AB 617 Community Air Protection
Program Steering Committee Meeting
Draft Meeting Notes

3/21/19
6:00 pm - 8:00 pm

Perkins Elementary School
(1770 Main Street, San Diego 92113)

Note: A mobile monitoring vehicle was made available for viewing in parking lot prior to the commencement of the meeting.

- **Opening Remarks**
  - District activities since 1/29/19 meeting
    - The District had three bi-weekly calls with CARB
    - The District conducted these inspections:
      - Stationary source inspections – 145, 11 Violations issued
      - Mobile source inspections – 38, No citations issued
    - Provided testimony to the State Assembly Natural Resources Committee
    - Mobile monitoring commenced on 3/1/2019
  - The Tell Us Now! App was discussed
    - The app is available in Spanish. To download the Spanish version of the app your language setting on your smart phone needs to be set to Spanish.
    - Question –The app requires a lot of information when you submit a complaint. Can the fields be reduced or can the app use geolocation?
    - Answer – We will bring this suggestion up to our information technology personnel.

- **Approval of 1/29/19 Steering Committee Meeting Notes**
  - Meeting notes were approved.

- **Public Comments**
  - Each speaker is limited to 3 minutes
    - There were no public comments during this period.

- **Presentation on License Readers (CARB staff)**
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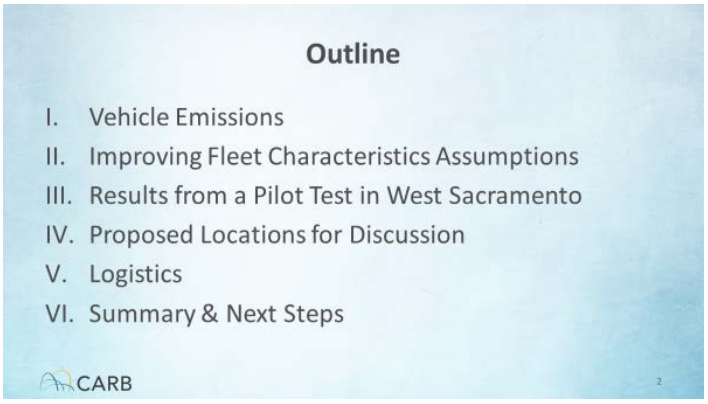
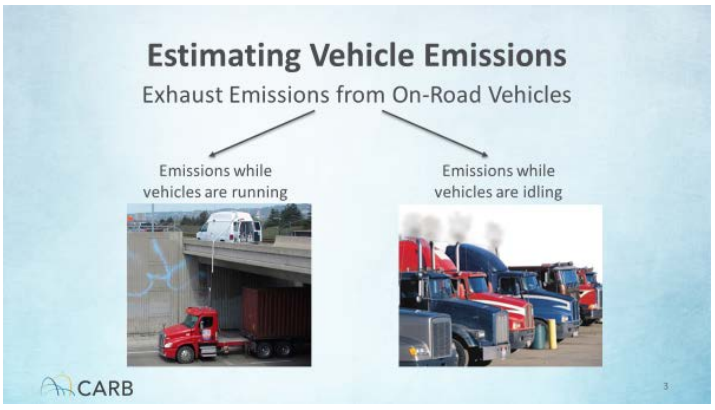
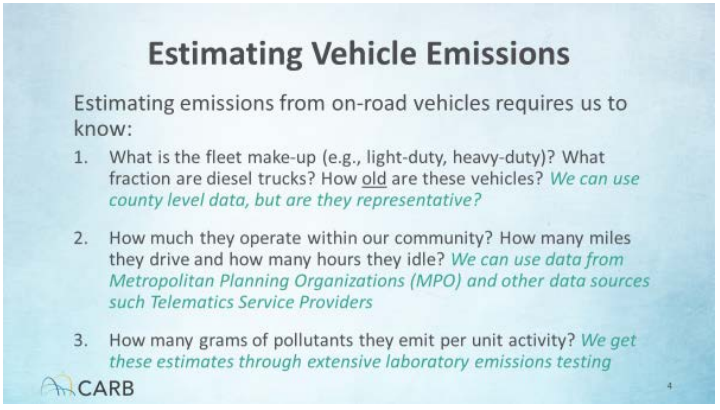
  - 

  - 

  - 

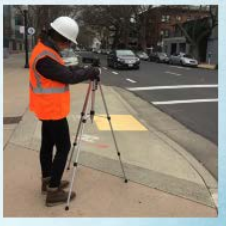
Improving Fleet Characteristics Assumptions

- **How can we improve our assumptions?** Use vehicle specific data collected within communities to refine:
  - ✓The fraction of light- vs heavy-duty vehicles
  - ✓Model year distribution and therefore age
  - ✓Traffic counts
- **What is the benefit of this data collection?** We can validate and/or refine our on-road vehicle emission estimates using this data

CARB 5

Method: Camcorder + Automated License Plate Reader (ALPR) Software

- Collect footage of on-road traffic within the community using camcorders
- Use ALPR software to read license plates
- Use DMV Registration data and other databases to link license plate to vehicle information



This is a Data Collection Exercise to Support Technical Analysis

CARB 6

Method: Camcorder + ALPR Software

CARB 7

ALPR Data Processing

ALPR Outputs:
- ✓ State
- ✓ Plate Number
- ✓ Plate Country

DMV / IRP (International Registration Plan)

- ❑ Model Year
- ❑ Weight Class
- ❑ Make / Model

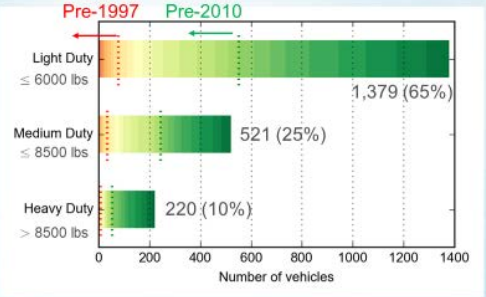
CARB 8

ALPR Privacy and Usage Policy

- Agencies that collect and process ALPR data will comply with 2015 Senate Bill 34 (SB 34) Automated License Plate Recognition Act requirements
- Agencies must maintain reasonable security procedures and practices to protect ALPR info and implement a usage and privacy policy for ALPR info
- Sections 1798.29 and 1798.82 also require any agency or business in California to disclose in specified way any breach of the security of the system or data
- CARB's ALPR privacy and usage policy: https://www.arb.ca.gov/enf/arb_alpr_privacy_usage_policy_050317.pdf

CARB

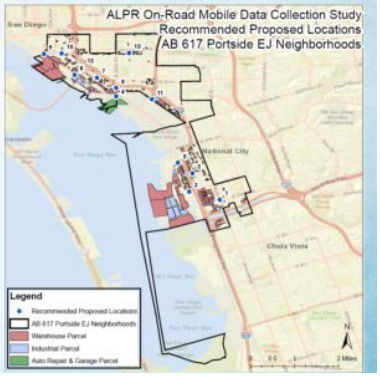
Results from a Pilot Test in West Sacramento



CARB

Initial Proposed Locations for Discussion

Location	Cross Streets	Justification
1	E 30th Street & National City Blvd	Near industrial zone, warehouses, and shopping centers
2	W 18th St & Wilson Ave	Near industrial zone, auto repairs, and school
3	Bay Marina Dr & Cleveland Ave	Near freeway, industrial zone, warehouses, and rail
4	Harbor Dr & S 28th St	Near industrial zone, shipyard, and rail. Location proposed by District.
5	Civic Center & Cleveland Ave	Near freeway, industrial zone, and warehouses
6	Boston Ave & S 28th St	Near freeway, industrial zone, warehouses, recycling center, and naval base. Location proposed by District.
7	National Ave & Sampson St	Near industrial zone, warehouses, and fuel terminals. Location proposed by EHC.
8	E Harbor Dr & Cesar E. Chavez Pkwy	Near freeway, industrial zone, warehouses, and rail
9	E Harbor Dr & Park Blvd	Near industrial zone, warehouses, fuel terminals, and shopping center
10	Commercial St & National Ave	Near industrial zone, warehouses, and rail
11	Main St & Rigel St	Near freeway, industrial zone, warehouses, shipyard, and recycling facility. Location proposed by EHC.
12	National Ave & Cesar E. Chavez Pkwy	Near freeway, industrial zone, and community park. Location proposed by District.
13	Commercial St & 30th Street	Near freeway, industrial zone, warehouses, and recycling facility

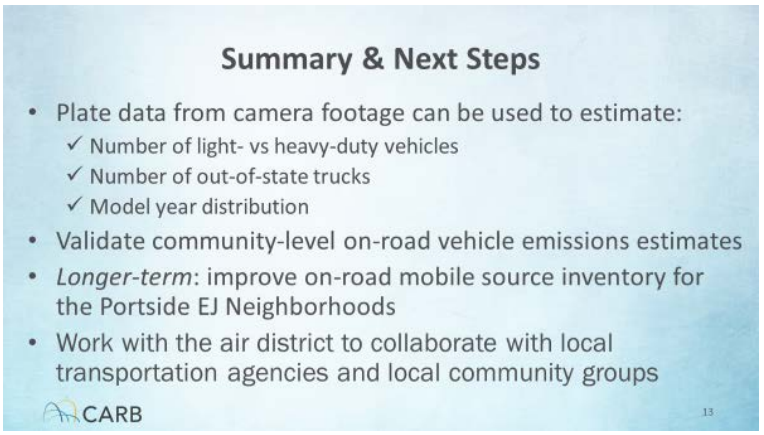


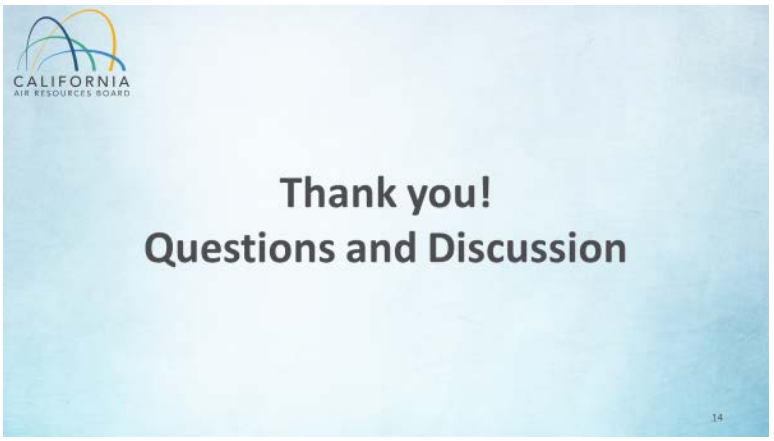
CARB

Field Logistics

- Approximately 2 weeks of video footage collection
- 3 teams of 2 collecting footage from 8:00 AM to 5:00 PM, 1 extra person as relief
- ~3 days of data collection per location
- Multiple cameras per intersection to capture multiple directions of traffic
- Collect data throughout the year to understand differences in vehicle types and activity during different times of day and during different seasons

CARB

- 

- 

- Question – Can you identify trucks from Mexico?
- Answer – Yes, trucks from Mexico will have dual plates with a second plate from the U.S.A.
- Statement – We will need to monitor earlier in the morning than your proposed time of 8:00 am
- Response – Agreed, the District will work with CARB and the community to use this technology at the appropriate times throughout the day.
- Question – How long will it take to process the video?
- Answer – It takes about 1-2 months to process video. We will need additional time beyond that to generate data in a report form.
- Question – Can this technology be used on the highway?
- Answer – No, the current equipment we have can not process vehicle license plates at that speed.
- Question – The Port traffic is variable based on when cargo is being off-loaded, how will you account for this?
- Answer – We agree and will work with the Port to get a representative sampling of the different conditions at and around the Port.
- Question – Will you create new regulations based on vehicle weight classes because of the findings of this study?
- Answer – No, there are current truck fleet regulations which encompass these vehicles.
- Question - What happens if your previous assumptions (% of trucks in each weight class) are shown by this study are not accurate?
- Answer – CARB assumptions are made on County averages but if we get more accurate data from the local study, we will adjust our assumptions.

- Question – Will there be a written standard operating procedure (SOP) for the use of this technology?
- Answer – Yes, there will be a SOP and we will share it with this committee.
- Question – Will you be able to determine emissions information from out of state license plates?
- Answer – Yes, we have access to a system which can get this information from out of state plates.
- Statement – The cost of six cameras and support equipment is approximately $15,000.
- Agreement – By a show of hands the committee agreed to move forward with the license plate reader study.

- **Larry Hofreiter (Port of San Diego)**
  - An update was given on the most recent Port Commissioners meeting. The Port supports efforts to reduce emissions from the commerce and will seek out incentive funding to speed up the transition to less polluting equipment. Larry acknowledged and thanked those who attended the meeting and provided comments to the Port Commissioners.

- **Presentation on emission data and health impacts (State of California Health Hazard Assessments (OEHHA))**
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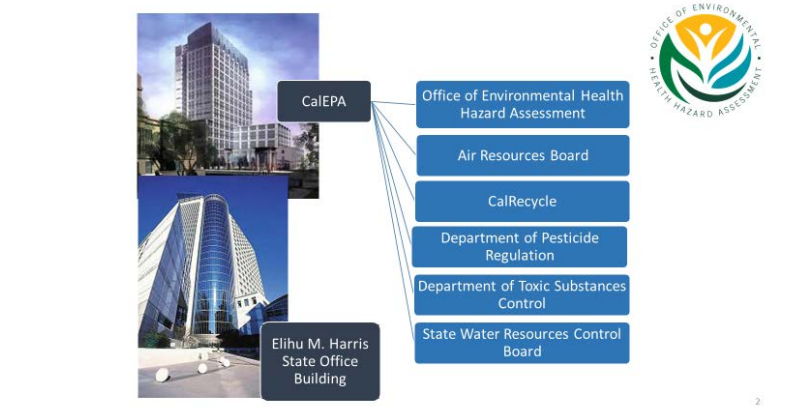
  - 

OEHHA Assessments Support CalEPA Environmental and Public Health Activities

CalEPA Mission:

To restore, protect and enhance the environment, to ensure public health, environmental quality and economic vitality.

OEHHA Mission:

To protect and enhance the health of Californians and our state's environment through scientific evaluations that inform, support and guide regulatory and other actions.

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Outline

- Background: risk, toxicity, and exposure
- How OEHHA determines toxicity
- Factors that influence toxicity
- How OEHHA determines Health Guidance Values for use in estimating risk
- Health concerns associated with some of the chemicals being measured
- How risk is determined from air monitoring data
- Suggestions for presenting air monitoring data

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Risk = Toxicity x Exposure

How dangerous is the chemical? → **Health Guidance Values**

Does the chemical contact or enter our body? → **Air monitoring data**

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How do we determine the toxicity of chemicals?

OEHHA develops benchmarks for toxicity called Health Guidance Values:

Noncancer: Reference Exposure Levels (RELs)

The amount of chemical in the air that is not likely to cause noncancer health effects (like asthma) even in sensitive populations like children and pregnant women

Cancer: Unit risks or cancer potency factors

Describe increase in cancer risk per unit of exposure

http://clipart-library.com/clipart/163895.htm

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What influences toxicity?

- Amount
- Length of exposure (time)
- Sensitivity

https://www.meadindoor.com/for-physicians/

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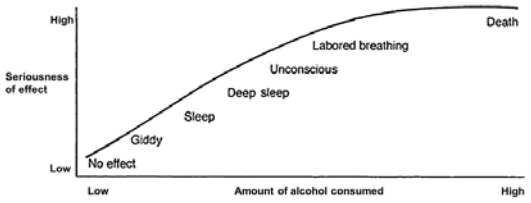
Health effects can become more serious if the amount someone is exposed to increases



https://science.education.nih.gov/supplements/webversions/Chemicals/guide/lesson3-1.html

Toxicity depends on the amount of time someone is exposed to a chemical

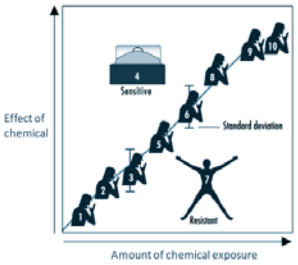
OEHHA develops Reference Exposure Levels for specific amounts of time

- Brief exposure (acute): occasional 1-hour exposures
- Moderate exposure: repeated 8-hour exposures over a significant fraction of a lifetime
- Constant exposure (chronic): continuous exposures from 1 year to a lifetime

https://accesspharmacy.mhmedical.com/content.aspx?bookid=2462&sectionid=194918140

More people are affected as the amount of chemical they are exposed to increases

People differ – some are more sensitive than others (like children and pregnant women), while others are less sensitive (resistant)



http://www.ilocis.org/documents/chpt33e.htm

How are health guidance values developed?

Review health effects information
↓
Identify most sensitive effects
↓
Determine relationship between amount of chemical and effect
↓
Determine amount that causes a specific effect
↓
Adjust amount for route, species, length of exposure
↓
Adjust amount for uncertainty (time differences, missing information, species)
↓
Adjust amount for differences in sensitivity between people
↓
Health Guidance Value

Hypothetical example
1000 parts per billion (ppb) (rat)
↓
100 ppb (human)
↓
÷ 10 (no developmental study)
↓
÷ 10 (asthmatic children)
↓
1 ppb

Health Concerns: Diesel Exhaust

Noncancer

- Respiratory irritation, cough, allergies, lung inflammation
- ↑ hospitalizations, ER visits, asthma attacks, premature deaths
- Sensitive populations
  - Those with respiratory and cardiovascular conditions
  - Children
  - Elderly

Cancer

- Increased cancer risk
- ~70% of average Californian's cancer risk from air pollution (CARB)

https://commons.wikimedia.org/wiki/File:Diesel-smoke.jpg

Health Guidance Values for Diesel Exhaust

Non-cancer
- Chronic REL: 5.0 µg/m^3
- Effect: Changes in rat lung

Cancer
- Unit risk: 0.0003 per µg/m^3
- Inhalation Cancer Potency Factor: 1.1 (mg/kg-day)$^{-1}$
- Effect: Lung tumors in workers

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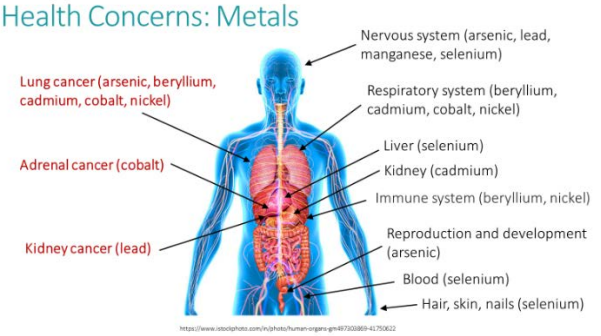
Health Concerns: Metals



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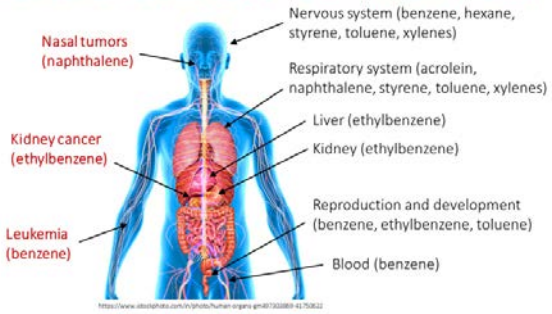
Health Concerns: Volatile Organic Compounds (VOCs)



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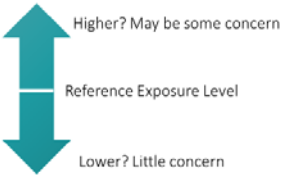
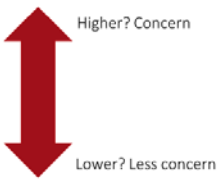
How do we determine the risk from the amount of a chemical measured in air?

Noncancer	Cancer
How does the amount in air compare to the Reference Exposure Level?	How much does the amount in air increase cancer risk by?





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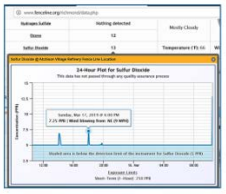
Data Presentation

Engage stakeholders

Define terms and chemical formulas

Graphs: lines for health standard and limit of detection

Example formats



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- Question – We have known diesel is bad for us for a long time, how did we get to this point where diesel is polluting our community?
- Answer – There are several regulations covering different types of diesel equipment. We have seen a gradual decrease in diesel emissions since these regulations have been adopted. We also saw a significant decrease in sulfur emissions when a low sulfur standard in diesel fuel was adopted.
- Question - Is mercury being measured for in the Portside Neighborhoods?
- Answer – No, mercury is not being measured.
- Question - Are health guidance values established for all VOCs?
- Answer – No, there are so many that sometimes we use values for structurally similar chemicals.
- Statement – Our goal in establishing limits on chemicals is to protect the most sensitive receptors (children, elderly, asthmatics).
- Question – Is the data collected in the Portside neighborhoods going to compared to health guidance values?
- Answer – The District will interpret the data and then let OEHHA review our findings for accuracy.
- Question – What are the most dangerous chemicals emitted?
- Answer – Our local monitoring program will give more specific pollutant data about the Portside Neighborhoods and what chemicals are of the greatest concern.
- Question – Will there be any studies done on people living in the Portside Neighborhood? There are some people in this room who have lived here our whole lives and may have significant exposures.
- Answer – We do not have any plans to conduct any study on people living in disadvanted environmental justice areas.
- Question – What will be done with the data from the Portside Neighborhoods once it is collected?
- Answer – The data will be used to determine specific sources of pollutants, find “hot spots” of pollution and then use tools such as incentive funding to reduce pollution sources.

- Update on Monitoring Sites, Equipment Purchases (District Staff)
  - A brief update was provided to the committee. It was mentioned that sampling commenced at Sherman Heights Elementary School.
  - It mentioned that APCD staff have been searching for suitable monitoring locations with the understanding that mobile monitoring data could alter locations.
    - Staff have been working with the Port of San Diego, the US Navy, Caltrans, and local schools for locating monitoring sites on their properties.

- Closing Remarks
    - The Next scheduled meeting is 4/23/19 at Perkins Elementary School Cafeteria (1770 Main Street, San Diego, 92113 from 6:00 pm - 8:00 pm).