



# Rule 462

## Organic Liquid Loading



Working Group Meeting No. 1  
November 6, 2024 – 9:00 am

Zoom URL: <https://scaqmd.zoom.us/j/92768644368>

Dial In: 1 669 900 6833

Webinar ID: 927 6864 4368 (applies to all)

# Agenda



Background & Rule Requirements

Rule Amendment Considerations

Rule Development Process and Next Steps



# Background & Current Requirements

# History

- Rule 462 was adopted in 1976 and has been amended six times
- Last amendment was in 1999 and primarily focused on correcting approval issues of the State Implementation Plan (SIP) identified by the U.S. Environmental Protection Agency (U.S. EPA)
- Part of correction involved updating various definitions within the rule



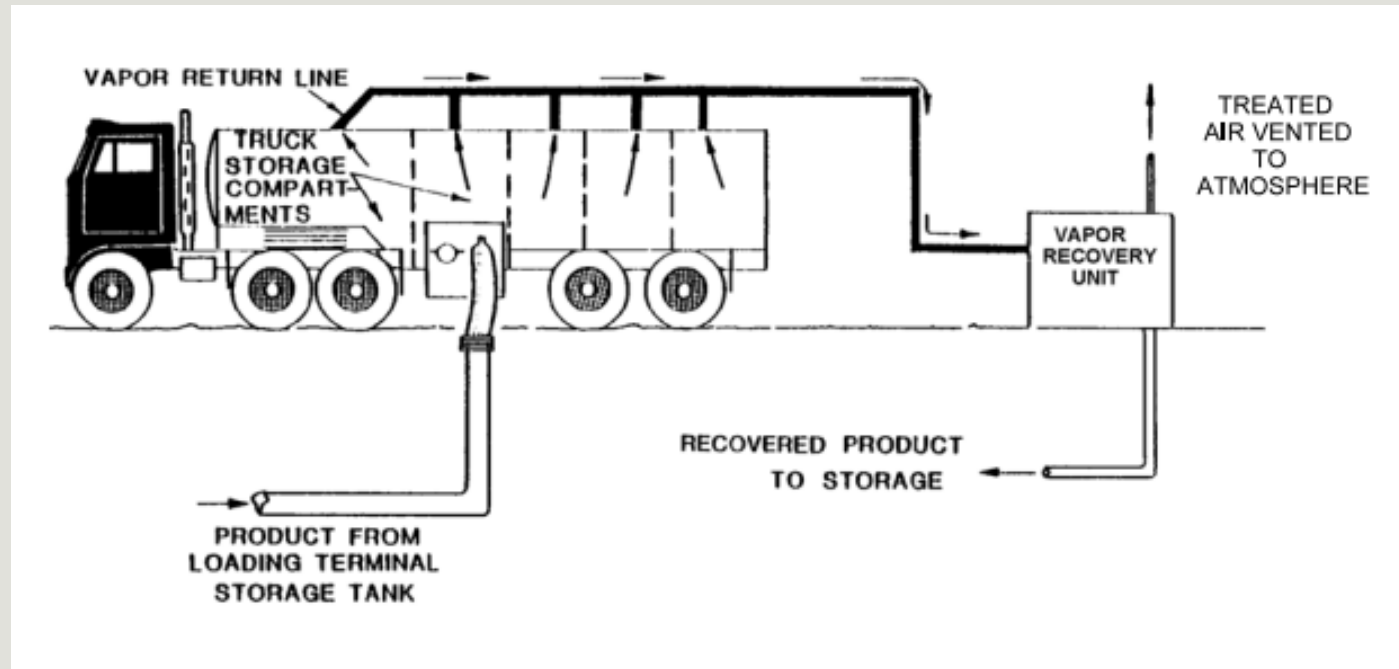
# Purpose



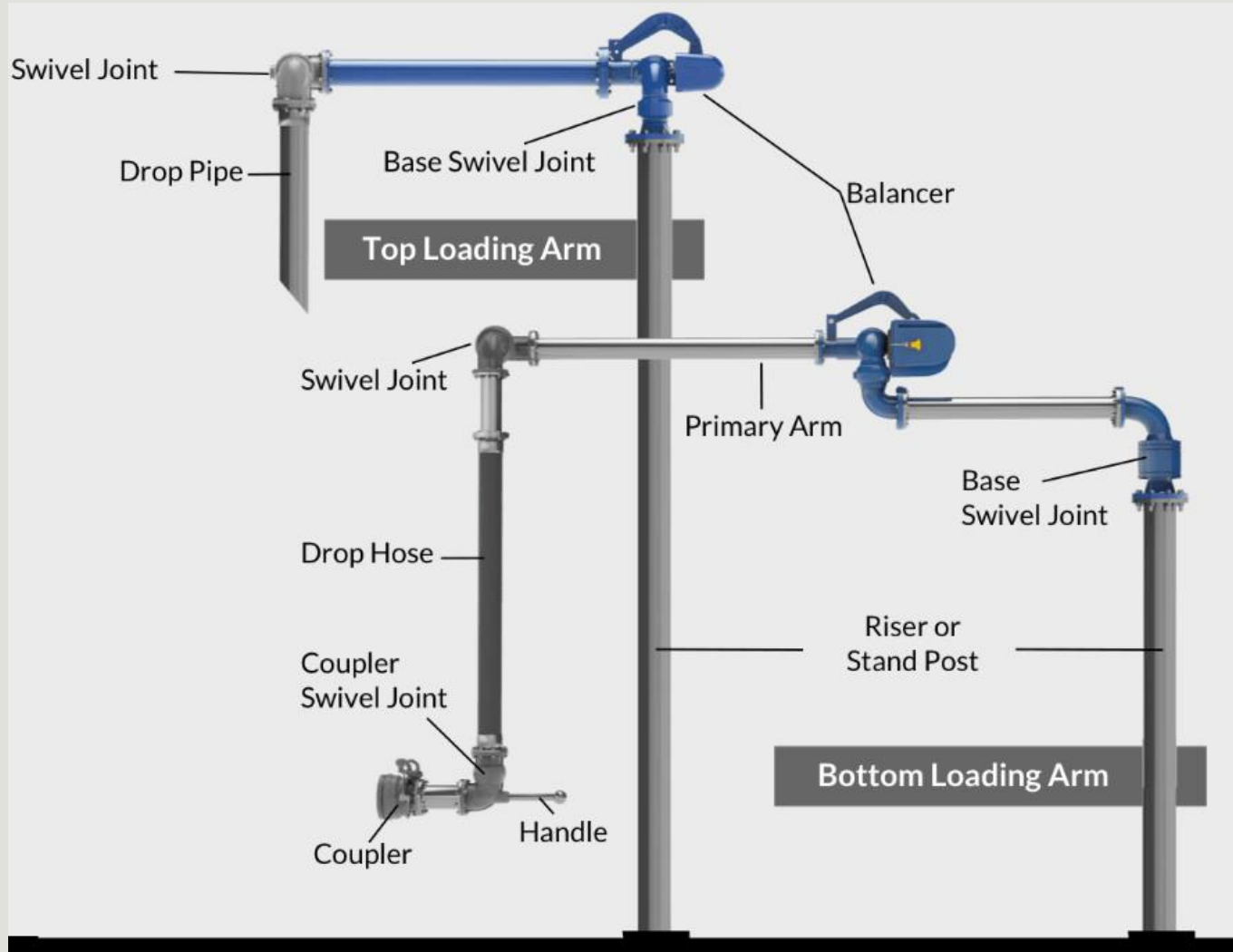
- Purpose of this rule is to control emissions of volatile organic compounds (VOCs) from facilities that load organic liquids into any tank truck, trailer, or railroad tank car
  - Further restrictions to the storage and loading of organic liquids and gasoline from various facilities located throughout the basin will not only reduce VOCs but also air toxics as a co-benefit

# Loading Truck

- Organic liquid loading involves the transfer of products such as gasoline from a storage tank to a tank truck, trailer, or railroad tank car
- Displaced vapors are captured via a vapor recovery system and are typically either recovered or incinerated



# Loading Arms



- Loading arms are used to transfer organic liquids between storage tanks and tank truck, trailer, or railroad tank car
- Two main types used are top loading arms and bottom loading arms
  - Example of top loading usage would be on railroad tank cars
  - Example of bottom loading usage would be gasoline transfer to tank truck

# Current Requirements

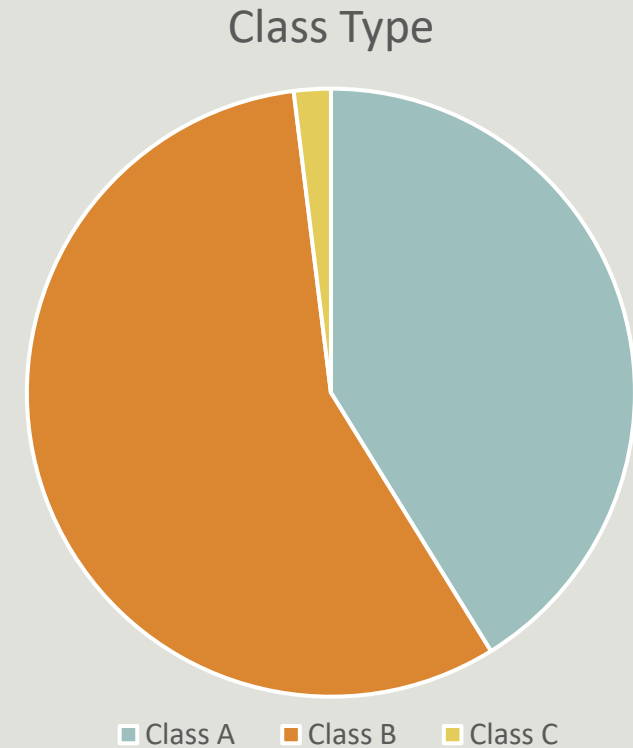
- Established limits for VOC emissions of 3,000 ppm from a source other than a tank truck, trailer or railroad tank car
- Quarterly organic vapor analyzer (OVA) inspections
- Specific requirements for facilities based on throughput and date built



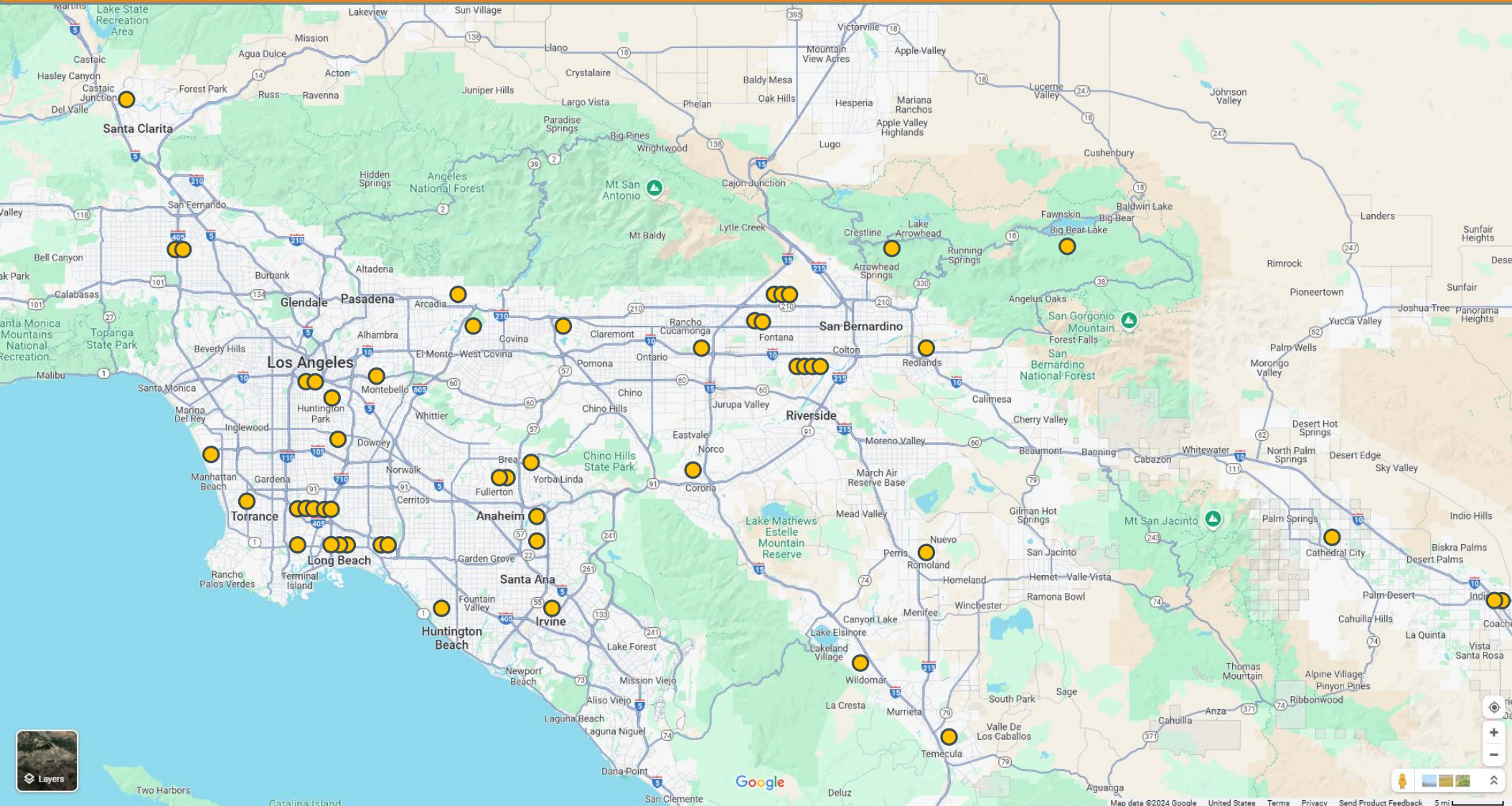


# Facilities

- There are approximately 51 active facilities within South Coast AQMD's jurisdiction subject to Rule 462
- More recent amendments to this rule have been for categorization of bulk loading facilities as A, B, or C
  - 21 are Class A which are primarily Title V facilities
  - 29 are Class B facilities
  - Only 1 Class C facility



# Site Locations



Rule 462 facilities within South Coast AQMD's jurisdiction

# Class A Facilities

- Class A applies to throughputs of 20,000 gallons or more per day of organic liquids
- Requires CARB or District-approved vapor recovery or disposal system
  - Vapor recovery systems shall reduce VOCs to 0.08 lbs/1,000 gallons
- Requires a continuous monitoring system (CMS)
- Gasoline transfers operated only for bottom loading



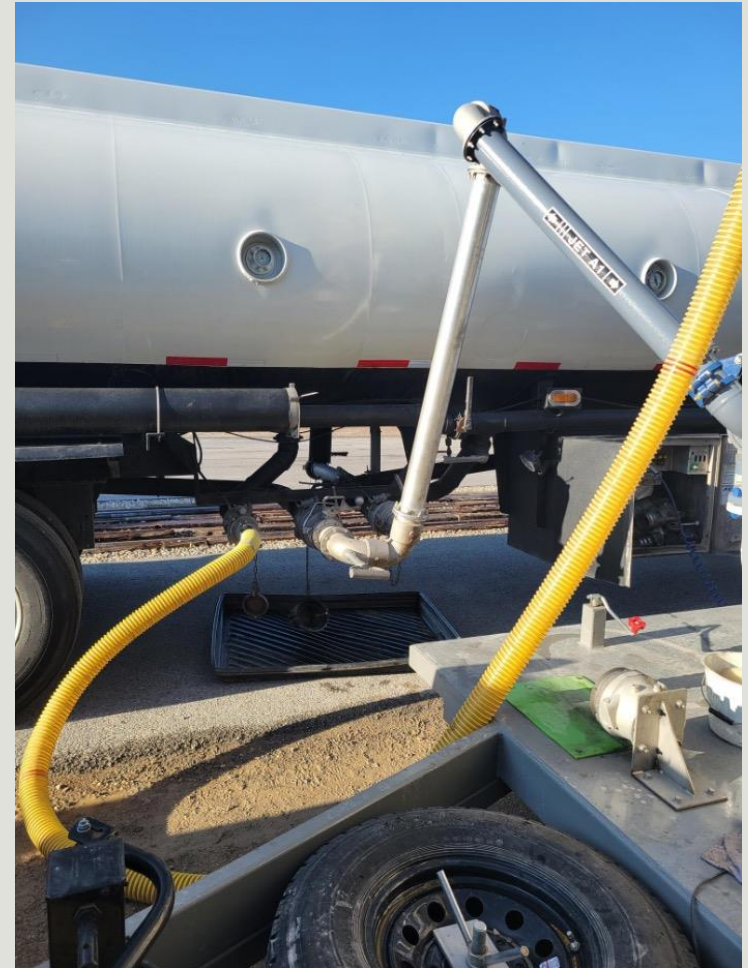
# Class B Facilities



- Class B facilities include those built prior to January 9, 1976 and :
  - Loads more than 4,000 gal/day of gasoline but no more than 20,000 gal/day; or
  - Loads no more than 4,000 gal/day but more than 500,000 gal/year
- Class B facilities also include those built after January 9, 1976 and loads no more than 20,000 gal/day of gasoline
- Class B facilities are required to have either a CARB certified or District-approved vapor recovery and/or disposal system and recover at least 90 percent of displaced vapors
- Gasoline transfers operated only for bottom loading

# Class C Facilities

- Class C facilities include those existing before January 9, 1976 and:
  - Load no more than 4,000 gal/day of gasoline; and
  - Loads no more than 500,000 gal/year
- Class C requirements less restrictive than A and B facilities
- Requirements include submerged fill loading or bottom fill loading
  - Submerged fill loading has fill pipe extending almost to bottom of cargo tank
  - Bottom fill loading has permanent fill pipe attached to cargo tank bottom
  - These methods are intended to reduce vapor loss during transfers



Example of  
Bottom fill loading

# Rule Amendment Considerations

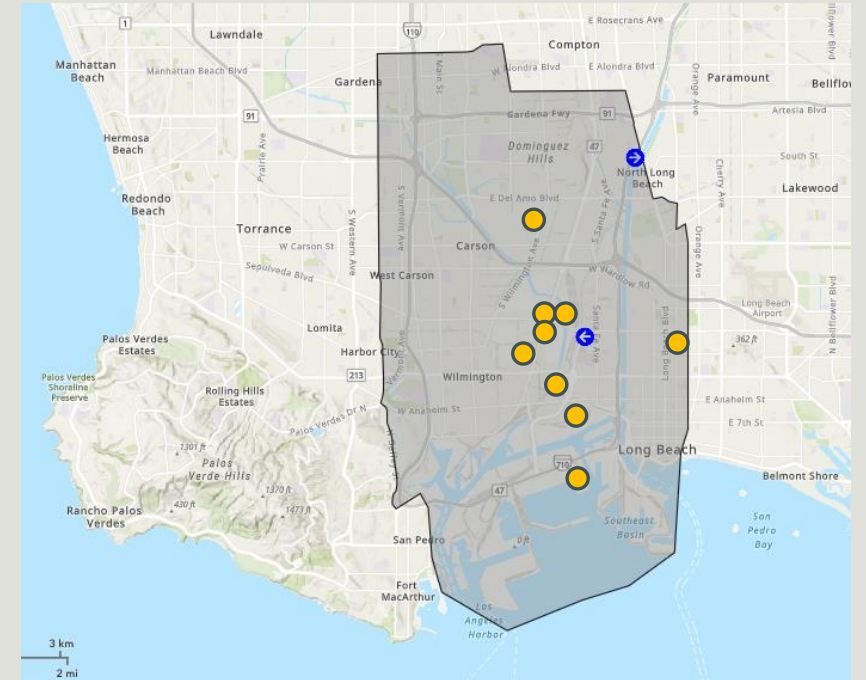


# Assembly Bill 617

Requires air districts to create Community Emissions Reduction Plans (CERPs) for designated communities

Requires strategies to be developed to reduce toxic air contaminants and criteria air pollutants in disadvantaged communities

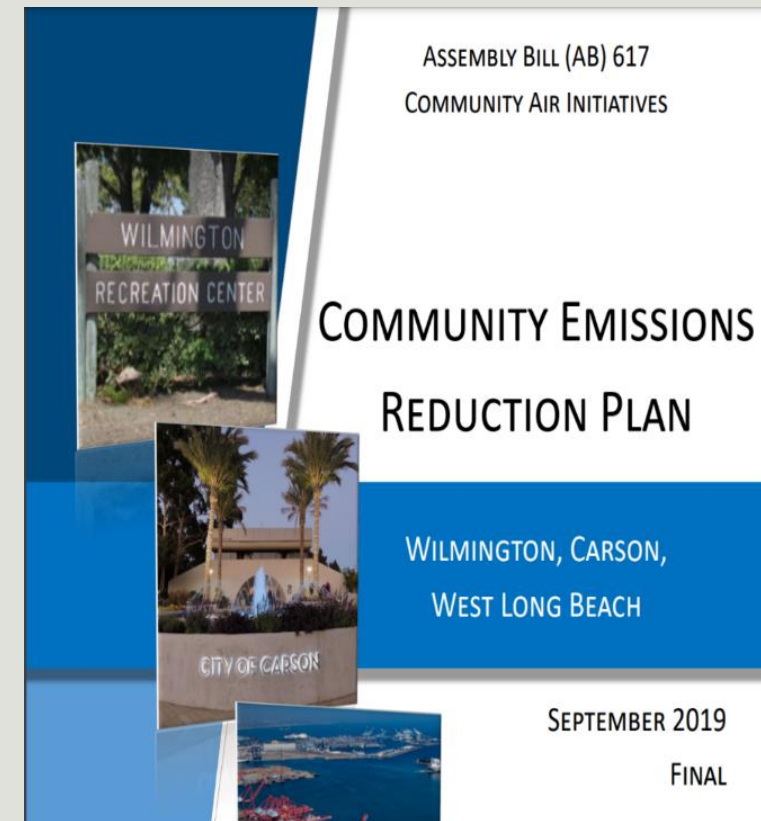
The community of WCWLB has several organic loading facilities/terminals within its borders



Wilmington, Carson and West Long Beach

# AB617 and CERP

- WCWLB community has requested further reductions in VOCs from petroleum-related facilities in their Community Emissions Reduction Plan (CERP)
  - 9 of 51 facilities are located within the Wilmington, Carson and West Long Beach area (WCWLB) which represents ~ 18% of the facilities
- While this rule was not specifically mentioned in the CERP some equipment at these facilities are required by other South Coast AQMD rules to conduct optical gas imaging (OGI) inspections
  - This rule aims to further reduce VOC emissions from organic liquid loading facilities/terminals





# Rule 462 Update Considerations



- Will evaluate the use of enhanced leak detection via optical gas imaging (OGI)
  - This will partially address FUG-01 – Improved Leak Detection and Repair [VOCs]
- Conduct Best Available Retrofit Control Technology (BARCT) assessment seeking to reduce VOC leak thresholds
- Examine increasing the vapor recovery control efficiency
- Consider additional source test requirements for vapor recovery systems

# Rule 462 Other Update Considerations

- Remove obsolete rule language
- Make the rule consistent with recent rule formatting
- Consider other revisions as requested by internal staff and stakeholders

(19) VOLATILE ORGANIC COMPOUND (VOC) is any volatile compound containing the element carbon, excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, ammonium carbonate, and exempt compounds.

(c) Applicability

The provisions of this rule shall apply to all the organic liquid loading facilities that are defined as Class A, B or C facilities pursuant to paragraphs (b)(2), (b)(3) and (b)(4) of this rule.

Will move up

(d) Requirements

(1) Loading Requirements at Class A Facilities

(A) Each Class A facility shall be equipped with

- (i) a CARB certified vapor recovery and/or disposal system, or;
- (ii) a District-approved vapor recovery and/or disposal system only when such system does not require CARB certification pursuant to Health and Safety Code 41954.

(B) Each vapor recovery and/or disposal system at a Class A facility shall be equipped with a continuous monitoring system (CMS) that

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# Rule Development Process and Next Steps

# Rule Development Process

Information Gathering – Meet with Stakeholders



Define Rule Objective and Scope

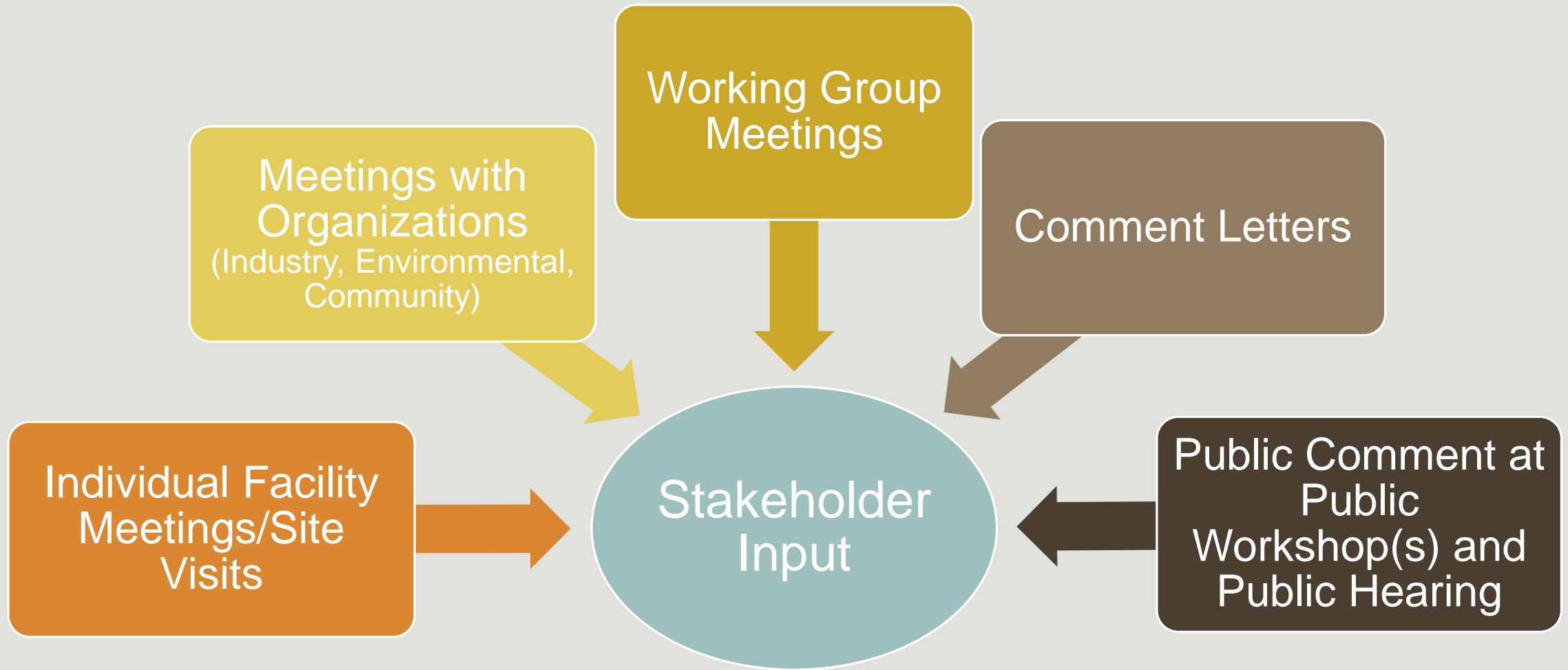


Develop Rule Concepts



Draft Proposed Rule Language

# Stakeholder Input



# Next Steps

Staff will continue with rule development process, which will include:

Continue information gathering

Site visits of affected facilities

Meetings with stakeholders

Rule concepts

# Proposed Rule Schedule for PAR 462



# Staff Contacts

South Coast AQMD staff is available to assist you with any questions or comments



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