations implementing NEPA (40 *Code of Federal Regulations* [CFR] 1500-1508); Federal Highway Administration (FHWA) Environmental Regulations (23 CFR 771); and the California Environmental Quality Act of 1970 (CEQA) (Public Resources Code [PRC] 21000 *et seq.* as amended) , implementing guidelines (California Code of Regulations [CCR], Title 14, Section

15000 *et seq.*), the Federal Clean Air Act, Clean Water Act, Executive Order 12898, AB 32 Global Warming Act, Resource, Conservation & Recovery Act (RCRA), U.S. Civil Rights Act Title VI, the California Health and Safety Code. CSE-1

The Coalition For A Safe Environment is an Environmental Justice Community based non-profit organization with members in Long Beach, Wilmington, Carson, San Pedro and over 20 cities in California.

We find the proposed Gerald Desmond Bridge Replacement Project Draft Environmental Impact Report (DEIR)/Environmental Assessment (EA) to be unacceptable because it fails to support evaluation factors approval criteria, fails to adequately justify all of its purposes and objectives, fails to eliminate where feasible all negative impacts, fails to mitigate negative impacts where feasible to less than significant, fails to include all reasonable, feasible, cost effective and available project alternatives and mitigation measures. CSE-2

The following information and outlined points, concerns, references, examples, issues, recommendations and requests describe the inadequacies of the DEIR/EA:

The DEIR/EA intentionally mischaracterizes information such as in the following paragraph:

"ES 1.2 INTENDED USES AND AUTHORIZING ACTIONS

The Port and Caltrans are acting as the lead agencies for the proposed project in accordance with CEQA and NEPA, respectively. The Port and Caltrans have prepared a joint EIR/EA for the proposed project."

The truth and correct information is that the Port of Los Angeles (POLA) will also use the bridge:

a. Port of Los Angeles should have been included as a co-lead agency.
b. It is a fact that the Port of Los Angeles also uses the bridge.
c. It is possible that POLA usage may exceed Port of Long Beach usage.
d. The POLA is not being required to mitigate its usage if the bridge and its increased capacity.

CSE-3

Caltrans and the ports are required to include correct and complete information. CFASE requests that the Final EIR/EA include:

a. The Port of Los Angeles be included as a co-lead agency.
b. An analysis of POLA current usage of the bridge.
c. POLA mitigation of its negative impacts and cumulative impact increases.

CSE-4

The DEIR/EA intentionally mischaracterizes information such as in the following paragraph: CSE-5

"The bridge is forecast to carry a substantial amount (39 percent) of non-port, regional through traffic in 2030 (Iteris, 2009). Regional traffic will increase due to several major development projects that have been constructed in downtown Long Beach, such as the Pike at Rainbow Harbor and the proposed San Pedro Waterfront Development in the Port of Los Angeles (POLA)."

The truth and correct information is that the bridge was primarily built for two purposes:

a. Facilitate local resident workers driving to and from work at the port.
b. Non-port through traffic to Long Beach, San Pedro and Wilmington.

CSE-5

The bridge was never built to be a primary or major truck route for the ports, their tenants, the goods movement, importers and big box retailers. The ports, their tenants, the goods movement industry, importers and big box retailers are primarily responsible for the significant bridge infrastructure damage, premature degradation, deterioration and decrease in life time usage.

The DEIR/DEIS fails to state that the building of the bridge was paid for primarily by the public and not the ports, their tenants or goods movement industry or importers.

Caltrans and the port are required to include correct and complete information. CFASE requests that the Final EIR/EA include:

CSE-6

a. A correct description not the port interpretation of the bridges original purpose.
b. Clearly state that the public paid for the original bridge.
c. Clearly state that the public will pay for the bridge and not the ports tenants, goods movement industry or importers. ie. WalMarts, K-Marts, Home Depot's etc.

The DEIR/EA intentionally mischaracterizes information such as in the following paragraph:

"Deficiencies

The primary roadway deficiencies are the lack of outside shoulders and the steep approach grades.

Shoulders. The lack of shoulders often results in broken-down trucks or passenger vehicles being stuck in the outside lane, effectively blocking or severely restricting the entire traffic flow in that direction of travel until the incident is cleared. The lack of shoulders also makes it more difficult for emergency vehicles and tow vehicles to gain access to the incidents."

CSE-7

The truth and correct information is that:

a. Caltrans and the port failed to restrict or eliminate significant port truck usage of the public bridge.
b. Caltrans and the port have allowed old trucks to service the ports a public agency knowing that they present significant traffic problems and safety concerns.
c. Caltrans and the port failed to state that trucks are overwhelmingly the cause of breakdowns on the public bridge.

Caltrans and the port are required to include correct and complete information. CFASE requests that the Final EIR/EA include:

a. An acknowledgement and discussion that Caltrans and the ports failed to restrict or eliminate significant port truck usage of the public bridge.
b. An acknowledgement and discussion that Caltrans and the ports have allowed old trucks to service the ports a public agency knowing that they present significant traffic problems and safety concerns.
c. An acknowledgement and discussion that Caltrans and the ports failed to state that trucks are overwhelmingly the cause of breakdowns on the public bridge.

CSE-8

The DEIR/EA intentionally fails to disclose information to the public such as in the following paragraph:

"ES 1.7.3 SCE Transmission Line Relocation

Because the new bridge would be 200 ft (61 m) above the MHWL, in contrast to the existing bridge at 156 ft (47.4 m) above MHWL, the project also requires that the SCE high-voltage transmission towers and lines that cross the Cerritos Channel north of the bridge be raised."

The truth and correct information is that:

a. Who is going to pay for the raising, replacement and/or extension of the SCE high-voltage transmission towers and lines.
b. What is the cost of raising, replacement and/or extension of the SCE high-voltage transmission towers and lines.
c. If SCE pays for these the costs, the costs will be passed on to the public via higher ratepayer rates which is a negative socio-economic impact.
d. Clearly state that the port, their tenants, goods movement industry, importers and big box retailers. ie. WalMarts, K-Marts, Home Depot's etc. will not pay for this negative socio-economic impact.

CSE-9

Caltrans and the port are required to include correct and complete information. CFASE requests that the Final EIR/EA include:

a. Caltrans and the port identify who will pay for the raising, replacement and/or extension of the SCE high-voltage transmission towers and lines.
b. Caltrans and the port identify What is the cost of raising, replacement and/or extension of the SCE high-voltage transmission towers and lines.
c. Caltrans and the port state that if SCE pays for these the costs, the costs will be passed on to the public via higher ratepayer rates which is a negative socio-economic impact.
e. Caltrans and the port clearly state that the ports, their tenants, goods movement industry, importers and big box retailers. ie. WalMarts, K-Marts, Home Depot's etc. will not pay for this negative socio-economic impact.

CSE-10

The DEIR/EA intentionally fails to disclose information to the public such as in the following paragraph:

"ES 1.8.1 No Action Alternative

CSE-11

Under the No Action Alternative, the Gerald Desmond Bridge would not be replaced or rehabilitated. It would remain in its existing deteriorated condition until a retrofit schedule is established. It would remain with insufficient roadway capacity to handle projected car and truck traffic volumes, and inadequate channel clearance for safe passage of some existing and new-generation container ships."

The truth and correct information is that:

a. Caltrans and the port intentionally have failed to schedule the bridge for rehabilitation.
b. Caltrans and the port intentionally have failed to secure funding such as stimulus funds for the bridge rehabilitation.
c. Bridge deterioration would slow down if Caltrans and the port restricted and eliminated significant port truck usage of the public bridge.
d. Number of breakdowns would slow down if Caltrans and the port restricted and eliminated significant port truck usage of the public bridge.
e. The bridge height does not have to be raised if the port does not allow large ships to use the inner harbor.

CSE-11

Caltrans and the port are required to include correct and complete information. CFASE requests that the Final EIR/EA include the information stated in a. – e.

The DEIR/EA intentionally fails to disclose information to the public such as in the following paragraph:

"ES 1.8.4 Bridge Rehabilitation Alternative

"...Lacking a detailed seismic performance study, it is assumed that the casings would be placed along the full height of the columns...."

CSE-12

The truth and correct information is that:

a. Caltrans and the port have had since 2004 to conduct a detailed seismic performance study and failed to do so.
b. Caltrans and the port have had since 2004 to seek expert professional engineering opinion.

Caltrans and the port are required to include correct and complete information. CFASE requests that the Final EIR include:

a. Caltrans and the port contract to conduct a detailed seismic performance study.
b. Caltrans and the port seek expert professional engineering opinion.
c. Caltrans and the port delay the DEIR/EA and supplement the DEIR/EA until all necessary studies are included.

CSE-13

The DEIR/EA intentionally mischaracterizes information such as in the following paragraph:

"Year 2030 forecasted traffic volumes without the project are approximately 124,670 total trips per day (including 54,360 trucks or 43.6 percent of the total traffic) on the Gerald Desmond Bridge (Iteris, 2009). Table 1-1 summarizes the daily traffic and truck percentages over the project planning years."

CSE-14

The truth and correct information is that:

a. Caltrans and the port failed to include comparison forecast data of other options such as prohibiting truck usage of the bridge which would significantly decrease bridge traffic.
b. Caltrans and the port failed to include comparison data of other options such as limiting the number of trucks using of the bridge.
c. Caltrans and the port failed to include comparison data of other options such as diverting containers being placed on trucks to containers being placed on rail and using the Alameda Corridor, which is currently at approximately 30% capacity.
d. Caltrans and the port failed to include comparison data of other options such as the port building an alternative cargo and container transportation systems such as an Zero Emissions Electric MagLev Train System such as the American MagLev Technology, Inc. proposed system which would significantly decrease and/or eliminate the usage of the bridge.

CSE-14

Caltrans and the port are required to include correct and complete information. CFASE requests that the Final EIR/EA include:

a. Caltrans and the port include comparison forecast data of other options.
b. Caltrans and the port disclose that American MagLev Technology, Inc. has proposed building a MagLev Train System at the Port of Long Beach that would eliminate a significant number of trucks.
c. Caltrans and the port disclose that the Port of Long Beach has refused to grant a 20' right-of-way to build a demonstration MagLev project at no cost to the public.
d. Caltrans and the port disclose that a Port of Long Beach terminal operator has volunteered to place 400 containers a day on the Maglev Train which would significantly reduce the number of trucks using the bridge.

CSE-15

The DEIR/EA intentionally fails to disclose information to the public such as in the following paragraph:

"1.6 ALTERNATIVES

The June 2004 Draft EIR/EA analyzed two alignment alternatives (Build Alternatives) and a No Action Alternative. Like the previous document, this revised Draft EIR/EA fully analyzes the North-side Alignment Alternative (identified as the preferred alternative [see Section 1.8.1.1]), the South-side Alignment Alternative, and the No Action Alternative; it adds a fourth alternative, Bridge Rehabilitation, which was not considered in the previous document.

The truth and correct information is that:

a. Caltrans and the port did not consider or disclose all alternatives that are known to them such as building a new bridge that prohibits truck usage, therefore no environmental, public health and public safety impacts.
b. Caltrans and the port did not consider or disclose building a MagLev Train System at the Port of Long Beach would eliminate or minimize truck usage of the new bridge.
c. Caltrans and the port did not disclose American MagLev Technology, Inc. has proposed building a MagLev Train System at the Port of Long Beach that would eliminate all or a significant number of trucks from using the bridge.

CSE-16

CSE-17

Caltrans and the port are required to include correct and complete information. CFASE requests that the Final EIR/EA include:

a. An assessment of all alternatives that are known to them such as building a new bridge that prohibits truck usage, therefore no environmental, public health and public safety impacts.
b. An assessment and demonstration a MagLev Train System at the Port of Long Beach that would eliminate or minimize truck usage of the new bridge.
c. An assessment of a MagLev Train System at the Port of Long Beach that would eliminate or minimize truck usage of the new bridge.
d. Caltrans and the port disclose that American MagLev Technology, Inc. has submitted a proposal to the Port of Long Beach for building a MagLev Train System at the Port of Long Beach that would eliminate all or a significant number of trucks from using the bridge.

CSE-18

The DEIR/EA intentionally fails to disclose information to the public such as in the following paragraph:

"1.7.1 Toll-Operation Alternative

A tolling alternative was considered because the Port is looking at various funding sources (including federal, state, and local sources) to help pay for the cost of the new bridge. This alternative was considered given that tolling is used on many northern California bridges as a primary revenue source; therefore, POLB and POLA jointly sponsored a Terminal Island Traffic and Toll Revenue Study to assess the following options:"

The truth and correct information is that:

a. Toll fees are regressive and will have a disproportionate impact on low income drivers and Environmental Justice Communities by requiring that they pay a higher percentage of monies towards the construction of the bridge.
b. Trucks are 5-10 times longer than passenger vehicles and therefore should pay 5-10 times the toll fee, yet they will pay the same toll as a passenger vehicle.
c. The public is being forced to pay and subsidize the majority of construction costs when the primary beneficiaries will be the ports, their tenants, goods movement industry, importers and big box retailers. ie. WalMarts, K-Marts, Home Depot's etc. who will not pay for this negative socio-economic impact.
d. The bridge was never built to be a primary or major truck route for the ports, their tenants, the goods movement industry, importers and big box retailers.
e. The ports, their tenants, goods movement industry, importers and big box retailers are primarily responsible for the significant bridge infrastructure damage, premature degradation, deterioration and decrease in life time usage.

CSE-19

Caltrans and the port are required to include correct and complete information. CFASE requests that the Final EIR/EA include:

a. An analysis f the regressive nature and disproportionate impact of tool fees on the public.
b. A description of truck lengths and their impacts by not paying fair and equal toll fees as the public.

c. A discussion and analysis that the ports, their tenants, goods movement industry, importers and big box retailers. ie. WalMarts, K-Marts, Home Depot's etc. will not pay for this negative socio-economic impact.
d. A discussion as to the original intent and usage of the bridge and how Caltrans and the ports have illegally allowed the private profit making port tenants, goods movement industry, importers and big box retailers to commandeer and take over a public bridge over time.
e. A discussion and analysis of the negative impacts to the bridge caused by port tenants, goods movement industry, importers and big box retailers

CSE-19

The DEIR/EA discloses significant information to the public such as in the following paragraph:

"2.1.2.3 Environmental Consequences

...The *Port and Model Elasticity Study* (Leachman & Associates, 2005), which was prepared for SCAG, and supplemental analyses conducted by SCAG indicate that a container fee of under $200 per forty-foot equivalent unit (FEU), combined with transportation congestion relief projects, would not alter shipper supply chain logistics. Another study, *Cargo on the Move through California* (Energy and Environmental Research Associates, 2006) prepared for the Natural Resources Defense Council (NRDC) concluded that a $30 container fee for capital improvements would not result in the diversion of cargo."

However it is buried in the middle of the document text, not highlighted nor the findings adopted as a course of action in the EIR/EA:

a. The issue as to who will pay for the cost of the bridge is the most important and significant negative public socio-economic aspect of the project.
f. A principal public governmental agency and an independent private third party non-profit organization conducted economic studies which concluded that the ports tenants, the goods movement industry, importers and big box retailers are fully capable of paying for the bridge construction via a container fee with less than significant impacts.
b. Caltrans and the port failed to select and recommend a container fee as the best and primary method to pay for the bridge.
c. Caltrans and the port have obfuscated their responsibility to represent the public's best interests and have in fact sold out the public to private business interests and lobbying to allow them to make higher profits at the public expense.

CSE-20

Caltrans and the port are required to include correct and complete information. CFASE requests that the Final EIR/EA include:

a. The recommendation that a container fee be the principle means of financing the bridge construction.
b. An increased discussion and analysis of the principal public governmental agency and an independent private third party non-profit organization economic studies.
d. An explanation why Caltrans and the port failed to recommend a container fee best and primary method to pay for the bridge.
c. Caltrans and the port acknowledge that their primary responsibility as a public agency is to represent the public's best interests.

CSE-21

CSE-22

The DEIR/EA intentionally mischaracterizes information such as in the following paragraph:

"2.1.2.3 Environmental Consequences

...For this reason, while the potential for growth inducement in cargo movement is identified as a possible impact of the roadway improvements associated with the bridge replacement project, the effects are too speculative to reliably evaluate and essentially remain unknown."

The truth and correct information is that the bridge will be a growth inducement and will have a significant negative impact:

a. The effects are not too speculative to reliably evaluate, there is an abundant of port data that will clearly disclose that there has always been increased growth when there have been transportation infrastructure improvements.
b. If Caltrans and the port were not capable of reliably evaluating this issue they could have easily hired a consultant firm to conduct an assessment as they have always done in the past when they want to justify items they or their tenants, goods movement industry, importers and big box retailers want.

CSE-23

Caltrans and the port are required to include correct and complete information. CFASE requests that the Final EIR/EA include:

a. An assessment of the potential for growth inducement in cargo movement is identified as a possible impact of the roadway improvements associated with the bridge replacement project.
b. An assessment of additional negative environmental, public health, public safety and socio-economic impacts.
c. The inclusion of additional mitigation to address the additional negative environmental, public health, public safety and socio-economic impacts.

CSE-24

The DEIR/EA discloses significant information to the public such as in the following paragraph:

"2.1.2.4 Avoidance, Minimization and/or Mitigation Measures

No measures are required."

The truth and correct information is that there are significant negative impacts that were not adequately disclosed, assessed, avoided, minimized or mitigated:

a. This submitted public comment identifies numerous deficiencies in the DEIR/EA.
b. Caltrans and the port intentionally refused to recognize these deficiencies although known to them and/or referenced by them in the DEIR/EA.

CSE-25

Caltrans and the port are required to include correct and complete information. CFASE requests that the Final EIR/EA include:

a. Include omitted deficiencies identified in public comments.
b. Include recommended and requested project alternatives and mitigation measures.

The DEIR/EA failed to disclose all of the significant information to the public such as in the following paragraph:

"2.1.3.1.2 Affected Environment Study Area

The EIR/EA was reviewed to identify potentially adverse effects of the project on the adjacent communities within the project area."

The truth and correct information is that all potentially adverse effects of the project on the adjacent communities within the project area were not identified:

a. Caltrans and the port arbitrarily determined what areas were impacted when in fact entire communities and cities will be impacted.
b. Caltrans and the port failed to include Transportation Corridor Communities and Warehouse Distribution Center Communities who will be impacted by the increased truck traffic and increased ship emissions from larger ships.

CSE-26

Caltrans and the port are required to include correct and complete information. CFASE requests that the Final EIR/EA include:

1. The EIR/EA include all of Wilmington, Carson, North San Pedro and all of the City of Long Beach Transportation Corridor Communities and Warehouse Distribution Center Communities
2. The EIR/EA include all Transportation Corridor Communities and Warehouse Distribution Center Communities within a fifty (50) mile radius Transportation Corridor Communities and Warehouse Distribution Center Communities.

CSE-27

The DEIR/EA failed to disclose all of the significant information to the public such as in the following paragraph:

"2.1.3.3.4 Avoidance, Minimization and/or Mitigation Measures

All measures summarized above and as discussed in Sections 2.1.5 (Traffic and Circulation) and Section 2.2.5 (Air Quality) would be implemented."

The truth and correct information is that all potential project alternatives, mitigation measures to avoid, minimize or eliminate impacts to Environmental Justice Communities and protected classes were not identified:

Caltrans and the port are required to include correct and complete information. CFASE requests that the Final EIR/EA include:

a. Caltrans and the port do not have an Environmental Justice Advocate or department to advise them on Environmental Justice issues.
b. Caltrans and the port never hired an Environmental Justice Consulting firm or Environmental Justice Organization to advise them on Environmental Justice issues.
c. Caltrans and the port failed to include the cumulative impacts identified by EJ Communities in the past into the EIR/EA.
d. Caltrans and the port failed to consider zero emitting and near zero emitting goods movement transportation technologies, pollution capture or control technologies.
e. Caltrans and the port never hired a consulting firm to research Environmental Justice Community recommended alternative technologies to mitigate impacts.

CSE-28

CSE-28

f. Caltrans and the port did not consider banning or limiting trucks on the bridge.
g. Caltrans and the port did not consider allowing only Electric Trucks and Hydrogen Fuel Cell Battery Trucks on the bridge.
h. Caltrans and the port did not consider allowing only trucks which have fuel combustion efficiency equipment and high efficiency pollution control devices.
i. Caltrans and the port did not consider requiring the Advanced Maritime Emissions Control System (AMECS) to be used on the larger ships that would be entering the inner harbor terminals.

CSE-29

Caltrans and the port are required to include correct and complete information. CFASE requests that the Final EIR/EA include:

a. Caltrans and the port hire an Environmental Justice Advocate and establish an EJ Department to advise them on Environmental Justice issues.
b. The Port of Long Beach establish a Port Community Advisory Committee equal to the Port of Los Angeles.
c. The DEIR/EA include EJ Community identified cumulative impacts that have in the past been presented to the port into the EIR/EA and in this public comment document.
d. The DEIR/EA include a recommendation to use the alternative transportation MagLev Train, AMECS System, Electric trucks, Hydrogen Fuel Cell Battery Trucks and fuel combustion efficiency equipment and high efficiency pollution control devices.

CSE-30

The DEIR/EA failed to disclose all of the significant public health impacts information to the public which would be identified in a Health Impact Assessment and not part of a Health Risk Assessment such as:

The DEIR Health Risk Assessment is not complete and accurate because it did not include:

A. A review of all public health impacts:

1. Respiratory Health Diseases.
2. Cardio-Pulmonary Diseases.
3. Neurological Diseases.
4. Child Learning Disabilities.
5. Physiological Development Disorders.
6. Blood Diseases (Leukemia, Lymphoma, Myeloma, Anemia).
7. Diabetes.
8. Autoimmune Diseases (Lupus, Fibromyalgia).
9. Child Obesity.
10. Endocrine Disruptors.
11. Mental Health. (Stress, Anger, Fear, Depression)
12. Temporary & Permanent Disabilities
13. Death

B. A comprehensive door-to-door Public Health Survey to establish a Public Health Baseline.
C. An accurate Sensitive Receptor Impact Zone Study.
D. Wind Pattern Aerosol Dispersion Meteorological Study.

Caltrans and the port are required to include correct and complete information. CFASE requests that the Final EIR/EA include:

a. Caltrans and the port include a Health Impact Assessment in the EIR/EA.
b. Caltrans and the port include a Public Health Survey in the EIR/EA
c. Caltrans and the port include a Public Health Baseline in the EIR/EA.
d. Caltrans and the port include a more comprehensive Sensitive Receptor Impact Zone Study.
e. Caltrans and the port include a Wind Pattern Aerosol Dispersion Meteorological Study.

CSE-31

The DEIR/EA failed to include appropriate mitigation to address all the public health impacts described in # 15 above.

Caltrans and the port are required to include correct and complete information. CFASE requests that the Final EIR/EA include:

a… Mitigation to reduce all public health impacts to less than significant.
b…Caltrans and the ports establish a Public Health Mitigation Trust Fund to pay for all Public Health Impacts based on a container fee of $ 10.00 per TEU that passes under the bridge into the inner harbor.

CSE-32

The Coalition For A Safe Environment Mission Statement is - To protect, promote, preserve and restore our Mother Earth's delicate ecology, environment, natural resources and wildlife. To attain Environmental Justice in international trade marine ports, goods movement transportation corridors, petroleum and energy industry communities.

Respectfully Submitted,

Jesse N. Marquez

Jesse N. Marquez
Executive Director

And As,

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City of Los Angeles Resident
Member of the Coalition For A Safe Environment
Member of the Sierra Club
Resident & Member Of The Public Adversely Impacted By The Projects Environmental, Public Health, Public Safety and Socio-Economic Negative Impacts

and

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City of Long Beach Resident
Member of the Long Beach Coalition For A Safe Environment
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NATURAL RESOURCES DEFENSE COUNCIL

March 22, 2010

Via Electronic Mail

Rick Cameron
Port of Long Beach
Planning Division
925 Harbor Plaza
Long Beach, CA 90801

Re: Gerald Desmond Bridge Replacement—Revised Draft EIR

Dear Mr. Cameron:

On behalf of the Natural Resources Defense Council, I write to provide comments on the Revised Gerald Desmond Bridge Replacement Draft Environmental Impact Report (DEIR)/Draft Environmental Assessment (EA). NRDC appreciates the opportunity to provide comments on the DEIR/EA. After careful review, we have concluded that it fails in many respects to comply with the requirements of the California Environmental Quality Act ("CEQA") and the National Environmental Policy Act ("NEPA"). As described below, the DEIR/EA is inadequate because it fails to carry out CEQA and NEPA mandates. It does not accurately identify or analyze the significant environmental impacts that would result from the implementation of this proposed massive freight expansion project, and it fails to provide sufficient mitigation for such impacts as it does identify. Moreover, it fails to consider alternatives that effectively protect the environment while providing good, well-paying, sustainable jobs for the region's workforce.

NRDC-1

Given the inevitable regional and acute local impacts of the proposed project, it is especially important that the DEIR/EA contain the necessary analysis to enable both the decision makers and the public to understand the significant environmental repercussions of the Project. Moreover, because unlike other Port projects, this project will be funded by taxpayers to the tune of

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NRDC-1

approximately $1.125 billion dollars,[1] it is especially critical that decision makers ensure a careful and lawful analysis of the environmental impacts from the proposed project. Additionally, the DEIR/EA must compare the proposed project to other possible alternatives for redeveloping the Port. Instead, the DEIR/EA effectively disguises the true impacts of the project by omitting crucial information regarding what the project will actually do, underestimating many environmental impacts and ignoring others altogether.

As a result of the DEIR/EA inadequacies, there can be no meaningful public review of the project. CEQA and NEPA accordingly require the Port and California Department of Transportation ("CALTRANS") to prepare and circulate a revised DEIR and appropriate environmental review under NEPA to permit a complete understanding of the environmental issues at stake.

I. The Environmental Review is Fundamentally Flawed Because of the Decision to Use an Environmental Assessment as Opposed to an Environmental Impact Statement Under NEPA.

NRDC-2

NEPA requires federal agencies to prepare an Environmental Impact Statement ("EIS") for all major Federal actions that "may significantly affect the quality of the human environment." 42 U.S.C. § 4332(2)(C); *Robertson v. Methow Valley Citizens Council,* 490 U.S. 332, 336 (1989). As the Ninth Circuit has repeatedly held, "An agency must prepare an EIS if substantial questions are raised as to whether a project ... may cause significant degradation of some human environmental factor." *Center for Biological Diversity v. National Highway Traffic Safety*, 538 F.3d 1172, 1219 (9th Cir. 2008) (citing *Idaho Sporting Cong. v. Thomas,* 137 F.3d 1146, 1149 (9th Cir.1998)). A party challenging an agency's failure to prepare an EIS, "need not show that significant effects will in fact occur, but only that there are 'substantial questions whether a project may have a significant effect.'" *Id.* (internal citations and quotation marks omitted).

An impact may be significant by virtue of either its context or its intensity. 40 C.F.R. § 1508.27. In assessing the intensity, or severity, of an impact, a responsible official should consider up to ten factors, including: the cumulative impacts of the exempted actions, whether the impacts of the actions to be exempted are "highly controversial," "the degree to which the possible effects on the environment are highly uncertain or involve unique or unknown risks," and the "[u]nique characteristics of the geographic area" where the action is to take place. 40 C.F.R. § 1508.27(b). The presence of any one of these factors may be sufficient to require preparation of an EIS. *Ocean Advocates v. U.S. Army Corps of Engineers*, 402 F.3d 846, 865 (9th Cir. 2005)(citing *Nat'l Parks & Conservation Ass'n v. Babbitt*, 241 F.3d 722, 731 (9th Cir.2001)). Furthermore, the preparation of an EIS is mandatory "where uncertainty may be resolved by further collection of data, or where the collection of such data may prevent

[1] SCAG, Draft 2008 RTP Amendment #3, (February 17, 2010), *available at http://www.scag.ca.gov/rtp2008/pdfs/amendrtp/amend03_2008RTP_PD.pdf.*

"speculation on potential . . . effects." *National Parks Conser. Assn v. Babbitt,* 241 F.3d 722, 737 (9th Cir. 2001). *See also* 40 C.F.R. § 1508.27(b)(5) (mandating preparation of an EIS to resolve areas of uncertainty about environmental impacts).

We find it remarkable that the CALTRANS and the Port of Long Beach have decided that the impacts from a $1.125 billion bridge replacement/expansion project in one of the most polluted parts of the most polluted air sheds in nation only requires an EA for compliance with NEPA. The current document is peppered with impacts that are deemed significant, so the use of EA is patently illegal.[2] Moreover, this project is highly controversial for many reasons. First, it provides more than a billion dollars to subsidize a project that is needed because of damage the freight industry has inflicted on this bridge.[3] Second, the project is controversial because there was a policy decision to remove tolling as an option for project despite prior commitments to truly analyze this type of strategy in the environmental document. Based on this and other considerations, prior to moving forward, CALTRANS must complete an EIS in compliance with the NEPA.

NRDC-2

II. The Environmental Document Uses an Unduly Narrow Scope of Impacts for Its Analysis.

Study after study shows that the Port of Long Beach is one of the major contributors to the egregious traffic congestion on the 710 freeway. Traffic is surely one of the issues that most concern the Port's local and regional neighbors, but there are other impacts, including air quality that suffer from the small study area. It is thus disappointing that the DEIR/EA has chosen to take a view of impacts so narrow as to make accurate analysis impossible. Even as other documents make clear that the Port has region-wide traffic and air quality impacts, the DEIR/EA limits its analysis to a relatively tiny area. At the same time, the only mitigation measures the DEIR/EA considers are road improvements, and it fails even to accurately describe, or even identify, those improvements. In short, the DEIR/EA's treatment of traffic and air quality issues is far less than its community and their decision makers deserve.[4]

NRDC-3

i) The DEIR/EA Uses a Study Area That Inaccurately Minimizes the Project's Severe Traffic Impacts.

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[2] DEIR/EA, at ES-13-19.
[3] Agenda of the Special Meeting of the Los Angeles Board of Harbor Commissioners and the Long Beach Board of Harbor Commissioners, ("However, gas taxes do not capture the full nexus as heavy trucks have a much greater impact on pavement wear and capacity. Trucks utilize approximately three times as much capacity as automobiles.") (Jan. 14, 2008) [Attached as Exhibit A].
[4] *Laurel Heights Improvement Association, Inc. v. Regents of the University of California* (1988) 47 Cal. 3d 376, 494.

NRDC-3

The study area chosen for the DEIR/EA's traffic analysis is unaccountably small, considering the study area remains so close to the actual bridge and ignores the regional impacts this bridge has on the region. The DEIR/EA provides no explanation, let alone substantial evidence, supporting its apparently arbitrary exclusion of any part of the I-710 and many other highways in the project vicinity.

According to one recent important freeway study, "large numbers of trucks that use the I-710 to travel between the Ports and rail freight yards located near Interstate 5 (I-5), and to warehousing and distribution points scattered *throughout the Southern California urban area*"[5] (emphasis added). This study, which focused on the same Port-related congestion problems at issue here, considered a study area extending through Commerce to SR 60.

More specifically, the Port of Los Angeles Baseline Transportation Study prepared by Meyer, Mohaddes Associates, Inc. ("MMA") illustrates the projected and current volume of truck trips that is directly related to the combined operations of both Ports' (the Port of Los Angeles and Port of Long Beach). MMA found that the I-710 carries over 25,000 port truck trips per day for travel south of the 405. Truck travel further north on I-710 carries 20,000 port trucks north of I-405, 15,000 north of Route 91, and 11,600 north of I-105. MMA projects that in a worst-case scenario, by 2025 unmitigated "port-related truck volume (for both ports combined) is projected to reach 60,000 on I-710 just north of the Ports, compared to 25,300 currently." The Port's own documents demonstrate the Port of Long Beach's share of traffic on these segments, which are outside the DEIR/EA's arbitrary study area, is substantial in its own right.[6]

By excluding large portions of heavily-impacted freeways, the DEIR/EA severely understates the Project's traffic impacts. The California Supreme Court has emphasized that "an EIR may not ignore the regional impacts of a project approval, including those impacts that occur outside of its borders; on the contrary, a regional perspective is required."[7] An EIR must analyze environmental impacts over the entire area where one might reasonably expect these impacts to occur.[8] This principle stems directly from the requirement that

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[5] Los Angeles County Metropolitan Transportation Authority, "I-710 Major Corridor Study" at S-9. [*See* "Attached Literature" Exhibit B].
[6] *See* Port of Long Beach, "2006 Emissions Inventory." Section 6 Heavy Duty Vehicles. (2008) [Attached as Exhibit C.]. The more recent emissions inventory for 2007 and 2008 do not indicate any diversion from these 2006 assumptions.
[7] *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal. 3d 553, 575.
[8] *See Kings County Farm Bureau*, 221 Cal. App. 3d at 721-23.

an EIR analyze all significant or potentially significant environmental impacts.[9] An EIR cannot analyze all such environmental impacts if its study area does not include the geographical area over which these impacts will occur.

Traffic from the project, together with traffic from the cumulative development anticipated in the region, would inundate area freeways. It would also contribute to the project's air quality and noise impacts. Yet this DEIR/EA leaves the public and decision-makers in the dark as to the Project's actual traffic impacts because it arbitrarily omits critical freeway segments that are related to this freight expansion project. The DEIR/EA has clearly failed to meet CEQA's mandate, and must be revised and re-circulated if it is to support approval of this Project.

NRDC-3

ii) The DEIR/EA Ignores Several Feasible Measures That Would Mitigate the Project's Traffic Impacts.

Even with its truncated study area, the DEIR/EA still finds that Project-related traffic will contribute to significant impacts. Faced with these substantial traffic impacts, the DEIR/EA proceeds to shirk its duty to identify measures that would mitigate or avoid the Project's traffic impacts. The EIR's duty in this regard is straightforward: it "shall describe feasible measures which could minimize significant adverse impacts."[10] The DEIR/EA flatly declines to follow this mandate, and so fails at its most essential duty– minimizing the environmental impacts of the Project.[11]

CEQA's core substantive component—with which every public agency must comply—requires that the Port "*shall* mitigate or avoid the significant effects . . . of projects that it carries out or approves *whenever* it is feasible to do so"[12] (emphasis added). Despite this clear mandate, the DEIR/EA ignores several feasible mitigation measures that could substantially reduce the Project's traffic impacts.

First, as a prior environmental review document admits, the Port is not well served by public transit.[13] Improving this situation by increasing transit service

NRDC-4

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[9] *See* Pub. Res. Code §§ 21061, 21068; *see also Citizens to Preserve the Ojai v. County of Ventura* (1986) 176 Cal. App. 3d 421, 432-33 (finding "an absolute failure to comply [with CEQA]" where information relevant to project's impacts was omitted).
[10] CEQA Guidelines § 15126.3(a)(1); *see also Woodward Park Homeowners Ass'n, Inc. v. City of Fresno* (2007) 150 Cal. App. 4th 683, 724 ("The EIR also must describe feasible measures that could minimize significant impacts.").
[11] *See, e.g., Save Round Valley Alliance v. County of Inyo* (2007) 157 Cal. App. 4th 1437, 1446 ("The foremost principle under CEQA is . . . to afford the fullest possible protection to the environment . . .") (internal quotation marks omitted).
[12] Pub. Res. Code § 21002.1(b).
[13] Middle Harbor Redevelopment Project, DEIR/EIS, at 3.5-1, *available at* http://www.polb.com/environment/docs.asp.

to the Port would obviously reduce traffic impacts. The DEIR/EA contains nothing to suggest that such improvements would be infeasible. Given the large number of Port and freight-related employees, it is likely that efficient, effective transit routes and schedules could be devised. These transit improvements would, moreover, serve as effective mitigation measures for the Port's air quality and greenhouse gas impacts, and must be considered in those contexts as well. Implementing such transit improvements would likely require further study of where Port workers live; as discussed below, such a study is already necessary for accurate analysis of the Project's population and housing impacts.

Another potential traffic mitigation measure would focus on improving the efficiency of truck usage at the Port. Currently, the port drayage market is structured to maintain a truck to driver ratio of close to 1:1. A system, like the one currently in place at the Port, that relies on individual drivers to own and operate their own trucks, inevitably contributes excessive traffic to the roadway system, as drivers must bring their trucks to and from work. If, however, trucks are owned by the trucking companies according to an asset-based, then trucks could be slip-seated. That is, a trucking company could dispatch a single truck on multiple shifts to be driven by different drivers. This would reduce the number of trucks needed to move the same number of containers on any given day. Additionally, with trucking companies owning their trucks and providing parking while trucks are out of use, this system would ensure that trucks were used for their real purpose—moving goods—and would reduce the amount of time trucks spend on the region's freeways–and causing congestion—solely for the purpose of getting a driver to or from work. By limiting the number of commute-only truck trips, the asset-based model and slip-seating could substantially reduce the Project's traffic impacts. The Port could implement this system simply by creating a concession system that requires all trucks accessing the Port to be owned by an asset-based trucking company. This system would, moreover, diminish idling time, substantially improving trucks' emissions performance and reducing the Project's air quality and greenhouse gas impacts. We see no reason it is not feasible.

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III. The Port Should Provide Funding to Provide Clinics and Other Sensitive Site Mitigation to Reduce the Impacts from Port Pollution.

To avoid injury to public health, the project must mitigate its impacts through the reduction of emissions to as near zero as possible, and this comment letter offers numerous measures that should be used in pursuing that goal. Given that increases in pollution are likely even after these measures are implemented and given the lasting effects of baseline pollution, further mitigation is needed to address the extraordinary impact of port related emissions on the respiratory health of communities near the ports and port-related goods movement corridors. The impact of this pollution is perhaps most demonstrable in children

NRDC-5

in the harbor area. According to the 2003 National Health Interview Survey, an estimated 9 million (12.5%) children under the age of eighteen in the United States have been diagnosed with asthma at some time in their lives. Data from the 2005 LA County Health Survey shows that 13.7% (381,000) of children 0-17 years old in LA County have been diagnosed with asthma. Research conducted by the Long Beach Health District demonstrates that 19.8% (28,000) of Long Beach children have been diagnosed with asthma.

Many residents of goods movement communities and workers at the ports have already suffered irreparable long term damage to their lungs – as noted earlier, diminished lung function in children generates lifelong health effects. The ports should fund the establishment of one or several medical facilities in Long Beach dedicated to the respiratory and general health of the people most affected by port emissions – those living in the neighborhoods closest to the port and along the I-710 corridor, and workers at the port.

Many of the goods movement adjacent neighborhoods in Long Beach and along the I-710 and other routes are heavily populated with low and moderate income families unable to afford health insurance. Similarly, while some workers at the port earn relatively high wages with good benefits, thousands of others earn low wages with few or no benefits. For example, the most recent academic study of port truck drivers – a class of workers severely impacted by diesel emissions – concluded that the drivers earn on average $29,000 per year, and that 90% of them lack health insurance.

Thus, funding for clinics should be sufficient not only to construct appropriate facilities, but also include adequate support for operations so that two classes of patients – residents of the identified goods movement adjacent communities and port workers can access the facility without out of pocket cost regardless of insurance status.

As the Revised DEIR/EA mentions, an appropriate way to provide this type of mitigation is to augment the community mitigation programs that were developed as part of the Middle Harbor Redevelopment Project. CEQA defines "feasible" as "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors."[14] Since the Port demonstrated that this type of sensitive site mitigation is feasible within the contours of CEQA, it should be included as part of this project. Moreover, the exorbitant costs of this projec (approximately $1.125 billion) allows for substantial expenditures to improve the health and welfare of the communities impacts from port operations, which the DEIR/EA finds cumulatively significant. Given that the Middle Harbo Redevelopment Project cost approximately $750 million, and this project is approximately 50% greater in costs, the Port should at a minimum increase the distributions to $7.5 million for each of the two community mitigation funds.

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[14] Cal. Pub. Res. Code § 21061.1.

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This additional $15 million (or approximately 1.3% of total project costs) will go a long way to remedy the impacts the Port is having on communities in the harbor area.

IV. The Greenhouse Gas Analysis and Mitigation Measures Fail to Comply with CEQA and NEPA.

As mentioned above, the artificially narrow scope of the study area also diminishes the analysis of greenhouse gasses that has been completed for this project. While NRDC agrees that regional and local planning are crucial to reductions in greenhouse gas emissions, we disagree that there are no project-specific mitigation measures that may be used to mitigate individual projects. Both the California Air Pollution Control Officers Association ("CAPCOA") and the California Attorney General have released sources that describe potential strategies to reduce impacts.[15] The Port and CALTRANS must analyzed these project-specific mitigation measures for compliance with CEQA and NEPA.

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The DEIR/EA cannot rely on its yet-to-be developed greenhouse gas mitigation programs to deflect from its duties to mitigate the significant impacts from its operations. At a minimum, the Port needs to release its greenhouse gas plan for the public and decision-makers to have any confidence that it is effectively tackling greenhouse gas emissions in the harbor area.

Finally, hidden deep in the document, the DEIR/EA notes that it will in fact be providing some mitigation for greenhouse gas emissions, despite its assertion that mitigation of GHG emissions is infeasible. The DEIR/EA states the following—

> *To partially offset the project-related significant and unavoidable cumulative increase in GHG emissions within the project area, the Port will require the project to contribute $647,000 to the Port's Greenhouse Gas Emissions Reduction Program.*[16]

The DEIR/EA provides no rationale why $647,000 is chosen, nor how much of the increase in greenhouse gas emissions this will serve to mitigate. If the Port intends to contribute to its greenhouse gas emissions mitigation fund, it needs to ensure that the mitigation is feasible within the constructs of CEQA and that it is rationally tied to the projects impacts. Here, simply choosing an arbitrarily low number fails to comply with CEQA and NEPA.

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[15] CA AG's ghg mitigation measures for CEQA projects, *available at* http://ag.ca.gov/globalwarming/pdf/GW_mitigation_measures.pdf; California Air Pollution Control Officer's Association White Paper on CEQA and Climate Change: http://www.capcoa.org/CEQA/CAPCOA%20White%20Paper.pdf.

[16] DEIR/EA, at 3-6.

V. The Revised DEIR/EA Does Not Adequately Discuss Alternatives to the Proposed Project.

The analysis of alternatives to the proposed project lies at "[t]he core of an EIR."[17] In this analysis, the EIR must consider a reasonable range of alternatives that would avoid or substantially lessen this impact while feasibly attaining most of the Project's basic objectives.[18] If the EIR refuses to consider a reasonable range of alternatives or fails to support its analysis with substantial evidence, the purposes of CEQA are subverted and the EIR is legally inadequate.[19] If a feasible alternative exists that will meet the project's objectives while reducing or avoiding its significant environmental impacts, the project may not be approved.[20]

An adequate alternatives analysis is a crucial component of complying with CEQA/NEPA. The CEQ has labeled the alternatives requirement as the "heart" of the EIS.[21] Further, NEPA contains a clear mandate that the alternatives must be explored in depth and with the same level of detail as the proposed action.[22] The analysis of the alternatives throughout the document fails in this respect. As articulated in detail above, the incorrect project description inhibits an accurate assessment of the alternatives to this expansion project by artificially limiting the number of alternatives that could fulfill this flawed objective.

The proposed project would have significant and unavoidable air quality and traffic impacts. The Project fails to tackle the project's largest sources of greenhouse gases: the transport and movement of goods and people. CEQA requires the DEIR/EA to consider alternatives that directly address these impacts.[23]

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[17] *Citizens of Goleta Valley II*, 52 Cal. 3d at 564; *see also* Pub. Res. Code § 21002.1(a) ("The purpose of an environmental impact report is . . . . to identify alternatives to the project . . . .").
[18] *See* § 21100(b)(4); CEQA Guidelines § 15126.6(a).
[19] *San Joaquin Raptor*, 27 Cal. App. 4th at 735-38; *Kings County Farm Bureau*, 221 Cal. App. 3d at 736-37.
[20] Pub. Res. Code § 21002.
[21] 40 C.F.R. § 1502.14; *see also Monroe County Conservation Council, Inc. v. Volpe*, 472 F.2d 693, 697-98 (2d. Cir. 1972)("The requirement for a thorough study and a detailed description of alternatives…is the linchpin of the entire impact statement."); Cal. Pub. Res. Code § 21002; 14 Cal. Code Regs. § 15126.6.
[22] *See* 40 C.F.R. § 1502.14 (a) and (b); *see also Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act* Regulations, 46 Fed. Reg. 18026 (Mar. 23, 1981)("The degree of analysis devoted to each alternative in the EIS is to be substantially similar to that devoted to the "'proposed action.'").
[23] *See* CEQA Guidelines § 15126.6(b); *Laurel Heights*, 47 Cal. 3d at 401-04; *Kings County Farm Bureau*, 221 Cal. App. 3d at 732 ("[I]f there is evidence of one or more potentially significant impacts, the report must contain a meaningful analysis of alternatives . . . which would avoid or lessen such impacts.").

As the Port and CALTRANS is well aware, California passed an ambitious law to tackle climate change, and it is discouraging that the DEIR/EA for a project with an increase greenhouse gas emissions includes neither adequate mitigation any alternative, other than required No Project alternative, that eliminates the proposed project significant and unavoidable greenhouse gas emissions.

Fortunately, many of the mitigation measures aimed at SCAQMD thresholds also increase efficiency or utilize technologies that decrease diesel fuel use and corresponding emissions of greenhouse gases; these measures can form the basis of an alternative project design aimed at improving the efficiency of ships, trucks, locomotives, and cargo-handling equipment, in order to reduce the Port expansion's carbon footprint.

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The most important aspect of this alternative would be the reduction of the Port's dependence on diesel trucks, primarily through rail electrification and other technologies, none of which the DEIR/EA addresses. Electricity coming from power plants does create GHG emissions, however each kilowatt-hour that replaces diesel saves 2–4 pounds of carbon dioxide (depending upon the source of electricity replacing it is).[24] Several electric rail systems were reviewed under the *CAAP Joint Port Transportation Technology Review Program - Zero Emissions Container Mover System* which is partly funded by the Technology Advancement Program.[25] The following systems were deemed either "More Feasible" or "More Ready": [26]

Maglev- utilizing electromagnetic force, a Maglev system would create zero emissions at source and has been demonstrated in La Jolla, CA as a feasible cargo shipping technology, though not yet ready and market available. At 80 mph new, elevated guideways would move cargo, also requiring associated terminal infrastructure. A demonstration project would not be undertaken to prove technological capacity but economic feasibility, since the Maglev is admittedly expensive. Port of Los Angeles study cost estimates $45.5 million/mile however annual fuel savings in 2007 were estimated to be $2 million.[27]

LIM-Rail-Linear motors would be placed along railroad tracks and aluminum plates attached to the bottom of cars. A magnetic field moving along the motors

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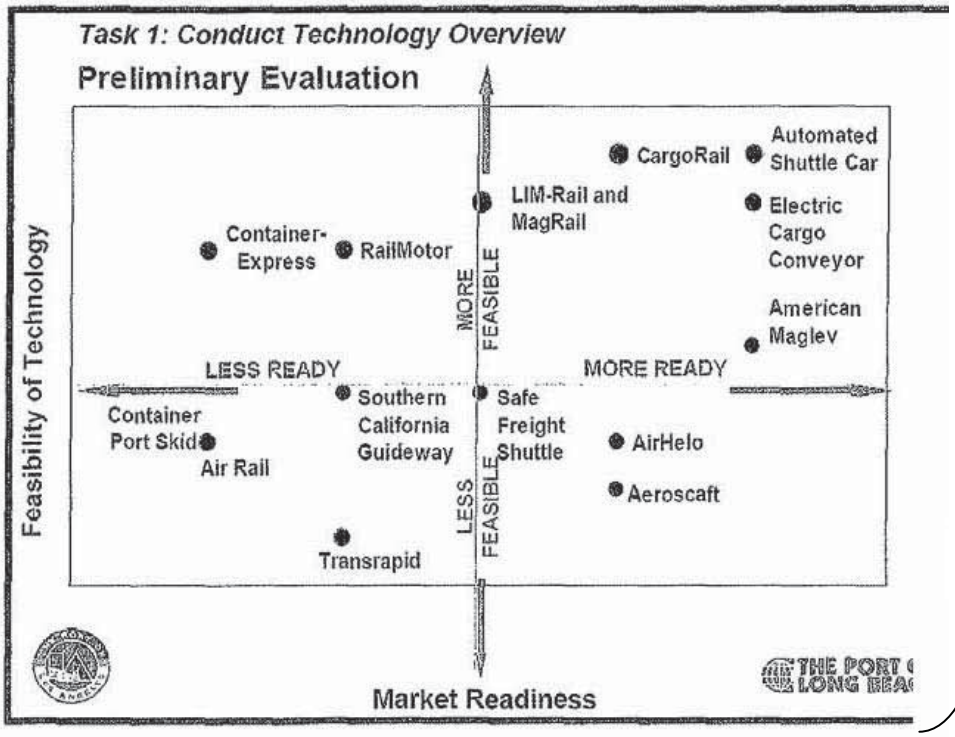
[24] Port·Innovation Workshop Final Report, Rocky Mountain Institute, April 2007
[25] Lyte, William. *Building a Maritime Technology Cluster at the San Pedro Ports.* Kennedy/Jenks Consultants. Presented 12/4/07. http://www.metrans.org/nuf/2007/documents/Lytepresentation.pdf
[26] General Atomics. *MAGLEV and Linear Motors for Southern California Transportation Presentation to Southern California Association of Government MAGLEV Task Force.* February 8, 2007. pg. 28.
[27] Assumptions: 10-mile route, 1 million cargo cars and 50 tons/car or 500 million ton-miles per year. Ibid. pg. 42.

in the track would induce a current in the plates and propel the vehicles. The LIM-Rail system uses existing infrastructure and current railroad operational practices, but can also be used in conjunction with the Maglev system. There is currently no test track for this concept, though the principles have been applied in other systems.

Electric Dual-Mode Trams- The CargoRail trams are rubber-wheeled vehicles that can carry marine cargo containers at 75 mph on an elevated guideway or on local streets. On the guideway, they would be propelled by electricity via permanent magnet hub motors in the wheels. On local streets they could be fueled by clean fuel, such as CNG, to generate the electricity for the motor.

Moreover, in conjunction with the POLA, the POLB commissioned a study of Zero Emission Container Mover Systems. As the chart from a presentation to the Board of Harbor Commissioners demonstrates, there are several technologies that have been quantified as "More Feasible" and "More Ready."[28]



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[28] Zero Emissions Container Mover System Evaluation Status Update, (September 6, 2007), *available at* http://www.portoflosangeles.org/DOC/Zero_Emissions_Container_Mover_System_Pres_090607.pdf.

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Finally, we are providing some rough calculations of the benefits and costs of various technologies that have been proposed as alternatives to traditional modes of diesel transport.

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Table 1: Technology Comparison

	Commercial Applications?	Use w/ existing infrastructure?	Ton-mile/kWh[29]	Cost per Mile (single track estimates)
LIM on the vehicle	TRANSIT	NO[30]	N/A	$100+ million (transit applications)
LIM on the Track	NO	YES	5-10	$10-20 million[31]
EMS Maglev	TRANSIT	NO	5-10	$70-170 million[32] (double track cost)
EDS Maglev	NO	NO	5-10	$45.5 million[33]
Electric Rail	YES	YES	8-10	$9-13 million[34]
CargoRail	NO	NO	N/A	$40-54

[29] The ton-mile/kWh figures are estimates since it is hard to determine efficiency without pilot tracks under weight. Direct use of electricity will likely have higher efficiency. Efficiency will differ based on loads and speeds. Electric applications also lose efficiency in creating and transferring electricity to the vehicle.
[30] Transit applications have been dedicated lines only. Likely lower grade steel rails not capable of withstanding heavy freight applications. All the concepts would require new guideway construction.
[31] Does not include costs to apply metal reactive plates to locomotives and railcars.
[32] Low cost figure based on the Transrapid dual guideway system built in Shanghai, China for high-speed transit. The high cost figure is based on the cost/mile for the low-speed Linimo transit line in Nagoya, Japan.
[33] Does not include cost of the vehicles estimated at $800,000 each – General Atomics figures.
[34] Cost estimates are from early 1990's SCAG study of electrifying the Alameda Corridor. Costs include cost of implementing electric infrastructure and 12-14 electric locomotives. Cost figures were put in 2007 dollars with inflation calculator. Total costs were divided by 20 miles to derive cost per mile estimates.

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Concept				million[35]
Automated Shuttle Car Concept	YES[36]	NO	N/A	N/A
Container Pipelines	NO	NO	N/A	N/A

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A reasonable range of alternatives must include proposals that "offer substanti environmental advantages" over the proposed project.[37] The technologie discussed here offer such an advantage and are proven to be feasible. Thus, is inexplicable why this DEIR/EA is devoid of any true analysis of alternatives t ease the Port into a more efficient and less polluting future.

VI. Removing the Tolling Option Violates CEQA and NEPA.

The DEIR/EA provides a crabbed rationale for removal of the tolling option fror the project. First, despite prior letters asking for more details on the tollin options for the DEIR/EA, the Port provides little to no description of the tolling options analyzed. Second, the Port makes several assumptions that are unfounded. For example, it concludes that since auto traffic might increase on some parts of there are great needs for additional road expansion projects. It does not explain why the purported diversion of traffic could not be accommodated by transit improvements. Third, the Port fails to articulate a rationale why the tolling option, which would actually improve some critical highway segments (e.g. reducing traffic on the I-710) outweighs the potential impacts to other road segments. Finally, the DEIR/EA does not explain whether it considered a tolling option solely for port-related vehicles (e.g. heavy-duty trucks) or for all vehicles. Since port activities are the major reasons why this bridge has deteriorated so fast, it is unclear why an alternative that examines ensuring the industry pays its fair share for the disproportionate impacts it has on this public infrastructure. According, the Port and CALTRANS must include an analysis of tolling options in the next iteration of the environmental review document.

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We appreciate your consideration of our comments. Please do not hesitate to contact me if you have any questions.

Sincerely,

Adriano L. Martinez
Project Attorney

[35] Includes the cost of 180 to 285 vehicles needed per mile at $120,000 per vehicle.
[36] The concept has been used in the Steel Industry for heavy applications.
[37] *See Citizens of Goleta Valley*, 52 Cal. 3d at 565-66.

THE COMMENTER SUBMITTED ADDITIONAL SUPLEMENTAL MATERIAL WITH THEIR COMMENT. THIS MATERAIL IS AVIALABLE FOR REVIEW AT POLB.COM.

The Propeller Club of Los Angeles - Long Beach

To promote the interests of international commerce, shipping, transportation and supporting industries, including governments and communities.

To provide a forum for discussion and to promote public education regarding critical issues which concern these industries.

February 23, 2010

Richard Cameron
Director of Environmental Planning
Port of Long Beach
925 Harbor Plaza
Long Beach, CA 90802

Dear Mr. Cameron:

The Propeller Club of Los Angeles/Long Beach would like to express our support of the Port of Long Beach's EIR to construct a new Gerald Desmond Bridge. This bridge is a major artery for commuter traffic, commerce and emergency vehicles in the cities of Los Angeles and Long Beach.

The Gerald Desmond Bridge is now 40 years old. It is deteriorating, with pieces of concrete periodically falling from the span. Caltrans has rigged netting to protect people and vehicles below the bridge from this debris; however, a permanent fix must be made as soon as possible.

The Port of Long Beach has a plan that enlists funding from federal, state and local sources to construct a new bridge alongside the existing bridge. This will allow uninterrupted traffic flow during construction.

With approximately 18 million vehicle trips a year over the existing bridge, the Gerald Desmond has exceeded its capacity. The proposed bridge will have three lanes of traffic in each direction as well as an emergency lane for disabled vehicles. Having three lanes in each direction, as well as a breakdown lane, will decrease congestion and improve the flow of traffic.

PCLA-1

Recently, Caltrans inspectors have given the existing Desmond Bridge low marks. The concrete decks and superstructure need significant improvements. It makes sense, rather than putting more money into repairs, to build a modern bridge that will last many decades. The new, proposed bridge would have a 200 foot vertical clearance. That would allow newer, cleaner, greener vessels to access the back channel of Long Beach Harbor.

The construction project would create approximately 4,000 jobs that would last for the length of the project, estimated at 5 years. The plan includes additional improvements to the Terminal Island and 710 interchanges. This should also assist with uninterrupted traffic flow.

Overall, the construction of a new, modern bridge through the Port of Long Beach would be good for the economy, good for the Port and good for the community. The larger bridge will keep traffic moving thus decreasing truck and auto emissions by reducing engine idling.

The Propeller Club of Los Angeles/Long Beach stands with the Port of Long Beach in support of the EIR for a new Gerald Desmond Bridge.

Sincerely,

Gary Gregory
President

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E-Mail propellerclub.lalb@verizon.net • Website: www.propellerclublalb.org

MAR - 4 2010

Community Outreach and Education Program
Southern California Environmental Health Sciences Center
1540 Alcazar Street CHP 236
Los Angeles, CA 90033

March 22, 2010

Via Electronic Mail
cameron@polb.com

Richard Cameron
Port of Long Beach
Planning Division
925 Harbor Plaza
Long Beach, CA 90801

Re: Gerald Desmond Bridge Replacement—Revised Draft EIR/EA

Dear Mr. Cameron:

On behalf of the Community Outreach and Education Program of the Southern California Environmental Health Sciences Center based at Keck School of Medicine of the University of Southern California, I write to provide comments on the Revised Gerald Desmond Bridge Replacement Draft Environmental Impact Report (DEIR)/Draft Environmental Assessment (EA). I appreciate the opportunity to provide comments on the DEIR/EA.

After careful review, I have concluded that the DEIR/EA fails in many respects to comply with the requirements of CEQA and NEPA. For these comments, I am choosing to focus on only one issue – paint with lead and chromates (hereinafter called "lead-based paint" (its removal, dispersion, disposal, and whether or not it will be reapplied). My concerns include potential worker safety issues when removing the paint, potential water safety issues from particles of paint falling into the water below the bridge, potential community safety issues from lead-based paint particles blowing in the wind over the community, safe disposal practices, and an issue seemingly overlooked in the DEIR/EA – whether an alternative to lead-based paint and lead-based yellow thermoplastic road striping will be utilized in painting the new bridge and its pavement, in order to avoid all the above issues with use of lead-based paint. The DEIR/EA contains two mentions of lead-based paint and thermoplastic paint in the Executive Summary and one page about mitigation measures (2-232-4) to be included in a lead compliance plan.

SCEHSC-1

SCEHSC-2

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SCEHSC-2

I do not deem this sufficient to ensure protection from potential exposure to lead, as described below. In fact, the lack of substantial attention to the issue of lead-based paint makes me worry about whether there are environmental experts at the Port of Long Beach (POLB) capable of overseeing this aspect of the bridge construction and formulation of the RFP for a contractor who understands the best practices. I would refer the POLB to significant literature on the American Association of State Health and Territorial Organization's (AASHTO) website.
http://environment.transportation.org/environmental_issues/construct_maint_prac/compendium/manual/7_1.aspx

SCEHSC-3

As evidence of the problem, I point to a series of lead poisoning cases in California about ten years ago in which contractors failed to properly protect workers: http://www.sspc.org/regnews/regnewsother/PbinWorkers.html
In fact, bridge demolition and maintenance are leading causes of lead poisoning among workers in the United States. See, e.g,. this case report of workers poisoned in Georgia by the Centers for Disease Control. A number of the workers were Mexican immigrants who did not speak English:
http://www.cdc.gov/mmwr/preview/mmwrhtml/00020710.htm

SCEHSC-4

Because of the significance of the lead-based paint issue in workers alone, I would argue that Caltrans must complete an Environmental Impact Statement ("EIS") in compliance with the National Environmental Policy Act ("NEPA"). I also argue that the EIR conducted by the Port is so lacking in information on protection from exposure to the constituents of lead-based paint, that the DEIR needs to be redone to correct this deficiency alone.

SCEHSC-5

I would also argue that the Army Corps of Engineers must complete an assessment for issuing a 404 permit, since there is significant potential for lead to fall into the waterways.

SCEHSC-6

Lead is one of the most "researched" metals in all of occupational medicine history and pediatric medicine, with numerous books and thousands of scientific publications. Yet the DEIR/EA fails to include mention of any of the hundreds of articles on lead poisoning in the literature that describe the health effects of exposure to this toxic material. The DEIR/EA fails to mention that the lead paint currently on the Desmond Bridge also likely contains chromates, another toxic material. The DEIR/EA must be redone to include descriptions of the toxicity of these materials so that there is a better understanding of why it is so important to prevent exposure during demolition, removal of lead paint, and repainting of the bridge. See examples of several articles about the toxicity of lead:

http://arjournals.annualreviews.org/doi/abs/10.1146/annurev.med.55.091902.103653

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Lead poisoning. Needleman H. Annu Rev Med. 2004;55:209-22. Review.

Lead poisoning in a historical perspective. Hernberg S. Am J Ind Med. 2000 Sep;38(3):244-54.

Protecting children from toxic exposure: three strategies. Guidotti TL, Ragain L. Pediatr Clin North Am. 2007 Apr;54(2):227-35, vii. Review. Erratum in: Pediatr Clin North Am. 2007 Jun;54(3):xv.

SCEHSC-6

FEDERAL REGULATIONS RELATING TO LEAD-BASED PAINT ON BRIDGES

Only a few of the following regulations relating to lead-based paint on bridges are even mentioned in passing in the DEIS/EA. This needs to be corrected in a redone DEIR/EA.

Table 1 - Regulations Impacting the Bridge Painting Industry

Impacting Regulation	*Effect on Coating Operations*
OSHA; CFR 29 1926.62, Lead in Construction	Establishes guidelines for protection and monitoring of workers removing lead paint from bridges. Requires lead training and monitoring for workers.
EPA; Resource Conservation and Recovery Act (RCRA)	Regulates the handling, storage, and disposal of lead (and other heavy metals) containing waste. Can increase the cost of disposal of waste from bridge paint removal by 10 times.
EPA; Comprehensive Environmental Response Compensation and Liability Act (CERCLA or Superfund)	Assigns ownership of and responsibility for hazardous waste to the generator "into perpetuity."
EPA; Clean Water Act	Regulates discharge of materials into waterways.
EPA; Clean Air Act Amendments	Mandates restrictions on allowable volatile-organic- compound (VOC) content of paints and coatings. Regulates discharge of dust into air from bridge painting

SCEHSC-7

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operations.

SCEHSC-8

WORKER HEALTH AND SAFETY PRECAUTIONS

Numerous local, state and federal agencies have identified bridge painting and bridge demolition as placing workers at great risk of lead exposure, leading to elevated blood levels, lead poisoning, or other symptoms and health problems. See articles cited above. As a result, both federal OSHA and CalOSHA have strict rules for construction workers exposed to lead. The DEIR/EA needs to provide very detailed specific information on how workers will be protected.

SCEHSC-9

DECONSTRUCTING THE BRIDGE AND MOVING ITS PARTS TO ANOTHER LOCATION TO REMOVE LEAD-BASED PAINT – BEST PRACTICES FOR REMOVAL

In one part of the EIR/EA, it states that "it is likely that lead-based paint (LBP) from the bridge would be chemically removed at a suitable offsite location." Here is the exact language from the DEIR/EA, page 2-232-4.

REVISED DRAFT ENVIRONMENTAL IMPACT REPORT/ ENVIRONMENTAL ASSESSMENT — Affected Environment, Environmental Consequences, and Avoidance, Minimization and/or Mitigation Measures

To prevent potential introduction of LBP into receiving waters, the contractor would take appropriate measures to eliminate LBP from reaching receiving waters. It is likely that paint from the bridge would be chemically removed at a suitable offsite location. If LBP removal is necessary during the bridge demolition process, then the contractor will comply with all applicable laws and regulations relative to this process. LBP removed from the bridge would be handled and disposed of in accordance with all applicable laws and regulation. Adverse effects are not anticipated.

No description or details of the potential offsite location are offered. No details of "appropriate measures" are provided. Yet the next sentence in the DEIR/EA discusses other procedures "if LBP removal is necessary during the bridge demolition process." Thus, the Port has no idea whether the plan is to remove the structures off-site, and if so, where. Or if the lead is removed onsite, what the measures will be, nor how such an important decision will be made.

Removing lead-based paint during bridge demolition is an extremely hazardous occupation and hundreds of bridge workers around the world have developed lead poisoning from such operations. The last sentence of the discussion about LBP states that **"adverse effects are not anticipated."** Such a glib remark without substantial mitigation measures defined and documentation is irresponsible, when lead is so toxic. The DEIR/EA must be redone to specifically detail exactly what will be done with the lead painted structures, where they will be taken, who the workers will be and their training, and what the risks are to either do this operation onsite or offsite. SCEHSC-10

These mitigations must be fully defined, with a carefully laid out mitigation plan and details on how the port will ensure that the workers doing this de-leading operation are protected, that residents far from the port are not subject to breathing the lead dust, and that groundwater and soil are not contaminated the location where the parts of this bridge are transported. Courts have emphasized that "an EIR may not ignore the regional impacts of a project approval, including those impacts that occur outside of its borders; on the contrary, a regional perspective is required."[1] SCEHSC-11

I believe that the lack of public health personnel in the employment of the Port of Long Beach leads to a lack of understanding in this DEIR/EA of the significance of the lead exposure issue. SCEHSC-12

I refer the POLB to the following FHWA document for research on alternatives for ways to remove lead-based paint safely.
http://www.tfhrc.gov/pubrds/july97/brdgct.htm SCEHSC-13

POTENTIAL FOR COMMUNITY EXPOSURE

Not only is there potential for residents near the bridge to be exposed to l, but there is also the potential for bridge workers to bring dust home on their clothes if special precautions are not followed. The DEIR/EA must describe these measures. SCEHSC-14

DISPOSAL OF MATERIALS CONTAINING LEAD-BASED PAINT (INCLUDING THERMOPLASTIC ROAD STRIPING)

The DEIR/EA mentions that lead-based paint and thermoplastic striping that contains lead will be disposed in accordance with regulations. A more detailed explanation of what will be required and the consequences of not complying needs to be included. SCEHSC-15

ALTERNATIVES TO LEAD-BASED PAINT FOR NEW BRIDGE PAINTING SCEHSC-16

[1] *Citizens of Goleta Valley*, 52 Cal. 3d at 575.

SCEHSC-16

It is critical that the port put significant attention and research into choosing an alternative to lead paint for the new bridge, if such products exist. I refer the POLB to the following FHWA document describing such research underway. http://www.tfhrc.gov/pubrds/july97/brdgct.htm

CHROMATES AND ASBESTOS COMPOUNDS

SCEHSC-17

If chromates and asbestos compounds are found to exist in the bridge structure, the same concerns raised for lead need to be considered for these two toxic materials. Detailed mitigation plans must be included in the DEIR/EA.

We appreciate your consideration of our comments.

Sincerely yours,

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MMWR articles on lead poisoning in bridge workers:

October 13, 1989 / 38(40);687-688,693-694

Lead Poisoning in Bridge Demolition Workers -- Massachusetts

In March 1988, lead poisoning was diagnosed in five of nine workers employed by a contractor to demolish a bridge spanning a river in western Massachusetts. A subsequent investigation by the Occupational Safety and Health Administration (OSHA) determined that from November 1987 through early March 1988 four of the affected workers had used acetylene torches to cut apart large sections of the bridge; the fifth had cut these sections into smaller pieces on a barge moored below the bridge.

In March 1988, two of the five workers involved in the cutting process sought medical advice: one had headaches and myalgia, and the other had nausea and arthralgia. Blood-lead levels (BLL) (tested on the basis of occupational history) were 78 and 67 ug/dL*, respectively (Table 1, page 693). The three other workers involved in the cutting process were then evaluated; their reported symptoms included joint stiffness, abdominal pain, irritability, and memory loss. BLLs in these workers were 58, 74, and 160 ug/dL. The highest BLL, 160 ug/dL, occurred in the worker assigned to the barge. Because the four remaining crew members had not worked in areas where they would have been exposed to lead fumes, they were not tested.

Four of the five affected workers were treated with chelation therapy (calcium ethylenediaminetetraacetic acid (EDTA)). Each worker excreted substantial amounts of lead and experienced a decline in symptoms. The fifth worker, who had a BLL of 58 ug/dL, demonstrated elevated lead excretion when given a test dose of EDTA. However, because he had become asymptomatic and had no evidence of organ damage, he was not treated with chelation therapy.

The OSHA investigation determined that paint covering the bridge contained 30% lead (by weight). Respirators available to the workers were not always equipped with cartridges that protected against lead fumes. The workers were not trained to OSHA standards in respirator use and wore the respirators infrequently. In addition, the employer had not provided clean work clothing or handwashing and eating facilities for the workers. OSHA cited the contractor for violating several regulations governing proper use of respirators. Reported by: J Himmelstein, MD, M Wolfson, MD, G Pransky, MD, Univ of Massachusetts Medical Center, Worcester; D Morse, MD, MassWEST Occupational Health Svcs, Holyoke; A Ross, MD, Farron Health Center, Turners Falls, Massachusetts. J Gill, Occupational Safety and Health Administration. Surveillance Br, Div of Surveillance, Hazard Evaluations, and Field Studies, National Institute for

Occupational Safety and Health, CDC.

Editorial Note

Editorial Note: Based on findings from the 1981-1983 National Occupational Exposure Survey, an estimated 827,650 U.S. workers have potential work-related exposure to lead (excluding leaded gasoline) (CDC, unpublished data). In the workplace, the respiratory tract is the major route of lead absorption. Clinical manifestations of occupational lead poisoning, which usually occur when BLLs exceed 40 ug/dL, can vary greatly in severity and include abdominal pain, anorexia, fatigue,arthralgia, headaches, irritability, depression, impotence, anemia, and hyperuricemia (2). Encephalopathy, peripheral neuropathies, and impaired renal function have been reported, but are infrequently associated with occupational exposure (2).

Lead poisoning may occur when workers and employers fail to recognize the presence of lead or fail to adhere to accepted safety guidelines. Recent reviews of workers' compensation data and laboratory-based lead registries indicate that workers at highest risk for lead toxicity include persons who work in lead smelters, storage battery-manufacturing plants, plastic-compounding factories, and nonferrous foundries (3,4; California Department of Health Services, unpublished data, 1987). Construction or demolition work that involves cutting through lead-coated metal structures, a process that generates high concentrations of lead fumes, can also present substantial risk for lead toxicity. Lead poisoning has been described in workers who repair and disassemble ships (5) and roofs (6,7), dismantle elevated subway lines (8,9), and demolish and strip paint from bridges (10-13).

Construction workers in the United States are excluded from regulation under the OSHA Lead Standard (1). However, other OSHA regulations governing the construction industry require respiratory protection for workers who use torches to cut through toxic preservative coatings, such as lead-containing paints (14), and mandate engineering controls or respiratory protection for workers exposed to airborne lead at concentrations greater than 200 ug/m3 (15).

As bridges in the United States age, they will require demolition or rebuilding. Construction workers engaged in these processes are at risk for hazardous lead exposure. Proper preventive measures, including engineering controls and appropriate use of respirators, should be carefully implemented. Physicians caring for construction workers should take thorough occupational histories and be aware that workers engaged in bridge demolition work may be at increased risk for occupational lead poisoning.

References

1. Office of the Federal Register. Code of federal regulations:

occupational safety and health standards. Subpart Z: Toxic and hazardous substances--lead. Washington, DC: Office of the Federal Register, National Archives and Records Administration, 1988. (29 CFR Section 1910.1025).

2. Cullen MR, Robins JM, Eskenazi B. Adult inorganic lead intoxication: presentation of 31 new cases and a review of recent advances in the literature. Medicine 1983;62:221-47.

3. Seligman PJ, Halperin WE, Mullan RJ, Frazier TM. Occupational lead poisoning in Ohio: surveillance using workers' compensation data. Am J Public Health 1986;76:1299-1302.

4. Wenzl TB, Conrad F, Tarlau ES, Siwinski G. Heavy metal hazard surveillance. Presented at the American Industrial Hygiene Conference, San Francisco, California, May 16, 1988.

5. Zenz C. Occupational medicine: principles and practical applications. 2nd ed. Chicago: Year Book Medical Publishers, 1988:550. 6. Susbielle G, Guyotjeannin C. Risques particuliers a certains postes de couvreurs. Arch Mal Professionnelles 1970;31:246-7.

7. Campbell BC, Baird AW. Lead poisoning in a group of demolition workers. Br J Ind Med 1977;34:298-304.

8. Feldman RG, Lewis J, Cashins R. Subacute effects of lead-oxidefumes in demolition workers (Letter). Lancet 1977;1:89-90.

9. Fischbein A, Daum SM, Davidow B, et al. Lead hazard among ironworkers: dismantling lead-painted elevated subway line in New York City. N Y State J Med 1978;78:1250-9. 10. Zimmer FE. Lead poisoning in scrap-metal workers. JAMA 1961;175:238-40. References 11-15 may be obtained from the Surveillance Branch, Division of Surveillance, Hazard Evaluations, and Field Studies, NIOSH, CDC, 4676 Columbia Parkway, Mailstop R-10, Cincinnati, OH 45226. *OSHA regulations state that an employee with confirmed BLL greater than 60 ug divided by L must be removed from lead exposure; similarly, an employee whose average BLL (measured on three occasions within 6 months) exceeds 50 ug divided by L must be removed from lead exposure (1).

May 28, 1993 / 42(20);388-390

Lead Poisoning in Bridge Demolition Workers -- Georgia, 1992

Bridge demolition and maintenance are leading causes of lead poisoning among workers in the United States (1-5). In June 1992, a local health department in Georgia detected elevated blood lead levels (BLLs) in four demolition workers. This report summarizes the investigation of these cases.

In February 1992, a temporary-service company was subcontracted by a steel corporation to cut apart steel beams that had been removed from a local bridge. Four men were hired; one worker, aged 54 years, began work in late February; two, aged 36 and 28 years, in March; and one, aged 24 years, in early April. All four were immigrants from Mexico; only two spoke English. The work was performed outdoors, without protective equipment or training, using oxy-acetylene flame-cutting torches.

In April, all four workers reported light-headedness and shortness of breath from the metal fumes, requiring frequent fresh-air breaks during the day. In early May, all four workers developed a variety of symptoms including headache, dizziness, fatigue, sleep disturbance, confusion, forgetfulness, arthralgia, and abdominal pain. Paper masks were provided to the workers in late May by the steel company; however, because these became blocked within hours by the accumulation of dust, the workers discarded them. The severity of symptoms intensified through June, with nausea, vomiting, constipation, weakness, shortness of breath, loss of balance, and nervousness. The 36-year-old worker left employment for 3 weeks (from mid-June through early July) because of his symptoms.

As part of an annual risk-management assessment by the steel company's insurance carrier, personal air sampling was conducted April 30 for one of the four workers; this specimen measured an airborne lead concentration of 525 ug/m3, more than 10 times the Occupational Safety and Health Administration (OSHA) permissible exposure limit (PEL) of 50 ug/m3 for general industry *. In early June, the steel company suggested BLL examinations of the workers; their BLLs, measured at the local health department, were 93, 90, 59, and 66 ug/dL for the 54-, 28-, 24-, and 36-year-old men, respectively. The workers' employment was terminated in late June on receipt of the test results by the company.

In follow-up to the BLL results, in mid-June the health department investigated each worker's household, using a standard protocol of visual inspection and portable radiographic fluorescence readings of window sills, walls, and trim; no environmental sources of lead exposure were identified. BLLs were obtained from three children who resided in the homes; all had levels less than 10 ug/dL, which is below the CDC BLL of concern for

children (6).

The health department recommended that the workers promptly seek medical evaluation and care; however, because they had no medical insurance and both the subcontractor and the steel company declined to assume the costs of treatment, the workers initially delayed seeking medical treatment. They subsequently contacted an attorney, who initiated worker's compensation proceedings and arranged for a local hospital to admit them for treatment. Each worker received three 5-day chelation treatments with intravenous calcium disodium ethylenediamine tetraacetic acid approximately 15 days apart. All four reported improvement but continued to experience memory deficits, arthralgias, headaches, dizziness, and/or sleep disturbances.

The health department also recommended that the workers request an OSHA inspection of the worksite. Findings from the inspection of the steel company on July 15 resulted in citations for violations of the medical removal protection and worker training provisions of OSHA's lead standard *. OSHA inspectors also investigated work conditions at the bridge from which the beams were removed; the demolition company was cited for excessive lead exposures (based on the construction industry PEL of 200 ug/m3 **), failure to provide personal protective equipment, and failure to monitor workplace conditions.

On December 14, 1992, the workers were evaluated at a university-based occupational medicine clinic. Physical examinations of three workers were normal; the 54-year-old worker was markedly depressed with evidence of neurologic abnormalities, including a strongly positive Romberg test and marked dysnomia. BLL measurements were 27, 25, 13, and 16 ug/dL for the 54-, 28-, 24-, and 36-year-old workers, respectively. No further treatment was recommended, but follow-up BLL monitoring was planned.

Reported by: H Frumkin, MD, F Gerr, MD, F Castaåeda, MD, A Leal, MD, Environmental and Occupational Medicine Program and School of Public Health, Emory Univ, Atlanta. S Brown, Chatham County Health Dept, Savannah, Georgia. LR Santiago, Savannah Area Office, Occupational Safety and Health Administration, US Department of Labor. Div of Surveillance, Hazard Evaluations, and Field Studies, National Institute for Occupational Safety and Health, CDC.

Editorial Note

Editorial Note: An estimated 90,000 bridges in the United States are coated with lead-containing paints (7). Because of maintenance and reconstruction requirements, lead exposure is a continuing occupational health hazard for construction and demolition workers. Previous cases of lead poisoning

associated with similar work have been characterized by extremely high BLLs in affected workers, which developed after brief exposures and, in some instances, were unresponsive to chelation therapy.

The findings in this report are consistent with other studies that indicate that minority groups are disproportionately exposed to lead and other occupational hazards (8,9). In addition, the hazardous process described in this report (flame-cutting or burning of paint-coated steel beams) had been subcontracted to a smaller company by a larger, well-established firm. Such subcontracting is common in the construction industry but often concentrates hazards among workers with limited access to appropriate training, personal protective equipment, and other safety and health measures.

Construction workers are subject to highly variable exposures, and high worker-turnover rates in the construction workforce may pose special hazards for construction workers. Effective June 3, 1993, a new interim final OSHA standard on "Lead Exposure in Construction" extends to workers in the construction trades the basic health and safety provisions of the OSHA lead standard for general industry, such as requirements for medical monitoring and medical removal protection (10).

The response of the health department to the lead exposure in these workers was prompt and effective. However, the limitations of the interventions available and the persistence of the workers' symptoms underscore the need for primary prevention -- including portable local ventilation, personal protective equipment, personal hygiene measures, and worker training -- during bridge renovation and related demolition work.

References

1.Fischbein A, Goldberg R, Haymes N, et al. Health effects of low-level lead exposure among iron workers repairing an elevated railway in New York City. Mt Sinai J Med 1978;45:698-712. 2.Landrigan PJ, Baker EL, Himmelstein JS, et al. Exposure to lead from the Mystic River Bridge: the dilemma of deleading. N Engl J Med 1982;306:673-6. 3.Pollack CA, Ibels LS. Lead intoxication in Sydney Harbor bridge workers. Aust N Z J Med 1988;18:46-52. 4.Marino PE, Franzblau A, Lilis R, Landrigan PJ. Acute lead poisoning in construction workers: the failure of current protective standards. Arch Environ Health 1989;44:140-5. 5.CDC. Lead poisoning in bridge demolition workers -- Massachusetts. MMWR 1989;38:687-8,693-4. 6.CDC. Preventing lead poisoning in young children: a statement by the Centers for Disease Control, October 1991. Atlanta: US Department of Health and Human Services, Public Health Service, 1991. 7.Katauskus T. R&D special report: DOT coats rusting bridges with layers of problems. R&D Magazine (May) 1990:42-8. 8.Robinson JC. Exposure to occupational hazards among Hispanics, blacks, and non-Hispanic whites in California.

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Am J Public Health 1989;79:629-30. 9.Friedman-Jimenez G. Occupational disease among minority workers: a common and preventable public health problem. American Association of Occupational Health Nurses Journal 1989;37:64-70. 10.US Department of Labor, Occupational Safety and Health Administration. Lead exposure in construction; interim final rule. Federal Register 1993;58:26590-649. (29 CFR section 1926).