



# **Working Group Meeting #1**

**Proposed Amended Rule 461 – Gasoline Transfer and Dispensing**

**Proposed Rule 461.1 – Gasoline Transfer and Dispensing for Mobile Fueling Operations**

**Proposed Amended Rule 219 – Equipment not Requiring a Written Permit Pursuant to Regulation II**

## **Meeting Information**

**September 2, 2020  
10:00 a.m.**

**Zoom Meeting Link:**

**<https://scaqmd.zoom.us/j/97290015728>**

**Dial In:**

**(669) 900-6833**

**Meeting ID:**

**972 9001 5728**

**Meeting Password:**

**700498**



# Meeting Information

- South Coast AQMD acknowledges the challenges to businesses and stakeholders due to COVID-19
- To ensure safe social distancing, working group meetings will be held remotely via videoconference and teleconference (Zoom)
- Although it is a different format, staff will take the time to listen to all stakeholder comments
- In addition to working group meetings, staff is available for individual meetings



# Presentation Agenda Overview



**Introduction**



**South Coast AQMD Applicable Rules**



**Mobile Fueling Operations**



**Rule Development Process**



**Information Gathering**



**Looking Ahead**



Agenda Item # 1  
**Introduction**





# South Coast AQMD

- Local air pollution control agency
  - Largest of the 35 local air agencies in CA and in the U.S.
  - 10,743 square miles
  - 17 million residents
- Responsibilities
  - Regulate emissions from stationary sources
  - Develop and implement plans to meet national air quality standards
  - Permit and inspect 28,400 affected businesses
  - Administer over \$100 million of incentive funding annually

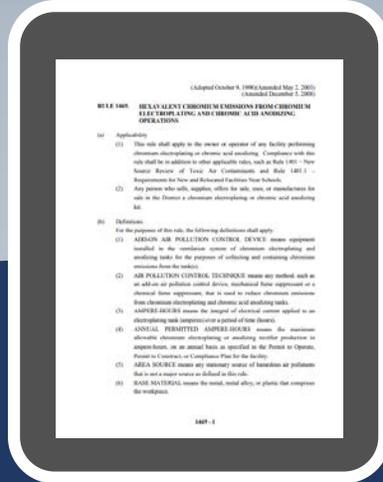




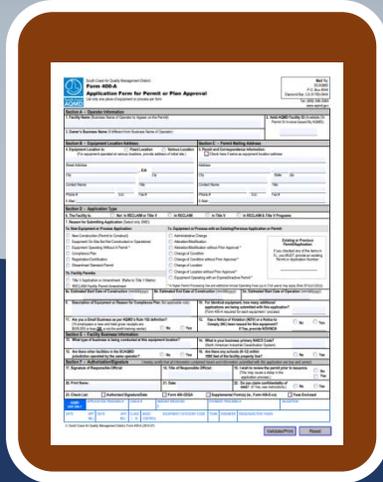
# Key South Coast AQMD Activities



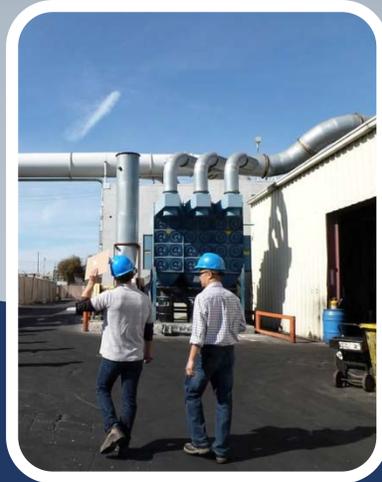
Develops the Air Quality Management Plan - blueprint for achieving compliance with federal and state clean air standards



Adopts air rules and regulations to reduce emissions from various sources



Issues permits for equipment that limit the amount of air emissions to ensure compliance with air quality rules



Conducts periodic inspections to ensure compliance with air quality requirements



Responds to air quality complaints from the public



Conducts ambient air quality monitoring including special studies



# Gasoline Storage and Dispensing Facility Emissions



- Regulatory program is designed to reduce:
  - Primary pollutants (VOC, NO<sub>x</sub>, SO<sub>x</sub>, CO, and PM) to meet state and federal ambient air quality standards
  - Toxic air contaminants to minimize the localized health risks
- Gasoline dispensing operations emit a variety of air pollutants:

**Primary Pollutant**

**VOCs**

Precursor to ground-level ozone

**Toxic Air Contaminants**

<p><b>Benzene</b></p> <p>Acute and chronic carcinogen</p>	<p><b>Ethyl Benzene</b></p> <p>Chronic carcinogen</p>	<p><b>Naphthalene</b></p> <p>Chronic carcinogen</p>
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# Comprehensive Regulatory Program to Address Criteria Pollutants and Toxic Air Contaminants

## Source-Specific

Regulation XI establishes requirements for a wide variety of equipment- and industry-specific emission sources

## Permitting and New Source Review of Criteria and Toxic Air Contaminants

- Regulation II specifies what sources must have a permit to operate
- Regulation XIII and Rules 1401 and 1401.1 establish New Source Review requirements that must be met before a permit is issued



## Prohibitory

Regulation IV establishes requirements for certain operations regardless of industry

## Source-Specific Toxic Air Contaminants

Regulation XIV establishes requirements for sources of toxic air contaminants



# Rules Applicable to Gasoline Storage and Dispensing

## Permitting and New Source Review Rules

- Rule 219 – Equipment Not Requiring a Written Permit Pursuant to Regulation II
- Rule 1303 – Requirements
- Rule 1313 – Permits to Operate
- Rule 1401 – New Source Review of Toxic Air Contaminants
- Rule 1401.1 -Requirements for New and Relocated Facilities Near Schools

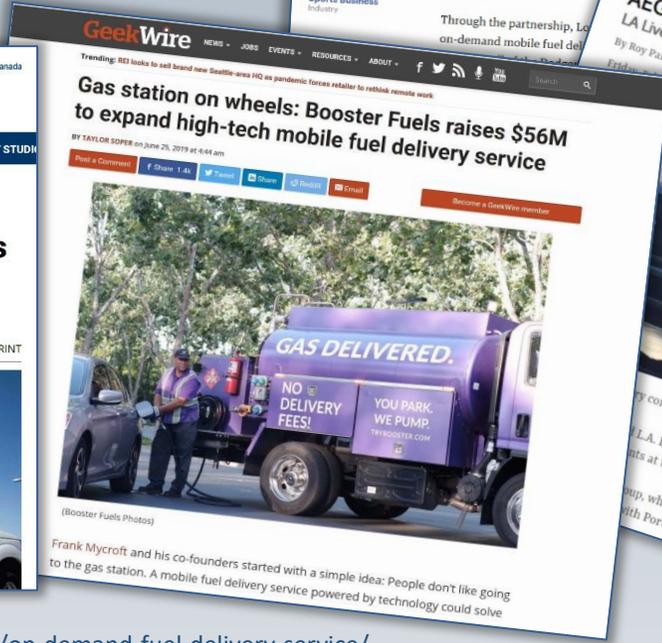
## Prohibitory Rules

- Rule 461 – Gasoline Transfer and Dispensing
- Rule 1170 – Methanol Compatible Fuel Storage and Transfer



# Mobile On-Demand Services are Extending into Gasoline Delivery

South Coast AQMD has observed an emergence of mobile fueling companies

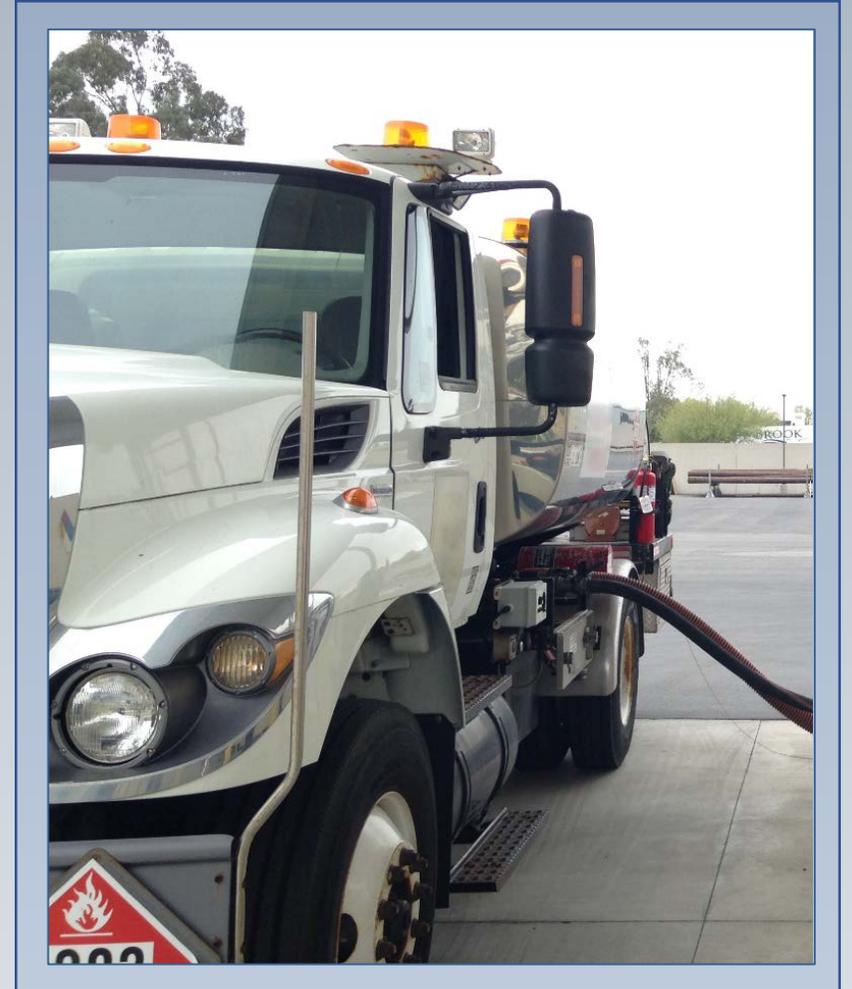


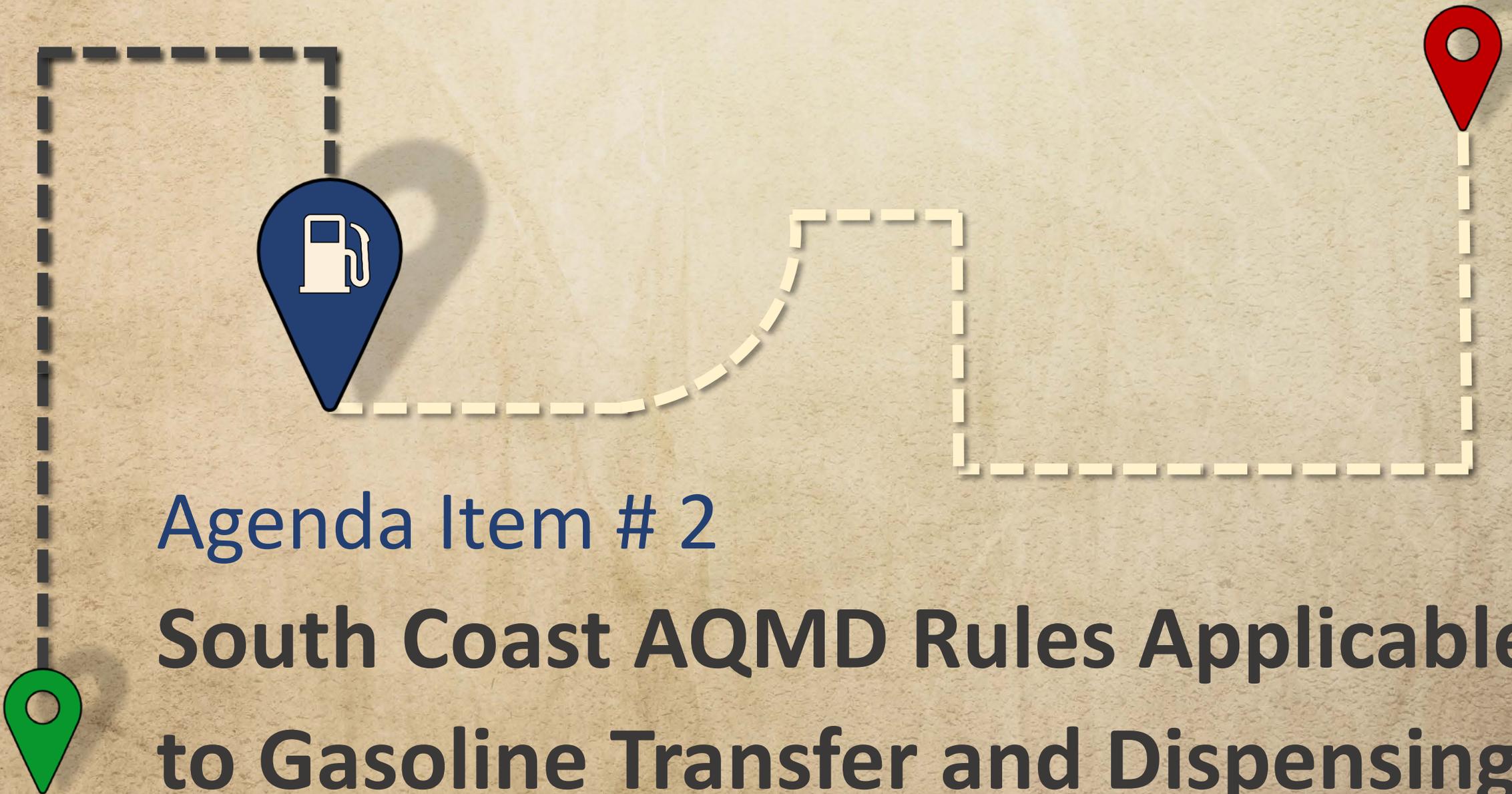
Citations: <https://mobisoftinfotech.com/resources/blog/on-demand-fuel-delivery-apps/> <https://www.excellentwebworld.com/on-demand-fuel-delivery-service/> <https://www.autonews.com/article/20160502/OEM06/160509986/gasoline-delivery-startups-want-to-fill-up-cars-anywhere-but-is-it-allowed> <https://www.geekwire.com/2019/gas-station-wheels-booster-fuels-raises-56m-expand-high-tech-mobile-fuel-delivery-service/> <https://labusinessjournal.com/news/2020/feb/21/aeg-fuelster-gas-delivery/> <https://www.bizjournals.com/losangeles/news/2020/03/05/on-demand-fuel-delivery-coming-to-dodger-stadium.html>



# Need for Rulemaking

- Development and amendments to Rule 461 – Gasoline Transfer and Dispensing have focused on retail stationary fueling facilities and non-retail fleet mobile fuelers
- There is an absence of specific requirements for mobile fueling operations
- There is a need for requirements to ensure public health is protected





## Agenda Item # 2

# South Coast AQMD Rules Applicable to Gasoline Transfer and Dispensing



# Applicable Gasoline Rules Overview

- Rule 219 – Equipment Not Requiring a Written Permit Pursuant to Regulation II
- Rule 1401 - New Source Review of Toxic Air Contaminants
- Rule 461 – Gasoline Transfer and Dispensing
  - Includes provisions for gasoline dispensing facilities and mobile fueling operations

South Coast AQMD Rule Book

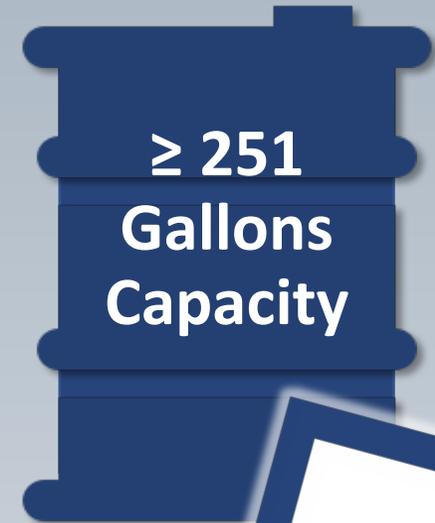
South Coast AQMD regulations each contain a series of rules. Clicking on any of the following regulations will take you to the table of contents for that regulation.

Regulation	Contents
I. General Provision	Rules 101 - 118
II. Permits	Rules 201 - 223
III. Fees	Rules 301 - 320
IV. Prohibitions	Rules 401 - 481 and Addendum
V. Procedure Before the Hearing Board	Rules 501 - 518.2
VI. (Repealed January 1, 1976)	
VII. Emergencies	Rules 701 - 715
VIII. Orders for Abatement	Rules 801 - 817
IX. Standards of Performance for New Stationary Sources (NSPS)	Regulation IX
X. National Emission Standards for Hazardous Air Pollutants (NESHAPS)	Regulation X
XI. Source Specific Standards	Rules 1100 - 1196
XII. Rules of Practice and Procedure Health and Safety Code Section 40509	Rules 1201 - 1231
XIII. New Source Review	Rules 1300 - 1325



## Rule 219 - Equipment Not Requiring a Written Permit Pursuant to Regulation II - (m)(9)

- Identifies equipment, processes, or operations that are not required to be permitted
- Storage and Transfer Equipment - (m)(9)
  - Equipment used exclusively for VOC containing liquid storage or transfer to and from such storage, of less than 251 gallons capacity
  - In addition, this exemption does not apply where the combined storage capacity of all tanks exceeds 251 gallons and the tanks are mounted on a shared mobile platform





## Rule 219 - Equipment Not Requiring a Written Permit Pursuant to Regulation II - (s)(2)(A)

- Exceptions - (s)(2)(A)
  - Written permits are required when the maximum individual cancer risk, cancer burden, chronic hazard index, or acute hazard index will be greater than applicable thresholds identified in Rule 1401 – New Source Review of Toxic Air Contaminants





# What is a South Coast AQMD Permit?

- A South Coast AQMD permit establishes specific conditions in which the equipment or process must operate
- Conditions in permits for equipment and control equipment ensure:
  - Emission or operating limits consistent with
    - Regulation XIII – New Source Review
    - Rules 1401 and 1401.1 – Toxics New Source Review
  - Compliance with a source-specific rule or regulation
  - Proper operation of control devices
  - Control of dust or odors

	SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT 21865 Copley Drive, Diamond Bar, CA 91765	page 1 Permit No. D123456
<b>PERMIT TO CONSTRUCT/OPERATE</b>		
<small>This initial permit must be renewed ANNUALLY unless the equipment is moved, or changes ownership. If the billing, for annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.</small>		
Legal Owner or Operator:	ABCD COMPANY 1234 PERMIT WAY DIAMOND BAR, CA 91765	ID 123456
Equipment Location:	1234 PERMIT WAY, DIAMOND BAR, CA 91765	
Equipment Description:	CARGO TANK MOTOR VEHICLE FUELING SYSTEM (MOBILE FUELER), CONSISTING OF: <ol style="list-style-type: none"><li>DUAL COMPARTMENT GASOLINE/DIESEL DISPENSING MOBILE FUELER, VEHICLE NO. 28895, FRANZEN-HILL HILL-VAC (G-70-193) CARB ADVISORY LETTER #07-07, CYLINDRICAL, 9'-5" L X 7'-5" W X 3'-11" H, 1,500 GALLON CAPACITY, POLYURETHANE INSULATION, WITH A WHITE SHELL, EQUIPPED WITH A PRESSURE/VACUUM RELIEF VALVE, AND TWO HEALY 100 JET PUMPS, CONSISTING OF:<ol style="list-style-type: none"><li>ONE 750 GALLON GASOLINE COMPARTMENT, EQUIPPED WITH PHASE I VAPOR RECOVERY SYSTEM.</li><li>ONE 750 GALLON DIESEL COMPARTMENT, NOT EQUIPPED WITH PHASE I VAPOR RECOVERY SYSTEM.</li></ol></li><li>1 - GASOLINE DISPENSING NOZZLE WITH A 75'-0" COAXIAL HOSE ON A RETRACTABLE HOSE REEL, EQUIPPED WITH PHASE II VAPOR RECOVERY SYSTEM, HEALY MODEL 400 ORVR.</li></ol>	
Conditions:	<ol style="list-style-type: none"><li>OPERATION OF THIS EQUIPMENT SHALL BE IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT WAS ISSUED, UNLESS OTHERWISE NOTED BELOW.</li><li>THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.</li><li>EXCEPT FOR DIESEL TRANSFERS, THE PHASE I VAPOR RECOVERY SYSTEM SHALL BE IN FULL OPERATION WHENEVER FUEL IS BEING TRANSFERRED INTO THE MOBILE FUELER.</li><li>EXCEPT FOR DIESEL TRANSFERS, THE PHASE II VAPOR RECOVERY SYSTEM, INCLUDING ALL ASSOCIATED ABOVE GROUND PLUMBING HARDWARE, SHALL BE INSTALLED, OPERATED, AND MAINTAINED AS CERTIFIED IN ACCORDANCE WITH CARB EXECUTIVE ORDER G-70-193 WHENEVER FUEL IS BEING TRANSFERRED INTO MOTOR VEHICLES, AS DEFINED IN RULE 461.</li></ol>	
<b>FILE COPY</b>		



# Permit Review

- Permit applications are reviewed to determine that proposed equipment will be constructed and operated to comply with South Coast AQMD rules
- Equipment that emits toxic air contaminants are additionally evaluated to ensure compliance with Rule 1401 health risk thresholds





# Permitted and Unpermitted Gasoline Dispensing Operations

## Retail and Non-Retail Gasoline Dispensing Operations

### Permitted

- Stationary underground or aboveground tank capacity of  $\geq 251$  gallons
- Mobile fueler cumulative capacity of  $\geq 251$  gallons and tank capacity of  $> 120$  gallons
- Any tanks equipped with vapor recovery
- Estimated health risks  $>$  Rule 1401 (Must meet Rule 1401 thresholds)

### Unpermitted

- Stationary underground or aboveground tank capacity of  $< 251$  gallons
- Mobile fueler cumulative capacity of  $< 251$  gallons and tank capacity of  $\leq 120$  gallons
- Estimated health risks  $\leq$  Rule 1401

**What are the health risks for unpermitted units?**



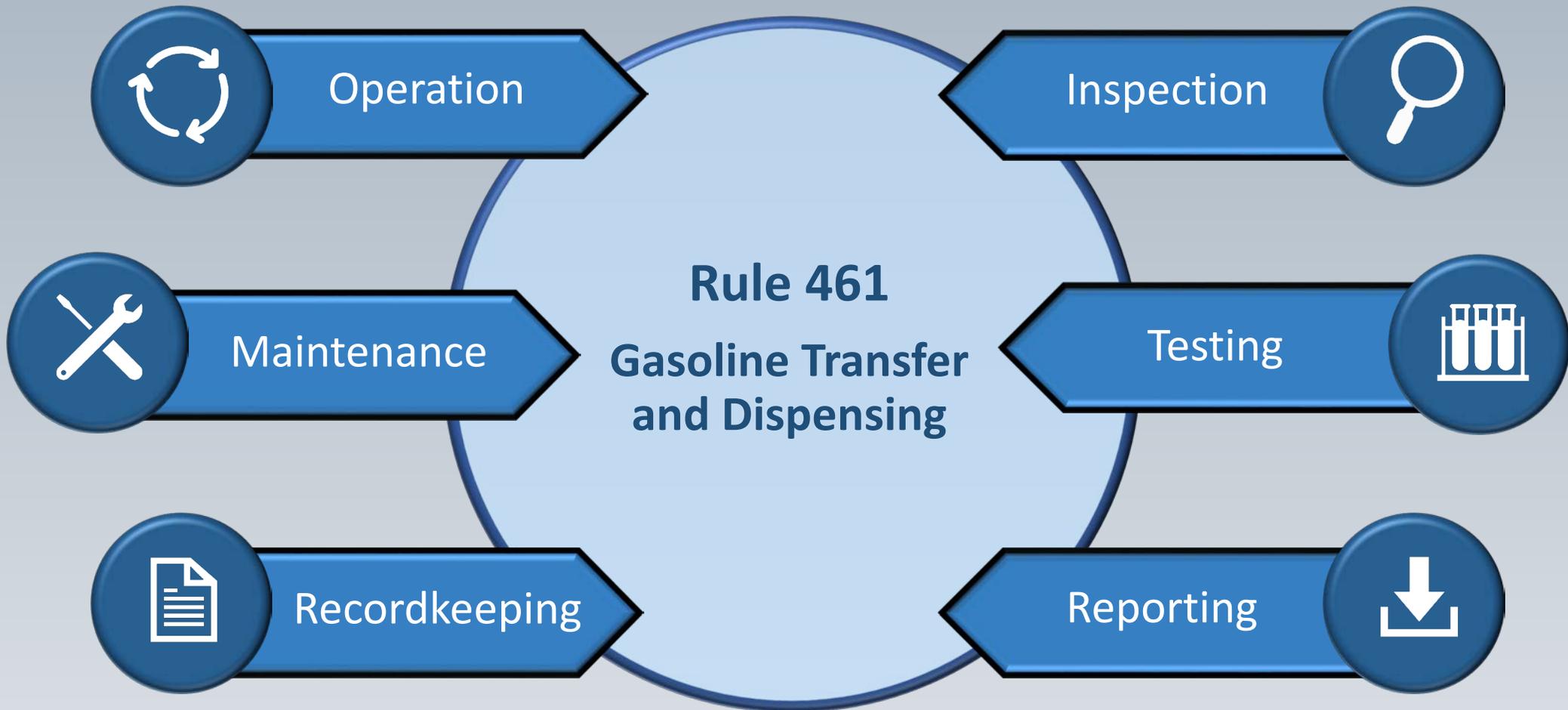
# Rule 1401 Permit Evaluation

- Permit applications for new, relocated, or modified permit units, that emit toxic air contaminants are evaluated to ensure compliance with Rule 1401
  - If a source has the best available control technology for toxics (T-BACT), throughput limits are based on a 10 in-a-million cancer risk
  - If a source does not have T-BACT, throughput limits are based on a 1 in-a-million cancer risk
- T-BACT is a control technique or emission limitation that results in the maximum degree of emission reductions that the South Coast AQMD had determined is reasonably achievable
- A permit will not be issued if the estimated health risks from all toxic air contaminants emitted from a permit unit exceed the applicable Rule 1401 thresholds:

Health Risk	Risk Type	T-BACT	Rule 1401 Threshold
Maximum Individual Cancer Risk	Cancer	No	1 per Million
		Yes	10 per Million
Cancer Burden	Cancer	N/A	0.5
Chronic or Acute Hazard Index	Non-Cancer	N/A	1.0



# Gasoline Storage and Dispensing Facilities





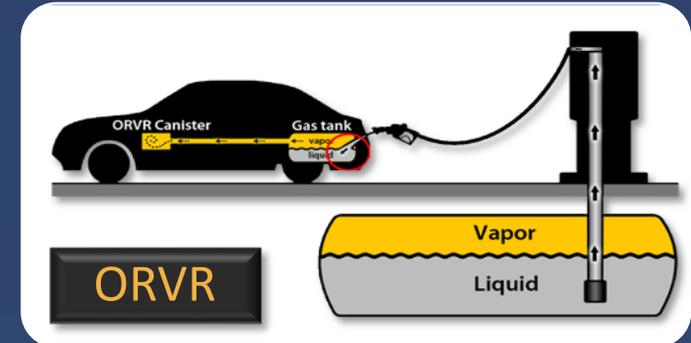
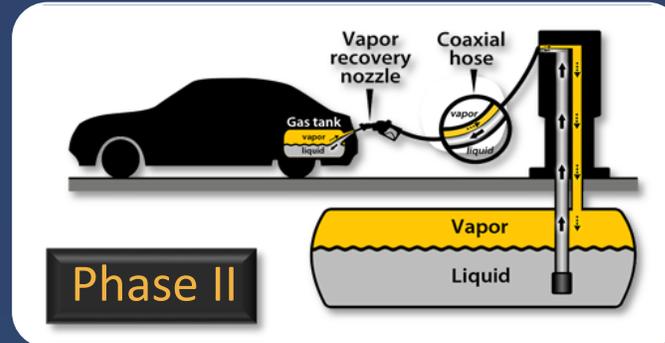
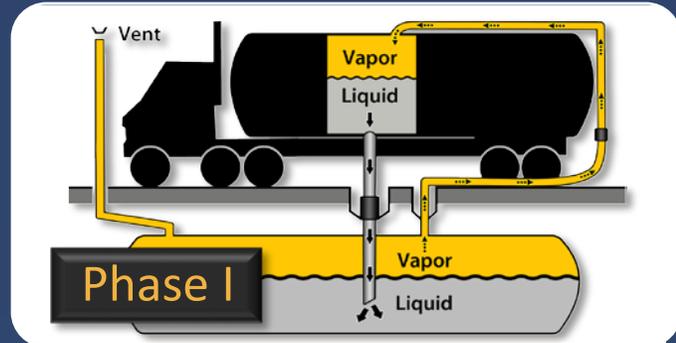
# Rule 461 – Gasoline Transfer and Dispensing



- Rule 461 specifies requirements for transfer of gasoline into any stationary storage tank, mobile fueler, or motor vehicle fuel tank to capture gasoline vapors during transfer and fueling operations
- Vapor recovery systems are installed at these facilities for collection and recovery of gasoline vapors displaced during
  - Transfer of fuels into a tank (Phase I):
    - Underground tanks have a minimum volumetric efficiency of 98% and an emission factor less than 0.15 pounds per 1,000 gallons
    - Aboveground and mobile fueler tanks have a minimum volumetric efficiency of 95%
  - Fueling operations for vehicles (Phase II):
    - Stationary storage tanks and mobile fuelers capable of recovering or processing displaced gasoline vapors by at least 98% or having an emission factor not exceeding 0.38 pounds per 1,000 gallons



# Rule 461 – Gasoline Transfer and Dispensing



## Phase I

### Vapor Recovery

Returns vapors from the storage tank back into the tank on the truck

## Phase II

### Vapor Recovery

Returns vapors to the underground storage tank during fueling of vehicle fuel tanks

## On-Board Refueling Vapor Recovery (ORVR)

ORVR redirects vapors away from fill pipe and captures them via an activated carbon canister in the vehicle



# Rules 461 and 219 Mobile Fueler Regulatory Highlights Timeline

1/9/1976

Rule 461  
Adopted

**461:** Only applicable to stationary storage.

**219:** Exemption for storage and transfer < 250 gallons.

10/5/1979

**219:** Storage or transfer exemption changed to < 251 gallons.

9/8/1995

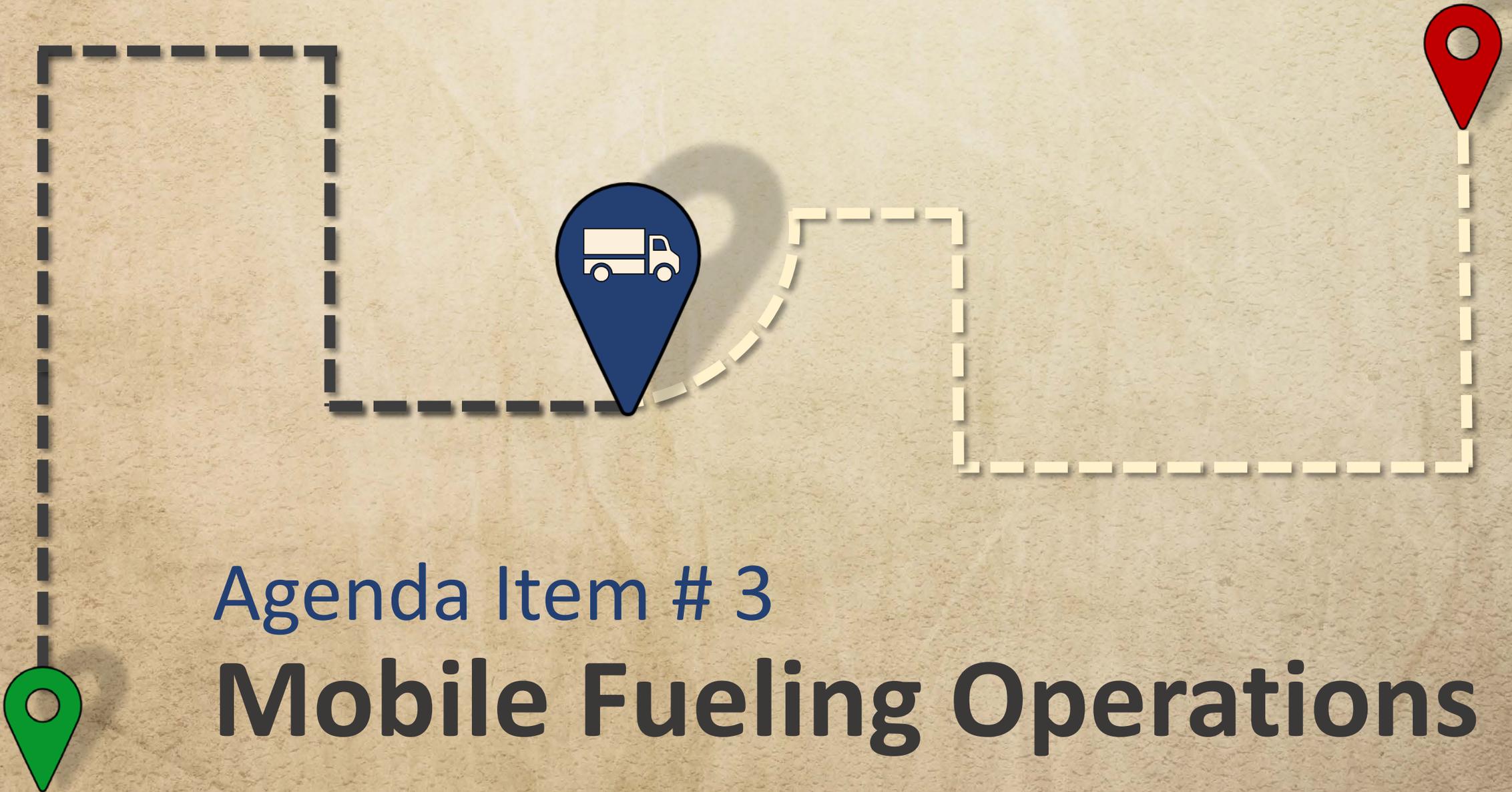
**461:** Mobile Fuelers with tanks of greater than 120 gallons capacity subject to Phase I and II.

6/15/2001

**461:** Mobile fueler Phase I and II applicability changed to a tank of greater than 120 gallons capacity.

3/7/2008

**461:** A non-retail gasoline dispensing facility may comply with certain requirements in lieu of meeting Phase II requirements.



Agenda Item # 3

# Mobile Fueling Operations



# Categories of Mobile Fueling

## Permitted

- Non-Retail gasoline mobile fuelers requiring a permit
- Industries include:
  - City Services
  - Utilities
  - Marine ports
  - Airports
  - Warehousing
  - Amusement park
  - Vehicle services

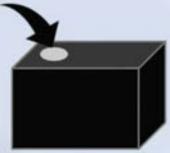
## Unpermitted

- Non-Retail and retail gasoline mobile fuelers exempt from permitting
- Industries include:
  - Landscape companies
  - Sports and entertainment venues
  - Schools
  - Private individuals

**What other industries are using mobile fueling services?**



## Potential Air Quality Concerns with Gasoline Mobile Fueling Operations



Top loading or fueling from the top of the tank can be more than 50 times more emissive than tanks that are bottom loaded and equipped with Phase I vapor recovery



Emissions can be significantly higher if gasoline dispensing activities are using non-CARB certified dispensing nozzles and gasoline is dispensed into vehicles that are not equipped with ORVR

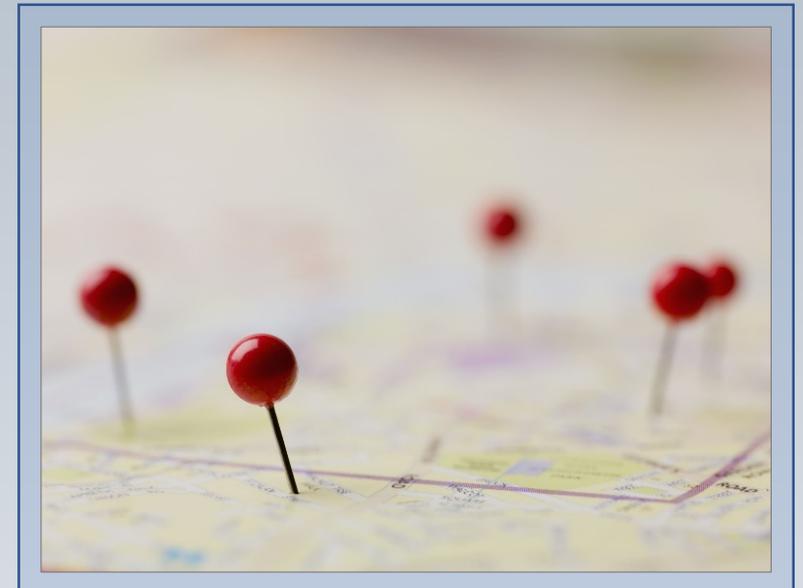


Retail mobile fueling operations with no throughput limits may be exceeding Rule 1401 cancer risk thresholds and posing significant health risks to the surrounding community



# Initial Rulemaking Objectives

- Address regulatory gaps with mobile fueling operations
- Ensure that retail mobile fueling operations are complying with South Coast AQMD rules and are not in conflict with other local, state, or federal requirements
- Establish requirements for retail mobile fueling operations
  - Permitting
  - Equipment
  - Loading and dispensing
  - Inspection
  - Recordkeeping and reporting





# Proposed Amended Rule 461 and Proposed Rule 461.1 Approach

## Existing

### Rule 461 – Gasoline Transfer and Dispensing

- Stationary Retail
- Mobile Retail
- Stationary Non-Retail
- Mobile Non-Retail



## Proposed Approach

### Proposed Amended Rule 461 – Gasoline Transfer and Dispensing

- Retail
- Non-Retail

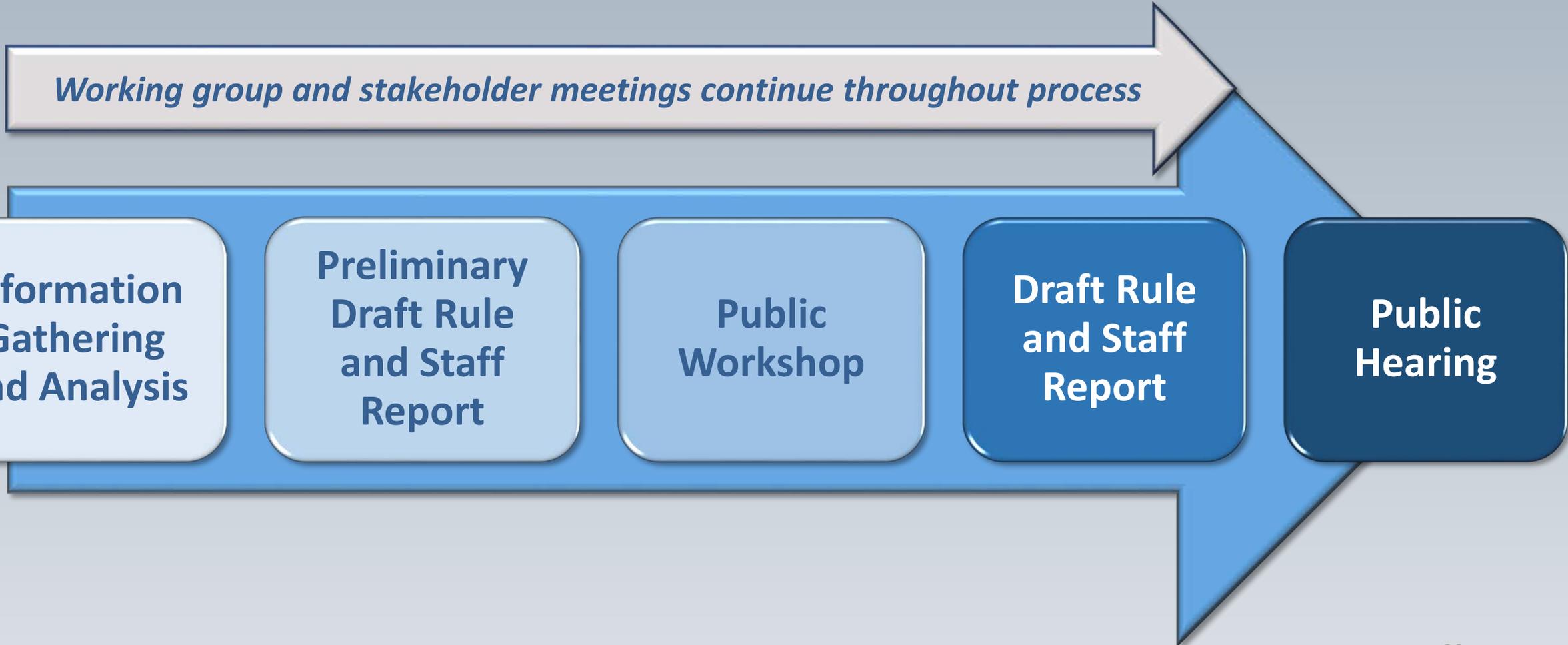
### Proposed Amended Rule 461.1 – Gasoline Transfer and Dispensing for Mobile Fueling Operations

- Retail
- Non-Retail





# Overview of Rule Development Process





# Working Groups

- Comprised of stakeholders and representatives from industry (regulated industry, equipment suppliers), community and environmental groups, labor associations, government agencies, and academia
- Working group meetings are held throughout the rule development process and are open to the public
- Objectives:
  - Build consensus and work through challenges
  - Opportunities for early input
  - Implement requirements for an unregulated source
- Assists staff in understanding:
  - Key issues and concerns
  - Industry terms, industry practices, etc.
  - Applicable technologies

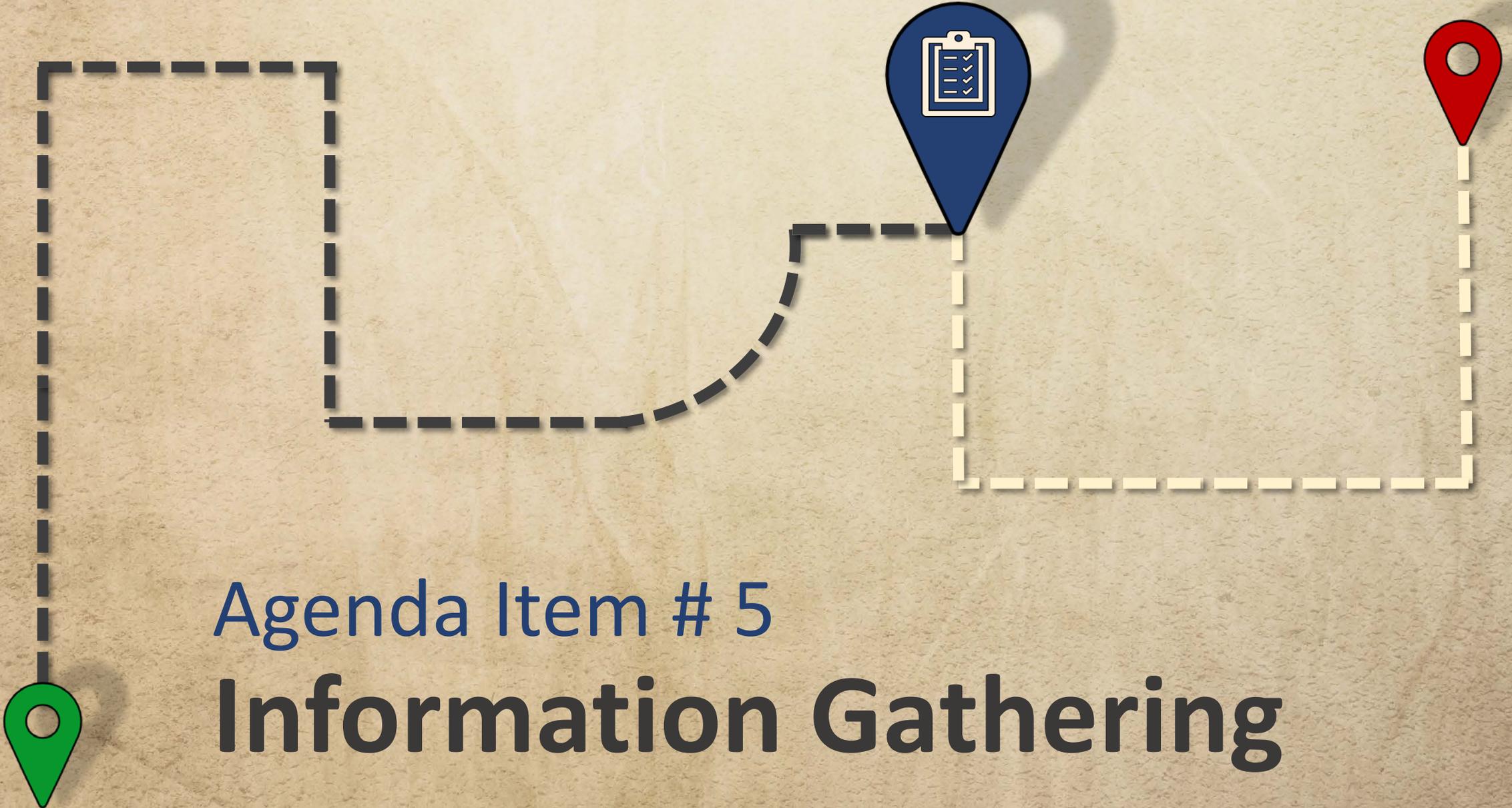




# Stakeholder Input

- Stakeholders can provide input during working group meetings and throughout the rulemaking process
- Early input is strongly encouraged to help develop proposed rule amendments and to address issues
- Working group meetings, individual meetings, and site visits allow stakeholders to dialogue directly with staff and discuss individual issues





Agenda Item # 5

# Information Gathering



# Gathering Information

- Information is used to provide more context
- Used to accurately characterize information used for the rulemaking and its impacts such as cost
- Sharing knowledge benefits the rule





# Survey

- Staff will be distributing a survey to facilities after this working group meeting
- Objective is to collect current operational information about equipment including:
  - A description of the source
  - Data necessary to estimate emissions from the source
- Will be available via:
  - Microsoft Forms
  - Microsoft Excel

The screenshot shows a survey form with a blue header and a white body. The header contains the South Coast AQMD logo and the title 'South Coast AQMD Proposed Amended Rule Survey for Mobile Fueling Operations'. Below the title, there is a paragraph explaining the survey's purpose and a list of three proposed rules. A note states that answers will not be provided until the survey is submitted, and a contact email is provided. The body of the form is titled 'General Information' and includes two required questions with text input fields.

**South Coast AQMD Proposed Amended Rule Survey for Mobile Fueling Operations**

This survey is being conducted by the South Coast Air Quality Management District to collect information that will be used for development of the following rules:

- Proposed Amended Rule 461 – Gasoline Transfer and Dispensing
- Proposed Rule 461.1 – Gasoline Transfer and Dispensing for Mobile Fueling Operations
- Proposed Amended Rule 219 – Equipment not Requiring a Written Permit Pursuant to Regulation II

Please note that answers will not be provided to the South Coast AQMD until the completed survey is submitted.

If you have any questions regarding this survey, please send them to [bgallivan@aqmd.gov](mailto:bgallivan@aqmd.gov).

**\* Required**

**General Information**

This section of the survey focuses on general information regarding your business.

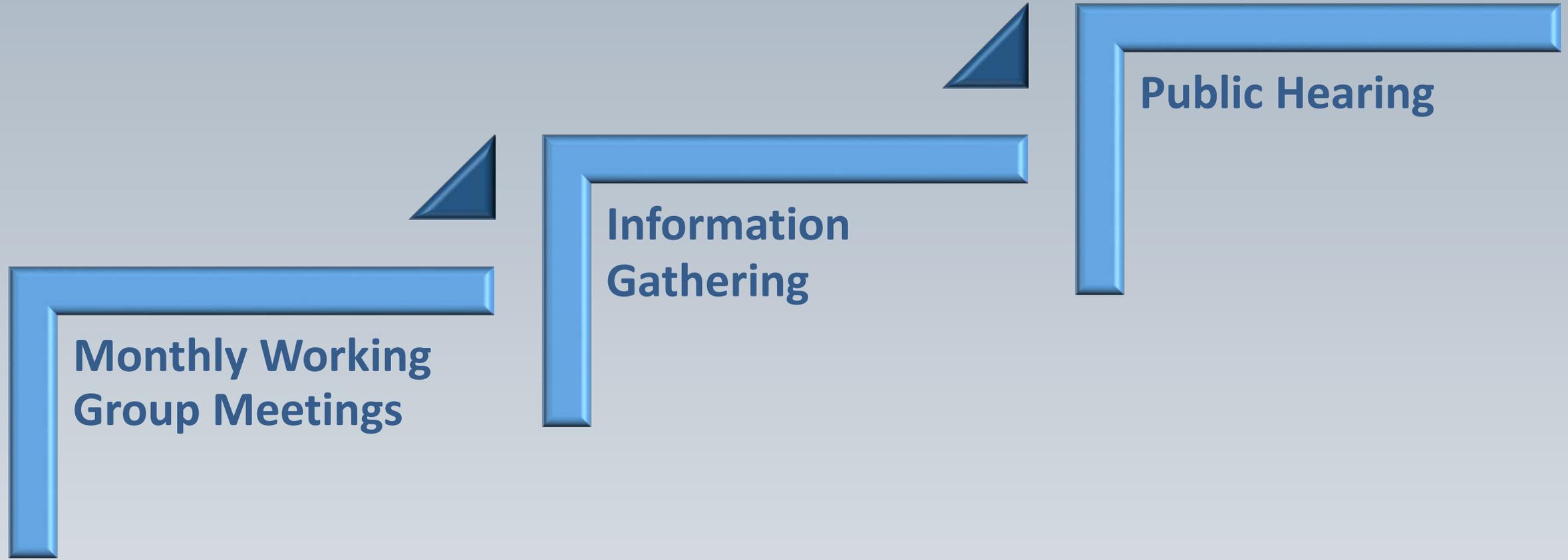
1. What name does your company do business as? \*

2. Please provide the name of a contact person for your business. (First, Last) \*





# Next Steps





# Stay Informed

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SCAQMD Advisor

SCAQMD's comprehensive bi-monthly newsletter containing the latest news, including rule

Subscribe to:

- Rule 461.1
- Rule 461





# PARs 461, 219, 222, and PR 461.1 Staff Contacts

Please contact staff with any questions or comments

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