



Speaker's Kit Introduction

The Long Beach Alliance for Children with Asthma (LBACA)

LBACA is a partnership to improve the health and wellbeing of children with asthma in Long Beach and its surrounding communities through improved healthcare delivery and quality, outreach, education, support systems, improved living environments and changes in policy at all levels.

LBACA's policy work, funded largely by the California Endowment's *Community Action to Fight Asthma*, is accomplished through collaborative relationships with public health agencies, community based and environmental justice organizations, academic collaboration and local, city and state officials. It is the result of these strong collaborative relationships that LBACA has been successful in participating in policy creation which protects the health and well being of children with asthma in California.

LBACA's successful participation in the policy process has occurred by its ability to bring community voices and perspectives into the policy arena. Building on leadership trainings, LBACA has been empowering and educating community members to bring forward their personal perspectives to guide the policy-making process.

Purpose of the Speaker's Kit

LBACA, along with supporting and collaborating organizations, has developed a Speaker's Kit to engage community members, environmental health and justice organizations, clinicians, public health practitioners, and other key stakeholders in the policy making process, specifically related to the Health Impacts of Goods Movement to promote community health. Designed to go hand in hand with a "Goods Movement 101" presentation, the Speaker's Kit will support key stakeholders in creating meaningful testimony which guides policy makers to making health-protective decisions. It is our hope that these fact sheets will give community leaders the confidence, scientific backing, and knowledge about how to share your personal stories in a way that makes policy makers sit up and listen.

Key collaborating organizations in the creation of this Speaker's Kit are as follows:



The purpose of the LBACA Speaker's Kit is to engage community members, environmental health and justice organizations, clinicians, public health practitioners, and other key stakeholders in the policy making process, specifically related to the Health Impacts of Goods Movement.

Community health: An organized effort to promote health, prevent disease and prolong life within a population through activities aimed at improving local conditions, enabling citizens to participate in public decision-making, and increasing the strength and effectiveness of communities.





Goods Movement Fact Sheet

GOODS MOVEMENT REFERS TO THE TRANSPORT OF PRODUCTS FROM WHERE THEY ARE MADE TO THE PLACES WHERE THEY ARE SOLD.

■ The complex system of **goods movement** in the U.S. is made up of container **ships**, **trucks**, **trains**, airplanes, **yard equipment**, **ports** and **warehouses** used to transport and store imports and exports. The goods movement system is the largest source of local and regional air pollution.

■ Furniture, clothing, cars, auto parts, toys, sporting goods, electronics, building materials and food are all examples of products that are made outside of the U.S. and then **imported** into the country.

■ Many products sold in the U.S. are **exported** in Asia.

■ 42% of all containerized imports that enter the U.S. come through the Ports of Los Angeles and Long Beach¹.

■ The Ports of Los Angeles and the Ports of Long Beach are the largest ports in the U.S., and combined, are the 5th largest ports in the world. Other major ports in California are the Port of Stockton, The Port of Oakland, the Port of Hueneme and the Port of San Diego.

■ Goods are transported in **international cargo containers**, which are measured in **TEU's**, or **twenty-foot equivalents**. Today's standard international cargo container is 40 feet in length, or 2 TEU's. Placed on its end, an international cargo container would be about as tall as a 3 story building.

■ **Container ships** running on dirty **bunker fuel** can carry anywhere from about 4,000 to 9,000 containers, depending on their size. Laid end to end 4,000 containers would stretch approximately from the Port of Los Angeles to Pasadena (about 30 miles).

■ Trucks and trains are used to transport containers from **marine terminals** to **rail yards** and **intermodal facilities** where they may be transferred to other trucks or trains; transloading facilities where goods are transferred into larger containers (usually 53') for transport on truck and train, and to distribution centers where containers are unloaded and reloaded onto trucks that carry goods to their final destination (most often big-box retail stores such as Wal-Mart, Target or Home Depot). Community groups favor **on dock rail** to **near dock rail yards** to decrease local traffic and air pollution impacts, however the emergence of distribution centers and transloading facilities throughout communities and neighborhoods (off dock) makes it difficult politically to promote on dock rail.

THE TRANSPORT OF GOODS IN CALIFORNIA IS EXPECTED TO INCREASE NEARLY 4 TIMES BETWEEN 2000 AND 2020

■ The projected 21 million containers (or 42 million TEU's) that are expected to come through California's ports in 2020 would circle the earth 6 ½ times!

■ Goods movement had resulted in high profits for large companies, and the ability for U.S. residents to buy cheap goods, but goods movement has also largely impacted the **health** of Californians, especially those

Health impacts from air pollution created by goods movement include: asthma and other lung illnesses; cancer; heart disease (heart attacks, stroke); worse lung function in children; more school absences; more premature and small babies; and premature death.

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living near ports, freeways, **rail yards** and other transportation hubs. Most of these areas are populated by low-income communities of color, making the goods movement an issue of **environmental injustice**.

- Ports, rail, trucks and other heavy equipment used to support the goods movement system use diesel fuel, and release emissions containing toxic contaminants including tiny particles called **particulate matter (PM)**.

- **Adverse health effects** are especially high for **sensitive groups**:

Workers whose work puts them in close proximity to pollution sources

Children whose lungs and bodies are still in the process of developing

Elderly people² whose immune systems are not as strong

In 2005 there were an estimated 2,980 premature deaths exposure to diesel emissions³. This is greater than the average number of homicides in the state of California during one year.

- Some goods movement infrastructure sites have had **Health Risk Assessments** conducted in order to assess the risk of adverse health effects from a facility and help communities, government and decision makers work together to decrease these risks.

- Other impacts of goods movement on nearby communities include traffic congestion, wear and tear on roads, noise pollution, light pollution, concerns about outdoor exercise, blight and decreasing property values.

THERE ARE ALTERNATIVES TO THE CURRENT GOODS MOVEMENT SYSTEM!

- Cleaner technology would reduce emissions from trucks, locomotives, ships and other machinery that uses diesel fuel.

- Requiring companies to pay a container fee could provide funds to apply towards cleaning up polluted areas and building cleaner, safer systems for goods movement.

- Land use guidelines and zoning ordinances would protect schools and residents from being in close proximity to harmful pollutants coming from the goods movement system of ports, freeways and other transportation hubs.

- Making health a central issue of policy-making would improve local, state, national and international protection of workers and residents.

Many decisions about goods movement in California are made by government agencies that hold public meetings and hearings. Your participation is needed in order to ensure the healthy future of our communities!

Californians who live near ports, rail yards and along high traffic corridors, are subsidizing the goods movement sector with their health.

— California Air Resources Board
Emission Reduction Plan,
March, 2006

¹ Found in "Paying With Our Health", Pacific Institute. Original source: Haveman JD, EM Jennings, and H Shatz. *California and the Global Economy: Recent Facts and Figures, 2006 Edition*. San Francisco, California: Public Policy Institute of California. 2006.

² Andrea Hricko, Power Point presentation: "Ports and Goods Movement 101", 10/16/2006 (I will find original source)

³ Found in "Paying With Our Health", Pacific Institute. Original source: Business, Transportation and Housing Agency, and California Environmental Protection Agency (Cal EPA). *Goods Movement Action Plan Phase 1: Foundations*. September 2005

⁴ Union of Concerned Scientists. "Sick of Soot: Reducing the Health Impacts of Diesel Pollution in California". 2004.



WHAT YOU NEED TO KNOW ABOUT GOODS MOVEMENT ACTIVITIES AND HOW TO PARTICIPATE

Health Impacts of Air Pollution

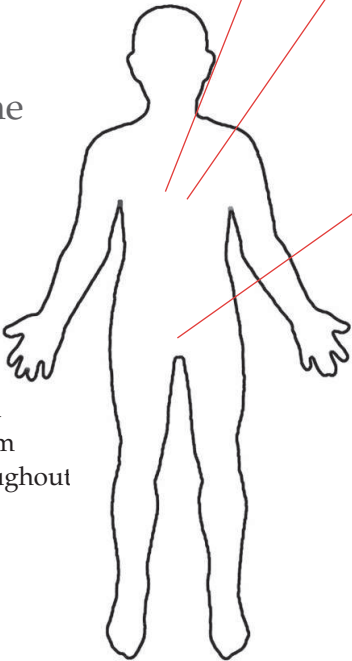
The environment has a direct impact on our health and can be broken down into four different types: social, cultural, built and natural, which all interact together having a direct impact on our health. Traffic-related air pollution is created by burning fuel, such as in cars, trucks, trains, ships, and other engines. Some of the pollutants are gases, and some are solid particles. Many of the pollutants are too small to be seen, such as tiny particles in traffic exhaust that are smaller than a human hair. The poor air quality that many Californians know as **smog** is caused by the six criteria air pollutants labeled by government regulators.

CRITERIA AIR POLLUTANTS

- Particulate Matter (PM)
- Nitrogen Oxides (NOx)
- Sulfur Oxides (SOx)
- Carbon Monoxide (CO)
- Ozone (O3)
- Lead

Air Pollution in the Body

As we breathe, gases and particles of traffic exhaust are drawn into the lungs, where they contribute to a range of health problems. Pollutants can damage the lungs, as well as get into the bloodstream and travel to organs throughout the body.



■ WHEN AIR POLLUTION LEVELS GO UP, THERE ARE MORE:

- emergency room visits
- hospital admissions
- asthma attacks
- children absent from school
- deaths from lung and heart illnesses

■ RESPIRATORY (LUNG) IMPACTS

- Increased respiratory (lung) illnesses
- Asthma exacerbations (makes asthma worse)
- Decreased lung function in children
- Chronic respiratory illnesses
- Cancer
- Premature death

■ CARDIOVASCULAR (HEART) IMPACTS

- Myocardial infarction (heart attack)
- Stroke
- Hypertension (high blood pressure)
- Atherosclerosis (artery disease)
- Arrhythmia (irregular heartbeat)
- Thrombosis (abnormal clotting)

■ REPRODUCTIVE (BIRTH) IMPACTS

- Preterm babies (born earlier than they should be)
- Low birth weight
- Slow growth in the womb
- Miscarriage
- Still birth
- Premature birth
- Infant mortality

Studies have found:

- A 10% increase in PM and SO₂ pollution associated with a 1% increase in infant deaths
- Breathing high levels of urban air pollution almost tripled a mother's chances of having a low birth weight baby

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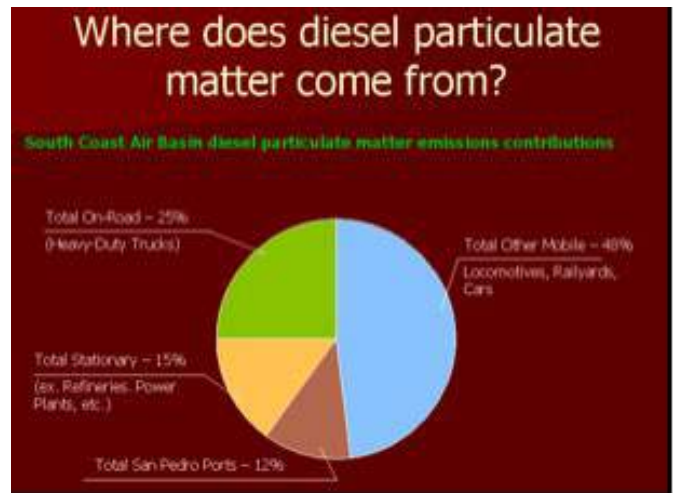


Diesel:

Diesel exhaust is produced when an engine burns diesel fuel. Diesel exhaust is a "Toxic Air Contaminant" and is linked with causing cancer. 70% of the cancer risk from air pollution is from breathing diesel exhaust (ARB estimate). Long-term exposure to diesel exhaust at work is linked with higher rates of lung cancer.

The effects of air pollution on children:

- Current levels of air pollution slow down lung growth, leaving children in more polluted communities with smaller lungs.
- Air pollution is linked to new cases of asthma, and making asthma symptoms worse.



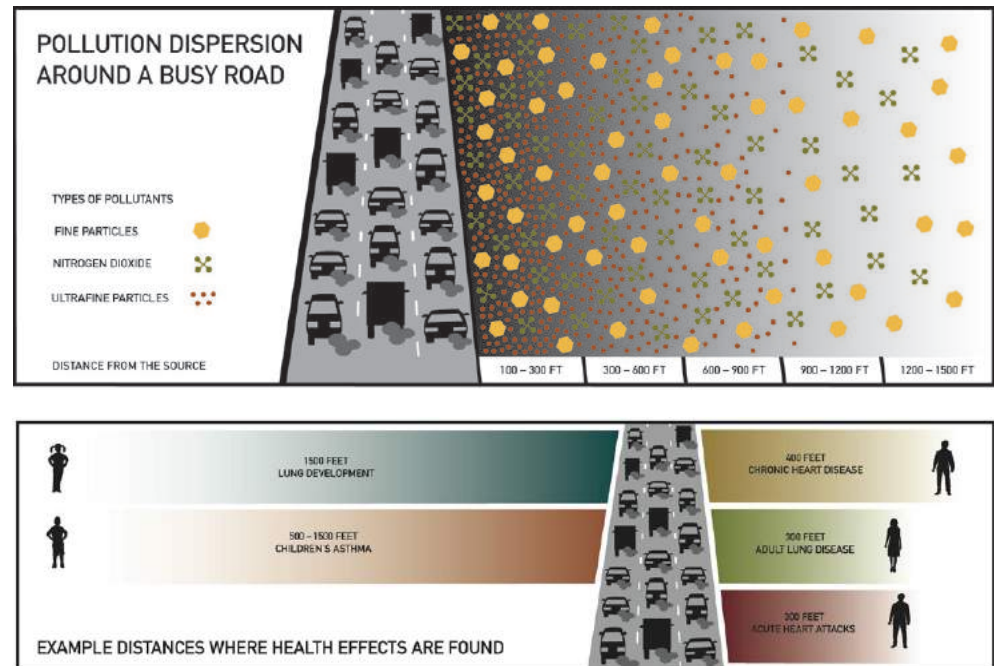
Source: http://www.portoflosangeles.org/environment_air.htm

Traffic Pollution:

Higher levels of pollution from busy roads and freeways means people who live nearby breathe more pollution. Living near busy roads and freeways is linked to:

- Smaller lung growth and function in children
- More school absences
- Higher risk of asthma
- More respiratory illness

Adapted from: All Choked Up: Heavy Traffic, Dirty Air, and the Risk to New Yorkers. March 2007 Environmental Defense http://environmentaldefense.org/documents/6117_AllChokedUp_NYCTrafficandHealthReport.pdf



FURTHER INFORMATION:

Air pollution forecasts
www.airnow.gov

Office of Environmental Health Hazard Assessment
(510) 622-3200
www.oehha.ca.gov

Air Quality Management District
(800) CUT-SMOG
www.aqmd.gov

Air Resources Board
(800) 363-7664
www.arb.ca.gov

American Lung Association of California
(800) LUNG USA (586-4872)
www.californialung.org

Southern California Environmental Health Sciences Center
(USC and UCLA)
www.usc.edu/medicine/scehsc
(323) 442-1096



Public Speaking and Testifying

If we want to show leadership or share important stories or lessons from our lives with others we will often have to speak in public. Public speaking is a common source of stress for everyone. Many of us would like to never have to speak in public.

There will be plenty of opportunities to speak on behalf of your community and what is important to you. Some of the different venues in which to speak include: town hall meetings hosted by legislators to educate the public on important issues, meeting with decision/policy makers, city council meetings and other regulatory public hearings.

Testimony Tips

Always be prepared before you give testimony. Here are some tips to keep in mind:

- Identify the process for getting your name on the list to testify (for example, fill out a speakers card).
- Keep your testimony short. Often you may only have 2-3 minutes to speak.
- Tell them:
 1. Who you are and who you are representing
 2. If you support or oppose the policy
 3. Why you support or oppose the policy, include personal stories whenever possible to show how the issue affects real people.
 4. What action would you like the policy makers to take.
- Speak to the policy makers, not the audience.
- Be courteous
- Coordinate your testimony with others, when possible, who are testifying so that you cover different points.
- Anticipate questions the policy makers might ask and plan how to respond.

NERVOUSNESS TIPS

FIVE THINGS YOU CAN DO:

- RELAX YOUR BODY
- BREATHE
- TRY AND "DEFUSE" THE SITUATION
- PRACTICE!
- PREPARE!

- Do not be alarmed if policy makers leave and enter the room during your testimony. Sometimes they need to be in two to three places at once.
- When possible bring copies of your testimony in writing to submit. This emphasizes your views and provides your contact information.

Remember to speak from your own experiences and knowledge!

TALKING POINTS TEMPLATE EXERCISE

Your message should contain a problem, a solution and an action. Condense your message into talking points. Each point should support your key message. Remember to target your talking points to decision/policy makers.

KEY MESSAGE _____

TARGET AUDIENCE _____

TALKING POINTS:

- 1.
- 2.
- 3.

PRACTICE!

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Communicating with Policy Makers

There are several ways to communicate with policy makers: meetings, providing public testimony, writing letters or sending emails. The key to humanizing the issue or problem is face-to-face contact with policy makers, showing a sign of commitment to solving it and developing a relationship.

Here are some tips to keep in mind:

- Organize a small diverse group of participants, of three to five people. If you are meeting with an elected official try and make sure some of the participants reside in the elected official's district.
- Select a spokesperson for your message. Chose someone who will appeal to the elected officials you are trying to persuade.
- Decide ahead of time who will conduct the meeting. Who will introduce the participants? Lead the meeting? Close the meeting? What materials will you take to leave with legislators at the end of the meeting?
- Get to know the elected official's staff. Elected officials often rely on the advice of key staff members. Staff will be your main point of contact if an elected official is unavailable or inaccessible.

Talking to Policy Makers

Here are some tips to keep in mind before and during a visit with decision/policy makers.

PREPARE FOR THE VISIT

- ESTABLISH YOUR AGENDA AND GOALS
- IDENTIFY WHO WILL PARTICIPATE IN THE MEETING
- KNOW THE POLICY MAKER'S BACKGROUND
- KEEP YOUR MESSAGE SIMPLE AND SHORT
- BE STRATEGIC ABOUT WHO COMES AND WHO SPEAKS
- WHEN POSSIBLE, PREPARE A ONE PAGE SUMMARY TO LEAVE
- PRACTICE!

WHAT TO EXPECT DURING THE VISIT

- BE PREPARED TO WAIT
- BE PREPARED TO MEET WITH STAFF
- STAY FOCUSED AND BE BRIEF
- BE ACCURATE AND GENEROUS WITH PRAISE
- BE CAREFUL NOT TO CLOSE DOORS
- LEAVE SOMETHING BEHIND
- **FOLLOW-UP:** EXPRESS THANKS AND AN INTEREST IN CONTINUING THE CONVERSATION.



Air Pollution Agencies Southern California Region

AGENCY	MISSION	OVERSIGHT/ AUTHORITY	GOVERNING STRUCTURE	FOR MORE INFORMATION
<p>Gateway City Council of Governments (COG)</p>	<p>The Gateway City COG's regional leadership and ongoing programs address important issues, which are the basis for continued economic vitality in the region. Some of these issues are traffic congestion, poor air quality, limited housing and environmental deterioration.</p>	<p>Gateway City COG encompasses 27 cities, the County of Los Angeles and the ports of Los Angeles and Long Beach, with a combined population of over two million residents. Gateway conducts outreach and communication to member agencies and various partners and stakeholders including neighboring councils of governments; regional transportation partners; environmental, air quality and health sciences advocates; economic development and housing stakeholders. Their goal is to work together through a consensus building approach to problem solving.</p>	<p>Gateway City COG has a 30-member governing Board of Directors with representatives from cities, the ports and the County. The Board meets monthly. In addition, the COG convenes specialized committees.</p>	<p>Gateway City COG 16401 Paramount Blvd. Paramount, CA 90723 (562) 663-6850 www.gatewaycog.org</p>
<p>Los Angeles County Metropolitan Transportation Authority (Metro)</p> 	<p>Metro is responsible for the continuous improvement of an efficient and effective transportation system for Los Angeles County.</p>	<p>Metro serves as transportation planner and coordinator, designer, builder and operator for the Los Angeles County region, a 1,433-square-mile service area, serving more than 9.6 million people.</p>	<p>Metro is governed by board of directors that convenes on a monthly basis. Board members include elected officials from Los Angeles County and surrounding cities, along with other appointees. Additionally, an executive staff headed by a Chief Executive Officer carries out Metro's day-to-day operations.</p>	<p>Metro Headquarters One Gateway Plaza Los Angeles, CA 90012-2952 (800) 266-6883 http://mta.net</p>
<p>California Environmental Protection Agency (Cal/ EPA)</p> 	<p>To restore, protect and enhance the environment, to ensure public health, environmental quality and economic vitality.</p>	<p>Under the Federal Clean Air Act, the Environmental Protection Agency (EPA) establishes health-based air quality standards that all states must achieve. Cal/EPA functions as an umbrella organization for 6 agencies charged with the protection of human health and the environment, including the California Air Resources Board. Cal/EPA works to ensure coordination and activities among agencies and resources. In addition, Cal/EPA is also charged with enforcing environmental laws, addressing environmental justice issues, and implementing quality improvement measures.</p>	<p>Cal/EPA's Office of the Secretary is a member of the Governor's cabinet, reporting directly to the Governor. The Secretary does not direct policies and decisions of the 6 agencies on a day-to-day basis, but provides overall vision and leadership that focuses the efforts of the six agencies on the goals of the Governor's Administration.</p>	<p>Cal/EPA Headquarters 1001 I Street P.O. Box 2815 Sacramento, CA 95812-2815 (916) 551-1313 www.calepa.ca.gov</p>

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AGENCY	MISSION	OVERSIGHT/ AUTHORITY	GOVERNING STRUCTURE	FOR MORE INFORMATION
<p>California Air Resources Board (ARB)</p> 	<p>To promote and protect public health, welfare and ecological resources through the effective and efficient reduction of air pollutants in recognition and consideration of the effects on the economy of the state.</p>	<p>In addition to federal standards, the California Clean Air Act establishes air quality requirements for cities and counties to meet. ARB is responsible for reducing emissions from mobile sources, such as cars, trucks, heavy-duty vehicles and trains. The agency issues permits directly to vehicular sources.</p>	<p>The ARB governing body consists of 11 members appointed by the Governor with the consent of the Senate: 5 members are chosen from the boards of air quality management districts around the state; 3 of the members are experts in specific categories relating to air pollution; and 2 members representing the public.</p>	<p>ARB Headquarters 1001 "I" Street P.O. Box 2815 Sacramento, CA 95812 (916) 322-2990 www.arb.ca.gov</p>
<p>South Coast Air Quality Management District (AQMD)</p> 	<p>Three-fold mission: 1) ensure expeditious progress toward meeting clean air standards set by federal and state laws; 2) ensure equitable treatment for all communities; and 3) operate efficiently and in a manner sensitive to business.</p>	<p>AQMD has jurisdiction over air pollution emitted from businesses and other stationary sources in LA and Orange counties and parts of Riverside and San Bernardino counties. AQMD develops plans and regulations to achieve public health standards by reducing emissions from business and industry. AQMD's Governing Board adopts these plans and regulations and submits them to the ARB and the Federal EPA for approval.</p>	<p>AQMD's functions under a 12 member governing board consisting of 4 elected officials representing LA, Orange, Riverside, and San Bernardino counties; 5 members representing the city councils in each county (LA County has 2); and 3 members chosen by state elected officials.</p>	<p>AQMD Headquarters 21865 Copley Dr Diamond Bar, CA 91765 (909) 396-2000 http://aqmd.gov/</p>
<p>Los Angeles Board of Harbor Commissioners</p> 	<p>To provide direction and create policy for the Port of Los Angeles.</p>	<p>The Los Angeles Board of Harbor Commissioners oversees the management and day-to-day operations of the Port of Los Angeles. The Los Angeles and Long Beach ports complex accounts for more than 40% of all the cargo container traffic coming into the United States.</p>	<p>The five-member board is appointed by the Mayor of Los Angeles and confirmed by the Los Angeles City Council. The commissioners serve five-year terms and elections are held every July for the offices of president and vice president. The Port of Los Angeles is a department of the City of Los Angeles and is often referred to as the Los Angeles Harbor Department.</p>	<p>Port of Los Angeles Administration Building 425 S. Palos Verdes Street San Pedro, CA 90731 (310) 732-7678 Mailing Address: P.O. box 151 San Pedro, CA 90733 portoflosangeles.org</p>
<p>Port Long Beach Harbor Commission</p> 	<p>To promote and develop the Port of Long Beach</p>	<p>The Commission is responsible for setting policy for the Port and managing the Harbor Department.</p>	<p>The Port of Long Beach is governed by the City of Long Beach and is called the Long Beach Harbor Department. The Board of Harbor Commission consists of five members who are appointed by Long Beach City Council.</p>	<p>Port of Long Beach Headquarters 925 Harbor Plaza Long Beach, CA 90801 (562) 437-0041 Mailing Address: P.O. box 570 Long Beach, CA 90801 www.polb.org</p>



Glossary of Goods Movement Terminology

Some of these terms have been used (and bolded, colored, etc.) throughout the Speaker's Kit

Adverse Health Effect: A health effect from exposure to air contaminants that may range from relatively mild temporary conditions, such as eye or throat irritation, shortness of breath, or headaches to permanent and serious conditions, such as birth defects, cancer or damage to lungs, heart, or other organs.

Container Ships: Used to transport containers by sea and can hold thousands of containers. Also referred to as Ocean Going Vessels (OGV), their capacity is often measured in TEUs. Container ships run on bunker fuel, a type of fuel oil considered more polluting than regular diesel used in other equipment, which has high levels of sulfur.

Criteria Air Pollutant: Examples include: ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, and PM10 and PM2.5. The term "criteria air pollutants" derives from the requirement that the U.S. EPA must describe the characteristics and potential health and welfare effects of these pollutants.

Distribution Center: A warehouse or other specialized building where goods are stored temporarily before they are re-distributed to retailers or wholesalers

Diesel Exhaust: Created when diesel fuel is burned by trucks, ships, rail, and other machinery releasing emissions containing diesel particulate matter (PM).

Environmental Justice (EJ): The fair treatment and meaningful involvement of all people — regardless of race, ethnicity, income or education level — in environmental decision making. EJ programs promote the protection of human health and the environment, empowerment via public participation, and the dissemination of relevant information to inform and educate affected communities.

Export: Any good or product transported from one country to another country, typically for use in trade.

Goods Movement: The transportation of products from where they are made to the places where they are sold.

Health: A state of complete physical, mental and social well-being, not just the absence of illness or disease.

Health Risk Assessment (HRA): An evaluation of risk which estimates the relationship between exposure to a harmful substance and the likelihood that adverse health effects will result from that exposure. Government agencies rely on risk assessments to help them determine which potential hazards are the most significant. Risk assessments can also guide regulators in decreasing environmental hazards. Members of the public who learn the basics of risk assessment can improve their understanding of environmental hazards, and they can work with decision makers on solutions to environmental problems.

Import: Any good or product, brought into one country from another country, typically for use in trade.

Intermodal facility: Intermodal transport requires more than one mode of transportation. This type of facility is designed for the movement of marine cargo containers between different modes of transportation, including ship, truck and train.

Marine terminal: A port facility by a body of water. A place on a waterway with facilities for loading and unloading ships.

Mobile Sources: Sources of air pollution such as automobiles, motorcycles, trucks, off-road vehicles, boats, and airplanes.

Near-dock rail: A facility that is located some distance from the main port terminal. Cargo containers must be transported by truck to this facility where they will then be loaded onto trains.

Nitrogen Oxides (NOx): A general term pertaining to compounds of nitric oxide (NO), nitrogen dioxide (NO2) and other oxides of nitrogen. Nitrogen oxides are typically created during combustion processes, and are major contributors to smog formation and acid deposition.

On-dock rail: A facility that is located on the marine terminal of a port. Containers are unloaded from ships and placed directly onto railcars. The location of these facilities dramatically reduces truck traffic volumes on surrounding freeways that serve a port.

Ozone: A strong smelling, pale blue, reactive toxic chemical gas consisting of three oxygen atoms. It is a product of the photochemical process involving the sun's energy and ozone precursors, and is a major component of smog. Ozone in the troposphere causes numerous adverse health effects and is a criteria air pollutant.

Particulate Matter (PM): Tiny particles of solid or liquid suspended in a gas. They range in size and are referred by their size.

PM10: A criteria air pollutant consisting of small particles with an aerodynamic diameter less than or equal to a nominal 10 microns (about 1/7 the diameter of a single human hair). Sometimes referred to as coarse particles, their small size allows them to make their way to the air sacs deep within the lungs where they may be deposited and result in adverse health effects.

PM2.5: Includes tiny particles with an aerodynamic diameter less than or equal to a nominal 2.5 microns. Sometimes referred to as fine particles, this fraction of particulate matter penetrates most deeply into the lungs and can get into the bloodstream, causing adverse health effects.

PM0.1: Includes tiny particles with an aerodynamic diameter less than or equal to a nominal 0.1 microns. Sometimes referred to as ultrafine particle, this fraction of particulate matter penetrates most deeply into the lungs and can get into the bloodstream, causing adverse health effects.

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Port: A facility to load or unload ships, planes or other forms of transportation equipment involved in moving goods from one place to another.

Rail Yard: A complex series of railroad tracks for storing, sorting, loading, unloading, and repairing trains. Rail yards serve as a site where containers of goods are transferred onto trucks or trains.

Sensitive Groups: Identifiable groups of the general population that are at greater risk than the general population to the toxic effects of a specific air pollutant (e.g., infants, asthmatics, elderly).

Smog: A combination of smoke and other particulates, ozone, hydrocarbons, nitrogen oxides, and other chemically reactive compounds which, under certain conditions of weather and sunlight, may result in a murky brown haze that causes adverse health effects.

Stationary Sources: Non-mobile sources such as power plants, refineries, and manufacturing facilities which emit air pollutants.

Sulfur Oxides (SO_x): Pungent, colorless gases (sulfates are solids) formed primarily by the combustion of sulfur-containing fossil fuels, especially coal and oil. Considered major air pollutants, sulfur oxides may impact human health and damage vegetation.

Train: A series of rail vehicles that move along guides to transport freight from one place to another, also referred to as Locomotives. Trains transport goods along railways or railroads.

Transloading Facilities: Sites where the transfer of cargo from truck to rail or from rail to truck occurs.

Trucks: Also referred to as Heavy Duty Vehicle (HDV), trucks are used to transport a container or trailer to and from the railroad intermodal terminal, to or from the customer's facility for loading and unloading or to and from the ports. This movement is known as Drayage.

Twenty Foot Equivalent (TEU): Unit of measurement for cargo transport. A typical shipping container is 2 TEU, and is also referred to as an International Cargo Container. Used for transporting goods, average international cargo container is 2 TEUs or 40 feet long.

Warehouse: A place in which goods or merchandise are stored; a storehouse.

Yard Equipment: Equipment used to move railcars around within a rail yard, including Switchers.

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