



# **At Berth Regulation Implementation Updates Webinar**

**May 17, 2022**

# Agenda

- Overview & Introductions
- Part 1: Innovative Concepts (IC)
  - Summary of IC applications received
  - Kick off public review process
- Part 2: At Berth Implementation Overview
  - Port and Terminal Plans
  - Interim Evaluation
- Part 3: Open Q&A

# New At Berth Regulation

- Adopted by CARB's Board on August 27, 2020
- Every vessel visiting a regulated terminal must connect to shore power or alternative control strategy
- Compliance required by:
  - January 1, 2023: Container, Reefer, Cruise
  - January 1, 2025: Auto carrier
  - January 1, 2025 (SoCal) and January 1, 2027 (NorCal): Tanker
- Alternative compliance pathways:
  - Vessel and Terminal Incident Events (VIEs and TIEs)
  - Remediation Fund (for specific qualifying circumstances)
  - Innovative Concepts



# Regulation Implementation

- January 1, 2021 - New Regulation took effect
- December 1, 2021 - Ports and Terminal Plans submitted to CARB
- December 1, 2021 - IC applications submitted
- December 1, 2022 - Publish Interim Evaluation Report





At Berth Regulation

# Innovative Concept Applications

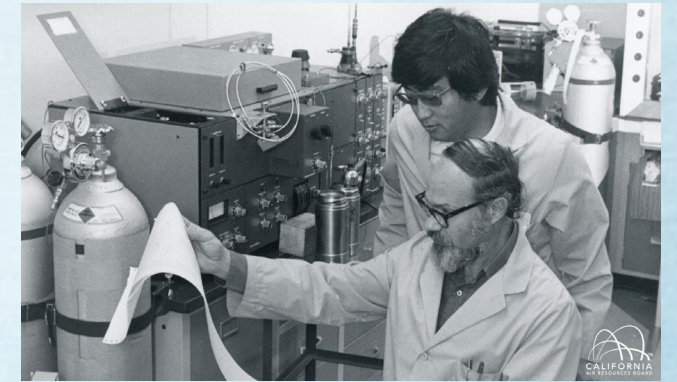
# What is an Innovative Concept?

Option that allows compliance through emission reduction projects that benefit impacted port communities



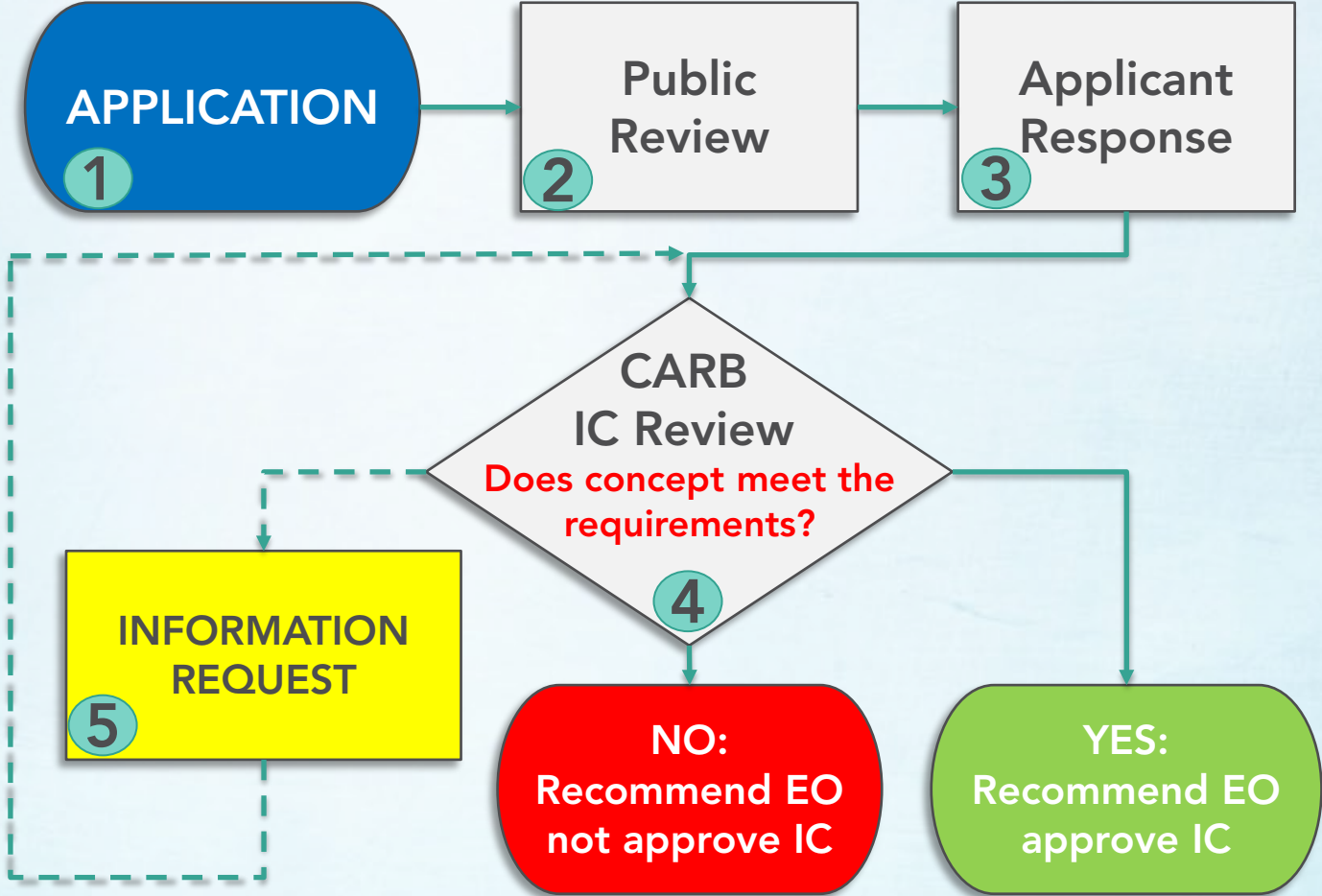
# Innovative Concept Key Requirements

- Received by December 1, 2021
- Reduce emissions<sup>1</sup> equivalent to, or greater than the level that would have been achieved by using a CAECS<sup>2</sup>
- Achieve reductions in and around same California port or marine terminal as with direct compliance
- Approved by CARB through Executive Officer
- Requirements are in Section 93130.17 of the Regulation



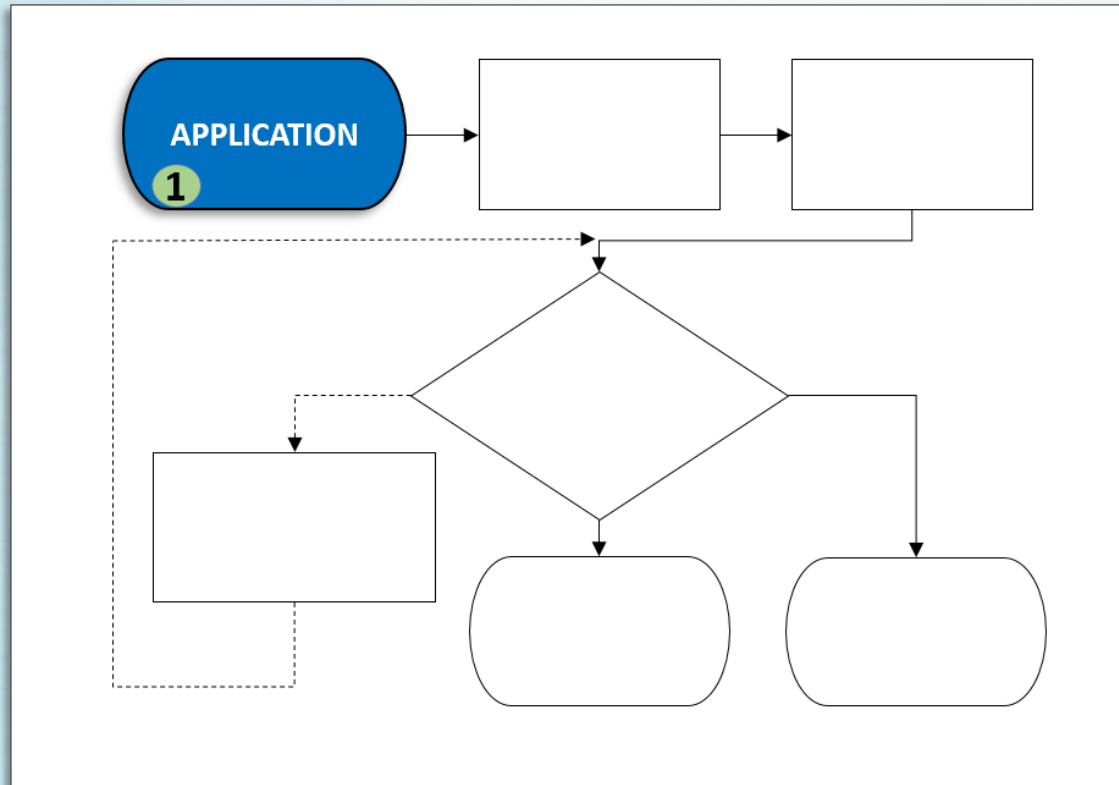
- 1) Reduce NO<sub>x</sub>, PM<sub>2.5</sub>, ROG while not increasing GHG
- 2) CAECS: CARB Approved Emission Control Strategies

# Innovative Concepts Application and Approval Process





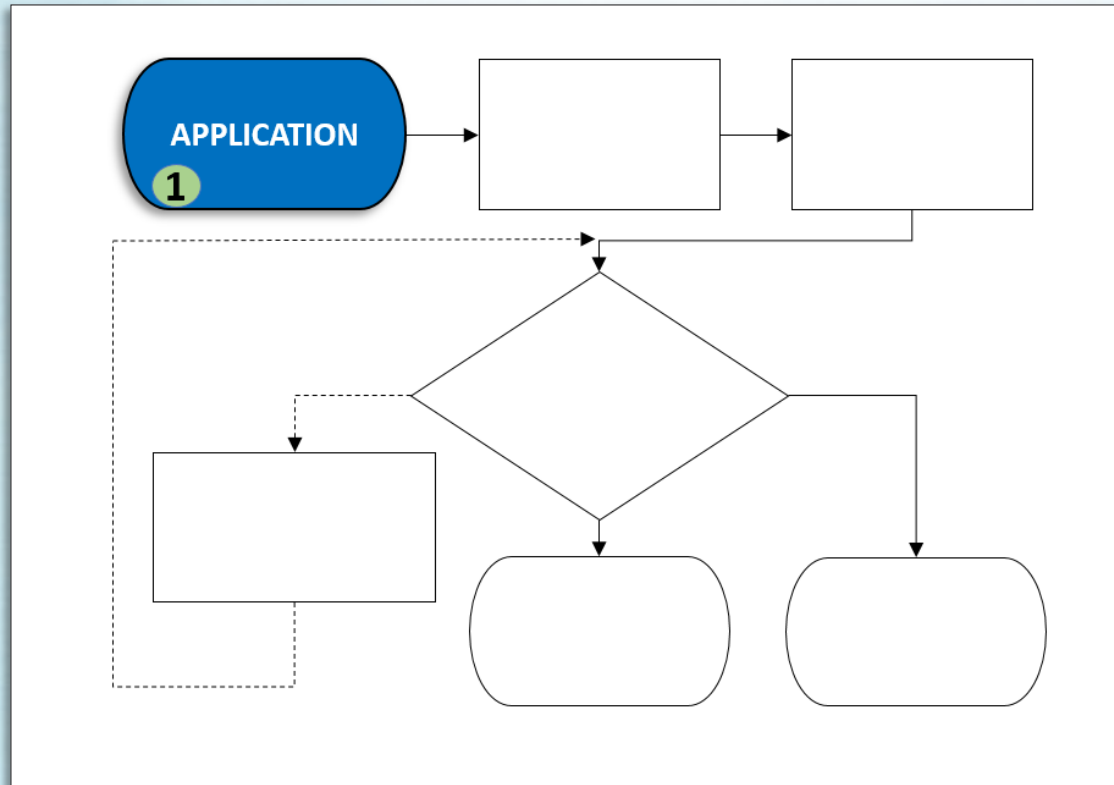
# Innovative Concepts Application and Approval Process



## *Application Process*

- **Due Dec 1, 2021**

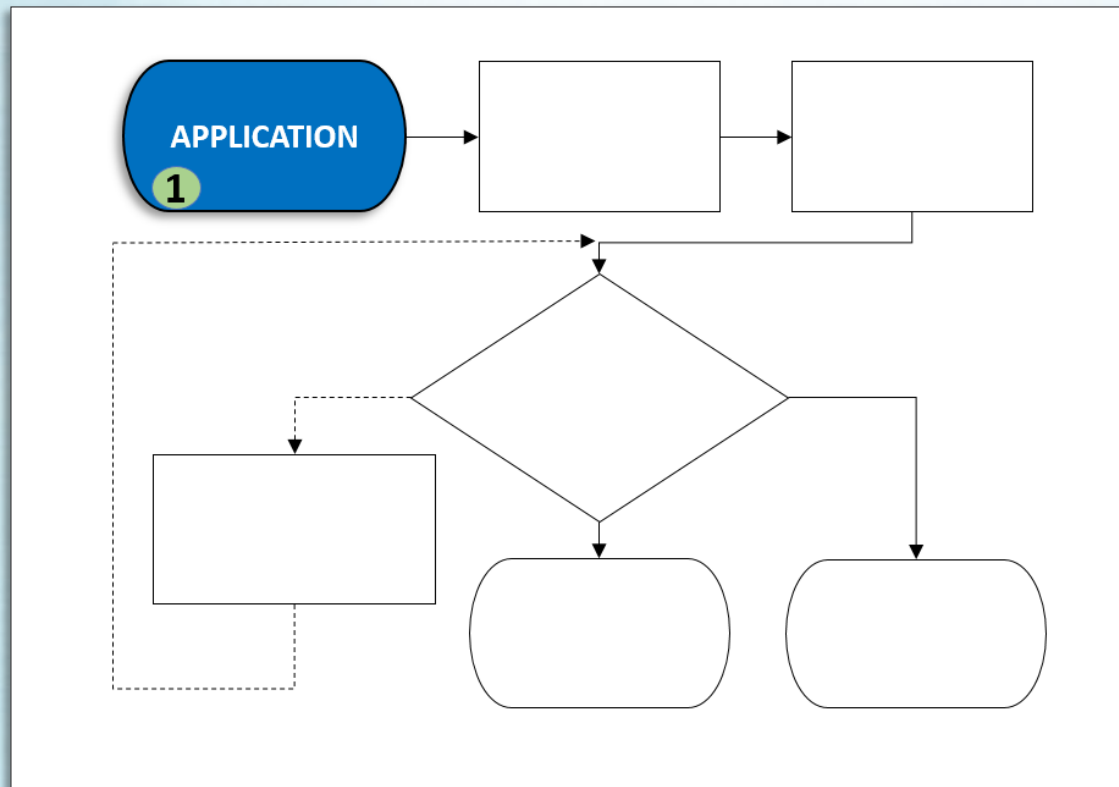
# Innovative Concepts Application and Approval Process



## *Application Process*

- Due Dec 1, 2021
- 11 Applications received before deadline
  - ◆ 4 "Technology"
  - ◆ 7 "Non-technology"

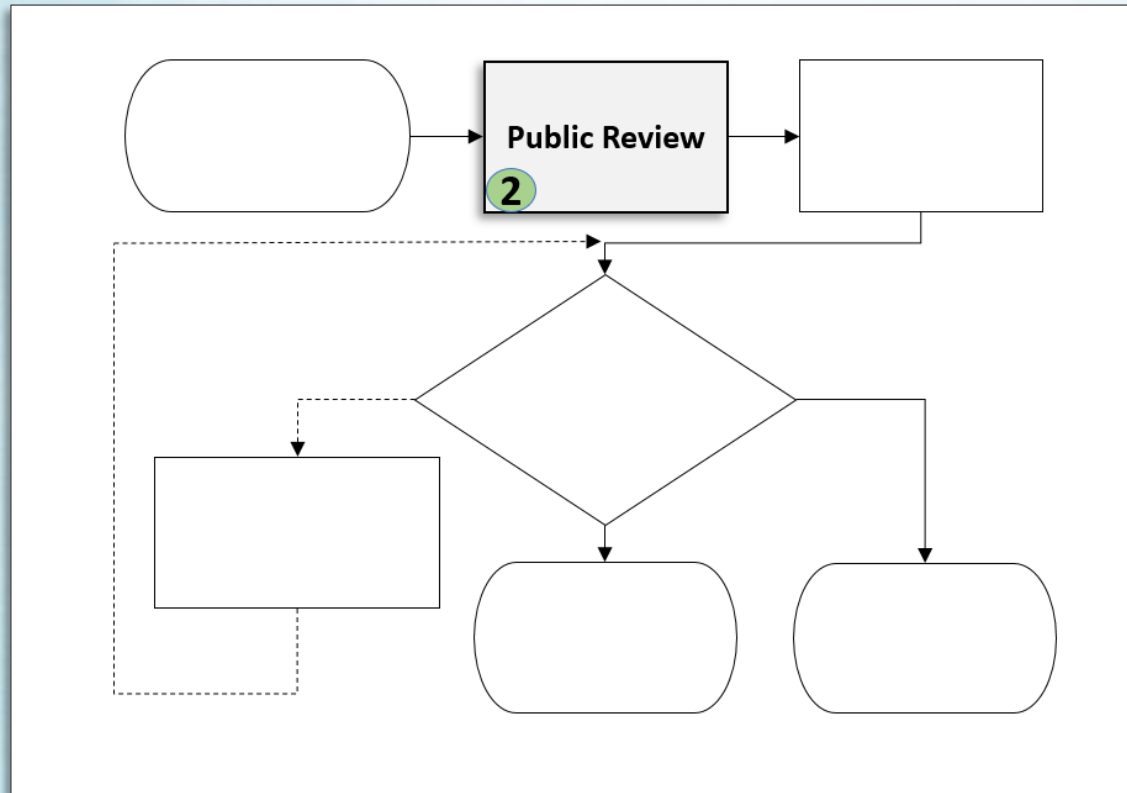
# Innovative Concepts Application and Approval Process



## *Application Process*

- **Due Dec 1, 2021**
- **11 Applications received before deadline**
  - ♦ 4 "Technology"
  - ♦ 7 "Non-technology"
- **Applications did not provide all the required information**

# Innovative Concepts Application and Approval Process

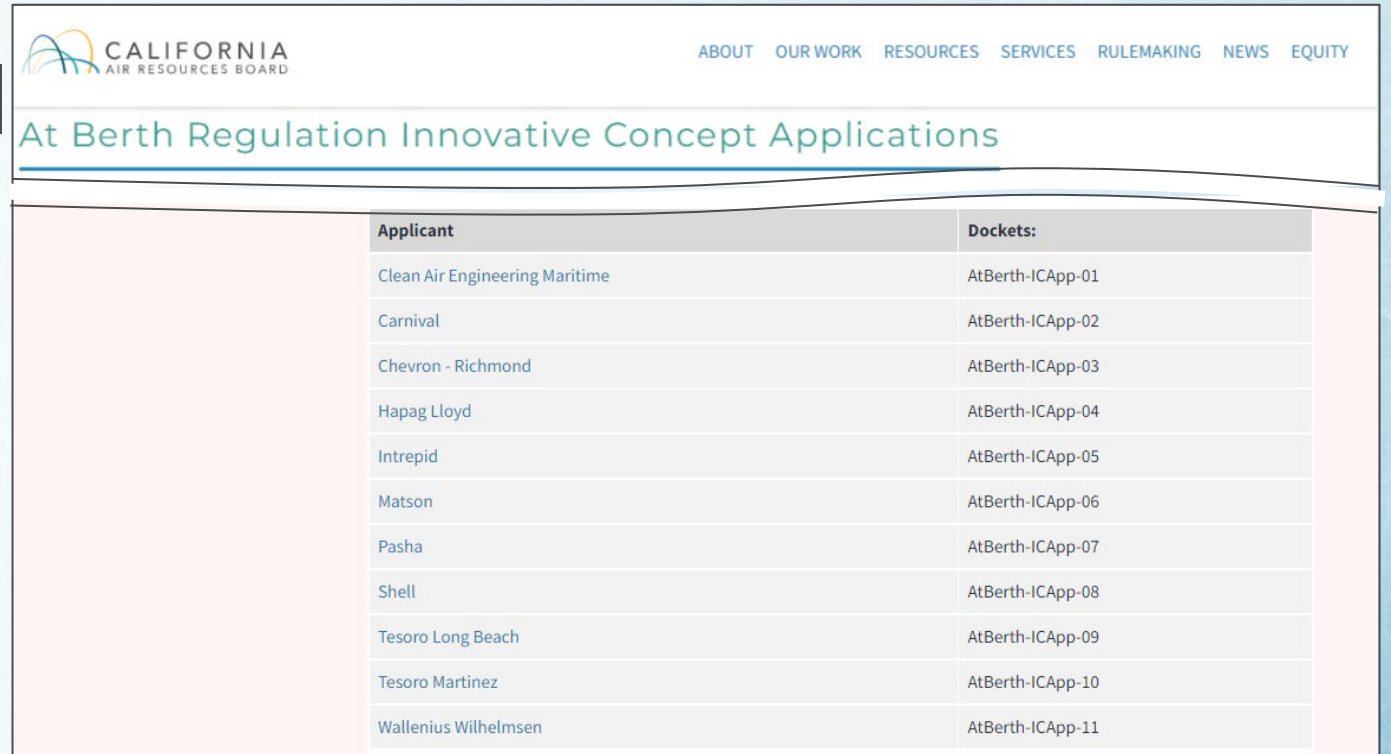


## *Public Review*

- *After this webinar, the applications will be posted for a 45-day public review*
- *CARB will notify applicants about missing information*
- *All comments will be posted*

# Public Engagement

- A comment docket will be available for each IC
- Comments can be submitted here:

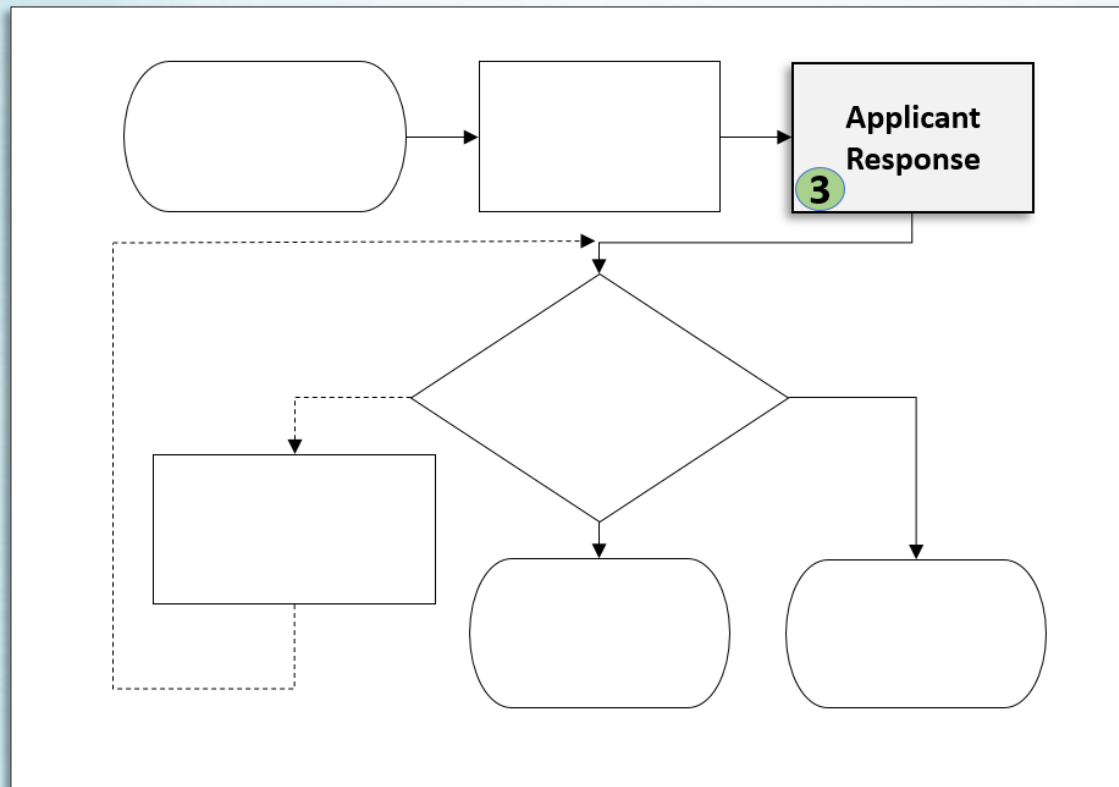


The screenshot shows the California Air Resources Board website. The header includes the CARB logo and navigation links: ABOUT, OUR WORK, RESOURCES, SERVICES, RULEMAKING, NEWS, EQUITY. The main heading is "At Berth Regulation Innovative Concept Applications". Below this is a table with two columns: "Applicant" and "Dockets:". The table lists 11 applicants and their corresponding docket numbers.

Applicant	Dockets:
Clean Air Engineering Maritime	AtBerth-ICApp-01
Carnival	AtBerth-ICApp-02
Chevron - Richmond	AtBerth-ICApp-03
Hapag Lloyd	AtBerth-ICApp-04
Intrepid	AtBerth-ICApp-05
Matson	AtBerth-ICApp-06
Pasha	AtBerth-ICApp-07
Shell	AtBerth-ICApp-08
Tesoro Long Beach	AtBerth-ICApp-09
Tesoro Martinez	AtBerth-ICApp-10
Wallenius Wilhelmsen	AtBerth-ICApp-11

<https://ww2.arb.ca.gov/berth-regulation-innovative-concept-applications>

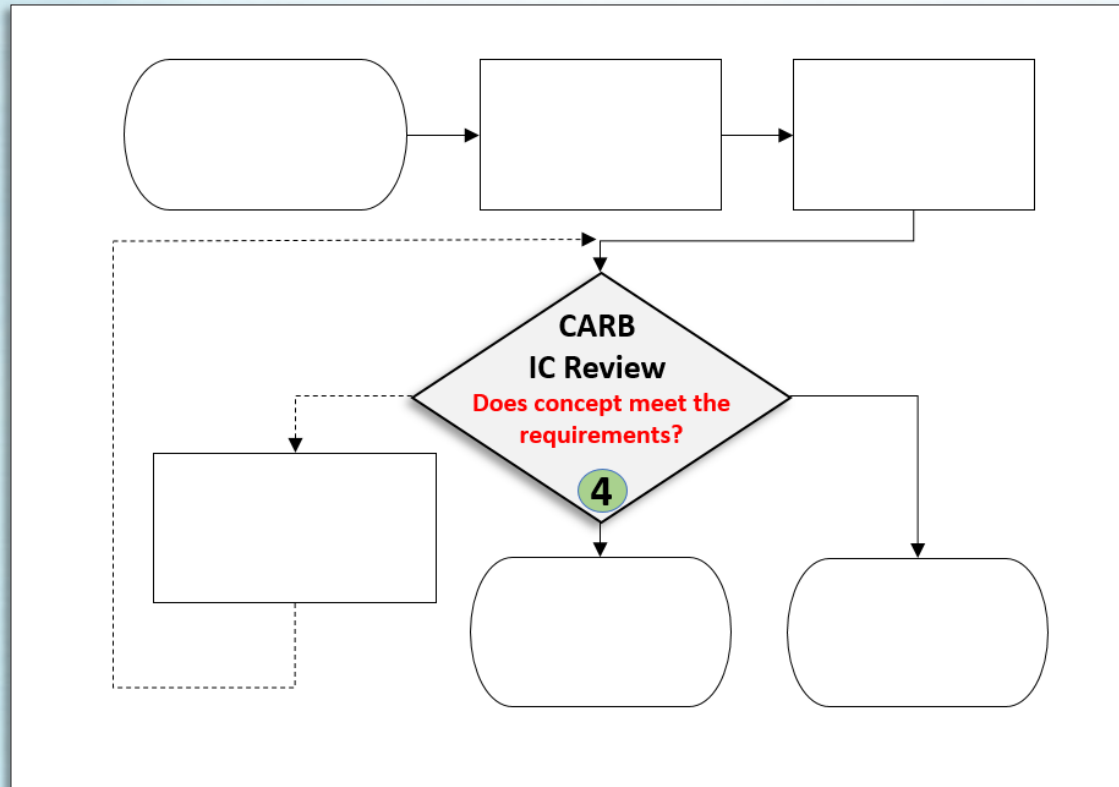
# Innovative Concepts Application and Approval Process



## *Applicant Response*

- *Applicants will have 45 days to respond to public comments and provide missing information*
- *Applicants' responses will then be posted*

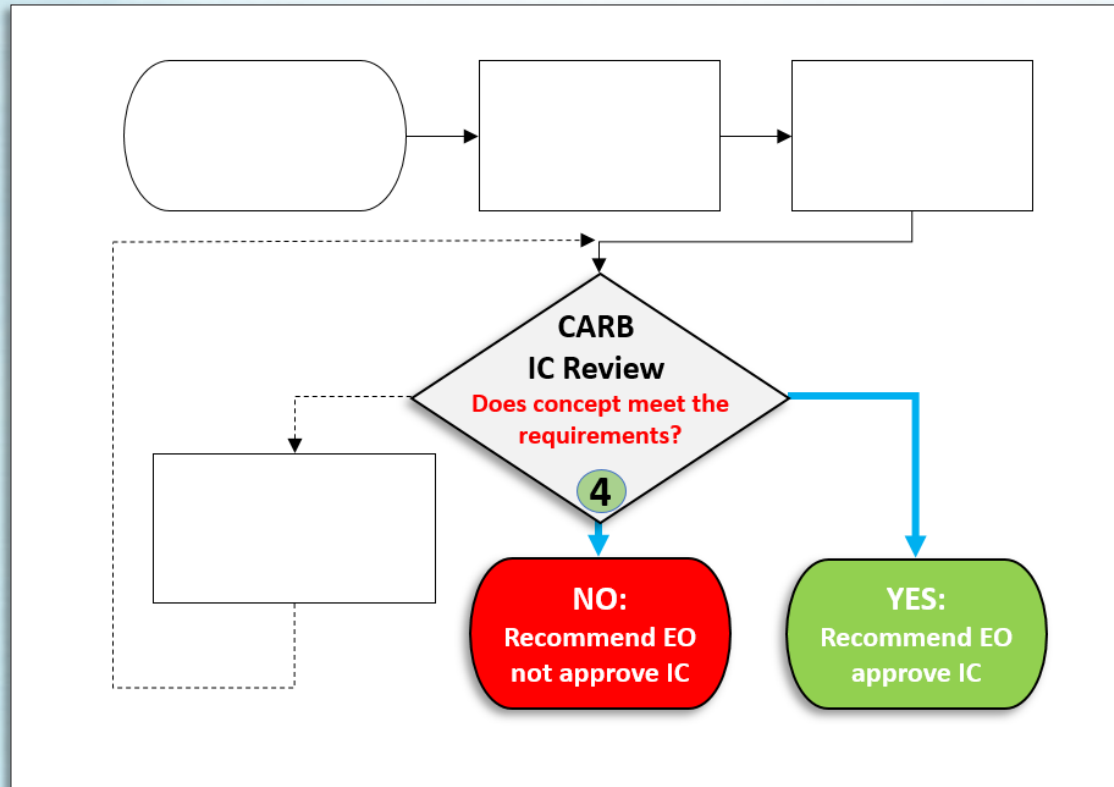
# Innovative Concepts Application and Approval Process



## *Innovative Concept Review*

- **CARB then reviews the ICs to ensure concepts meet the regulatory requirements**

# Innovative Concepts Application and Approval Process

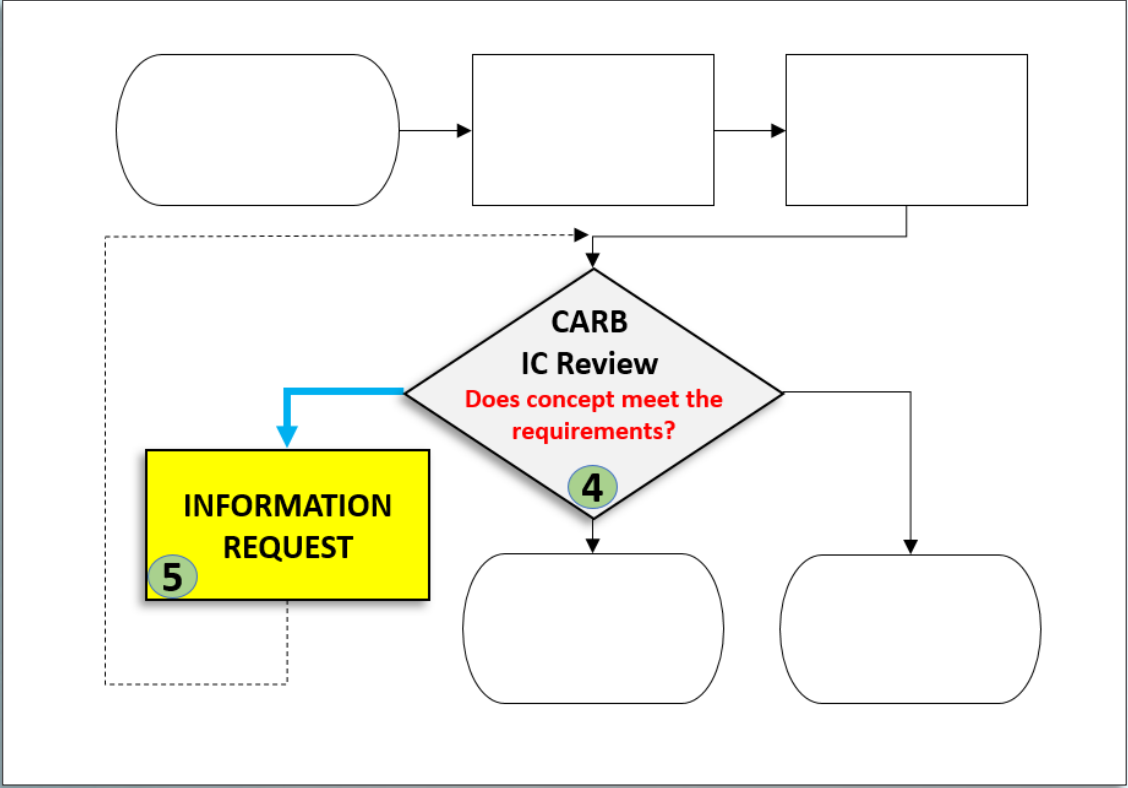


## *Innovative Concept Review*

- CARB then reviews the ICs to ensure concepts meet the regulatory requirements
- CARB staff will make recommendations to the Executive Officer (EO)
- EO will notify the applicants that their IC has been approved as a compliance option



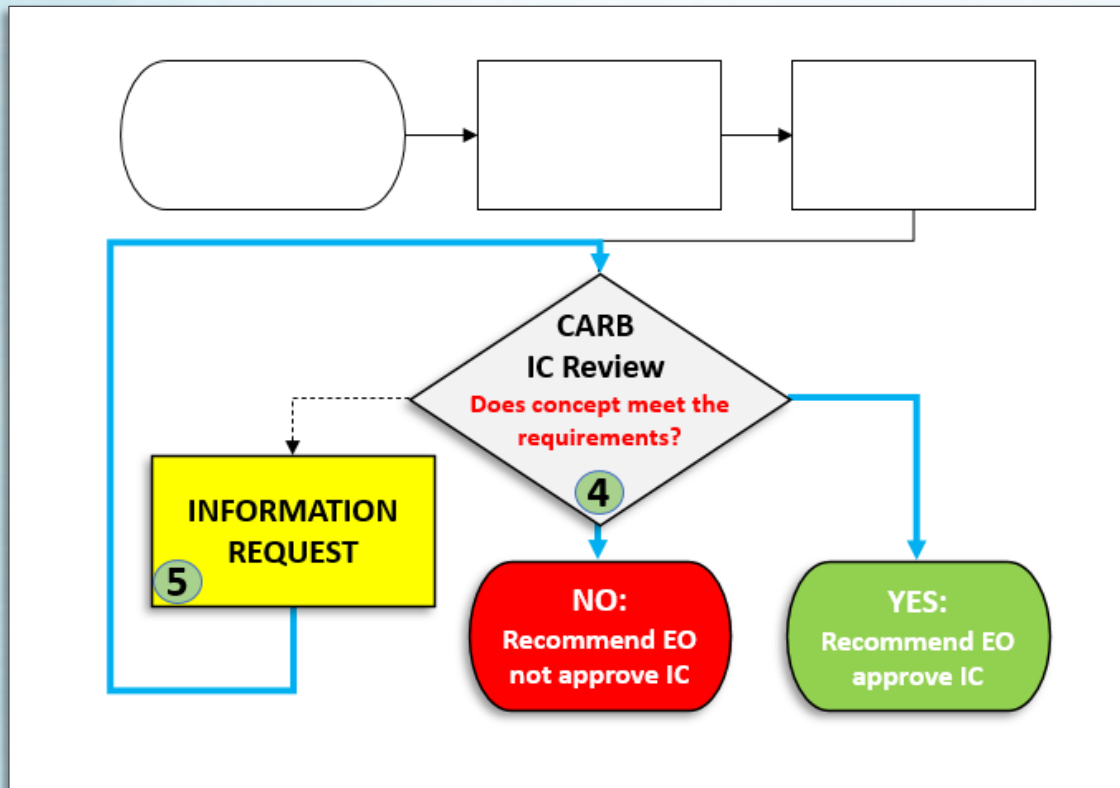
# Innovative Concepts Application and Approval Process



## *Incomplete Applications*

Section 93130.17 (b)(5) of the regulation describes the process for incomplete applications:

# Innovative Concepts Application and Approval Process

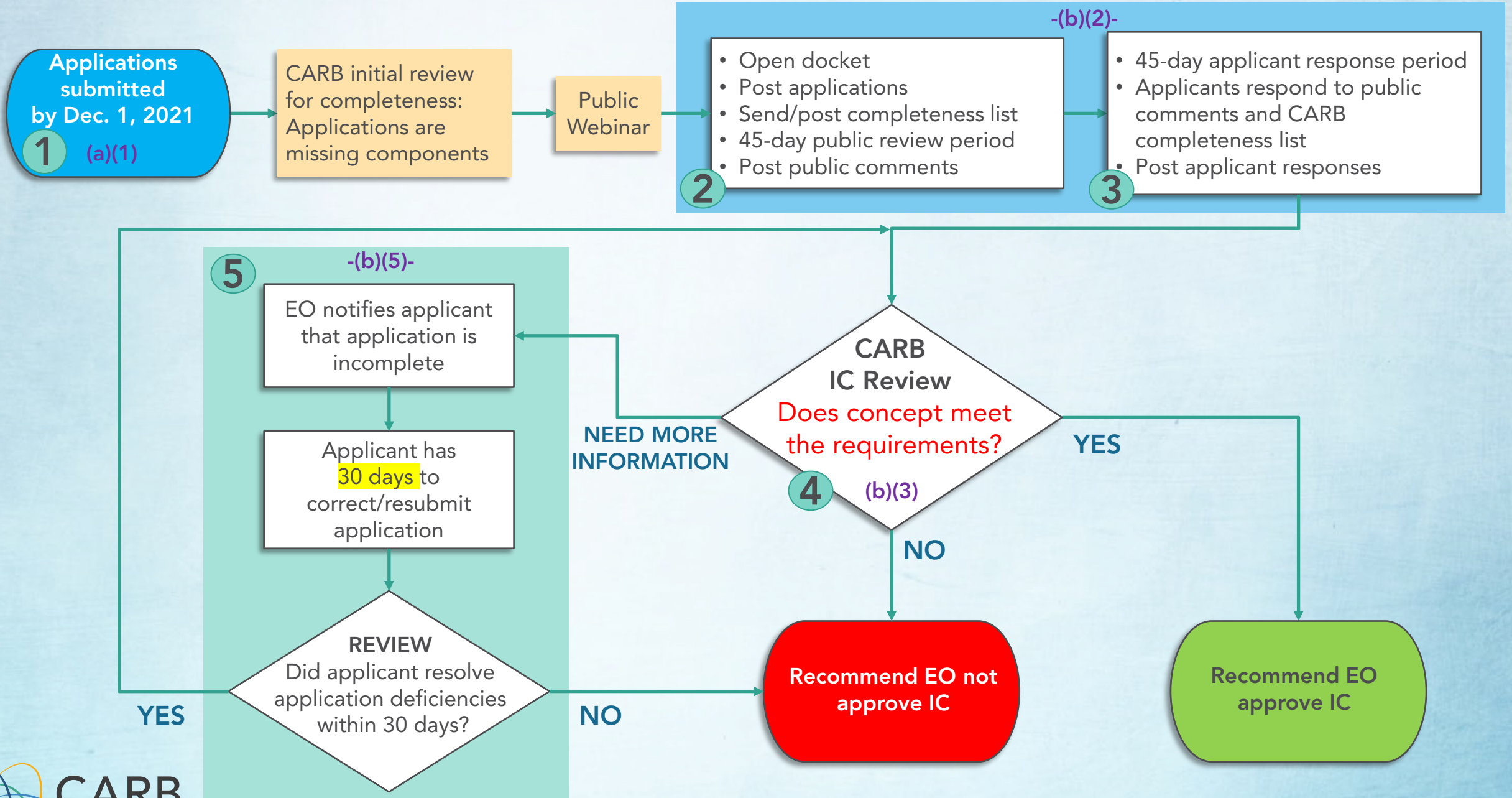


## *Incomplete Applications*

Section 93130.17 (b)(5) of the regulation describes the process for incomplete applications:

- Applicants will be notified that their application is incomplete and will be given an opportunity to provide more information
- Applicants have 30 days to correct and resubmit application
- CARB will then re-evaluate the Innovative Concept

# Innovative Concepts Application and Approval Process Flow Chart



# Next Steps

- Applications will be posted
- Public has a 45-day window to evaluate and provide feedback
- Applicants will be notified regarding the information that is missing from their application
- Applicants will then have 45 days to respond to public comments
- CARB will evaluate the ICs or notify applicants if more information is needed

# Questions?



At Berth Regulation

# Port and Terminal Plans

# Purpose of Port/Terminal Plans

Goal is to demonstrate each port's/terminal's path toward compliance

Details responsibilities between ports, terminals and CAECS

Assist with Interim Evaluation

# What Was Required?

Plans should include:

- Equipment and location
- Number of vessels expected to use the strategy
- Berth coordinates
- Where equipment will be used
- Terminal and Port berthing restrictions
- Schedule for installing and operating equipment
- Terminal-Port division of responsibilities



# Port and Terminal Plan Timeline

## Submittal

- To CARB by December 1, 2021

## After Submittal

- Staff had 90 days to review plans

## Complete or Incomplete?

- If ports/terminals did not receive an incomplete letter from CARB within 90 days of submittal, plans were deemed complete

## Revised Plans

- February 1, 2024: Revised ro-ro and S. CA tanker plans due
- February 1, 2026: All other tanker revised plans due

# Primary Compliance Strategy

## Container, Reefer, and Cruise Vessels

- Received: 9 Port Plans, 19 container/reefer terminal plans, and 4 cruise terminal plans

Container and Reefers:

Shore Power

Capture and Control  
System

Cruise Vessels:

Shore Power

- Main Deficiencies: Missing coordinates, number of vessels to use strategy, lack of detailed installation schedules, and missing signatures

# Primary Compliance Strategy Ro-Ro Vessels

- Received 8 ro-ro terminal plans

Shore power/barge/land-based  
capture and control combo

Shore power

Hydrogen fuel cells

- Main Deficiencies: Missing coordinates, general contact info, number of vessels to use strategy, lack of detailed installation schedules, and missing signatures

# Primary Compliance Strategy Tanker Vessels

- Received 21 tanker terminal plans

Barge/land-based  
capture and control

Shore Power

Innovative Concepts

- Main Deficiencies: Majority of plans did not have a schedule for installing equipment, stating the schedule is dependent on CARB approved CAECS

# Where Can I Find the Plans?

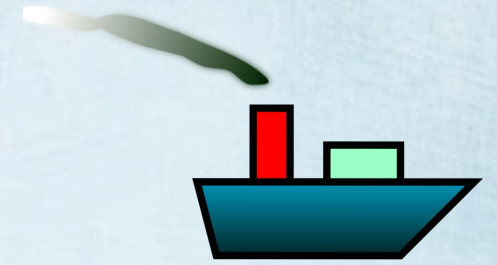
- Plans are publicly available on CARB's website:
  - <https://ww2.arb.ca.gov/our-work/programs/ocean-going-vessels-berth-regulation>
- Updated ro-ro and tanker Terminal Plans will be due to CARB one year prior to their compliance year

# Questions?



# At Berth Regulation Interim Evaluation

# Interim Evaluation



- Assess the progress in adopting control technologies and the status of infrastructure upgrades
- Evaluate possible inclusion of control requirements for bulk and general cargo vessels and vessels at anchor
- Must be published by December 1, 2022
  - Followed by an update to the Board (likely early/mid 2023)
- Data/analyses should be provided to CARB no later than June 2022
  - Can send information via email to [shorepower@arb.ca.gov](mailto:shorepower@arb.ca.gov)



# Interim Evaluation Topics

## Status of Control Technologies

- Update the status of control technologies (assessing progress made in adopting control technologies for new vessel categories (ro-ro and tanker))

## Feasibility of Requirements for Additional Vessel Categories

- Assessment of the feasibility of control requirements for bulk/general cargo vessels and for vessels at anchor

## Innovative Concepts

- Summary of Innovative Concepts applications received by CARB

## COVID Impacts

- Evaluation of impacts resulting from the COVID pandemic

## Public Process

- Discussion of community involvement and public process since the Regulation took effect (Jan. 1, 2021) in preparation for the drafting of the Interim Evaluation report

# Data Needs

- CARB is looking for data to assist with staff's evaluation of:
  - COVID impacts
  - Feasibility of control requirements for bulk and general cargo vessels and vessels at anchor
  - Labor delays
  - Infrastructure readiness for ro-ro and tanker vessels
  - Community impacts
- CARB encourages all public information submittals



# Public Process

- CARB will consider all information submitted by any member of the public or industry stakeholders
  - Including Port and Terminal Plans, site specific engineering evaluations, logistical considerations, health risk/exposure assessments
- CARB staff will provide further guidance on the public review process



# How Will CARB Use the Interim Evaluation Report



- Evaluate and summarize implementation status of the Regulation
- Develop recommendations for CARB's Board
  - Based on COVID impacts and new technical information or health studies
- Determine if control requirements are now feasible/recommended for:
  - Bulk and general cargo vessels
  - Vessels at anchor
- Findings will shape next steps recommendations to CARB's Board

# Contact Information

## Innovative Concepts

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## Port and Terminal Plans & Interim Evaluation

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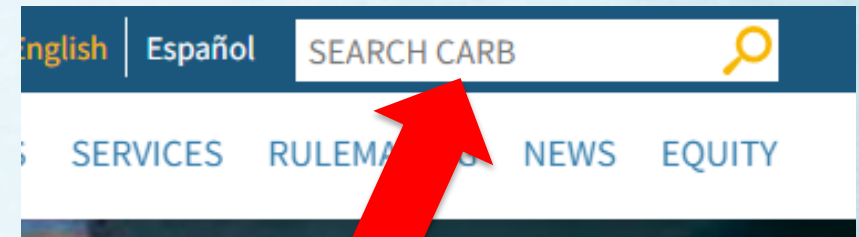
Elizabeth Melgoza, Marine Strategies Section

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# Where to Find More Details

- More information can be found at: <https://ww2.arb.ca.gov/our-work/programs/ocean-going-vessels-berth-regulation>
- Or go to: <https://arb.ca.gov> and type into the search window: "at berth"  
(The first option will open the page listed above)



# Questions?