



Memo re: Significant, Widespread Concern Among Health Care and Public Health Professionals Regarding Serious Health and Safety Risks of Coal Export

To: Oakland City Council
Honorable Mayor Libby Schaaf
City Attorney Barbara Parker
City Administrator's Office

From: No Coal in Oakland

Date: March 15, 2016

This memo presents a series of letters signed by over 200 individual local health care providers and public health professionals, as well as several major health associations representing over 25,000 members locally and throughout California.

Their message is uniform: export of coal through Oakland presents significant public health and safety concerns and should be prohibited. Their statement of utmost concern is robust as it is based upon evidence, professional expertise, and the principles of equity and protection of the most vulnerable in our community.

While the No Coal in Oakland coalition facilitated the opportunity for these health professionals to express their health and safety concerns, the vast majority of submissions were garnered by outreach efforts independent of the coalition, representing strong interest among members of many health organizations.

We hope that the stand these health professionals have taken to safeguard the health and safety of our communities will be echoed in clear action by you, our public officials, to stop coal and other hazards from exporting through Oakland.

ATTACHMENTS:

- Attachment A: Independent health care and public health providers - 125 signatures
- Attachment B: Joint submission from California Medical Association Foundation, Network of Ethnic Physicians Organizations, and Golden State Medical Association - 20,000 members
- Attachment C: Alameda-Contra Costa Medical Association - 4,200 members
- Attachment D: San Francisco Bay Area Chapter, Physicians for Social Responsibility - 2,500 members; 103 individual signatures

Health and Safety Concerns Regarding Coal Transport in Oakland

Distribution initiated February 5, 2016

Dear Mayor Libby Schaaf and Members of the Oakland City Council,

We are physicians, nurses, healthcare providers and public health professionals serving the people of Oakland and other local communities. We are writing to oppose coal export from the upcoming Oakland Bulk and Oversized Terminal (OBOT).

We are especially concerned that coal shipment through Oakland may adversely affect health by increasing exposure to particulate matter and toxic substances, and by potentially contributing to climate change and its health hazards. We are also concerned about associated increases in healthcare costs and burdens on local health infrastructure. Millions of tons of coal may pass through Oakland annually, and ensuing health threats and costs could be significant.

The release of coal dust increases the dangers of air pollution by increasing exposure to particulate matter. Coal dust consists of very tiny particles, including very fine particles less than 2.5 microns (PM2.5). As documented by the U.S. EPA and California EPA, exposure to such particles is implicated in lung damage, asthma, heart disease, cancer, adverse birth outcomes, and premature death along with increases in hospitalization, emergency department visits and lost days of work and school. Research indicates that there is no safe level of exposure to PM2.5 and so there is no coal shipment scenario that will not impact the public's health.

Coal dust, including PM2.5, also carries with it heavy metals including mercury, arsenic, cadmium, chromium, lead and nickel, which have been associated with increased risk of cancer, birth defects, genetic defects, endocrine disruption, and neurological damage. These toxic substances can also enter the San Francisco Bay and local fresh waters and ultimately our food supply. In addition, with roughly 30% of Bay Area air pollution currently coming from Asia, our communities may be exposed to these dangers twice – on the way out through coal dust and then back again by way of post-combustion air pollution.

Research indicates that coal dust is released not only at the outset of transport but also at its destination, placing Oakland children, elderly, and chronically ill most at risk for these adverse health effects. West Oakland residents in particular will face increases in already unacceptably high levels of health disparities, asthma and chronic disease. The terminal's workforce and people residing and recreating nearby also will be at risk. To the extent coal particulate and toxic matter blow farther, Oakland and surrounding communities may also face exposure risks.

The unproven mitigation strategies before the City Council cannot assure the people's protection from PM2.5, toxic substances, and (albeit rare) explosions or derailments. The latter hazards, in a densely populated setting or near drinking water sources, could produce significant mass-casualty and public health emergencies.

The volume of coal potentially shipping from Oakland would be great enough to contribute to climate change and all of its well-understood health sequelae. A decision to export coal from Oakland will produce not only a local, but also a global deleterious impact on health.

As health professionals who care deeply about the health of our patients, our communities, and our planet, we urge you to protect public health and oppose a coal-export plan in Oakland.

Respectfully,

Attachment A

References

Ewing et al. (2010) Pb Isotopes as an Indicator of the Asian Contribution to Particulate Air Pollution in Urban California Environ. Sci. Technol. 44 (23), pp 8911–8916. accessed from the internet January 2016 <http://pubs.acs.org/doi/abs/10.1021/es101450t#afn2>

United States Environmental Protection Agency (2009) Integrated Science Assessment for Particulate Matter. EPA/600/R-08/139F Accessed from the internet January 2016 file:///Users/heatherkuiper/Downloads/PM_ISA_WITHOUT_ANNEXES.PDF

United States Environmental Protection Agency, Particulate Matter accessed from the internet January 2016 <http://www3.epa.gov/pm/health.html>

Additionally, this letter draws from and reinforces the expert guidance submitted to the City Council in September by Dr. Bart Ostro, former Chief of the Air Pollution Epidemiology Section of the California Environmental Protection Agency and by Dr. Paul English, state environmental epidemiologist and branch scientific advisor for the Environmental Health Investigations Branch at the California Department of Public Health (attached). Their citations are listed as follows:

Green et al. (2009) Environmental Health Perspectives 117: 1939-44.

Hammer et al. (2014) Environmental Health Perspectives 122:115–119.

Jaffe et al. (2014) Atmospheric Pollution Research 5:344-351.

Malig and Ostro (2009) Occupational and Environmental Medicine 66:832-839.

Malig et al. (2013) American Journal of Epidemiology 178:58-69.

Ostro et al. (2006) Environmental Health Perspectives 114: 29–33.

Ostro et al. (2009) Environmental Health Perspectives 117:475-480.

Ostro et al. (2014) Occupational and Environmental Medicine 72:123-9.

Progress in pediatric asthma surveillance II: geospatial patterns of asthma in Alameda County, California. Roberts EM, English PB, Wong M, Wolff C, Valdez S, Van den Eeden SK, Ray GT. Prev Chronic Dis. 2006 Jul;3(3):A92. Epub 2006 Jun 15

California Environmental Protection Agency. CalEnviroscreen 2.0
<http://oehha.ca.gov/ej/ces2.html> Accessed 9/14/15

“What Coal Train Dust means for human health” Oregon Public Broadcasting, 2015.
<http://www.opb.org/news/article/coal-dust-a-closer-look/> Accessed 9/14/15

Doctors:

Aditya Gangopadhyay, MD
Alka Sharma, MD
Amy Dennis, MD
Ann Harvey, MD
Aparajita Sohoni MD, MS
Brad Ching, MD
Brandon Shulman, MD
Chris LeMaster, MD, MPH
Christina Ng, MD
David Doostan, MD
David Levinson, M.D.
Dustin Mark, MD
Eric Hsia, M.D.
Ethan Bodle, MD, MPH
Evelyn Gandara, MD
Evelyn Loo, MD
H. Gene Hern, MD, MS
Harrison J. Alter, MD, MS
Heather Kuiper, DrPH, MPH
Helen Kuo, MD
Helen Ratico MD
James L. Shively, MD
Janice L. Kirsch, M.D., M.P.H.
Jeanne A. Noble, MD, MA
Jennifer Harris, MD
Jeremy Swartzberg, MD
Jill J. Leggn, MD
Joanne De Phillips, MD, MPH
Justin Bosley, MD
Kathleen Regacho, MD
Kelly Quinley, MD, BA
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Loren Rauch, MD, MPH, MHS
Lorraine Bonner, MD
Moses Graubard, MD
Richard P C Rodgers, MD
Ritesh Bhandari, MD
Rohini J Haar, MD MPH
Senai Kidane, MD
Serene Chen, MD
Steven Bailey, MD
Sue Chan, MD
Susan Lo, MD
Suzanne Lippert, MD, MS
Suzy Lim, MD
Thomas Dalton, MD, MA
Tim Quinn MD
Vicki J. Gutgesell, MD
Yusuke Kimura, MD

Doctors signing other No Coal letters:

Arthur Chen, MD
Floyd Huen, MD, MBA
Fred Strauss, MD
Joseph A. Panicali, MD
Lawrence M. Ng, MD
Miya Yamamoto, MD, FACOG
Rollington Ferguson, MD
Susan Jacobson, MD
Tolbert Small, MD

Nurses, Nurse Practitioners and Physician**Assistants:**

Amanda Bloom, PA-C
Aaron Beardsley RN
Allison McCabe, RN
Amy Mariano, RN
Anita Wong, RN, FNP-C, MSN
Becky Johnston, RN
Cathy Siri, RN
Christina Tam, RN
Christine Araweta, PA-C
Cynthia Belew, RN, MS, CNM, WHNP-C
Cynthia Cook, RN
Deborah Whitehead, RN
Diane Schlager, RN
Elise Mediera, RN
Gayle Rusih, RN
Jeanine Malone, RN
Jessica Phuriphan, RN
Judy Williams, RN
Kelly Perrin, RN
Lisa Pisani, RN
Macy Lieu, FNP
Mary Elder, RN
Paul Quien R.N
Penny Scott, RN
Phoebe Williams, RN
Phyllis Pei, RN, MBA
Rachel Mulcahy RN
Randi-Marie Souza, RN, MSN
Scout E. Hebinle, RN-C
Sharon Ferguson, RN
Shuk Ching Yeung, RN
Sumi Wong-Yap, NP
Sydney Gillett, RN
Tracy Perron, RN
Yan Fen Chen, RN

Nurses signing No Coal petitions:

Ben Levy, RN
Berit Block, RN
Betty Gleason, RN
Deb Bayer, RN
Deborah Collins, RN
Efren A. Garza, RN

Organizations sending letters:

Alameda Contra Costa Medical Association
California Medical Association Foundation,
Network of Ethnic Physicians Organizations, and
the Public Health Institute Center for Climate
Change and Health.
Physicians for Social Responsibility - San
Francisco Bay Area

Nurses signing No Coal petitions:

Barbara Wilcox, RN
Deborah Hoffman, RN
Erin Bradley, RN
Erin Carrillo, RN
Iyana Amayani, RN
Jennifer Lambert, RN
Karen O'Rourke, RN
Lenore Hawley, RN
Linda Cain, RN
Luisa Bissett, RN
Maya Richardson, RN
Mimi Lee, RN
Nancy Kempf, RN
Rochelle Pardue-Okimon, RN
Rubi Cuevas, RN
Sara Crystal, RN
Sarah Evertsen, RN
Sue Hartness, RN
Susan Muerth, RN
Susan Pegnin, RN
Thorild Urdal, RN
Victoria Becker, ANP



Golden State Medical Association



Dear Mayor Libby Schaaf and Oakland City Council,

We are writing to you **as physicians and health professionals** to ask that you keep coal out of the City of Oakland. Please reject the proposal to transport coal through the bulk export terminal at the former Oakland Army Base. The reason for this request is simple:

Coal is bad for our health.

The residents of West Oakland are already subject to an unfair burden of exposure to toxic pollution from the port, freeways, and industrial sources, and to health inequities associated with low income and a large population of people of color. The transport of coal through Oakland poses potential risks of exposure to particulate matter from coal dust and diesel locomotive exhaust. Particulate matter is associated with adverse health impacts on the cardiovascular and respiratory systems, including increased onset of and exacerbation of asthma. Diesel particulate matter is a known carcinogen. Noise and vibration are associated with high blood pressure and poor mental health. The community risk due to storage and processing of coal at the export facility is unknown.

Coal combustion contributes to asthma, lung cancer, heart disease, stroke, adverse pregnancy outcomes, and impaired lung and neurodevelopment in children. Coal-burning power plants are the largest industrial source of air pollution, emitting a toxic brew of chemicals, and causing over 13,000 deaths and more than 20,000 heart attacks each year in the U.S. Coal pollution has its greatest impacts on people of color, the elderly, children, and those with respiratory disease.

Exporting coal for use abroad is also likely to adversely impact our health here. Recent studies show that smog-forming chemicals make their way across the Pacific Ocean from China to create ozone here in California, undermining our progress in reducing air pollution.

Coal combustion is one of the most significant contributors to climate change. Climate change is the greatest health challenge of this century, threatening our air, water, food, shelter, and security. The health impacts of climate change are seen now in the effects of warming on rising ozone levels and pollen levels, affecting asthma and allergies, changes in the distribution of disease-carrying mosquitos, and impacts on food costs and water quality associated with the drought. Climate change also disproportionately impacts people living in poverty, people of color, the young, and the old.

West Oakland already suffers an unacceptably high burden of asthma, heart disease, and food insecurity. We simply cannot afford to further insult the health of Oakland by risking the adverse health impacts of coal transport, coal combustion, or climate change.

We urge you to protect the health of Oakland residents. Say NO to coal in Oakland.

Sincerely,
California Medical Association Foundation
Network of Ethnic Physician Organizations
Golden State Medical Association

Attachment B



ALAMEDA-CONTRA COSTA MEDICAL ASSOCIATION

6230 CLAREMONT AVE. • P.O. BOX 22895 • OAKLAND, CA 94609-5895 • TEL 510/654-5383 • FAX 510/654-8959

February 12, 2016

City Council President Lynette Gibson McElhaney
Oakland City Hall
1 Frank H. Ogawa Plaza
Oakland, CA 94612

RE: Potential Negative Health and Safety Impacts of Transporting Coal

Dear Council President McElhaney and Councilmembers:

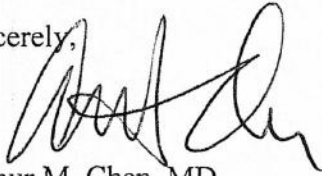
The Alameda-Contra Costa Medical Association (ACCMA), representing 4,200 East Bay physicians, would like to express concern about the potential negative health and safety impacts of transporting coal through the proposed bulk commodities terminal facility in the former Oakland Army Base. Permitting coal transport could adversely affect the public health by increasing exposure to particulate matter and toxic substances and could negatively impact the already compromised air-quality of our region. Moreover, any effects would likely have a disproportionate impact on residents living in close proximity to rail lines who already experience health disparities and some of the worst health outcomes in our community.

It is well documented that coal dust contains PM2.5 and other harmful fine particles that have been linked to lung damage, asthma, heart disease, cancer, adverse birth outcomes, and premature death along with increases in hospitalization, emergency department visits and lost days of work and school. Alameda County Public Health Department analysis has shown that East and West Oakland children are already hospitalized for asthma twice as much as children under five elsewhere in the county. The California Environmental Protection Agency, World Health Organization, and other institutions have specified there is no clear cut safe level of exposure to PM2.5 particles, suggesting that current federal regulatory standards for PM2.5 may not be adequate to protect the public health. Coal dust also contains heavy metals including mercury, arsenic, cadmium, chromium, lead and nickel, which have been associated with increased risk of cancer, birth defects, genetic defects, endocrine disruption, and neurological damage. The Bay Area Air Quality Management District's (BAAQMD) Community Air Risk Evaluation (CARE) program already identified Oakland and the City of Alameda as areas where air pollution contributes most to poor health impacts and where sensitive populations, defined as youth and seniors are most vulnerable to air pollution. Diesel emissions have also been shown to contribute to asthma and other health conditions. Other concerns about transporting coal through our community include: the risk of environmental contamination of agricultural lands, drinking water and our natural environment; and, the possibility of catastrophic derailments, spills, fires and explosions.

Attachment C

In light of these concerns, the ACCMA urges the Oakland City Council to safeguard the health of our community and prohibit the export of coal from the proposed bulk commodities export terminal at the Oakland Army Base until there is a proven safe method. If you have any questions or wish to discuss these concerns, please contact Donald Waters, ACCMA Executive Director, at 510-654-5383 or dwaters@accma.org.

Sincerely,

A handwritten signature in black ink, appearing to read 'Arthur M. Chen', written over the word 'Sincerely,'.

Arthur M. Chen, MD
President

cc. Libby Schaaf, Mayor of Oakland
Oakland City Councilmembers
Oakland City Administrator
Muntu Davis, MD, Public Health Officer, Alameda County



Physicians for Social Responsibility
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March 15, 2016

Mayor Libby Schaaf

Members, Oakland City Council

250 Frank Ogawa Plaza, 3rd floor

Oakland, CA 94612

Dear Mayor Schaaf and Members of the Oakland City Council,

We are physicians, nurses, health care providers and public health professionals serving people of Oakland, neighboring parts of the East Bay, and the entire San Francisco Bay Area region. We are writing to oppose the current proposal to export coal through Oakland.

We are particularly concerned that any coal export through Oakland will likely increase major health risks to our already vulnerable population by increasing exposure to: hazardous fine particulate matter, toxic chemicals and/or metals, possible explosions, and the burgeoning hazards of climate change. We also are concerned about the expected associated increase in health care costs and burdens on local health infrastructure stemming from these operations and related population exposures. With an estimated 9 million tons of coal proposed for export through Oakland annually, these potential health threats and costs may be significant.

The release of coal dust, inevitable in the handling of coal, increases the dangers of air pollution by increasing exposure to particulate matter. Coal dust consists of very tiny particles, often smaller than 10 microns, including very fine particles less than 2.5 microns (PM2.5). Exposure to such particles has been implicated in the development of lung damage, asthma, heart disease, cancer, adverse birth outcomes, and associated with premature death along with increases in hospitalization and emergency department visits. Research indicates that there is no safe level of exposure to PM2.5 and so there is no coal shipment scenario that will not significantly impact public health.

Coal dust, including PM2.5, also carries with it toxic heavy metals including mercury, arsenic, cadmium, chromium, lead and nickel. These substances have been long-associated with the development of cancer, birth and genetic defects, endocrine disruption, and neurological damage. Given our proximity to the San Francisco Bay, these toxics can enter our local waters and ultimately our food supply. In addition, with roughly 30% of the Bay Area's air pollution currently coming from Asia, our communities may be exposed to these toxic substances twice – on the way out through coal dust and then back again by way of post-combustion air pollution.

Oakland's children, elderly, and chronically ill are most at risk. The communities surrounding the port and labor force will also be at great risk, increasing the already unacceptably high burden of health disparities of these exposed populations. As coal dust is known to travel great distances,

Attachment D

The Active Conscience of American Medicine

the health of all of Oakland and neighboring municipalities can be potentially endangered as well. The unproven mitigation strategies in the proposal before the City Council cannot assure adequate protection from PM2.5, toxic substances, or even explosions. The latter hazard, in a populous urban setting, could produce a potentially tremendous mass-casualty emergency.

Finally, the volume of coal anticipated to ship from Oakland is significant enough as to ultimately measurably contribute to climate change and all of its well-understood environmental and public health sequelae. A local decision to place a coal terminal in Oakland will have a truly deleterious impact on global health – for the worse.

In summary, as health professionals who care deeply about the health of our patients, our communities and our planet, we urge you to protect public health and strongly oppose the proposed coal-export plan for Oakland.

Respectfully,

Sally Abrams, L.Ac.

J. Angell, Retired Researcher

William W. Atkins, ASRT

Tim Barrington, BSEE

Joan W. Bazar, PhD

Ronald Bieselin, MD

Stephanie Bloom, MD, MPH

Christine Brazis, AS, Psychiatric Technician

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Shellee Davis, MA, REAT

Mary Lou De Natale, EdD, RN, CNL

Kathy Dervin, MPH

Vivian Ettinger, RN

Jessica Fielden, MD

Susan Fisher-Owens, MD, MPH

Jennifer Flattery, MPH

Don Gaede, MD

Jeff Gee, MD

Robert Gould, MD

Thomas Gourley, MD

Scott Grinthal, CATC

Thomas Hall, MD, DrPH

Martha Harnly, MPH

Lisa Hartmayer, RN, MSN, NP

Steve Heilig, MPH

Linda Helland, MPH

Eric Henley MD, MPH

Howard Herzenberg, MD

Don Hoernschemeyer, PhD

Donna L. Horn, PhD

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Petrice Kam, NP
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Don King, MD
Julie Kiser, MD
Blanche Korfmacher, LCSW
Kerry D. Kravitz, MD, PhD
Robert Krueger, LCSW
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Catherine Loudis RN, BSN
Daniel Lowenstein, MD
Rosie Maciel, RN
Preston Maring, MD
Gerald H. McKelvey, LVN
Michael McMaster, PhD
Marianna Mejia, MA, LMFT
David P. Michener, MD MPH
Hercules D. Morphopoulos, DDSDDS
Rachel Morello-Frosch, PhD, MPH
Paul Morse, CNA, BA, retired
Judith Murphy, MD
Sahar Nouredini, RN, PhD
Devki Patel, MD
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Marj Plumb, DrPH
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Thomas Webb, M.A., M.A.P.S.
David W. Weller, MPH
Dr. Henry Weinberg, PhD
Stephen Weitz, PhD
R. Jay Whaley, MD
Elizabeth Wobus MD
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