CALIFORNIA
AIR RESOURCES BOARD

Update on the Status of the Proposed Control Measure for Ocean-Going Vessels At Berth

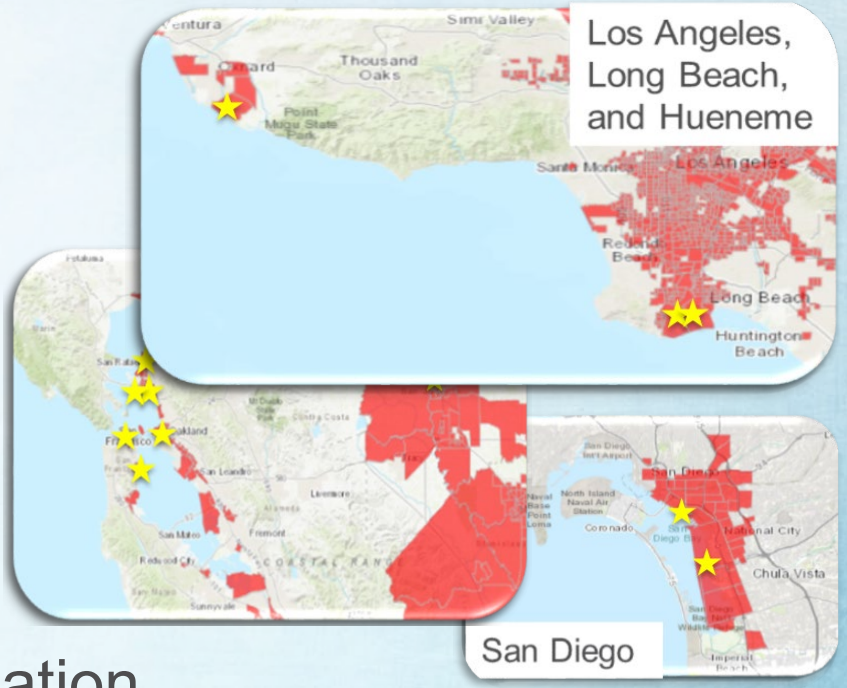
June 25, 2020

Building On An Effective Regulation

- Existing At-Berth Regulation was approved in 2007
- Ground-breaking Regulation
  - Successful joint effort between industry, ports, and the State
  - Emissions reduced from over 13,000 visits since 2014
  - Achieved an 80% reduction in emissions from cruise, container, and reefer vessels
  - Shore power installed at 65 berths and on >500 vessels
  - 3 capture and control systems built
  - Global model to combat port emissions

Need For Proposed Regulation

- Port communities heavily impacted by freight
  - Increased risk of premature death, hospitalizations, and cancer risk
- Need further reductions and public health benefits
- Address implementation challenges with existing regulation



(SB 535 Disadvantaged Communities in red)

Key Objectives of At Berth Proposal

- Provides transition time (several years) to make the needed investments in clean technology
- Reduces emissions from auxiliary engines and some tanker boilers
- Contains safeguards to address situations where emissions reductions may be uncertain
- Would result in emissions reductions from an additional ~2,300 vessel visits per year

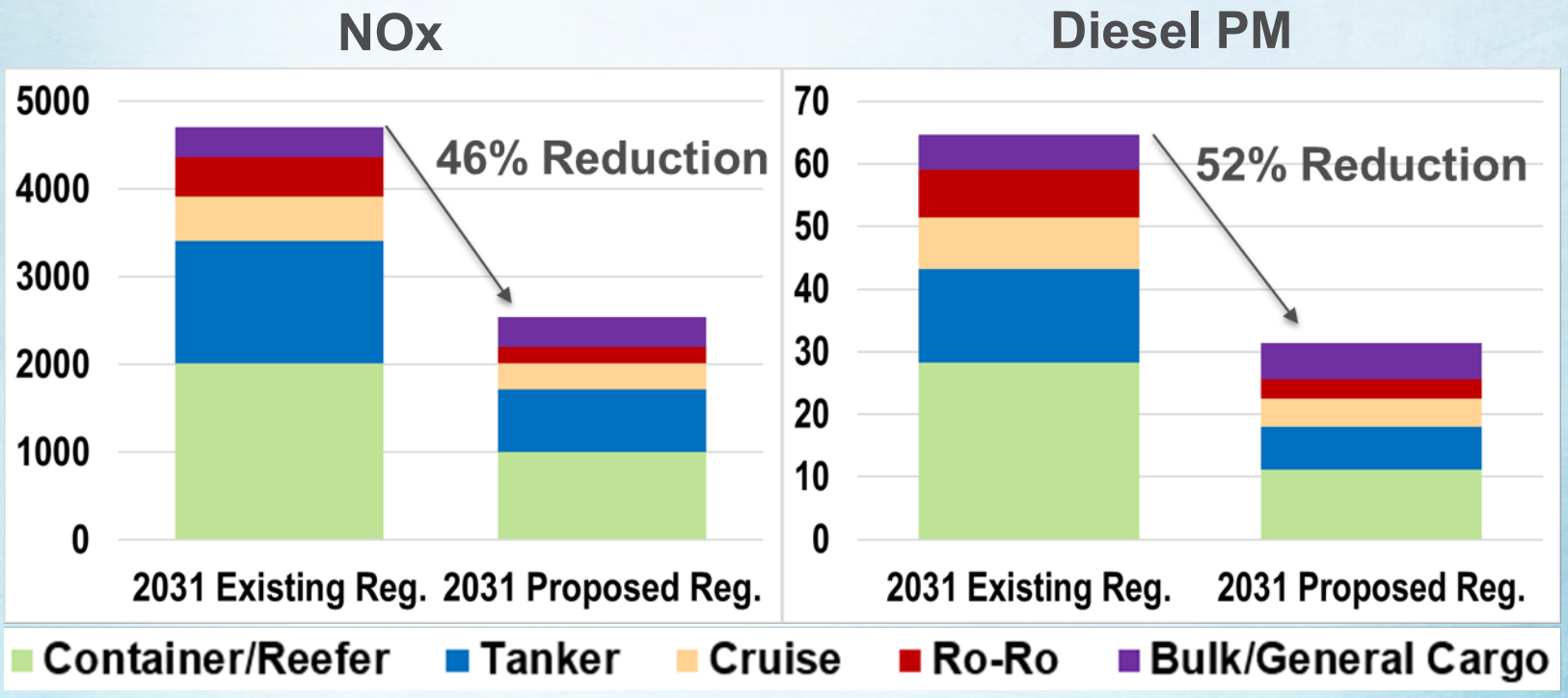
Rulemaking Process

- Proposed Regulation available for public comment between October 15 - December 9, 2019
- CARB Board heard initial proposal on December 5, 2019 and directed staff to consider changes
- Webinar to discuss proposed changes was held on January 30, 2020
- “15-day” changes were available for public comment March 26 - May 1, 2020

Summary of 15-Day Changes

- Accelerated implementation dates for tankers and ro-ros
- Development of Innovative Concept compliance option
  - Achieves equivalent or greater emissions reductions at lower costs
  - Renewable every three years as long as reductions are met
- Interim evaluation strengthened and expanded
- Key regulation language clarifications and updates

Proposed Regulation Achieves Significant Emissions Reductions*



*Projected Statewide Emissions (Tons Per Year)

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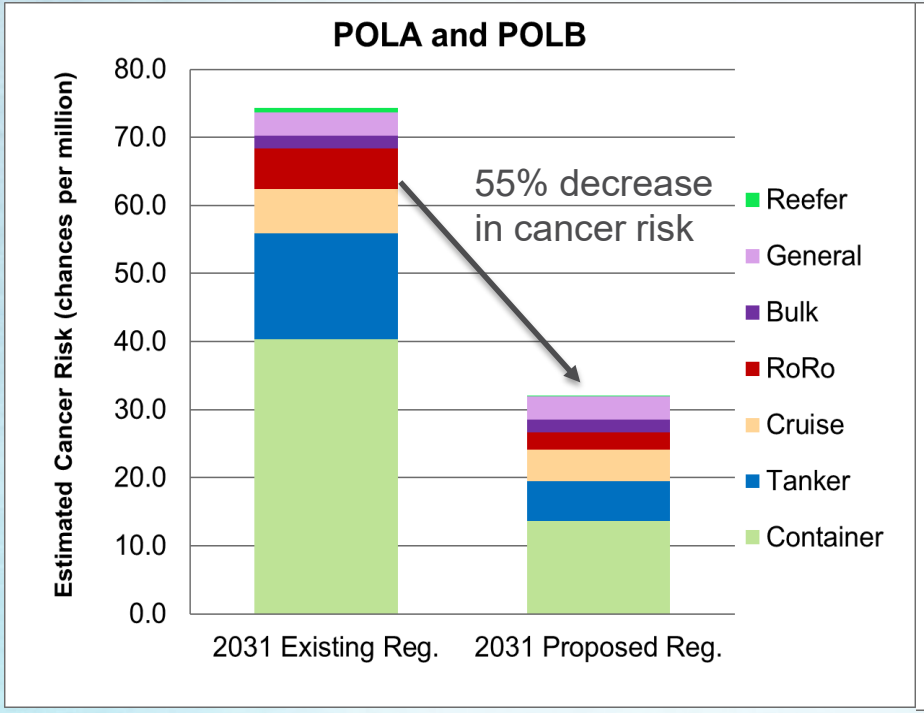
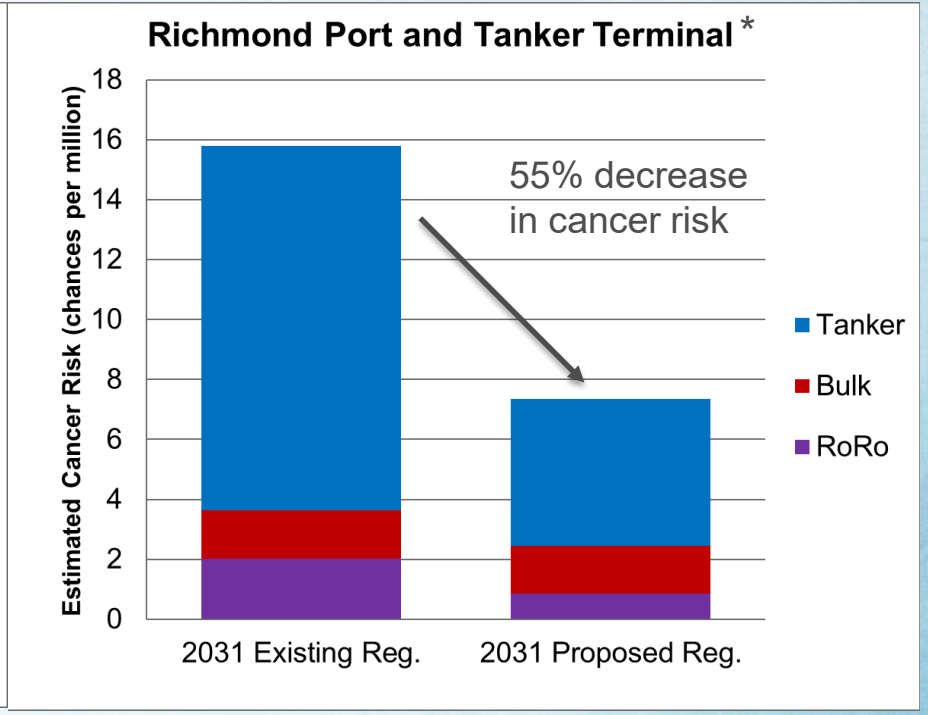
Proposed Regulation Provides Significant Reduction in Potential Cancer Risk





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* Richmond does not receive container, reefer, or cruise visits

Provides Additional Health Benefits

- Reduced mortality, hospitalizations, and emergency room visits
- Reduction in exposure to toxic diesel PM
  - For example, reduced exposure to 3.7 million residents in South Coast
- Additional benefits not monetized, such as:
  - Elevated vulnerability and impacts in disadvantaged communities, brain and lung health, cancer risk and birth outcomes

Summary of Stakeholder Comments

- Implementation dates too soon/not soon enough
- Innovative concepts provision is useful/uncertain
- Delay/don’t delay rulemaking due to pandemic/recession

Container, Reefer, & Cruise Vessels

- Vessels regulated since 2014
- Pandemic impacting both container and cruise industry (mostly cruise)
- Stakeholder requests to keep existing regulation for container/reefer/cruise
  - Requests will not adversely impact emission reductions until 2023
- Discuss adjusting implementation date from 2021 to 2023

Container Vessels

-10%*

Cruise Vessels

-70%*

*Feb-May 2019 vs. 2020 impacts to container volumes and cruise visits

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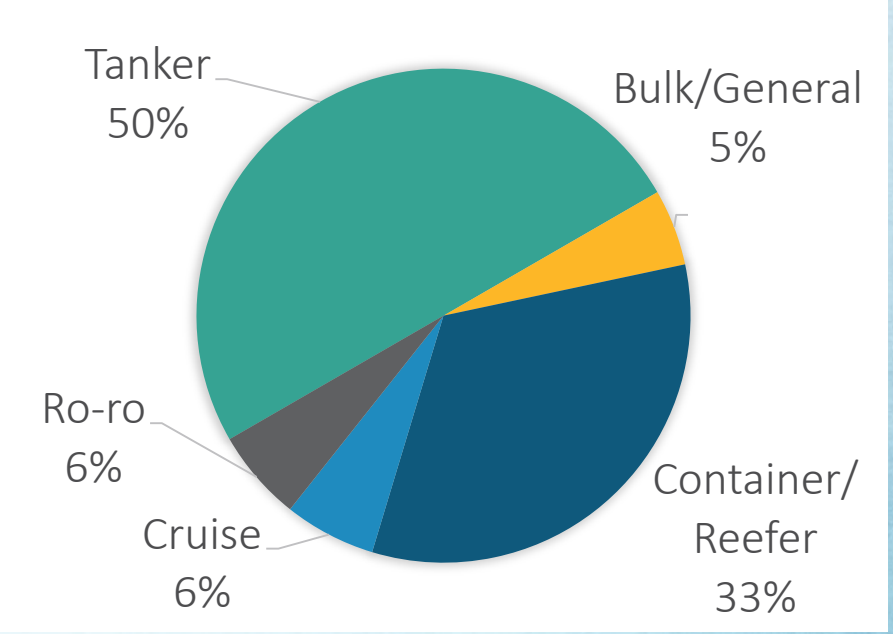
Ro-Ro Vessels

- ~50-75% reduction in visits (Feb-May 2019 vs. 2020)
- New car purchases tend to recover slowly (anticipated to take years)
- Discuss adjusting implementation date from 2024 to 2025
  - Will not significantly impact emission reductions

Tanker Vessels

- Crude oil imports down ~15% (Feb-May 2019 vs. 2020)
- Crude oil imports already showing increases in May/June
- Implementation dates are 4-6 years away
- Discuss maintaining 2025 and 2027 implementation dates

Projected 2020 Statewide At Berth PM2.5 Emissions

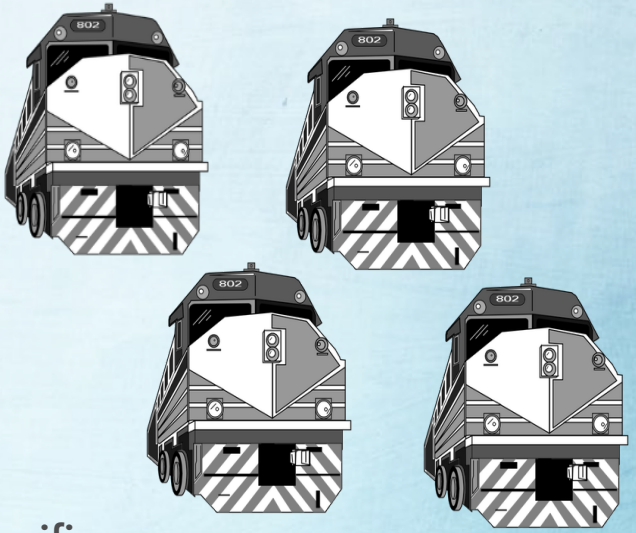


(Aux. Engines and Boilers)

Example of Innovative Concepts

At Berth controls one tanker terminal with about 70 visits per year

Replace four* Tier 1 line haul locomotives operating within impacted communities with cleanest Tier 4



- Discuss adjusting Innovative Concepts approval period from three years up to five years

*Will vary depending on project specifics

Next Steps

- Based on public comments and Board discussion, staff proposes to:
  - Follow-up with stakeholders on adjustments
  - Prepare second 15-day changes for public review/comment by early July
  - Return within next 2 months (August) for final board action
- Must submit to Office of Administrative Law (OAL) by December 2020