

Booster Regular Variance Application

For SCAQMD Hearing Board
August 3, 2022



(a) No variance shall be granted unless the hearing board makes all of the following findings:

(1) That the petitioner for a variance is, or will be, **in violation of** Section 41701 or of **any rule, regulation, or order** of the district.

(2) That, **due to conditions beyond the reasonable control of the petitioner**, requiring compliance would result in either:

(A) an arbitrary or unreasonable taking of property, or,

(B) **the practical closing and elimination of a lawful business.**

(3) That the closing or taking would be **without a corresponding benefit in reducing air contaminants.**

(4) That the applicant for the variance has **given consideration to curtailing operations** of the source **in lieu of obtaining a variance.**

(5) During the period the variance is in effect, that the **applicant will reduce excess emissions to the maximum extent feasible.**

(6) During the period the variance is in effect, that the **applicant will monitor or otherwise quantify emission levels from the source, if requested to do so by the district**, and report these emission levels to the district pursuant to a schedule established by the district.

(a) The hearing board, in determining whether or not the petitioner has presented evidence sufficient to make the finding specified in paragraph (2) of subdivision (a) of Section 42352...**shall consider**, in addition to any other relevant factors, **both of the following**:

- (1)** In determining whether or not conditions exist which are **beyond the reasonable control** of the petitioner, the hearing board shall consider the **extent to which the petitioner took actions to comply or seek a variance, which were timely and reasonable under the circumstances**. In so doing, the hearing board shall consider **actions taken by the petitioner since the adoption of the rule**, regulation, or order from which the variance is sought.
- (2)** In determining whether or not requiring compliance would result in either an arbitrary or unreasonable taking of property or the **practical closing and elimination of a lawful business**, the hearing board shall consider **whether or not an unreasonable burden would be imposed upon the petitioner if immediate compliance is required**.

Booster must obtain fire approvals for every customer site, before AQMD will process applications

Fire approval

Fire authority must provide written approval for Booster to operate either across its jurisdiction or at individual sites

SCAQMD permits

- Once fire approval is obtained, the District will approve site-specific permits for dispensing locations that either:
- 1. Need higher gasoline throughput limits that are higher than authorized in Booster’s permits (11-14k gallons per month)
 - 2. Within 1000 ft of a school

School public notice

For dispensing locations within 1000 ft of a school, District/Booster must undertake a public noticing process to alert all parents and nearby residents to the pending permit

Booster largely dispenses for its fleet customers in industrial locations, at night

BRIGHTVIEW LANDSCAPE is an example of a Booster customer where Variance Relief is needed to resume service.

- **Location:** 8726 Calabash Ave, Fontana, CA
 - Industrial Park
- **Site Type:** Large Industrial Zoned Site Location
 - Not Accessible to the Public
- **Surroundings:** Surrounded by other Industrial Sites
 - No Schools within 1,000 ft
- **Hours of Service:** Mondays ~11:00pm - 4:00am
 - Middle of the Night Outside of Any School Hours



(1) If Booster were to operate it would be in violation of the following rules and permit conditions

Written Fire Approval	
461.1(g)(4) (written fire approval required)	The owner or operator of a Retail Mobile Fueler shall not Transfer or Dispense Gasoline at a Dispensing Location, unless: (A) The Dispensing Location is approved for operation of a Retail Mobile Fueler in writing by the responsible fire department or other designated fire authority; (B) A statement in writing from the responsible fire authority, city, or county that approval is not required has been provided to the Executive Officer.
Permit Condition 19 (written fire approval required)	Prior to dispensing gasoline at a location, the owner or operator of the MFOD shall provide documentation to South Coast AQMD representative(s) from the responsible fire department or other designated fire authority indicating that the dispensing location is approved for operation. If approval is not required by the local fire authority, city, or county, a statement in writing shall be made available to the South Coast AQMD representative(s).
Permit Condition 28(g) (written fire approval recordkeeping)	The owner or operator of the MFOD shall maintain the following information for each dispensing location: Documentation by the responsible fire department or fire authority granting written approval to operate at the dispensing location or that written approval to operate is not needed for the dispensing location.
461.1(k)(2)(G) (written fire approval recordkeeping)	For each Dispensing Location, the owner or operator of a Retail Mobile Fueler shall maintain the following information: Documentation by the responsible fire department or fire authority to the owner or operator for either: <ul style="list-style-type: none">• (i) The written approval to conduct Transfer or Dispensing Gasoline from a Retail Mobile Fueler at the specified Dispensing Location; or• (ii) The written statement that approval of the Transfer or Dispensing of Gasoline from a Retail Mobile Fueler is not required at the specified Dispensing Location.

(1) If Booster were to operate it would be in violation of the following rules and permit conditions (cont'd)

Rule & condition violations that directly result from lack of written fire approval	
Permit Condition 36 <i>(written fire approval reporting)</i>	Beginning July 1, 2022 and pursuant to Rule 461.1 (m)(1), the owner or operator of the MFOD shall electronically submit the applicable records required by Rule 461.1 paragraph (k)(2) for the dispensing location to the Executive Officer, via the South Coast AQMD's mobile fueler reporting portal. This notification shall be sent within 48 hours prior to dispensing at a new dispensing location.
Permit Condition 41 <i>(AQMD requires written fire approval before allowing throughput increase)</i>	The monthly maximum quantity of gasoline dispensed at a dispensing location from all MFOD units owned or operated by Booster Fuels, Inc. shall not exceed the monthly gasoline dispensing limits: Los Angeles (13,550 gallons per month), Orange (14,566 gallons/month), Riverside/San Bernardino (11,208 gallons/month). To exceed these monthly gasoline dispensing limits requires an active site-specific Permit to Operate issued by SCAQMD.
203(b)	The equipment or agricultural permit unit shall not be operated contrary to the conditions specified in the permit to operate.

(2) Conditions are beyond Booster's reasonable control

Fire Agency Approval Required Despite No Procedure to Obtain Such Approvals

- Booster worked proactively with CalFire to draft the mobile fueling section of the International Fire Code (s5707), which created a framework for states and local jurisdictions to allow mobile fueling.
- Some local fire authorities haven't yet adopted this framework / established their own formal permitting processes
 - Some fire departments have preferred to give Booster *verbal* approval to operate within the new code, but don't have yet have a process for providing *written* approval or mechanisms for reimbursement of their costs for a formal review process
 - Other local fire departments are just taking a long time to establish their permitting processes. There is no funding available for this process and fire departments have other priorities (e.g. wildfires during the summer months).
 - *EXAMPLE: EMAIL FROM BRYAN HEALEY (DEPUTY FIRE MARSHAL, OCFA, March 9, 2020) - "Hey Guys, It's been a little crazy around here the last 30 days or so. I have not forgotten about you this is just a low priority now. Keep conducting business as usual we will get the mobile sites and the fleet sites figured out as soon as we are through this virus issue. Thanks for your patience."*
- The District will not process Booster's permit applications.

Booster has already established permitting frameworks with 7 fire jurisdictions and soon we hope to be receiving permits from another 5 fire authorities. Wherever there is a fire permitting process, Booster will follow it to the letter.

C O M P L E T E	Fire authority	Status	Estimated time to written approval
	OC Fire Authority	• Issuing written site specific permits to Booster.	Complete
	LA County Fire	• Permitted Booster to operate in any city governed by LA County Fire.	Complete
	Compton FD	• Permitted Booster to operate anywhere in Compton.	Complete
	Santa Fe Springs FD	• Provides annual permits for Booster to operate at specific sites.	Complete
	Riverside FD	• Site specific permits issued following site inspections.	Complete
	San Bernardino FD	• Fire Marshal advised in writing that permits are not required to operate in San Bernardino	Complete
	Ontario FD	• Permitted Booster to operate anywhere in Ontario	Complete
	Riverside County FD	• Fire Marshal requested demo of Booster tanker safety - demo tomorrow, Thursday 8/4.	Q3/Q4 2022
	LA City Fire	• LA Planning Department reviewing Booster customer site plans and is working with LA City Fire. We expect approvals to start being issued soon.	Q3/Q4 2022.
I N P R O G R E S S	Anaheim FD	• Anaheim Fire Department reviewing Booster customer site plans and is expected to begin issuing approvals shortly. • City Council and Community Development Director supportive of zoning code interpretation that will allow for mobile fueling.	August
	Fullerton FD	• Booster engaging with Fire Marshal, good chance permit will be issued	Aug/Sep 2022
	Fontana FD	• Booster engaging with Fontana FD and other local government, expect permit to be issued	August 2022

(2) Requiring compliance would result in the practical closing and elimination of a lawful business. An unreasonable burden would be imposed upon Booster if immediate compliance is required.

EXHAUSTIVE LIST OF SITES FOR WHICH BOOSTER IS SEEKING VARIANCE:

- 1. EXISTING CUSTOMERS THAT ARE PAUSED**
- 2. CUSTOMER SITES BOOSTER IS CONTRACTUALLY OBLIGATED TO SERVICE**

NONE OF WHICH ARE WITHIN 1,000 FT. OF A SCHOOL

Customer	Dispensing Location	Status
Brightview Landscapes	8726 Calabash Ave, Fontana, California, USA	Paused
Bemus Landscape	33750 Stonehill Dr, Dana Point, CA 92629	Paused
Golden Age Dental Care	701 South Raymond Avenue, Fullerton, CA, USA	Paused
Amazon DLX9	5750 Mesmer Avenue,Culver City,CA,90230	Contractually obligated
Amazon DLX7	6450 Katella Avenue ,Cypress, CA	Contractually obligated
Amazon DJW8	35750 Date Palm Drive, Cathedral City, CA	Contractually obligated
Amazon DCX8	1256 N. Magnolia Ave, Anaheim, CA 92801	Contractually obligated
Amazon DUR9	27711 Diaz Rd, Temecula, CA	Contractually obligated
Amazon DPS5	28820 Chase Place,Valencia,CA,91355-5422	Impacts contractual obligations
Amazon DLA8	2815 W. El Segundo Blvd, Hawthorne, CA 90250	Impacts contractual obligations
Amazon DFX9	14952 Bolsa Chica St, Huntington Beach, CA	Impacts contractual obligations
Amazon DD06	2751 Skypark Drive, Torrance, CA	Impacts contractual obligations
Zum Transportation	17022 S Figueroa St, Gardena, CA 90248	Contractually obligated
Zum Transportation	11120 Peoria St, Sun Valley, CA 91352	Contractually obligated

(2) Requiring compliance would result in the practical closing and elimination of a lawful business. An unreasonable burden would be imposed upon Booster if immediate compliance is required.

- **Economic losses:** On July 1, Booster ceased operations in the South Coast worth **\$7,795,200 in annual revenue**. Our small company is now at risk of permanently losing committed customers if we can't service them.
 - That revenue loss was equivalent of **six (6) full-time employee positions (23% of the Booster's drivers in the District)**. In order to avoid layoffs, Booster has had to reduce worker hours and send drivers to other markets to work.
- **Potential contractual losses:** Booster's largest customer accounts for about 30% of our revenue and has the contractual right, if Booster is unable to service several of their locations in the District within 90 days of agreed service dates to reallocate Booster's business across the United States to one of Booster's competitors.
 - If all of Booster's business with this customer across the United States were awarded to a competitor, this would result in a **catastrophic loss of revenue to Booster, in excess of \$100 million, as well as the loss of many more jobs.**

(3) The closing of business would be without a corresponding benefit in reducing air contaminants.

- **Booster tankers can operate dispensing less than 1,500 gallons/day in gasoline. On SCAQMD's own emissions factors, this would mean LESS THAN 1 LB/DAY of TOTAL VOC EMISSIONS.** This is at least:
 - **13% LESS** VOC Emissions compared to the gas stations our customers will have to fill at.
 - **Up to 50x LESS** VOC Emissions compared to pickup trucks who our customers will turn to for service.
- Booster customer advised would be switching to a pick-up truck competitor, Yoshi, from July 1.
- Another competitor, Fuelster, informed our South Coast GM that Fuelster would operate at Dodgers Stadium

(4) Booster has considered curtailing operations in lieu of obtaining a variance.

- On July 1, Booster did cease operations for 16 customers sites which Booster can't service without a variance.
- And should the variance be granted, **Booster is willing to curtail operations** in a manner that would result in **less than 1 lb/day of total excess VOC emissions** per Mobile Fueling On-Demand Gasoline Delivery Vehicle.
- This **level of emissions is considered de minimis** by the District.
- The loss from fully curtailing operations for our largest customer would be profoundly damaging for our small company, our community and our workforce - this can not be considered a viable solution.

(5) During the period the variance is in effect, Booster will reduce excess emissions to the maximum extent feasible.

- Booster will curtail operations so that each tanker would dispense 1,500 gallons/day, compared to our current maximum daily throughput limit of 2,200 gallons/day - a reduction of up to 30% in daily dispensing.
 - **This is something Booster is willing to do in order to be below the “de minimis” VOC level of 1lb/day.**

Pollutant	Total Estimated Excess Emissions (lbs/day)	Reduction Due to Mitigation (lbs/day)	Net Emissions After Mitigation (lbs/day)
Volatile Organic Compounds (VOCs)	1.196 lbs/day	.239 lbs/day	.957 lbs/day

- Booster’s model already reduces emissions vs gas station: lower spillage, less vehicle miles travelled, shorter supply chain.

(6) During the period the variance is in effect, Booster will quantify emission levels from the source and can regularly report these to the District

Rule 461.1(k) requires extensive monthly reporting from Booster and we will comply with these requirements. **For each dispensing location, Booster will provide record of:**

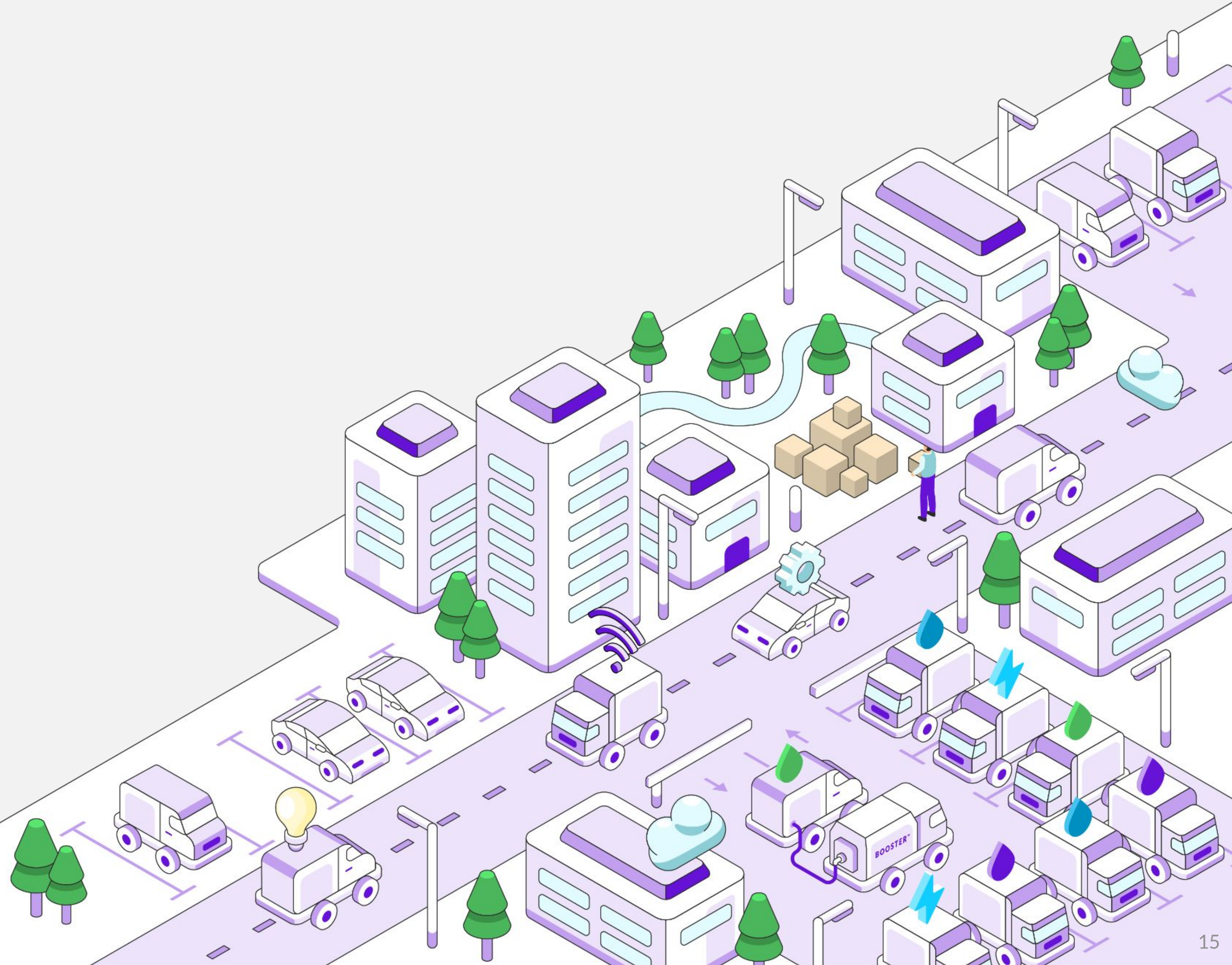
- Name, Address and County of Dispensing Location
- Date, Start Time and End Time of Dispensing
- Total Gallons Dispensed
- Make, Model, Year, and VIN of Each Vehicle Fueled

Emission levels can be quantified from this information. Booster will also comply with any additional reporting that SCAQMD requires under any variance issued.

Solution: Regular Variance

- **Booster believes it can secure the substantial majority of written fire approvals with an additional 5 months of compliance time. A regular variance would provide time for this to occur.**
 - Booster's proactive engagement has yielded a significant number of fire permits, and we expect this to continue.
- **Booster expects to achieve final compliance by December 31, 2022.**

Technical Appendix



MAXIMUM EMISSION ESTIMATES (per Mobile Fuel Tank Vehicle):

Maximum Operations

- **Max Hours of Operation per Week:**
 - Monday–Friday: 20 hours/day
 - Saturday–Sunday: 10 hours/day
 - TOTAL HOURS: 120 hours/week
- **Max Gallons Dispensed per Hour:**
 - TOTAL GPH: 110 gallons/hour
- **Max Days of Operation per Year:**
 - 48 weeks/year
 - 7 days/week
 - TOTAL DAYS: 336 days/year

Maximum Throughput

- **Max Annual Throughput:**
 - $120 \text{ hrs/week} \times 110 \text{ gallons/hr} \times 48 \text{ weeks/year} = 633,600 \text{ gallons/year}$
- **Maximum Daily Throughput:**
 - $20 \text{ hrs/day} \times 110 \text{ gallons/hr} = 2,200 \text{ gallons/day}$
- **Average Daily Throughput:**
 - $633,600 \text{ gallons/year} \mid 336 \text{ days/year} = 1,886 \text{ gallons/day}$

MAXIMUM EMISSION ESTIMATES (per Mobile Fuel Tank Vehicle):

Table 1 below shows the **exact emission factors used by SCAQMD** when issuing Booster’s current Permits to Operate under Rule 461.1, compared to the emission factors used by SCAQMD when issuing a permit to a conventional gas station under Rule 461. These **emission factors are used by SCAQMD to determine the level of Volatile Organic Compound (VOC) emissions** associated with both conventional and mobile gasoline transfer and dispensing operations permitted within the South Coast AQMD.

Table 1: SCAQMD VOC Emission Factors for Gasoline Transfer and Dispensing (The Emission Factors used by SCAQMD to issue Booster Permits to Operate under Rule 461.1 have been highlighted)			
Emission Source	Conventional Gasoline Dispensing Facility (lbs/1000 gallons)	Booster Mobile Fueling On-Demand (MFOD) Gasoline Delivery Vehicle (lbs/1000 gallons)	Basis for MFOD Gasoline Delivery Vehicle Emission Factors
Loading	0.15	0.00	Zero loading emissions: Fuel delivery vehicles bypass the transfer of fuel into underground/aboveground storage tanks and dispense directly into customer vehicles.
Breathing	0.024	0.08	Higher end of extreme scenario for transit losses from tank trucks loaded with product (Rule 461.1 requires Booster use CARB certified DOT spec Cargo Tank): “Breathing emissions were taken from U.S. EPA’s AP-42 Chapter 5.2, Table 5.2-5 for transit losses from tank trucks loaded with product (higher end of extreme scenario)”. See: Table B, South Coast Air Quality Management District, Modeling Review of Booster Fuels’ MFOD Units.
Refueling	0.32	0.42	Emission factor for refueling of ORVR vehicles without Phase II controls (Rule 461.1 requires Booster fuel only ORVR vehicles): CARB 2013 Revised Emission Factors for Phase II Vehicle Fueling at California Gasoline Dispensing Facilities (Attachment 1). Available at: https://ww3.arb.ca.gov/vapor/gdf-emisfactor/attachment1.pdf .
Spillage	0.24	0.12	Emission factor for Eco-Nozzle (Rule 461.1 requires Booster to use a CARB certified Enhanced Conventional (ECO) Nozzle): CARB Executive Order NVR-1-E. Available at: https://ww3.arb.ca.gov/vapor/eos/eo-nvr1/eo_nvr1e.pdf .
Hose Permeation	0.009	0.0268 lb/day (based on 10 g/m²/day)	Emission factor for Low-Permeation Hose (Rule 461.1 requires Booster to use a CARB certified Low-Permeation hose): CARB Executive Order NVR-1-E. Available at: https://www.aqmd.gov/docs/default-source/compliance/Gas-Dispensing/eo_nvr1b_092715.pdf?sfvrsn=6 . *NOTE: The hose permeation factor was adjusted based on the hose length/diameter of the MFOD (50 feet, ¾”) and the listed hose permeation rate of 10.0 g/m2/day
TOTAL VOC EMISSIONS	.743 lbs/1,000 gallons	.62 lbs/1,000 gallons + .0268 lbs/day hose permeation	TOTAL VOC EMISSIONS COMPARISON CONVENTIONAL GASOLINE STATION = .743 lbs of VOC Emissions per day (per 1,000 gallons dispensed) VERSUS BOOSTER MFOD DELIVERY VEHICLE = .647 lbs of VOC Emissions per day (per 1,000 gallons dispensed) NEARLY 13% LESS VOC EMISSIONS PER 1,000 GALLONS DISPENSED PER DAY COMPARED TO A CONVENTIONAL GAS STATION

MAXIMUM EMISSION ESTIMATES (per Mobile Fuel Tank Vehicle):

Booster's MFOD gasoline delivery vehicle results in a total of **.62 lbs of VOCs per 1,000 gallons dispensed plus a hose permeation of .0268 lbs of VOCs per day. THIS IS NEARLY 13% LESS VOC EMISSIONS COMPARED TO A CONVENTIONAL GAS STATION (per 1,000 gallons dispensed per day).**

Thus, since a Booster MFOD gasoline delivery vehicle can only dispense an average of 1,886 gallons/day (see "Maximum Throughput" calculations above), the maximum amount of daily VOC emissions associated with a Booster MFOD gasoline delivery vehicle will average **1.196 lbs per day** when only vehicles equipped with ORVR are fueled, as required under SCAQMD Rule 461.1(d)(3) and CARB Executive Order VR-601-A.

Daily Estimated Emission Calculations

- **Booster MFOD Gasoline Delivery Vehicle with an Average Throughput of 1,886 gallons/day:**
 - 1,886 gallons/day | 1,000 gallons = $1.886 \times .62 \text{ lbs/1,000 gal} = 1.169 \text{ lbs/1,000 gallons}$
 - $1.169 \text{ lbs/1,000 gallons} + .0268 \text{ lbs/1000 gal (daily hose perm)} = \textbf{1.196 lbs/day TOTAL}$

Daily Estimated Emission Reduction Calculations (Compared to a Conventional Gas Station)

- **Conventional Gas Station with an Average Throughput of 1,886 gallons/day:**
 - 1,886 gallons/day | 1,000 gallons = $1.886 \times .743 \text{ lbs/1,000 gal} = \textbf{1.401 lbs/day TOTAL}$
- **TOTAL DAILY VOC EMISSION REDUCTION**
 - $1.401 \text{ lbs/day (Conventional Gas Station)} - 1.196 \text{ lbs/day (Booster MFOD Delivery Vehicle)}$
 - $\textbf{= .205 lbs/day TOTAL VOC EMISSION REDUCTION}$
 - $\textbf{NEARLY 15% REDUCTION IN DAILY VOC EMISSIONS}$

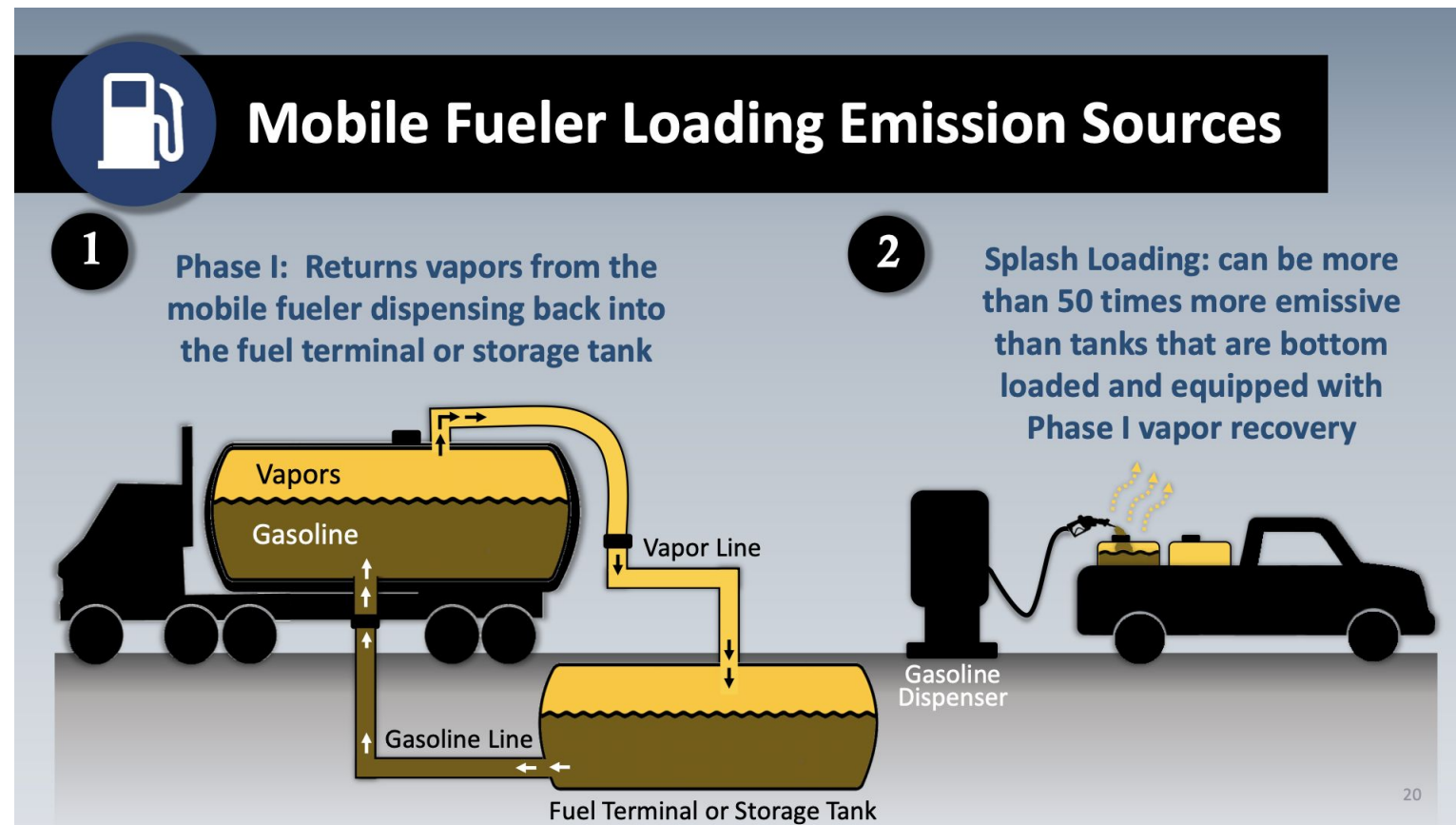
Daily Estimated Emission Reduction Calculations (through limiting operations to 1,500 gallons/day)

- **Booster MFOD Gasoline Delivery Vehicle with an Average Throughput of 1,500 gallons/day:**
 - 1,500 gallons/day | 1,000 gallons = $1.5 \times .62 \text{ lbs/1,000 gal} = .93 \text{ lbs/1,000 gallons}$
 - $.93 \text{ lbs/1,000 gallons} + .0268 \text{ lbs/1000 gal (daily hose perm)} = \textbf{.957 lbs/day TOTAL}$

Booster Avoids the Emissions Intensive Activities of Gas Stations and Unregulated Pick-up Truck Competitors

1. PER SCAQMD, BOOSTER'S PICK UP TRUCK COMPETITORS ARE UP TO 50x WORSE

- *SCAQMD, Proposed Rule 461.1, Public Working Group Meeting #3 (March 18, 2021)*



Booster does not need Phase I vapor recovery as we do not pump into underground storage tanks - which themselves are harmful for the environment

2. BOOSTER ONLY FUELS CARS WHICH HAVE ONBOARD REFUELING VAPOR RECOVERY (ORVR) SYSTEMS — WHICH IS 20x BETTER

- *CARB 2013 Revised Emission Factors for Phase II Vehicle Fueling at California Gasoline Dispensing Facilities*
 - .42 lbs/1,000 gallons (100% ORVR without Phase II) compared to
 - 8.4 lbs/1,000 gallons Uncontrolled Emission Factor (No ORVR, No Phase II)
 - $8.4/.42 = 20x$ Worse

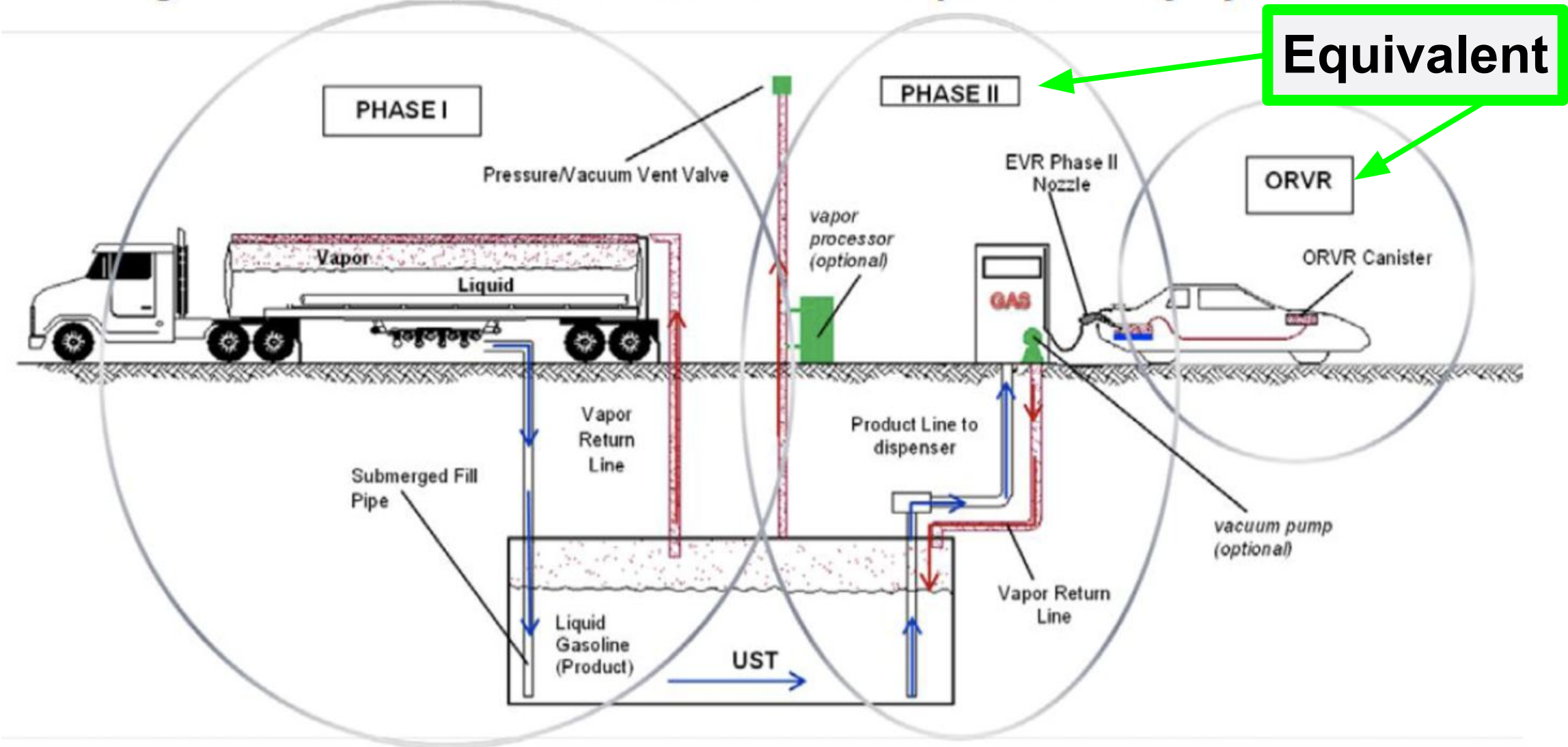
3. ORVR IS EQUIVALENT TO PHASE II

- *CARB: Study on Measurement of Gasoline Vapor Emissions from Vehicles Equipped with On-board Vapor Recovery (July 24, 2008)*
 - “In California, the Phase II enhanced vapor recovery (EVR) systems are certified to meet limits for both total emissions and fugitive emissions. As shown in Table 6, the emission factors calculated for the facility in this study [fueling of vehicles equipped with ORVR], without a Phase II system, meet both of the EVR Phase II emission limits.”
- *SCAQMD: PR 461.1 - Gasoline Transfer and Dispensing for Mobile Fueling Operations Staff Report (adopted as of Jan 7, 2022)*
 - “ORVR systems are required to meet the regulatory standard of 95% control efficiency.”

Mobile Fueling Avoids the Emissions Intensive Supply Chain of a Gas Station

GAS STATION:

Figure II-I: Phase I, Phase II and Onboard Vapor Recovery Systems



vs.

BOOSTER:

Figure II-I: Phase I, Phase II and Onboard Vapor Recovery Systems

