Nathan Stringer

From:	john anderson <j.ando.action_10@hotmail.com></j.ando.action_10@hotmail.com>
Sent:	Sunday, 7 December 2014 3:11 PM
То:	information-Planning
Subject:	Moorebank Intermodal ssd 5066 epbc 2011/6086

Attention Andrew Beattie

Bio Diversity. I have read the report from both proponents of the Moorebank Intermodal and they acknowledge the presence of threatened and endangered species which I know is over 34 in number but the one thing I don't see is the impact of diesel emissions on them .It is recognised that in areas of traffic predominately diesel emission vehicles their emissions pose a massive threat to species and plants and it is known that alongside highways there is little sign of life because the Lichens in the environments don't take kindly to air pollution which is mainly caused 70% by diesel emissions as a result the presence of the diesel vehicles pose a massive risk to them.I know from research that there is a huge population of koalas in both areas and their sensitive noses will mean they will be greatly effected..Also I have seen evidence that species foliage in this area and the comment is that they must go elsewhere to do what they probably have done for many years

I have heard many reports of many rare species been sighted near the proposed site and it is obvious the presence of the diesel emiisions will greatly impact on them. Also many live adjacent to the Georges River which means the diesel emmissions falling into the Georges River must impact on them and should be disallowed under the EPBC act 1999 asw it wont be a controlled action as their absence from the area will have a impact on the environment

Construction Period of time

In the EIS papers it clearly shows that there will be a construction period of 15 years and it is disgraceful to think any community have to expect this inconvenience over this period of time with the noise the traffic as has been stated a number of times if this project was situated in low residential areas it would be able to be better managed and cause much less problems in construction and would be able to be completed quicker

Property Values Many residents are greatly concerned about the effect of the Moorebank Intermodal on property values and are convinced their quiet areas where there is not much hevy vehicle traffic will destroy there present quiet area which most residents treasure

Crime Levels It is aknown fact that shipping containers can contain guns and drugs and it could have a impact on the crime levels in the area which is a matter of great concern and must be addressed

Employment Levels The Moorebank Intermodal is expected to employ up to 1500 workers in construction and operation and it is known that if a mixed residential and industrial land was utilised for this land it could employ up to 15000 jobs which would be more useful for employment in the area and would take some of the traffic problems from the area.That is why 16500 residential parcels and other mixed development would go a long way in financing a Intermodal in the correct location which could be better planned

John Anderson 4 namoi court wattle grove NSW Ph.98252794 mob.0409368603

Nathan Stringer

From:	john anderson <j.ando.action_10@hotmail.com></j.ando.action_10@hotmail.com>
Sent:	Sunday, 7 December 2014 2:40 PM
То:	information-Planning
Subject:	RE: another useful document perhaps

Attention Andrew beattie re Moorebank Intermodal ssd 5066-epbc 2011/6086 This is information obtained from California which shows that Intermodal similar to the Moorebank Intermodal pose a massive risk to residents especially our very young old and infirmed and must be thoroughly investigated by all and sundry John Anderson 4 namoi court wattle grove NSW 2173 .Mob.0409368603

From: j.ando.action_10@hotmail.com To: darab@people.net.au Subject: RE: another useful document perhaps Date: Sat, 29 Nov 2014 09:15:24 +1100

From: j.ando.action_10@hotmail.com To: andrew@andrewmcdonald.org Subject: RE: another useful document perhaps Date: Sat, 29 Nov 2014 09:14:45 +1100

From: j.ando.action_10@hotmail.com To: lozzalemond@yahoo.com.au Subject: RE: another useful document perhaps Date: Tue, 15 Jul 2014 08:45:54 +1030

From: j.ando.action_10@hotmail.com To: atararsov@fairfaxmedia.com Subject: RE: another useful document perhaps Date: Thu, 21 Nov 2013 14:11:49 +1100

From: j.ando.action 10@hotmail.com To: aatarosov@fairfaxmedia.com.au Subject: RE: another useful document perhaps Date: Thu, 21 Nov 2013 14:06:24 +1100 From: j.ando.action_10@hotmail.com To: john.c.anderson10@boeing.com Subject: FW: another useful document perhaps Date: Fri, 15 Jun 2012 09:57:22 +1030

From: <u>dbonic@swiftdsl.com.au</u> To: <u>lozzalemond@yahoo.com.au</u>; <u>00corbo@tpg.com.au</u>; <u>j.ando.action_10@hotmail.com</u> Subject: FW: another useful document perhaps Date: Wed, 13 Jun 2012 16:55:10 +1000

From: Andrea Hricko [mailto:ahricko@usc.edu] Sent: Monday, 21 March 2011 4:30 AM To: 'dbonic'; 'D'; <u>ned.mannoun@gmail.com</u>; <u>625110@tpg.com.au</u>; <u>nansi.gidiess@worldaviation.com.au</u>; <u>bbruce1960@hotmail.com</u>; <u>7674np@gmail.com</u> Subject: another useful document perhaps

• Our ports and Union Pacific railroad have proposed a new intermodal in L.A. This is a document that I prepared about diesel exposure/traffic at the EXISTING intermodal, before expansion. It handles 750,000 TEUs a year and wants to double. The Ports and UP argue that if the intermodal is approved to double in capacity, then the railroad will upgrade the facility to be more "green." <u>http://www.ictf-jpa.org/</u>

The USC report is the last document in this document library, in which you will also see the California Air Resources Board Health Risk Assessment: <u>http://www.ictf-jpa.org/document_library.php</u>. Try this link:

• USC Traffic and Exposure Assessment near ICTF*

Andrea M. Hricko

Prof of Prev Med

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Nathan Stringer

From:	john anderson <j.ando.action_10@hotmail.com></j.ando.action_10@hotmail.com>
Sent:	Sunday, 7 December 2014 2:08 PM
То:	information-Planning
Subject:	FW: URGENT This information could save your life
Attachments:	Kresge - LAYOUT FINAL -3-15 for Moorebank.doc

Attention Andrew Beattie re Moorebank Intermodal ssd 5066/epbc 2011/6086 closing on 8th December this is additional to the information which I forwarded separately showing that the Cancer risk goes from 1000 in a million done eo 10 in a million 4-8 miles away and it is estimated that there are 100000 residents in that area. So we as residents will not have our health risks elevated from unnecessary health risks associated with diesel emmissions from millions of container vehicles which will also have a massive impact on our environment

John Anderson 4 namoi court wattle grove NSW 2173 Mob.0409368603

From: <u>dbonic@swiftdsl.com.au</u> To: <u>lozzalemond@yahoo.com.au</u>; <u>j.ando.action_10@hotmail.com</u>; <u>damosmith71@hotmail.com</u>; <u>b.last@optusnet.com.au</u>; <u>allancorben@bigpond.com</u> Subject: FW: URGENT This information could save your life Date: Sun, 7 Dec 2014 13:54:50 +1100

Just forward to anyone still doing submission. I am

From: The South West Sydney Community Alliance (c) [mailto:7674np@gmail.com]
Sent: Sunday, 20 March 2011 8:55 PM
To: undisclosed-recipients:
Subject: URGENT This information could save your life

URGENT TO READ ATTACHMENT.

If you had any doubts as to how dangerous the Intermodal will be to you read on,

Both Labor and Liberal have been keeping the facts from you, here are the proven facts.

Get out on the streets and yell loudly.

Ring & email, TV, Radio and all national newspapers. You cannot deny the evidence

Regards

Jim McGoldrick

PS special thanks must go to Professor Andrea Hricko, what a great mate of ours, from below address who has been working with me since day one in our no Intermodal fight. What great people.

Do not forget to say thanks ahricko@usc.edu

This information could save your life, get out there and tell the world.

Andrea M. Hricko

Prof of Prev Med

Keck School of Med, USC &

Director, Community Outreach and Education

Southern CA Env Health Sciences Ctr

1540 Alcazar Street CHP 236

L.A. CA 90033

323-442-3077

From: Jim McGoldrick [mailto:<u>7674np@gmail.com]</u>

Sent: Monday, January 10, 2011 2:13 AM

To: Adriano Capaldi; Allan Corben; Allan Corben; Alvan Freeman; Andrea Hricko; Angela Wu; Anne and Bernie Dingley; Arlette Figon; Barry & Joy Collier; Barry Collier; Bede & Lilia Onuoha; Brian & Maureen Cooney; Colm & Clare Slane; Craig Corbett; Dev Govender; Emma Wells H.; Geoff Pollitt; George & Michelle Featherstone; Gilbert loiseau; Glen Butterfield; Gosia; Ian Pryde; <u>isokolof@bigpond.net.au</u>; Jackie Frew; Jega Kenagan; John Kalfagiannis; Kostrzewa Jeff; <u>lindalend@gmail.com</u>; Lindsay Holmes; Mr Wen Yu Gui; NICOLE & MATT Widdicombe; Noel Clark; Paul Armstrong; Ray Van; Richard Walsh; Ron & Sue Armstrong; rosemary mcormick; Roslyn & Richard Malloy; Sonia Kaur; Sophie Kalfagiannis; Steve and Liz Katsidis; <u>suzie@globalfashionservice.com.au</u>; Todd & Antonella Bertram; Trevor Vella **Subject:** Please see attachment

--

Thank You

Jim McGoldrick

Mob. 0410740399

You have received this email because you have registered to receive updates and newsletters on the No Moorebank Intermodal Fight.

You may unregister and discontinue these emails by clicking on <u>7674np@gmail.com</u> and in text box print " **STOP**" allow 7 days to take effect.

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Opinions expressed are those of named contributers and are not always the views of Jim McGoldrick

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Freight Transport and Goods Movement - Impacts on Workers, Health, Community and the Environment

An excerpt from the forthcoming report: Global Trade Impacts: Addressing the Health, Social and Environmental Consequences of Moving International Freight through Our Communities

Recommended citation

Matsuoka M, Hricko A, Gottlieb, R, and De Lara J *Global Trade Impacts: Addressing the Health, Social and Environmental Consequences of Moving International Freight through Our Communities.* Occidental College and University of Southern California (Los Angeles, forthcoming, 2011).

This excerpt on health impacts was written by Andrea Hricko, USC:

Andrea Hricko is Professor of Preventive Medicine at the Keck School of Medicine of the University of Southern California (USC), where she directs the Community Outreach and Engagement Programs (COEP) of the Southern California Environmental Health Sciences Center, funded by the NIEHS, and the Children's Environmental Health Center, funded by NIEHS and U.S. EPA. She is a member of THE Impact Project, funded by The Kresge Foundation and The California Endowment, and was a member of the Goods Movement Work Group to the U.S. EPA National Environmental Justice Advisory Council.

This excerpt about the health effects of freight transport and goods movement was made possible by generous support from The Kresge Foundation, the National Institute for Environmental Health Sciences, and The California Endowment.

Table of Contents

Impacts on Workers, Health, Community, and the Environment	
Impact on Workers	3
Health and safety of workers in the freight transportation industry	4
Exposure to Air Pollutants	
Health effects of exposure to PM _{2.5}	5
Diesel particulate emissions in the community: impacts on residents' health	
Health impacts of exposure to ultrafine particles	7
Exposure to traffic-related pollution: living close to busy road and highways	
Regulation of diesel emissions	
Exposure to Noise	
Neighborhood Impacts – Lighting, Traffic Congestion, Truck and Rail Accidents	

Impacts on Workers, Health, Community, and the Environment

Evidence makes it clear that global trade and the freight transportation system causes substantial environmental, health, workplace and community impacts. These include local and regional air pollution from emissions of ships, trucks, locomotives, and yard equipment operating at ports, rail facilities, on highways, and at warehousing operations. Such impacts can disproportionately affect residents in communities near ports and in neighborhoods near freeways or where heavy truck traffic or locomotives are present, in addition to affecting the health of dock and warehouse workers, truck drivers, and railroad employees. Recognizing that port and rail communities disproportionately bear the costs of health impacts from international trade while the rest of the U.S. reaps benefits, Mayor Bob Foster of Long Beach CA commented in 2008:

Quite frankly, my first job as mayor of Long Beach is to protect the health and safety of my citizens. In my city, families that live along the trade corridors have two to three times the statewide average of asthma cases. That's not an accident. I've said it many times: we are not going to allow kids in Long Beach to contract asthma so someone in Kansas can get a cheaper television set. Those days are over.¹

Other neighborhood impacts from freight transportation operations include noise, roundthe-clock bright lighting at port and rail operations, conflicts between incompatible land uses and public health, and the potential for contamination from hazardous spills. Goods movement communities also face traffic safety problems, unsafe streets for pedestrians, and hefty local tax charges to repair streets that are damaged by big-rig trucks.

Workers in the freight transportation industry face a number of issues. Some, such as unionized longshore workers, are able to secure living wages and benefits while others, such as warehouse workers, are part of the contingent workforce, working at the convenience of employers and often through a temp agency. Still others, such as port truck drivers, who are technically classified as "independent contractors," are left to carry the heavy burden of maintaining and operating their trucks while performing the work of private freight transport firms.

On a more global scale, international trade activities contribute to global warming, with significant emissions of carbon dioxide, black carbon and other pollutants. While the published and peer review literature has documented these community, workplace, health, and environmental impacts, findings have not been widely incorporated into policy decisions or into assessments of the comparative benefits and negative impacts from international trade and freight transportation. The section of the report below provides a brief summary of health research findings and helps situate the policy and organizing context for how best to address the underlying problems associated with international trade and goods movement traffic. Additional information about air pollution and health impacts can be found in a searchable U.S. EPA database of scientific citations.²

Impact on Workers

Health and safety of workers in the freight transportation industry

Many workers in the goods movement industry also face significant health and safety hazards on their jobs as truck drivers, warehouse workers, and railroad workers. For example:

- Worker fatalities. In 2009, workers in the "transportation and warehousing" industry had the second highest number of worker fatalities in the United States, with #1 being "construction." As a rate, workers in this industry had the third highest work injury fatality rate of all industries, exceeded only by the category of "agriculture, forestry, fishing, and hunting" (#1) and by "mining" (#2).³
- **High hazard jobs**. In California, both warehousing and truck transportation were on the "Highest Hazard Occupation" list for OSHA inspections (2009-2010).
- **Exposure to heat stress**. Workers in non-air conditioned truck and locomotive cabs and in warehouses are subject to potential heat stress. Warehouses in the Inland Valleys of Southern California, where summer temperatures are often above 100 degrees F, seldom have air-conditioning.
- Lung cancer and heart disease deaths, accidents truck drivers. A study of causes of death among unionized workers in the trucking industry (compared with the general U.S. population) found an excess of lung cancer and heart disease deaths among drivers, dock workers and shop workers at trucking terminals, and higher than expected deaths from transportation-related accidents.⁴ Another scientific study surveyed 31,000 union workers in the U.S. trucking industry exposed to higher levels of diesel exhaust on a regular basis as part of their jobs. It found that they were more likely to develop lung cancer with increasing years of work.⁵ According to the California Air Resources Board, lung cancer rates among workers in the trucking industry are among the top five highest rates of all industries surveyed in the state.^{6, 7}
- Lung cancer deaths railroad workers. A study of nearly 55,000 U.S. railroad workers (who worked in the industry from 1959 1996 found that exposure to diesel exhaust was linked to lung cancer deaths among these workers.⁸
- **COPD railroad workers**. U.S. railroad workers hired after the introduction of diesel locomotives had a 2.5% increase in chronic obstructive pulmonary disease (COPD) mortality risk for each additional year of work in a diesel-exposed job.⁹

For those workers who live in the neighborhoods surrounding ports, the health risk is compounded. In Los Angeles, for example, 50% of port truck drivers live in low-income or poverty level neighborhoods near the ports and along the port trucking corridors,¹⁰ where levels of localized air pollution are elevated.

Exposure to Air Pollutants

Air pollution is a mixture of gases, such as carbon monoxide and nitrogen dioxide, and particles of different sizes. The particles usually come from vehicle emissions, factories, wood or gas stoves, and/or wildfires.

Goods movement activities provide multiple sources of air pollution, much of which relate to diesel emissions. Freight transportation can add to "regional air pollution" or, in cases where freight facilities are close to homes and schools, they can create "localized pollution." Thus, ship and vehicle emissions near a port can add to the regional pollution that residents in a wide geographic breathe. But for those residents who live in close proximity to a marine terminal with ships, yard equipment and idling trucks waiting for containers, it can mean additional "local pollution." This is also true for residents living near rail yards, highways, and distribution centers. In these cases, not only are the residents exposed to regional pollution similar to all residents in their region, but they are also exposed to additional pollution because of their closeness to truck, locomotive and ship exhaust.

Diesel exhaust consists of gases and particles. Some of these particles are in the PM _{2.5} range (that is they are smaller than 2.5 microns in diameter). Within that size range are extremely small particles called "ultrafine particles," tinier than 0.1 microns in diameter. Automobile exhaust also contains particles in these sizes. Both cars and diesel trucks emit "black carbon" in their exhaust, although much higher levels of black carbon (or "elemental carbon") are found when sampling air pollution levels on truck-congested highways than on highways with mostly gasoline vehicles.

Diesel particulate forms a large part of the fine particulate matter (PM) in urban air.¹¹ Because studies of PM seldom differentiate the source of the particulate matter (that is, whether the PM comes from gasoline vehicles, diesel vehicles, power plants, refineries, etc.), we present first the information on health effects of PM and then the specific studies addressing diesel PM. We also note that diesel exhaust contains gases as well as both fine and ultrafine particles (UFPs).

Below, we describe some of the research findings on health effects of exposure to air pollution.

Health effects of exposure to PM_{2.5}

Studies demonstrate that exposure to $PM_{2.5}$ (particles) increases the risk of cardiovascular disease and reduces life expectancy. That is, those exposed to higher levels of particulate matter are more likely to develop cardiovascular disease or die earlier than expected from heart disease (such as heart attacks and coronary artery disease, according to a number of studies published during the past 20 years.^{12,13, 14} The American Heart Association recently published a statement on the role of air pollution in heart diseases, stating that:

Numerous epidemiological studies conducted worldwide have demonstrated consistent associations between short-term elevations in PM and increases in daily cardiovascular morbidity [illness] and mortality [death].... Several studies have also reported adverse cardiovascular outcomes in relation to long-term PM exposure. Elderly patients, those with underlying coronary or pulmonary disease, lower socioeconomic populations, and diabetics may be at particularly increased risk... Pope has estimated an average loss of life expectancy directly related to chronic air pollution exposure from between 1.8 and

3.1 years for those living in the most polluted cities in the United States. Cardiovascular causes account for the majority (69%) of the overall excess in morbidity and mortality.¹⁵

Globally, concerns have also been raised about shipping emissions, because ships have diesel engines that run on bunker fuel – a low-grade fuel that is considered "dirtier" than diesel fuel. A landmark study by a University of Delaware scientist noted that those living near coastlines are at particular risk from particulate matter in shipping emissions; he and his team calculated that 60,000 persons a year die prematurely from particulate matter released by ocean-going ships involved in international trade.¹⁶

Diesel particulate emissions in the community: impacts on residents' health

Concerns about diesel exposure are highlighted in this report because the ships, trucks, locomotives and much of the yard equipment used along the entire goods movement supply chain are diesel-fueled and emit a significant amount of air pollutants – and they create significant risk for residents in goods movement communities.

Diesel emissions cause some of the most extensive impacts from freight transportation. The California Air Resources Board estimates, for example, that goods movement activities in that state each year cause 3,700 people to die prematurely – earlier than they would have if they had not been breathing high levels of particulate matter.¹⁷

To calculate the anticipated output of particulate matter (PM) and other air pollutants, a number of ports have conducted emissions inventories. One of the first such studies was conducted in Southern California and published in 2007, estimating that the Port of Los Angeles in 2005 was contributing 12.5% of the PM air pollution in the Southern California region (and that the Los Angeles and Long Beach Ports combined were contributing some 25% of the region's PM).¹⁸ This inventory determined that ships were the largest source of diesel pollution from the ports, producing 54% of the ports' diesel emissions in 2006, with freight trucks being second.¹⁹

Another study of the Port of Los Angeles was a Health Risk Assessment (HRA), conducted by the California Air Resources Board. It found an elevated diesel cancer risk in those living close to the Port, but also found that even 15 miles away residents had a higher risk than others in Southern California did. The HRA calculated that emissions from the two Ports combined were estimated to cause annually 120 premature deaths and 750 asthma attacks.²⁰ Another study by the South Coast Air Quality Management District took air pollution samples and modeled air pollution risks. It, too, demonstrated elevated diesel cancer risks in and around the Port of Los Angeles, leading one resident – an emergency room physician – to proclaim that those in the Harbor area were "living in a diesel death zone."²¹

Emissions inventories have also been conducted at 18 major rail yards in California, as part of a series of Health Risk Assessments for those yards prepared by staff of the California Air Resources Board. The inventories were used to estimate the tons of particulate matter in diesel exhaust emissions at each yard per year. For example, a large BNSF rail yard in Barstow, CA was estimated to emit 26 tons of diesel particulate matter per year.

Above, we described some of the known health impacts of diesel exposure on workers, including lung cancer. Exposed community members are also considered at risk of lung cancer from diesel emissions in and near their communities. Some of the other known health impacts for residents exposed to diesel include:

- **Reduced lung function in children exposed to diesel while growing up**. According to investigators at the University of Southern California, children who grow up in more polluted communities with high levels of elemental carbon or EC (indicating diesel particle pollution) are more likely to have reduced lung function.²²
- Effects on lung function in adults with asthma, exposed for a brief period to diesel exhaust. A study in London demonstrated that short-term acute exposure to diesel exhaust in adults who already had asthma could impact lung function; the study compared persons with asthma who walked in a park with no diesel traffic and then several weeks later walked on a London street with high volumes of diesel taxis and buses. Reduction in lung function and an increase in markers of inflammation were seen when the group was exposed to diesel exhaust and the changes were associated with elevated levels of elemental carbon and UFPs.²³
- **Reduced sperm production and endocrine disruption in laboratory animals**. In a series of Japanese studies of laboratory animals, prenatal (in *utero*) exposure to diesel exhaust particles were found to reduce sperm production in adulthood.²⁴ The Japanese team concluded that exposure to diesel exhaust particles disrupts endocrine (testicular) function in the male mouse reproductive system.²⁵ In many of these studies, filtered air caused the adverse effects, suggesting that the gaseous phase of diesel exhaust appears to be the cause.

Health impacts of exposure to ultrafine particles

New concerns have been raised in the past 10-12 years about the potential health effects of ultrafine particles (UFPs) from combustion processes. These UFPs have been studied less extensively than $PM_{2.5}$ or larger PM_{10} particles. UFPs do not weigh much because of their size, making up only 10% of the total mass of $PM_{2.5}$, and they have a large surface area, to which harmful chemical constituents from the exhaust can adhere.²⁶

Recently, fourteen European scientific experts collaborated on reviewing the scientific literature on UFPs. Most of the experts concluded that:

The likelihood of an independent causal relationship between increased short-term UFP exposure and increased all-cause mortality, hospital admissions for cardiovascular and respiratory diseases, aggravation of asthma symptoms and lung function decrements was rated medium to high.²⁷

The group stressed the importance of considering UFPs in future risk assessments and the need for further research on UFP exposure and health effects. Similar suggestions were made at a symposium in California sponsored by the South Coast Air Quality

Management District, at which several scientists who spoke concluded that that if UFPs cause health effects, an air pollution standard for UFPs is needed.²⁸

Some of the studies show that:

- More than 90% of particles in diesel exhaust are actually ultrafine particles UFPs) smaller than 0.1 micron in diameter, and the tiny particles can be easily inhaled into the lung.²⁹ Laboratory studies increasingly show that these UFPs are more toxic and have a greater ability to cause lung inflammation than larger sized particles.³⁰
- Ultrafine particles appear to possess the most toxic potential of various size particles, according to Los Angeles researchers.³¹
- Ultrafine particles translocate (migrate) to the brain³² and to promote early atherosclerosis (hardening of the arteries) in exposed laboratory animals.³³

Exposure to traffic-related pollution: living close to busy road and highways

New studies over the past decade have examined the levels of traffic-related pollution at different distances from homes and schools, the volume of nearby traffic, and the nature of land uses in the area. These studies have shown that the levels of several traffic-related pollutants (ultrafine particles, nitrogen dioxide, and elemental carbon, a marker for diesel) are high in close proximity to roadways, especially within the first 150 meters from the road³⁴ and that living or going to school in close proximity to busy roads and highways with significant traffic-related pollution is linked to adverse health effects. Studies involving children exposed to traffic-related pollution have shown the following effects:

- **Reduced lung function**. Children who live near traffic-related air pollution are more likely to suffer reduced lung function as they grow up.³⁵
- **Increased risk of asthma**. Children living in homes within 225 feet of a highway have an increased risk of asthma.³⁶ Children are more likely to develop asthma when exposed to traffic pollution at school.³⁷
- **Increased wheezing, use of medication**. Asthma exacerbation such as wheezing and use of more asthma medication occurs more often among children living closer to highways.³⁸

Many recent studies involve adults exposed to traffic-related pollution. The research findings have shown the following adverse effects:

- **Low-birth weight babies.** Women who live near busy highways while pregnant are more likely to have babies with low-birth weight or who are premature.³⁹
- **Miscarriages**. California women who live within 50 meters of a road with daily traffic of 15,200 or more (compared to women living further away and exposed to less traffic) were more likely to suffer miscarriage. This finding was especially true among African-American and nonsmoking women.⁴⁰

- **Pregnancy complications**. Exposure to traffic-related air pollution during pregnancy increases risk of preeclampsia and preterm birth.⁴¹
- Women undergoing in-vitro fertilization who were exposed to higher levels of traffic-related air pollutants, particularly nitrogen dioxide, had an increased chance of in-vitro fertilization failure.⁴²
- **Breast cancer**. The risk of breast cancer among post-menopausal women is higher in areas where there are higher levels of NO₂. In this Canadian study, there was an increased risk of ~25% for every increase of 5 ppb in exposure to NO₂ (as a marker for traffic-related pollutants) when the levels in one area were 5 ppb higher than in another area, the risk of breast cancer went up by 25%.⁴³
- Atherosclerosis. Adults living within 328 feet of a Los Angeles freeway have twice the average progression of atherosclerosis, the thickening of artery walls that can lead to heart disease and stroke.⁴⁴
- **Cognitive impairment**. Women living within 50 meters of roads with at least 10,000 vehicles a day on them are more likely to develop mild cognitive impairment as they age.⁴⁵
- **Diabetes**. In a study of German women living near busy roadways, women who were exposed to traffic-related pollution were more likely to develop new cases of diabetes than those who were not exposed.⁴⁶
- **Heart/lung disease deaths**. Living near a major road is strongly associated with deaths from cardiopulmonary (heart/lung) disease. Adults who lived near a major road in the Netherlands were found to have twice the risk of mortality from heart/lung disease as adults in the same city living further from roads.⁴⁷
- **COPD**. Long-term exposure to traffic-related air pollution may contribute to the development of chronic obstructive pulmonary disease (e.g., emphysema), and this may be more likely to occur in people with diabetes and asthma.⁴⁸

In addition, an analysis of cancer by census tracts in Los Angeles County found elevated rates of throat, mouth and tongue cancers and certain types of lung cancer in close proximity to a truck-congested I-710 freeway in Los Angeles County,⁴⁹ one of the most heavily used highways for movement of goods in the country.

Regulation of diesel emissions

Vehicle emission standards in the U.S. are promulgated by the U.S. EPA. The State of California has authority under the Clean Air Action to adopt more stringent standards, which are set by the California Air Resources Board. Other states can adopt the California standards or the national standards.

The U.S. EPA has studied the health effects of diesel exhaust and concluded that diesel is a "likely" human carcinogen, that is, a toxic likely to cause cancer in humans who are exposed over time. The agency regulates diesel exhaust as a Mobile Source Air Toxic (MSAT).

In California, diesel particulate matter is regulated more strictly than in the rest of the U.S. In 1998, diesel particulate was designated a Toxic Air Contaminant (TAC) in that state, based on more than 30 studies showing that worker exposure to diesel exhaust is linked to lung cancer and other health effects.⁵⁰ This designation, along with hundreds of scientific studies showing the health effects of particulate matter (especially $PM_{2.5}$) provides authority for California to strictly regulate diesel emissions.

Community groups have raised serious concerns about locomotive emissions, especially from idling locomotives operating at rail yards that are near homes and schools. U.S. EPA has primary regulatory authority over locomotive emissions and has issued regulations. Arguing that "Federal law preempts California from setting emission standards for new locomotives and new engines used in locomotives," CARB has instead negotiated voluntary agreements with BNSF and Union Pacific, the two major freight railroads operating in the State. The South Coast Air Quality Management District attempted to limit idling of locomotives, efforts that have ended up in litigation. These voluntary efforts have disappointed and angered environmental justice organizations that represent residents who live near rail yards and resulted in protests in both Los Angeles and Sacramento.

Exposure to Noise

Port and intermodal rail operations are noisy by virtue of the locomotives and yard equipment being used and the handling of heavy containers by cranes and other equipment. A common negative impact in freight transportation communities relates to the high volume of heavy-duty trucks – a major source of noise. Community and occupational health studies show that noise can affect health and quality of life.

Transportation noise research, largely conducted in Europe, shows three main types of impacts from noise:

- **Psychological (e.g. annoyance).** A number of studies show significant annoyance from exposure to high levels of transportation noise above 60 decibels.⁵¹ Children studied in The Netherlands were found to be seriously annoyed by both aircraft noise and road traffic noise at school.⁵²
- **Physiological (e.g., hearing loss, increase in blood pressure).** Published studies show that workers are at risk of noise-induced hearing loss from noise at rail yards.⁵³ In addition, chronic noise exposure may contribute to the progression of heart disease.⁵⁴ In a recent study in the Netherlands, adults living near roadways who were exposed to noise were found to have higher rates of stroke in relationship to higher levels of noise, after accounting for air pollution.⁵⁵
- Mental health (e.g., anxiety). Elevated noise levels from road traffic and airports affect children's mental health and classroom behavior.^{56, 57, 58} Excessive noise from traffic can disturb restorative sleep.⁵⁹

The figure below shows the noise levels in decibels for common outdoor and indoor noise activities. Note that quiet urban daytime noise is usually slightly above 50 dBA

and that a diesel truck 50 feet away, going 50 miles per hour, may register between 80 and 90 dBA.

Figure 6. Noise levels for common activities

	Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
ſ	Jet Fly-over at 300m (1000 ft)		Rock Band
	Gas Lawn Mower at 1 m (3 ft)	0	
	Diesel Truck at 15 m (50 ft), at 80 km (50 mph)		Food Blender at 1 m (3 ft) Garbage Disposal at 1 m (3 ft
	Noisy Urban Area, Daytime		Ganbage Disposar at 1 m (5 it
9	Bas Lawn Mower, 30 m (100 ft)		Vacuum Cleaner at 3 m (10 ft
	Commercial Area Heavy Traffic at 90 m (300 ft)		Normal Speech at 1 m (3 ft)
		60	Large Business Office
	Quiet Urban Daytime	50	Dishwasher Next Room
	Quiet Urban Nighttime Quiet Suburban Nighttime	40	Theater, Large Conference Room (Background)
	Out at Dural Mathema	(30)	Library
	Quiet Rural Nighttime	0	Bedroom at Night, Concert Hall (Background)
		20	Broadcast/Recording Studio
		10	
	Lowest Threshold of Human	\bigcirc	Lowest Threshold of Human
	Hearing		Hearing
	E	xh ibit 2.2.6-1	

Source: Final Environmental Impact Report for the Gerald Desmond Bridge, Port of Long Beach. 2010

The chart below shows estimated noise levels at certain distances from busy roads and at certain speeds, with varying levels of traffic. It helps to illustrate how much the number of trucks and the speed that the traffic is moving impacts the noise levels. The more trucks there are and the faster the traffic is moving results in higher noise levels.

Figure 7. Levels of noise at 150 feet from busy roads

Vehicles per Hour				
Automobiles	Medium Trucks	Heavy Trucks	Speed, mph	Leq(h) dB(A)
1,500	100	200	65	67
1,500	100	200	50	64
1,500	100	0	65	63
1,500	0	0	65	62

TABLE 3 One-hour Equivalent Sound Level at 150 feet from Roadway

Source: Transportation Research Board of the National Academies, TR News. Transportation noise. Sept-Oct 2005, Number 240.

According to Southern California Association of Governments, complaints about noise vary according to the decibel level⁶⁰

Table 2. Impacts of various noise levels on sensitive uses

Source: Adapted from text, SCAG Regional Transportation Plan, Proposed EIR, 2004.⁶¹

As the table above shows, widespread complaints begin when noise gets into the 60 dB range, with serious annoyance between 60-70 dB.

Noise from locomotives is particularly high. A Southern California study showed that the noise impact caused by 40 freight trains per day generates approximately 75 decibels at 200 feet from the tracks and that freight trains also generate substantial amounts of ground-borne vibration near the tracks.⁶² Community residents near rail yards in Los Angeles have complained about noise for decades.⁶³ A recent study in Teaneck, NJ by Rutgers investigators estimated that 40% of residents living near train tracks where locomotive horns sounded at night had a high probability of waking from the horn noise.⁶⁴

Despite documentation of excessive noise levels and the presence of federal noise limits, many proposed rail yard projects claim that they will generate no significant noise impacts. For example, in 2010, McCalla, AL, residents expressed concerns about potential noise from a proposed Norfolk Southern Railroad intermodal hub,⁶⁵ but a consultant hired by the railroad dismissed the noise concerns even before finishing an environmental review.⁶⁶

Noise level	Where the noise is	Impact
55 dB	Outdoors near homes and	Sporadic complaints and community
	sensitive uses	annoyance start
DNL 55-60 dB	Outdoors and near sensitive	Upper range for intelligible speech
	uses	indoors at a typical home
55-60 dB range	Homes and sensitive uses	Widespread complaints
60-70 dB	Homes and sensitive uses	Threats of legal action begin
70 dB and above	Homes and sensitive	Strong appeals to local officials to
		stop the noise and threats of legal
		action

Neighborhood Impacts – Lighting, Traffic Congestion, Truck and Rail Accidents

When faced with new or expanding freight transportation facilities, concerns of residents often focus on the proximity of neighborhood schools and homes to ports, rail yards, warehouses, and highways. While residents in these communities highlight potential health effects of traffic-related air pollution and noise, they also express deep concern about their "quality of life." Ports, rail yards, and many distribution centers operate round-the-clock operations, often employing bright lights, often referred to as "stadium lighting." New interest in the effects of bright nighttime lighting has recently emerged, with human studies looking at the effect of bright light and disturbances in sleep,

hormones, immune function, and circadian rhythm. ⁶⁷ A laboratory study in mice has shown that nighttime exposure to artificial light stimulated the growth of breast tumors by suppressing the levels of a key hormone called melatonin.⁶⁸ In addition, night lighting (or "bright skies") creates serious negative consequences for animal and bird life. ⁶⁹

Occasional train derailments and frequent truck accidents are a common occurrence in goods movement communities. Nationwide, in 2008, more than 4,000 persons were killed in big-rig truck accidents, with 69% of them being occupants of passenger vehicles.⁷⁰ Also in 2008, more than 200 persons died at highway-rail grade crossings involving freight railroads.⁷¹ Traffic congested with big-rig trucks is also a common complaint and safety hazard in communities with ports and rail yards. Big-rig trucks constitute 20-25% of the volume of vehicles on the Long Beach Freeway in Southern California, the conduit from the Ports to the major downtown rail yards.⁷² The truck route already has 35,000 trucks a day on it, and there is a proposal to triple that number by widening and double-decking the freeway in some sections of its 20-mile route.⁷³

Race and Place Issues

According to the U.S. EPA National Environmental Justice Advisory Council report on goods movement:

The environmental, public health and quality-of-life impacts of goods movement on communities are more pronounced in areas with major transportation hubs and high traffic roads. Minority and low-income communities near these hubs and throughways bear disproportionate impacts because of their close proximity to multiple pollution sources.⁷⁴

A screening analysis done for U.S. EPA determined that at least 13 million people, including a disproportionate number of low-income, African-Americans and Latinos, live in close proximity to these facilities and are exposed to higher levels of diesel particulate matter than other residents in their region.⁷⁵

Incompatible Land Uses

As in many communities across the country, land use decisions have resulted in homes, schools, and even parks being located near ports, highways, rail yards, and warehouses. Despite the growing amount of scientific research that shows the direct correlation of health risk with proximity to freeways, rail yards, and diesel emission sources, health considerations typically are not integrated into land use decision-making. In Southern California for example, 65 schools are located within one mile of the I-710 Freeway,⁷⁶ a major highway connector from the Ports of Los Angeles and Long Beach for which government officials have proposed an expansion. More than 600,000 residents, including 212,000 under age 18, live within 1,500 meters of the freeway.⁷⁷

Another example of incompatible land uses concerns rail yards in Southern California. In the Los Angeles area, BNSF is proposing to develop a new intermodal rail facility four miles from the ports,⁷⁸ and Union Pacific has proposed expansion of its adjacent UP Intermodal Container Transfer Facility (ICTF).⁷⁹ Many neighboring residents oppose

both projects because they are located in close proximity to schools and established residential communities.⁸⁰ Draft environment impact reviews for the two projects are expected in 2011.

At the urging of community and environmental justice groups in California, the California Air Resources Board adopted guidelines for the siting of schools near sources of pollution, such as rail yards, ports, warehouses, and busy highways.⁸¹ In addition, the U.S. EPA recently published draft guidelines on school siting, which suggest buffer zones to protect students from the pollution of highways, rail yards, and ports.⁸² These proposed guidelines do not have legal authority, however, and few local governments responsible for land use planning have actively pursued implementation of such approaches. See land use and health section below.

Health Impacts in Asia from Manufacturing Products for Export

The dramatic increase in international trade, especially between developing countries in Asia and the U.S., has also resulted in major impacts for the exporting countries as well, where the system of trade is inextricably linked to manufacturing processes that compound negative impacts to worker, health, and communities.

As China's economy has changed to focus on manufacturing and on international trade, occupational hazards have become a major concern. Lead poisoning (and more recently cadmium poisoning) among workers, for example, has been a ubiquitous problem in – and near – metal smelters in China. Children in Chinese provinces have also suffered. For example, children living near factories that produce car batteries (which contain recycled lead) have suffered from elevated levels of lead in their blood.⁸³ Protests have broken out in a number of Chinese cities when children have been found with lead poisoning or when authorities have suggested siting new chemical plants there.⁸⁴

Growing awareness and concern focuses on air pollution. A finance organization called 24/7 Wall St. recently performed an analysis to determine the 10 cities with the world's worst air. They reviewed studies on air quality, government data, and information about sulfur dioxide, nitrogen dioxide, and particulate matter. Among the top 10 were the following four cities in China: Beijing (tied with New Delhi, India), Chongqing, Guangzhou and Hong Kong.⁸⁵

A 2006 scientific study investigated high levels of air pollution in the Pearl River Delta region of China, home to hundreds of manufacturing operations and found that the region "produces more than \$100 billion of goods annually for export to North America, Europe, and other parts of Asia [and that] 10-40% of emissions of primary SO₂ [sulfur dioxide], NOx [nitrogen oxides], RSP [respirable suspended particulates], and VOC [volatile organic chemicals] in the region are caused by export-related activities."⁸⁶ This funding has spurred environmental and public interest groups such as Civic Exchange, who advocate for reduction of sulfur content in fuels burned by ships.⁸⁷

Climate Change/Global Warming/Natural Resource Impacts

Beyond the enormous and multi-dimensional health impacts, international shipping and freight transportation have begun to be identified as major contributors to greenhouse gas emissions and climate change. In fact, a recent study by NASA's Goddard Institute for Space Studies identifies the transportation sector, including trucks, ships, and rail that rely on diesel fuel, as "the greatest contributor to atmospheric warming now and in the near term."⁸⁸ Trucking and rail freight in the U.S. alone accounts for 1.5% of global emissions,⁸⁹ and shipping alone accounts for approximately 3-3.5% of total global emissions and 13% of global emissions from transportation.⁹⁰ According to the International Maritime Organization (IMO), the shipping industry releases more greenhouse gases than the global aviation industry.⁹¹ On its own, a single container ship is said to emit more greenhouse gases than two thousand diesel trucks⁹² and its emissions may contribute to pollution hundreds of kilometers inland.⁹³

Shipping releases more carbon dioxide (CO₂) than all but six of the world's nations – more, for example, than is released by Germany.⁹⁴ Due to the anticipated growth in world trade, CO₂ emissions from global shipping are expected to rise by 126-218% by 2050 if a business-as-usual approach is followed.⁹⁵

Much of these greenhouse gases come from the shipping industry's use of bunker fuel, a "bottom of the barrel" high sulfur petroleum product. Ships burn bunker fuel in diesel engines and the engines are among the world's highest polluting combustion sources per ton of fuel consumed.⁹⁶ Not only is bunker fuel dirty, but much of it is actually imported by China from Venezuela making the transport of the dirty fuel even more polluting in the process of transporting it. California officials are worried about increased concentrations of nitrogen oxides from burning bunker fuel, stating that they are "causing a rise in the acidification of the ocean, since the oceans are the "sink" into which about one-third of all NOx emissions are eventually deposited.⁹⁷ Burning bunker fuel in ships also produces harmful black carbon, a carbonaceous (carbon rich) aerosol considered by many to be responsible for climate change, second only to CO₂.⁹⁸ A December 2009 study in the scientific journal *Lancet* pointed to the importance of black carbon, which, in combination with ozone, "could together exert nearly half as much global warming as carbon dioxide."⁹⁹

In yet another piece of the fuel supply chain, exports of low-sulfur coal from Montana to China are raising concerns and protests among residents in Oregon, not far from a coal export terminal in Longview, Washington, from which the coal would be shipped to Asia. Residents point out the irony that they are trying to close their own coal-burning generating plants and meanwhile may become the export location for millions of tons of coal each year to China.¹⁰⁰

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⁷⁹ The ICTF is governed by a Joint Powers Authority. See <u>http://www.ictf-jpa.org/</u> for the railroad's expansion plan. (Accessed February 28, 2011, at <u>http://www.ictf-jpa.org/</u>)

⁸⁰ Schoch D. Proposed rail yard angers residents of nearby Long Beach community. (Accessed March 11, 2011, at <u>http://articles.latimes.com/2005/oct/06/local/me-rail6</u>

⁸¹ California Air Resources Board. Air quality and land use handbook: a community health perspective. 2005. (Accessed March 4, 2011, at <u>http://www.arb.ca.gov/ch/landuse.htm</u>)

⁸² U.S. EPA School Siting Guidelines. <u>http://www.epa.gov/schools/siting/</u>

⁸³ Polluting battery plant that caused high blood lead in kids closed. January 7, 2011. (Accessed March 12, 2011, at <u>http://english.sina.com/china/p/2011/0106/355017.html</u>)

⁸⁴ Pearce F. As China's pollution toll grows, protesters and media push back. Yale Environment 360. (Accessed March 12, 2011, at http://e360.yale.edu/feature/as chinas pollution toll grows protesters and media push back/2254)

⁸⁵ Mcintyre D. The 10 cities with the world's worst air. Daily Finance. November 29, 2010. (Accessed March 5, 2011, at <u>http://www.dailyfinance.com/story/10-cities-with-worlds-worst-air/19729753/?icid=sphere_copyright</u>)

⁸⁶ Tirschwell P. Atlantic expectations. The Journal of Commerce. July 16, 2010

⁸⁷ Hora RM. Tackling pollution at Hong Kong's ports. Wall Street Journal. (Accessed March 3, 2011, 2010, at <u>http://blogs.wsj.com/hong-kong/2010/12/19/tackling-pollution-at-the-ports</u>)

⁸⁸ NASA. Road transportation emerges as key driver of warming in new analysis from NASA. Feb 18, 2010. (Accessed March 1, 2011, at <u>http://www.nasa.gov/topics/earth/features/road-transportation.html</u>)

⁸⁹ U.S. Environmental Protection Agency, Inventory of U.S. greenhouse gas emissions and sinks, 1990-2006. 2008.

⁹⁰ Crist P. ITF Research Centre, ITF/OECD. "GHG emissions from international shipping and the potential for control and reduction," presented at Multi-year Expert Meeting On Transport and Trade Facilitation: Maritime Transport and the Climate Change Challenge. February 2009.

⁹¹ Second IMO GHG Study 2009, International Maritime Organization (IMO), London, UK, April 2009

⁹² Friends of the Earth, Oceana, Center for Biological Diversity, Earthjustice. Petition to Environmental Protection Agency for rulemaking under the Clean Air Act to reduce the emission of air pollutants from marine shipping vessels that contribute to global climate change. October 2007. (Accessed February 28, 2011, at

http://na.oceana.org/sites/default/files/o/fileadmin/oceana/uploads/Climate_Change/Marine_GHG_Petition _FINAL.pdf)

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⁹⁴ Eyring V, Corbett J. Comparing fuel consumption, carbon dioxide and other emissions from international shipping and aircraft: a summary of recent research findings, DLR-Institute of Atmospheric Physics. 2007. (Accessed February 1, 2011, at

http://www.pa.op.dlr.de/SeaKLIM/Fuel Emissions International Shipping.html)

⁹⁵ Crist P. GHG emissions from international shipping and the potential for control and reduction. Presented at Multi-year Expert Meeting On Transport and Trade Facilitation: Maritime Transport and the Climate Change Challenge. ITF Research Centre, ITF/OECD. February 2009.

⁹⁶ Corbett J, Fishbeck P. Policy forum: emissions from ships. Science 1997;278(5339)823-824.

⁹⁷ State of California, petition to the U.S Environmental Protection Agency. Petition for rulemaking seeking the regulation of green house gas emissions from ocean-going vessels. October 3, 2007. (Accessed March 6, 2011, at ag.ca.gov/cms_pdfs/press/N1474_Petition.pdf)

⁹⁸ Ramanathan V, Carmichael G. Global and regional climate changes due to black carbon. Nature Geoscience 2008;1:221-227.

⁹⁹ Smith KR, Jerrett M, Anderson HR, Burnett RT, Stone V, Derwent R, Atkinson RW, et al. Public health benefits of strategies to reduce greenhouse-gas emissions: health implications of short-lived greenhouse pollutants. The Lancet. 2009;374(9707):2091-2103.

¹⁰⁰ Oregonian Editorial Board. The Northwest's newest export: global warming. The Oregonian. December 1, 2010. (Accessed February 28, 2011 at <u>http://www.oregonlive.com/opinion/index.ssf/2010/12/the_northwests_newest_export_g.html</u>)

Nathan Stringer

From:	john anderson <j.ando.action_10@hotmail.com></j.ando.action_10@hotmail.com>
Sent:	Saturday, 6 December 2014 12:07 PM
То:	information-Planning
Subject:	Moorebank Intermodal ssd5066 epbc 2011/6086 EIS

Attention Andrew beattie I strongly object to the Moorebank IIntermodal as the cost to build the project to operate in a satisfactory way would be 15-20-25 billion dollars money which no proponent or government has and to build it cheaper would result in tragic circumstances as it is estimated that up to 34 intersections would require serious upgrading and it is obvious no one has the intention to do that. Their is no way they could use Cambridge avenue and Heathcote Rd is a very substandard road and struggles to meet ordinary passenger traffic loads. That would mean that the only access would be Moorebank Avenue and the M5 which with traffic gridlock usually extending on a 24/7 basis these tyrucks and vehicles would have no possible way to access this intersection

Their is talk of bypasses along near the Cumberland highway but with that intersection being the 3rd highest accident spot it is inconceivable that would be successful. The big problem about this project is that it has being planned by people who have very liitle knowledge of the area and the problems the area has on a daily basis. To build the Intermodal in a area wihout the daily congestion has to be be able to be done in a quarter of the cost as it wouldn't have to compete with traffic gridlocked roads and would be away from heavy populated areas where air pollution is a enormous problem. In essence community concerns have been totally ignored and is a national disgrace

John Anderson 4 namoi court wattle grove NSW 2173 ph.98252795 mob.0409368603

Nathan Stringer

From:	john anderson <j.ando.action_10@hotmail.com></j.ando.action_10@hotmail.com>
Sent:	Sunday, 7 December 2014 1:39 PM
То:	information-Planning
Subject:	RE: Additional Further to request for scientific help on diesel exhaust

From: j.ando.action_10@hotmail.com To: atarasov@fairfaxmedia.com.au Subject: RE: Additional--- Further to request for scientific help on diesel exhaust Date: Tue, 22 Apr 2014 13:14:16 +1030

Attention Andrew beattie ssd 5066 epbc 2011/6086 re Moorebank Intermodal closing 8th December 2014 This is the cancer risk from California where it shows the cancer risk goes from 1000 in a million next to the railyard installation down to 10 in a million 5 miles away. Thepopulation in that area would be approaching 1000,000 residents John Anderson Mob.0409368603 4 namoi court wattle grove NSW 2173 p.s there is no way that Australia would be effected any different

From: darab@people.net.au To: lozzalemond@yahoo.com.au; 00corbo@tpg.com.au; j.ando.action_10@hotmail.com Subject: FW: Additional--- Further to request for scientific help on diesel exhaust Date: Wed, 13 Jun 2012 16:54:27 +1000

From: Andrea Hricko [mailto:ahricko@usc.edu] Sent: Monday, 17 January 2011 4:42 PM

To: 'Roy Carter'; I.morawska@qut.edu.au; 'D'; ctruax@usc.edu

Cc: 625110@tpg.com.au; j.anderson_lag@hotmail.com; peter_langsam@bigpond.com;

nansi.gidiess@worldaviation.com.au; ned.mannoun@gmail.com; cllrhadchiti@liverpool.nsw.gov.au; darab@people.net.au

Subject: RE: Additional--- Further to request for scientific help on diesel exhaust

Yes, the California Air Resources Board has done Health Risk Assessments for 18 rail yards in CA. They have calculated the diesel cancer risk, based on emissions inventories by the major freight railroads (BNSF and UP). Then they studied meteorology etc and drew isopleths for where they estimated the highest risks to be around the rail yards. They are all posted <u>http://www.arb.ca.gov/railyard/hra/hra.htm</u> For example, see page 27 of the .pdf for the BNSF Hobart Yard:

<u>http://www.arb.ca.gov/railyard/hra/bnsf_hobart_hra.pdf</u> (Note this is based on EXCESS risk over background diesel cancer risk of about 1000/one million. Anything over 10/one million risk is considered "excess.")

As indicated in Figure II-3 and Figure II-4, the area with the greatest impact has an estimated potential cancer risk of over 1000 chances in a million, occurring in the area right next to the boundaries of the railyard fence line. The land use of this area is identified as industrial use. Because of the characteristics of meteorology, the ambient diesel PM concentrations become more dispersive northeast of the railyard. The estimated potential cancer risks are about 500 chances in a million at approximately 300 yards (up to 600 yards in the northeast) from the railyard boundaries. The land within this zone is mainly for industrial use; only about 100 residents live within this zone.

The estimated potential cancer risks decrease to about 250 at approximately a half mile (up to one mile in the northeast) from the railyard boundaries. Some residential areas are located in the north part of this zone. At about one mile (up to two miles in the northeast) from the railyard boundaries, the estimated potential cancer risks decrease to about 100 chances per million. The estimated potential cancer risks further decrease to 50 in a million at about 1.5 miles (up to 3.5 miles in the northeast) from the railyard boundaries, then to 25 in a million at approximately 2.5 miles (up to 5 miles in the northeast) from the railyard boundaries. At about 4 miles (up to 8 miles in the northeast) from the railyard boundaries, the estimated potential cancer risks are at 10 in a million or lower.

Andrea M. Hricko Prof of Prev Med Keck School of Med, USC & Director, Community Outreach and Education Southern CA Env Health Sciences Ctr 1540 Alcazar Street CHP 236 L.A. CA 90033 323-442-3077

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From: Roy Carter [mailto:roy.carter.1@hotmail.com]
Sent: Sunday, January 16, 2011 8:57 PM
To: l.morawska@qut.edu.au; D; ahricko@usc.edu; ctruax@usc.edu
Cc: 625110@tpg.com.au; j.anderson lag@hotmail.com; peter langsam@bigpond.com; nansi.gidiess@worldaviation.com.au; ned.mannoun@gmail.com; cllrhadchiti@liverpool.nsw.gov.au; darab@people.net.au

Subject: RE: Additional--- Further to request for scientific help on diesel exhaust

Thank you for yr kind reply professor Morawska. The reference to yourself was via the USA Californian based Anti Freight Hub Conference Organisers I believe. Yr statements of 300-400m affectation from Traffic Corridores is completely opposite of the broad scale research conducted about Freight Hubs in the USA which conclusively prove (they espouse) a major public health detriment within a much Larger Geographical Area from Source. Ergo, as you seem unversed in the Affects on Humans of Freight Hubs of major proportion as published by the Californian EPA (this one is to be the Largest in Australian History) you are probably going to be useful to us once you have been supplied with the data by Professor Hricko. In addition I will send you any data from the proponents that we are supplied with for yr interest and comment.

Best Regards

Roy Carter Wattle Grove NSW.

From: l.morawska@qut.edu.au

To: <u>roy.carter.1@hotmail.com</u>; <u>smokey_70@bigpond.com</u>; <u>ahricko@usc.edu</u>; <u>ctruax@usc.edu</u>

CC: <u>625110@tpg.com.au</u>; <u>j.anderson_lag@hotmail.com</u>; <u>peter_langsam@bigpond.com</u>;

nansi.gidiess@worldaviation.com.au; ned.mannoun@gmail.com; cllrhadchiti@liverpool.nsw.gov.au; darab@people.net.au

Date: Mon, 17 Jan 2011 12:37:31 +1000

Subject: RE: Further to request for scientific help on diesel exhaust

Dear Roy,

Just a few words in the midst of all the activities necessary under the post flood situation, and a few days before my departure for a three weeks oversees business trip.

I would like to help, but what you have described is still too general and open ended to be able to make any meaningful statements. For example you say that that the distance is much less than 1000 m for many residences or that the schools lie within 2000 m. But normally the impact from traffic corridor emissions is not experienced past the first few hundred meters from the corridor (up to 300 – 400 m). Therefore while I see that the situation it is potentially a problem, I cannot state, in a quantitative way that this or that receptor (school, residences, etc) be affected, without having much more in depth picture of the situation. And general statements as such, will not necessarily help or be relevant. So I am really stack and not sure how to help...

With my best regards,

Lidia

Lidia Morawska, PhD

Professor, School of Physical and Chemical Sciences Director, International Laboratory for Air Quality and Health Queensland University of Technology

2 George Street

Brisbane, Q 4001 Australia

Phone: +61 7 3138 2616

Fax: +61 7 3138 9079

e-mail: <a href="mailto:limitstam.investigation-complete:limitstam

See International Laboratory for Air Quality and Health: <u>http://www.ilaqh.qut.edu.au</u>

From: Roy Carter [mailto:roy.carter.1@hotmail.com]

Sent: Thursday, 13 January 2011 1:51 PM

To: D; Lidia Morawska; <u>ahricko@usc.edu</u>; <u>ctruax@usc.edu</u>

Cc: <u>625110@tpg.com.au</u>; <u>j.anderson_lag@hotmail.com</u>; <u>peter_langsam@bigpond.com</u>; <u>nansi.gidiess@worldaviation.com.au</u>; <u>ned.mannoun@gmail.com</u>; <u>cllrhadchiti@liverpool.nsw.gov.au</u>; <u>darab@people.net.au</u>

Subject: RE: Further to request for scientific help on diesel exhaust

Hi Professor Morawska, in accordance with the request of Dominic Scutella I wish to clarify:

We have two proponents on sites opposite across a singe road, between Residential Areas.

Closeness is circa much less than 1000m for many residences. Ten Schools and 19 Childcare Centres Lie within 2000m of the Extremeties of the Sites.

There is a Major Motorway (M5) alongside and a Freight Railway Line across the narrow river which bounds on one of the two sites.

The Proponents are apparently only responsible to account for their own On Site Emissions. (SIMTA is one proponent which includes QR Queensland Rail and the Australian Government is the other via Moorebank Project Office.

The Aggregate of Two Intermodals plus their surrounding Freight Zones would cover circa 260ha. One Million TEU Container Units per Site is the Deemed Handling quantity Required.

Estimated Truck movements exeed 2000 per day per site. Trains Total both sites circa 80 per day(allowing for container return journeys)X2. (4 Deisel Locomotives Per Train).

Full Multiple use Freight Handling including Refrigerated Containers and Dangerous Goods.

Under Section 3A of the NSW Planning and Assessment Act the Minister has the power to grant permission to proceed, thus far no public exhibition of plans or studies have been produced or made available.

However Political Pressure is heavy to proceed regardless of the consequences as the NSW Government has failed to Plan Correctly for future Freight Handling in NSW therefore has no other optional plan. We need any information available or that you could muster to describe the airshed conditions in a

scenario as I have described.

I would of course if provided with data by the proponents, forward same for your perusal, however we are expecting a completely cladestine approach to this Human Rights Travesty.

Best Regards, Roy Carter

From: <u>smokey 70@bigpond.com</u>

To: <a>l.morawska@qut.edu.au; <a>ahricko@usc.edu; <a>ctruax@usc.edu

CC: <u>roy.carter.1@hotmail.com</u>; <u>625110@tpg.com.au</u>; <u>j.anderson_lag@hotmail.com</u>;

<u>peter langsam@bigpond.com; nansi.gidiess@worldaviation.com.au; ned.mannoun@gmail.com;</u> <u>cllrhadchiti@liverpool.nsw.gov.au; darab@people.net.au</u>

Subject: request for scientific help on diesel exhaust

Date: Wed, 12 Jan 2011 21:17:56 +1100

12/1/2011

Dear Professor Lidia (School of Physical and Chemical Sciences Director, International Laboratory for Air Quality and Health Queensland University of Technology),

Thank you for your offer to help. We have some proposals made to us but they are not being honest with us.

Sorry but I have a bandage around part of my hand which is making it extremely difficult to type.

Roy - another member of our community is more up to date with the specifics, I will ask him to contact you.

Thanking you Dominic Scutella Phone 0408 9731 97 118 Daintree Drive Wattle Grove Sydney NSW 2173

From: Lidia Morawska [mailto:l.morawska@qut.edu.au] Sent: Tuesday, 11 January 2011 3:27 PM To: D; 'Andrea Hricko'; 'Carla Truax' Subject: RE: request for scientific help on diesel exhaust Dear Dominic, Sorry for not replying earlier, but I had a short break around Christmas. Now back to work (of course, provided that flooding in Brisbane would not interfere with this), before an overseas business trip at the end of the next week. I am happy to help to the extend we can, but would like to be very clear as to what help you need. You mentioned that you would like information about the health effects of diesel on various community group, particularly in Australia. I am not aware of any major Australian studies on this, but we could do a literature search. But you have also mentioned that Andrea has been providing you with some information on this topic. So the question is whether Andrea has already done a literature search? We could also help when a proposal is announced, because than we could assess the actual likely concentration levels at the receptor sites, and all the other details of emissions (which obviously would be very difficult to do not knowing any specifics). With my best regards, Lidia Lidia Morawska, PhD Professor, School of Physical and Chemical Sciences Director, International Laboratory for Air Quality and Health Queensland University of Technology 2 George Street Brisbane, Q 4001 Australia Phone: +61 7 3138 2616 Fax: +61 7 3138 9079 e-mail: <a>l.morawska@qut.edu.au See International Laboratory for Air Quality and Health: <u>http://www.ilaqh.qut.edu.au</u> From: D [mailto:smokey 70@bigpond.com] Sent: Sunday, 19 December 2010 9:00 AM

To: 'Andrea Hricko'; 'Carla Truax'; Lidia Morawska Subject: request for scientific help on diesel exhaust

Importance: High

18th December 2010

Dear Professor Lidia Morawska (Professor at the School of Physical and Chemical Sciences, Queensland University of Technology in Brisbane),

Re: your Research into Pollutants and their possible affects on Health.

Just wondering if you can help please? A colleague of yours Professor Andrea Hricko has been providing some information to us about the affects of diesel pollutants on health. This is because there are proposals for a Freight Zone to be built next to our homes in South West Sydney (Moorebank Intermodals).

The Proponents of the Freight Zone at Moorebank, Sydney, Australia are the Australian Federal Government, the New South Wales State Government and a Private Consortium on one sector.

Apparently, the Proponents believe that the Deisel Toxins and Particulates present no problem because they can be Filtered. However the design of the installations are Open Field not a fully enclosed area. Two Million Teu Per annum to be handled with Ten Schools and Nineteen Child Care Centres within 2000 metres of the site boundary extremities. Freight will be transported by both trains and semi-trailers on a massive scale – it is planned to be well and truly the Biggest in Australia.

A submission period is about to begin in which we can lodge our concerns. It has been pointed out that most of the research that we have heard about is based in the United States.

Please, our community would like to ask for your assistance?

Can you please help provide information regarding the potential health affect's on our children and community – in particular Australian research.

Yours Appreciatively of any Assistance, **Dominic Scutella** Phone 0408 9731 97 118 Daintree Drive Wattle Grove Sydney NSW 2173 From: Andrea Hricko [mailto:ahricko@usc.edu] Sent: Thursday, 16 December 2010 5:08 AM To: 'Carla Truax'; 'D' Cc: roy.carter.1@hotmail.com; 'Jim McGoldrick'; ned.mannoun@gmail.com; peter langsam@bigpond.com; glenbutterfield@hotmail.com; j.anderson lag@hotmail.com; 'Dara B' Subject: RE: Urgent please I do have a suggestion.... I have written to Professor Lidia Morawska of Brisbane; she is, one of your country's experts on air pollution, especially ultrafine particles, to see if she can possibly provide assistance. http://www.ilagh.gut.edu.au/Personel/Im.htm Here is her work on road tunnels http://esciencenews.com/articles/2009/08/29/tunnels.concentrate.air.pollution.1000.times I doubt very much that she has done any work on rail, few have.... But I told her that some of you would be contacting her and I sent her some of the news articles and links about the project. Andrea Andrea M. Hricko Prof of Prev Med Keck School of Med, USC & Director, Community Outreach and Education Southern CA Env Health Sciences Ctr 1540 Alcazar Street CHP 236 L.A. CA 90033 323-442-3077 From: Carla Truax [mailto:ctruax@usc.edu] Sent: Wednesday, December 15, 2010 9:12 AM To: 'D'; 'Andrea Hricko' Cc: roy.carter.1@hotmail.com; 'Jim McGoldrick'; ned.mannoun@gmail.com; peter langsam@bigpond.com; glenbutterfield@hotmail.com; j.anderson lag@hotmail.com; 'Dara B' Subject: RE: Urgent please You're quite welcome! We're here to help. Unfortunately I don't have any contacts in Australia. What do you think, Andrea? Carla Truax **Outreach Coordinator** Southern California Environmental Health Sciences Center University of Southern California 1540 Alcazar St, CHP 236 Los Angeles, CA 90033 Office (323) 442-2745 Fax (323) 442-3272 Email ctruax@usc.edu

From: D [mailto:smokey 70@bigpond.com] Sent: Wednesday, December 15, 2010 12:50 AM To: 'Carla Truax' **Cc:** roy.carter.1@hotmail.com; Jim McGoldrick; ned.mannoun@gmail.com; peter langsam@bigpond.com; glenbutterfield@hotmail.com; j.anderson lag@hotmail.com; Dara B Subject: RE: Urgent please Importance: High Hi Carla, Thank you IMMENSELY for all the information. Just wondering if you might know of any Australian research / University Contacts that we can also speak to? Thanking you, **Dominic Scutella** From: Carla Truax [mailto:ctruax@usc.edu] Sent: Wednesday, 15 December 2010 9:43 AM To: 'D' Cc: 'Andrea Hricko'; 'Ed Avol'; 'Penny Newman' Subject: RE: Urgent please Hi Dominic, we are currently gathering all the presentations and materials from the conference. I have attached the presentations from the Science Panel, and also posted them online on the conference page http://hydra.usc.edu/scehsc/web/Conference%202007/Conference%202010.html I will work on getting you the rest of the presentations as soon as possible. I'd also like to point you towards the great resources we put together from the 2007 conference, available on this page: http://hydra.usc.edu/scehsc/web/Resources/Conference%20Resource%202007/Conference%20Resource %202007.html Don't hesitate to let me know if you need anything else. Sincerely, Carla Carla Truax **Outreach Coordinator** Southern California Environmental Health Sciences Center University of Southern California 1540 Alcazar St, CHP 236 Los Angeles, CA 90033 Office (323) 442-2745 Fax (323) 442-3272 Email ctruax@usc.edu

At 03:17 AM 12/14/2010, you wrote: 14/12/10

RE: Conference CD/DVD

Dear Mr Edward Avol,

Can you please help as we are having difficulty obtaining the Conference CD's ??

Some members of our community went to the Conference regarding the impacts of Railyard Freight Intermodals.

In Australia, they are just about to develop 2 of them next to our homes.

I would like to Please Urgently purchase this CD / DVD.

Can you please advise how I can do this?

Thanking you,

Dominic Scutella 118 Daintree Drive Wattle Grove NSW 2173 Australia

Ed Avol Professor, Environmental Health Division Department of Preventive Medicine Keck School of Medicine University of Southern California 1540 Alcazar Street Suite 236 Los Angeles CA 90033

avol@usc.edu (323) 442-1090 (office phone) (323) 442-1096 (Division Office)

Nathan Stringer

From:	john anderson <j.ando.action_10@hotmail.com></j.ando.action_10@hotmail.com>
Sent:	Sunday, 7 December 2014 12:50 PM
То:	information-Planning
Subject:	Moorebank Intermodal sdd5066/epbc 2011/6086

Contamination. It would be impossible to clean up both sites for the Intermodal as it has being a dumping ground for many years and I have been informed by ex army personell that dumping of unwanted goods was common place. Also the contamination from shipping containers would only worsen the situation as the containers come from all around the world. I have been informed that to clean up the containers in fact sterilise them wpould cost billions of dollars and that doesent occur at Port Botany now so it would not occur in the future. With 34 threatened and endangered species and plants they could be decimated

Traffic Gridlock The M5 and other local roda are virtually gridlocked 24/7 now and the MIC saying that the containers could fit on offpeak times is far off the mark it is not funny. I have seen staff doing traffic studies but not for the full period of time that traffic gridlock occurs. It has been estimated that up to 34 intersections probably 40 intersections would need upgrading but that is not mentioned to occur which would mean that there would be no alternative but for traffic to come to a complete stop

Noise. I live close to both SIMTA and MIC LTD intermodal site as close as 400 metres and I have problems with local noise so it would be impossible to mitigate noise from construction Locomotives Container trucks and the volume of traffic that would be generated. In port Botany it been proven that noise travels up to 3km away and I see no reason why the same wouldn't happen here as the site is elevated and noise would roar down from that area

Health Concerns Cancer risk Liverpool is one of the worst health areas in NSW and I am astounded that the area is even contemplated for the projects which must bring a sea of diesel emissions. Also I know that the area has large cancer patients and it is inconceivable that anyone would want to increase this number. I am sure from figures I have witnessed is that the area contains double the number of cancer patients as other areas in Sydney which I find deplorable...I witness huge volumes of diesel heavy vehicles in the area and the air monitoring in the area must not detect much of this air pollution. Also it is known that 3000 residents in Australia die each year due to air pollution but this seems to be always ignored.IT is time for this problem to be addressed as surely the life of residents must be fully considered. So if nothing else there must be a full inquiry into this matter for this area and not just shoved into the too hard basketThe area has the highest number of residents with diabetes which has enormous health concerns...The area has a 5% higher mortality rate and a 8% higher cardiovascular problems with enormous number of residents with disabilities.

Social Impact The area where the Moorebank Intermodal are situated is a predominantly family orientated area and kids make up a big proportion of the population with Wattle grove having a 8.7% number of kids 0-4 Moorebank 8.4 % 0-4 and Liverpool 80% in 0-4 age bracket Casula Hammondville would have similar %.While Sydney has 6.6% in that age bracket.This is a national disgrace as their health is the most effected along with very senior residents as children don't fully develop until they are 25 years old

John Anderson 4 namoi court wattle grove NSW 2173 ph.98252794 mob.0409368603

Andrew Beattie

From: Sent: To: Subject: john anderson <j.ando.action_10@hotmail.com> Monday, 8 December 2014 10:19 PM information-Planning RE: Moorebank Intermodal ssd5066 epbc 2011/6086

From: <u>i.ando.action 10@hotmail.com</u> To: <u>information@planning.nsw.gov.au</u> Subject: Moorebank Intermodal ssd5066 epbc 2011/6086 Date: Mon, 8 Dec 2014 22:17:18 +1100

Attention Andrew Beattie

Unsuitability of Moorebank Intermodol site After researching much about the Moorebank Intermodal I have come to the conclusion that the Governments and Proponents couldn't have come up with a worst site for their Intermodal if they tried. Anyone who knows anything about the area realises that the Moorebank Intermodal is destined for failure .Im sick and tired of reading articles which completely ignores the wishes of residents in the South West of Sydney and as I have stated many times before residents have been completely ignored and nobody is addressing the real issues.

Everyone knows that the area will only be a another link in the delivery chain but our research and logic is always completely ignored. The area is a disasterous pollution area and that explains the bad health record of the area but this is also ignored and the wishes of big business always seem to take precedence . With Casula and Wattle grove in close proximity the impact on these area will be felt for many years if this debacle is allowed to continue, with research shows clearly how residents who live so close will be put at great risk it shows clearly that nobody cares for us any we are just canon fodder for parties who have no idea of what will occurr. I am astounded when I read that the project will cost 1 billion dollars as I know that the correct costing will go closer to 25 billion with the required infrastructure that will be required.

I have received many letters saying that there will be a full merit assessment but when the final analysis is made this is quickly forgotten and all the empty promises are just quickly forgotten. If there is any sort of compassion or decency shown other alternatives must be explored which have some sort of chance of being a success. The site in Moorebank is very exposed and the sea of disel emissions will have a huge impact on residents and the surrounding environment will be badly impacted which will never be able to recover

John Anderson 4 namoi court Wattle grove. NSW 2173 ph.98252794 mob.0409368603

E-mail Message	
From:	ohn anderson [SMTP] ando action 10@hotmail.com]
То:	Public Goward's Office Email [EX /O=MIN/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=5AC6AD7B09FE1A48808B23FEDCEF8244- 000000059ADC1
Cc:	
Sent: Received: Subject:	21/10/2014 at 11:14 AM 21/10/2014 at 11:14 AM Moorebank Intermodal current Environmental impact study
Attachments:	Corro Action Sheet - ED.doc

The Hon Planning minister M.S.P.Goward As you are aware the Moorebank Intermodal Company is currently exhibiting the Moorebank Intermodal which is estimated to handle 1.2 Milion containers and in the future operate a interstate rail scheme to handle a further 500,000 teu which is going to place a great burden on the area. Recently the MIC forward a coloured brochure claiming the same impact on the area as the SIMTA intermodal claimed, it has left our committee of concerned residents dumbfounded as we are all too well aware of the traffic gridlock occurring in the area and health problems that would occur. I have forwarded many emails in the past to the previous planning minister and attended numerous meetings to explain our very serious concerns as we have been aware that most of the containers are destined for Eastern creek and to have them sent to Moorebank just to send by truck to that area is only a another leg on the didtribution chain..All my previous emails have resulted in a guarantee that their will be a full merit assessment of our concerns but I am convinced that has never occurred and the matter seems like that their is a desire to implement the Moorebank Intermodals and problems would be addressed later.

One of my main concerns that those behind the Moorebank Intermodals aren't conversant with the problems that exist in the area and don't see the massive traffic gridlock which is virtually lasting for the fill day and having experience in the Sydney Ports previously there is no way that proper container terminals could operate without placing a great burden on the community and with the area containing a great n7umber of youths which is borne out by the MIC papers there has been no proper social impact study done and after consultation with our committee many with professional qualifications they are amazed how the lack of scrutiny of our very valid claims.

I have complained a number of times to the local state member M.S Melanie Gibbons who shares our concerns and I was very indignant when a meeting I had with the Planning department received little or no recognition. The current EIS papers which number thousand of pages will never justify what the MIC LTD is trying to do as they are not addressing the proper issues

I think in fairness to the residents of Liverpool and the south west our concerns need much more proper scrutiny as the result will be too disasterous for the area and with the Moorebank Intermodal going to be the largest freight Hub in Australia our claims need much more proper scrutiny as being long time residents we all fear for the consequences and with the area one of the worst polluted areas in the city it requires much more diligence on those planning this project

Kind Regards John Anderson chairman residents against Intermodal development Moorebank member Liverpool council no intermodal committee 4 namoi court wattle grove NSW 2173 Ph.98252794 mobile 0409368603.