Port of Los Angeles
At-Berth Port Plan

This port plan has been prepared pursuant Section 93130.14(b)(3) of the Airborne Toxic Control Measure for Auxiliary Diesel Engines Operated on Ocean-Going Vessels At-Berth in a California Port.

Contents

1. GENERAL INFORMATION

Port Contact Name: Amber Coluso

Phone Number: (310) 732-3950	Email: acoluso@portla.org

Terminals Included in this Plan:

Name:	Geographic Boundary Coordinates:
1. APM Terminals (APMT)	1. 33.722090886996625, -118.25254438337515
2. West Basin Container Terminal (CS)	2. 33.756491978297944, -118.2883656707375
3. Phillips 66	3. 33.75550245219525, -118.27207489342517
4. Everport	4. 33.74319965018955, -118.26468118948587
5. Fenix Marine Services	5. 33.74134726929683, -118.25331298693834
6. Kinder Morgan	6. 33.75683899474685, -118.28017520886124
7. Ultramar	7. 33.75997302835016, -118.26669471196274
8. PBF Energy	8. 33.734901549457234, -118.27277912250663
9. Shell Mormon Island Terminal	9. 33.75433052370465, -118.26739388705505
10. TraPac	10. 33.77056754790128, -118.26734023042205
11. Vopak	11. 33.76648577062244, -118.26006492568224
12. Wallenius Wilhelmsen	12. 33.7690695347976, -118.25803662615778
13. Everglades Terminal (WBCT)	13. 33.759357363825934, -118.28791607308987
14. Yusen Terminals	14. 33.75480470379808, -118.25695173480659
15. SSA Pacific	15. 33.7244589648447, -118.27615445460938
16. Shore Terminals	16. 33.779605, -118.233935

2. TERMINAL DETAILS

Terminal details can be found on the subsequent pages.

2.8. **Phillips 66**

Identification and description of which strateg(ies) terminal will use for compliance:

Phillips 66 is planning to comply through the terminal exception of low activity terminal. See **Attachment C** for more details.

Equipment purchases and/or construction that are in progress or must still be completed to reduce emissions:

Not applicable.

Schedule for installing equipment and/or any necessary construction projects:

Not applicable

Division of responsibilities for enacting infrastructure:

Port:

- Construction/permit approval through the Application for Port Permit (APP) process
- Port to submit vessel visit information to CARB
- If technically feasible, provide equipment or necessary infrastructure at terminal as determined through Terminal's Permit (lease) with the Port
- Responsibility of uncontrolled emissions due to construction as determined by the Terminal's Permit (lease) with the Port
- Responsibility of uncontrolled emissions from repair of Port owned shore power infrastructure/equipment

Terminal:

- Initiation of construction through the Application for Port Permit (APP) process
- If technically feasible, provide equipment or necessary infrastructure at terminal as determined through Terminal's Permit (lease) with the Port
- Responsibility of uncontrolled emissions due to construction as determined by the Terminal's Permit (lease) with the Port

Terminal approval of responsibilities:
By signing below, the terminal's responsible officer confirms that he/she has reviewed the division of responsibilities and agrees to them under penalty of perjury.

Name: Mike Preston Title: Operations Manager

Signature: Date: 1/8/24

3. PORT-SPECIFIC BERTHING RESTRICTIONS

The Port does not impose any berthing restrictions on terminals. Restrictions imposed by terminal operators themselves may be found in their respective terminal plans (see attachments).

4. SIGNATURES

By signing below, the port's responsible officer confirms that he/she has reviewed this plan under penalty of perjury and understands this plan is subject to verification by CARB staff.

Name: Michael DiBernardo Title: Deputy Executive Director

Signature: Michael DiBernardo Date: Jan 24, 2024

ATTACHMENT C

Phillips 66 Company Los Angeles Marine Terminal
At Berth Terminal Plan (Revised)

This terminal plan has been prepared pursuant Section 93130.14(a)(3) of the Airborne Toxic Control Measure for Auxiliary Diesel Engines Operated on Ocean-Going Vessels At Berth in a California Port.

1. GENERAL INFORMATION

Terminal Contact Name: Kurt Alvarado

Phone Number: (310) 952-6206 | Email: kurt.s.alvarado@p66.com

Berths Included in this Plan:

Name:	Approximate Geographic Boundary Coordinates:*
1. Port of Los Angeles Berths 148 / 149	1. 33.755776, -118.273676
2. Port of Los Angeles Berths 150 / 151	2. 33.754170, -118.271208

**The number of berths on a terminal and the spatial positioning of berths are dependent on vessel size; thus, the geographic boundary coordinates are approximate only.*

2. STRATEGY DETAILS

Strateg(ies) used to comply with the requirements for ocean-going vessels visiting each berth:

1. Low-use terminal exemption
2. Third party barge-based California Air Resources Board (CARB), United States Coast Guard (USCG) and International Maritime Organization (IMO) approved and accepted for safe interfacing with tanker vessel's capture and control system

2.1 [Strategy 1 – Low Use Terminal]

Identification and description of all necessary equipment:

Equipment:	Location:
1. None	1. n/a

Number of **vessels** expected to use this strategy (annual): Up to 19

Number of vessel **visits** expected to use this strategy (annual): Up to 19

Berths where equipment will be used:

1. Port of Los Angeles Berths 148 / 149
2. Port of Los Angeles Berths 150 / 151

Schedule for installing equipment:

Project:	Estimated Completion Date:
1. n/a	1. n/a

2.2 [Strategy 2, if needed – Barge Based CAECS]

Identification and description of all necessary equipment:

Equipment:	Location:
1. Emission capture and control system that is CARB, USCG and IMO approved and	1. Spudded or moored (for station keeping) barge at or near vessel stern

accepted for safe interfacing with tanker vessels

Number of **vessels** expected to use this strategy (annual): Up to 75

Number of vessel **visits** expected to use this strategy (annual): Up to 75

Berths where equipment will be used:

1. Port of Los Angeles Berths 148 / 149
2. Port of Los Angeles Berths 150 / 151

A terminal operator claiming that a physical and/or operational constraint will delay its ability to implement its preferred CARB approved control strategy to achieve emission reductions from vessels at berth according to the requirements of section 93130 et seq., must also include with its terminal plan a technical feasibility study evaluating if there are any other emission control options that could be implemented more quickly at the terminal:

Provided as an attachment to this updated plan is the feasibility study prepared by Moffatt and Nichol for the Los Angeles Marine Terminal. This detailed study includes specific information regarding the Los Angeles Marine Terminal and the implementation of the control measures to comply with the regulation and a potential schedule for completion.

Not all potential compliance methods are reasonably foreseeable for tankers at the Los Angeles Marine Terminal. For example, CARB has determined that shore power is not a reasonably foreseeable compliance option for tankers because of significant infrastructure changes needed to the vessel itself. CARB also has noted that there are currently no on-board emission control strategies verified by CARB for ocean-going vessel applications, and that retrofitting existing vessels to run on the only known alternative fuel used for vessels – liquid natural gas – is physically difficult and unlikely to occur. Thus, CARB asserts that it is reasonably foreseeable that tankers would use the capture and control option as the primary means of compliance – meaning that tankers and tanker terminals unable to use a feasible capture and control system must rely on limited exceptions to the emissions rate requirements like VIE/TIE, qualifying for use of the remediation fund, or applying to CARB to approve an innovative concept.

The single viable compliance strategy for the Los Angeles Marine Terminal is the barge-based capture and control option. The third-party Moffatt and Nichol study estimated a barge-based capture and control system for the Los Angeles Marine Terminal to be available to Phillips 66 by entering a long-term service agreement with a barge vendor that is estimated to cost approximately $1 million upfront to establish the agreement, with an annual operations cost of approximately $1.99 million. There are currently no barge-based capture and control systems for marine oil terminals and tank vessels in the Port of Los Angeles region, and while a barge-based capture and control system is technically feasible, various factors could affect its completion and implementation. The estimated date for a system to be operational could be as early as April 2026, which is approximately 15 months after the CARB compliance deadline. There is no purchase option for Phillips 66.

To ensure an adequate supply of control equipment in the Port of Los Angeles, Phillips 66 requests there be at least two third-party barge-based capture and control system providers that are CARB, USCG and IMO approved and accepted for safe interfacing with tanker vessels in the Port of Los

Angeles Area prior to the compliance date for the facility. This is to ensure that competitive bids can be obtained before executing a contract with the successful bidder(s). Due to topside space limitations, land-based systems are not feasible due to hazardous zones and electrification is not feasible due to tanker incompatibility and safety concerns.

These constraints and others, including other terminal-based compliance technologies, directly impacting the operability and safety of the ship/shore interface are documented in the Moffatt and Nichol Feasibility Study and the DNV "CARB OGV at Berth Regulation Emissions Control Technology Assessment for Tankers" reports that are provided as an attachment.

Schedule for installing equipment:

Project:	Estimated Completion Date:
1. Third party vendor	1. April 2026

3. TERMINAL OPERATOR/PORT BERTHING RESTRICTIONS

Are there any terminal or port specific berthing restrictions? If yes, please describe.

Phillips 66 complies with all federal, state, and local requirements. Terminal restrictions are documented in the latest Terminal Operating Limits as approved and regulated by the California State Lands Commission (CSLC) in compliance with California Building Code (CBC) Chapter 31F: Marine Oil Terminals also known as the Marine Oil Terminal Engineering and Maintenance Standards (MOTEMS). Additional berthing restrictions are identified in the facility Marine Operations Manual.

4. DIVISION OF ROLES AND RESPONSIBILITIES

Division of responsibilities for enacting infrastructure:

Port:

- Permit the operation of Emission Control Barge in POLA waterways.

Terminal:

- Contract with 3rd party CAECS service provider
- Require use of the 3rd party CAECS service provider on vessels that call to terminal
- These responsibilities only go into effect if P66 is no longer designated a low activity terminal.

Are there any contractual limitations applicable to the terminal relevant to enacting the infrastructure? If yes, describe.

Port approval of responsibilities:

The Port's responsible officer confirms by signing below that he/she has reviewed the division of responsibilities set forth in Section 4 of this At Berth Terminal Plan and agrees to them under penalty

of perjury. The Port does not make any representations or attestations about the accuracy, feasibility, or legality of the Terminal Operator's proposed compliance strategy set forth in this At Berth Terminal Plan.

Name: Michael DiBernardo	Title: Deputy Executive Director
Port: Port of Los Angeles	
Signature: Michael DiBernardo	Date: Jan 24, 2024

5. SIGNATURE OF TERMINAL OPERATOR

By signing below, the Terminal Operator's responsible officer confirms under penalty of perjury that he/she has reviewed this At Berth Terminal Plan and is submitting this At Berth Terminal Plan as [Terminal Operator's] compliance strategy for the At Berth Regulation. [Terminal Operator] understands this plan is subject to verification by CARB staff.

Name: Mike Preston	Title: Operations Manager, Los Angeles Refinery
Signature:	Date: 1/8/24