THE PORT OF LOS ANGELES
425 S. Palos Verdes Street Post Office Box 151 San Pedro, CA 90733-0151 TEL/TDD 310 SEA-PORT www.portoflosangeles.org

November 24, 2021

Chief, Transportation and Toxics Division
California Air Resources Board
1001 I Street
Sacramento, CA 95814
Electronic Submission Via Shorepower@arb.ca.gov

SUBJECT: PORT OF LOS ANGELES PORT PLAN SUBMISSION FOR CALIFORNIA AIR RESOURCES BOARD AT-BERTH REGULATION

The City of Los Angeles Harbor Department would like to thank the California Air Resource Board (CARB) staff for the time and effort that has been spent assisting us in completing our port plan for the CARB At-Berth Regulation requirement at the Port of Los Angeles. After almost a year of coordinating with our fifteen regulated terminals, we are pleased to submit the completed port plan.

Please contact Amber Coluso of my staff at acoluso@portla.org with any questions regarding our submitted port plan.

Sincerely,

CHRISTOPHER CANNON
Director of Environmental Management

CC:LW:TD:TP:AC:YO
APP No.: 201210-542

cc: Angela Csondes, acsondes@arb.ca.gov
Nicole Light Densberger, Nicole.lightdensberger@arb.ca.gov

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/Shore Terminals	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

2. TERMINAL DETAILS

Terminal details can be found on the subsequent pages.

2.1. **APMT**

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

APMT intends to use shore power as its primary strategy. See **Attachment A** for more details.

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

APMT plans to install 3 Alternate Marine Power Extended assemblies to facilitate connections. Installation is anticipated to be complete by 2022. See Attachment A for more details.

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

Project:	Estimated Completion Date:
1. Alternative Marine Power	1. Complete
2. Alternate Marine Power Extended assemblies	2. 2022

Division of responsibilities for enacting infrastructure:

Port:

- Alternate Marine Power 401-405 construction currently planned, maintenance and operation inclusive of power supply and availability.
- 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 Operator:

- Alternate Marine Power Extended Assembly installation, maintenance and operation.
- Initiation of new construction through the Application for Port Permit (APP) process.
- 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 Terminal owned shore power infrastructure/equipment.

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: Steven M. Trombley Title: Managing Director

Signature: Steven M. Trombley Date: 11/2/2021

2.2. **West Basin Container Terminal (China Shipping)**
Identification and description of which strateg(ies) terminal will use for compliance: West Basin Container Terminal intends to use shore power as its primary strategy. See **Attachment B** for more details.
Equipment purchases and/or construction that are in progress or must still be completed to reduce emissions: None.
Schedule for installing equipment and/or any necessary construction projects: Not applicable.
Division of responsibilities for enacting infrastructure: Port: ● 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 Operator: ● Initiation of construction through the Application for Port Permit (APP) process ● 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 Terminal owned shore power infrastructure/equipment
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: QUENTIN YAN Title: Vice President Signature: Date: 9/29/2021

2.3. Phillips 66 Company

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

Phillips 66 plans to use the low-use terminal exception as its compliance strategy with a barge-based system as a secondary strategy, if and when a system is approved by CARB. 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
- 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 infrastructure/equipment

Terminal:

- Initiation of construction through the Application for Port Permit (APP) process
- 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 terminal-owned infrastructure/equipment

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: Tim Seidel | Title: G.M. – Phillips 66 Los Angeles Refinery

Signature: Tim Seidel | Date: 10/27/21

2.4. Everport

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

Everport intends to use shore power as its primary strategy. See **Attachment D** for more details.

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

Everport is installing five additional shore power vaults.

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

Project:	Estimated Completion Date:
1. Shore power vaults	1. August 2021

Division of responsibilities for enacting infrastructure:

Port:

- 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 Operator:

- Initiation of construction through the Application for Port Permit (APP) process
- 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 Terminal owned shore power infrastructure/equipment

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: Thinh Vo

Title: Terminal Manager

Signature:

Date: 9/29/2021

2.5. Fenix Marine Services

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

Fenix intends to use shore power as its primary strategy. See **Attachment E** for more details.

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

None.

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

Not applicable.

Division of responsibilities for enacting infrastructure:

Port:

- Provide equipment or necessary infrastructure at terminal as determined through FMS Permit (lease) with the Port (shared with Terminal)
- Responsibility of uncontrolled emissions due to construction as determined by the Terminal's Permit (lease) with the Port (shared with Terminal)
- Responsibility of uncontrolled emissions from repair of Port owned shore power infrastructure/equipment

Terminal Operator:

- Initiation of construction through the Application for Port Permit (APP) process
- Provide equipment or necessary infrastructure at terminal as determined through FMS Permit (lease) with the Port (shared with the Port)
- Responsibility of uncontrolled emissions due to construction as determined by the Terminal's Permit (lease) with the Port (shared with the Port)
- Responsibility of uncontrolled emissions from repair of Terminal owned shore power infrastructure/equipment

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: Jeff Brown Title: Senior Manager - HSSE/ISO

Signature: Jeff B Date: 10/12/2021

2.6. **Kinder Morgan**
Identification and description of which strateg(ies) terminal will use for compliance: Kinder Morgan intends to contract with a CARB-approved third-party barge-based emissions control system. See **Attachment F** for more details.
Equipment purchases and/or construction that are in progress or must still be completed to reduce emissions: Not applicable – Kinder Morgan intends to contract with third-party provider when approved.
Schedule for installing equipment and/or any necessary construction projects: Not applicable – Kinder Morgan intends to contract with third-party provider when approved.
Division of responsibilities for enacting infrastructure: <u>Port:</u> Permit the operation of Emission Control Barge in POLA waterways. <u>Terminal:</u> Contract with 3rd party service provider.
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: John RIRIE Title: Director, Engineering Signature: Date: 10/12/24

2.7. Ultramar/Shore Terminals

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

Ultramar and Shore Terminals intend to use a CARB-approved emission control system once approved. See **Attachment G** for more details.

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

CAECS

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

Project:	Estimated Completion Date:
1. CAECS	1. Dependent on CARB certification date

Division of responsibilities for enacting infrastructure:

Port:

- Provide equipment or necessary infrastructure at terminal as negotiated by the parties
- Responsibility of uncontrolled emissions due to construction as negotiated by the parties
- Responsibility of uncontrolled emissions from repair of Port owned infrastructure/equipment as required by law

Terminal Operator:

- Initiation of construction through the Application for Port Permit (APP) process
- Provide equipment or necessary infrastructure at terminal as negotiated by the parties
- Responsibility of uncontrolled emissions due to construction as negotiated by the parties
- Responsibility of uncontrolled emissions from repair of Terminal owned infrastructure/equipment as required by law

***Ultramar** 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: Ui An for Mark Phair	Title: Director Technical Services
Signature:	Date: November 9, 2021

***Shore 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: Jerome D. Jackson	Title: General Manager Terminals & Pipelines
Signature:	Date: 11/09/2021

2.8. PBF Energy

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

PBF Energy is planning to comply through the terminal exception of low activity terminal. See **Attachment H** 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: Joshua Briscoe Title: Area Manager

Signature: Date: 10-13-2021

2.9. **Shell Mormon Island Terminal**
Identification and description of which strateg(ies) terminal will use for compliance: Shell intends to use a CARB-approved Emission Capture and Control Equipment (barge or land based to be determined) and innovative concept, using CAECS to control non-regulated OSV emissions to develop emissions credits. See **Attachment I** for more details.
Equipment purchases and/or construction that are in progress or must still be completed to reduce emissions: CAECS Third Party operator provided emission capture and control equipment
Schedule for installing equipment and/or any necessary construction projects: See Attachment I for more details. Project: 1. Tanker Capture and Control Equipment Estimated Completion Date: 1. Contingent upon technology development for safe tanker operations and CARB certification
Division of responsibilities for enacting infrastructure: Port: • 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 infrastructure/equipment Terminal: • Initiation of construction through the Application for Port Permit (APP) process • 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: Lee Cheatham — Title: Distribution Operations Manager Signature: Lee Cheatham — Date: November 16, 2021

2.10. **TraPac**
Identification and description of which strateg(ies) terminal will use for compliance: TraPac intends to use shore power as its primary strategy and a bonnet system as a secondary strategy. See **Attachment J** for more details.
Equipment purchases and/or construction that are in progress or must still be completed to reduce emissions: None.
Schedule for installing equipment and/or any necessary construction projects: None.
Division of responsibilities for enacting infrastructure: <u>Port</u>: • Provides functional berths and ensures a reliable supply of electricity for AMP use • Constructs and maintains equipment to supply electricity AMP vaults • Provides qualified staff to provide timely hook up of AMP equipment • Provides alternative CAESC when port construction interferes with berth availability and/or electricity supply <u>Terminal Operator</u>: • Provides the AMP vault infrastructure for vessel plug-in. • Provides ILWU labor to load and unload AMP containers. • Provides ILWU labor to perform vessel plug-in. • Coordinate vessel operator with POLA AMP connection staff. • Coordinate vessel operator with Bonnet Barge, when feasible. • Provides alternative CAESC when terminal construction interferes with berth availability <u>Vessel</u>: • Ensure vessel crew are fully trained for AMP processes. • Engage outside consultant when training required. • Have crew on hand for all vessel plug/unplug. • Ensure all vessels systems have been inspected and in good working order prior to arrival. • Engage tugboat services to meet designated arrival times. • Purchase and ensure AMP containers are available and in good working order. • Ensure Bonnet Barge services are properly arranged
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: BANA JAMES Title: VP Operations Signature: Bana James Date: Nov 15, 2021

2.11. Vopak

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

Vopak plans to use a land- or barge-based CARB-approved emission control system. Final decision on equipment selected will be based only upon successful proof-of-concept testing underway. For more details, see **Attachment K**.

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

Vopak still must purchase and/or construct the emission capture and control system.

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

Please see Attachment K for more details, including footnotes.

Project:	Estimated Completion Date:
1. Land-based exhaust capture & treatment	1. January 1, 2025*
2. Barge-based exhaust capture & treatment	2. January 1, 2025*

Division of responsibilities for enacting infrastructure:

Port:

- 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 infrastructure/equipment

Terminal Operator:

- Initiation of construction through the Application for Port Permit (APP) process
- 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 Terminal owned infrastructure/equipment

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: Michael LaCavera Title: Managing Director

Signature: Date: 10/26/21

2.12. **Wallenius Wilhelmsen**

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

Wallenius Wilhelmsen intends to use shore power as its primary strategy. See **Attachment L** for more details.

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

Wallenius Wilhelmsen must construct the shore power infrastructure at its berth.

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

Schedule refers to Wallenius Wilhelmsen's terminal plan found in Attachment L.

Project:	Estimated Completion Date:
1. Conduit from power source	1. Q3 2024
2. Switchgear and transformer	2. Q4 2024
3. Moveable power connection point	3. Q1 2025

Division of responsibilities for enacting infrastructure:

Port:

- Initiation of shore power construction including design and permits
- Installation of all material for an end to end solution from LADWP substation to vessel connection point

Terminal:

Inform Port when the PCC voltage requirements are agreed upon by the international community

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: Peter Breinee Title: GM LAVPC

Signature: Date: 11-3-2021

2.13. **Everglades Terminal (WBCT)**
Identification and description of which strateg(ies) terminal will use for compliance: WBCT intends to use shore power as its primary strategy. See **Attachment M** for more details.
Equipment purchases and/or construction that are in progress or must still be completed to reduce emissions: None.
Schedule for installing equipment and/or any necessary construction projects: Not applicable.
Division of responsibilities for enacting infrastructure: <u>Port:</u> • 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 <u>Terminal Responsibilities</u> • Initiation of construction through the Application for Port Permit (APP) process • 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 Terminal owned shore power infrastructure/equipment
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: TOM VAN EYNDE Title: PRESIDENT Signature: Date: 15-NOV-2021

2.14. Yusen Terminal

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

Yusen plans to use shore power as its primary strategy with a bonnet system as a secondary strategy. Please see **Attachment N** 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:

Provides the AMP vault infrastructure for vessel plug ins
Provides functional berths with supply of electricity for AMP use
Provides qualified staff to provide timely hook up of AMP equipment

Terminal Operator:

Provides ILWU labor to load and unload AMP containers.
Provides ILWU labor to perform vessel plug-in.
Coordinate vessel operator with POLA AMP connection staff. Assist vessel operator with Bonnet Barge, when feasible.

Vessel:

Ensure vessel crew are fully trained for AMP processes.
Engage outside consultant when training required.
Have crew on hand for all vessel plug/unplug.
Ensure all vessels systems have been inspected and in good working order prior to arrival.
Engage tugboat services to meet designated arrival times.
Purchase and ensure AMP containers are available and in good working order.
Ensure Bonnet Barge services are properly arranged.

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: Ken Fletcher Title: General Manager - SSE

Signature: Date: 11/11/12

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:	11/15/2021

ATTACHMENT A

APM Terminals Pacific, LLC
At Berth Terminal Plan

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: Christopher Allen

Phone Number: 310.222.4270	Email: Christopher.allen@apmterminals.com

Berths Included in this Plan:
2500 Navy Way, Terminal Island, CA 90731

Name:	Approximate Geographic Boundary Coordinates:*
15. Port of Los Angeles Berth 401	15. 33.732978, -118.243694
16. Port of Los Angeles Berth 402	16. 33.732052, -118.247149
17. Port of Los Angeles Berth 403	17. 33.730861, -118.251264
18. Port of Los Angeles Berth 404	18. 33.729575, -118.255538
19. Port of Los Angeles Berth 405	19. 33.725364, -118.259897

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

2. STRATEGY DETAILS

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

1. Shore power (Alternative Maritime Power, or AMP)

The primary method of compliance for Pier 400 will be shore power. Pier 400 is currently equipped with shore power at many locations along the berths. Pier 400 is installing additional Alternate Marine Power Extended assemblies to accommodate the ever increasing size of oceangoing vessels and the need to have power available in additional places along the berths. Pier 400 does not believe these assemblies require permitting or CEQA review. Additionally:

- No electrical upgrades to shore power as a stand alone circuit(s) will be required however; substantial increase in electrical supply to Pier 400 will be required to accommodate total electrical load. With the electrification of terminal equipment to run in 2030 it is not clear how the additional load will be supplied.
- Pier 400 does not foresee a need for structural upgrades to wharves to support weight of any added equipment
- Alternate Marine Power Extended assemblies requires some minor installation and approvals which should be complete 2022. It is anticipated these assemblies will be operational 2022.

Vessel operators are responsible to ensure their vessels are equipped to handle Pier 400s shore power and equipment and that the vessel equipment is fully functional. Pier 400 will confirm vessels are equipped with shore power capability prior to arrival at Pier 400 in accordance with requirements.

1 Shore Power

Identification and description of all necessary equipment:

Equipment:	Location:
1. Alternate Marine Power 401 AV1-307	1. Berth 401
2. Alternate Marine Power 401 AV2-910	2. Berth 401
3. Alternate Marine Power 401 AV3-1107	3. Berth 401
4. Alternate Marine Power 401 AV4-1220	4. Berth 401
5. Alternate Marine Power 402 AV5-1500	5. Berth 402
6. Alternate Marine Power 402 AV6-2231	6. Berth 402
7. Alternate Marine Power 402 AV7-2450	7. Berth 402
8. Alternate Marine Power 402 AV8-2525	8. Berth 402
9. Alternate Marine Power 403 AV9-3554	9. Berth 403
10. Alternate Marine Power 403 AV10-3853	10. Berth 403
11. Alternate Marine Power 403 AV11-3914	11. Berth 403
12. Alternate Marine Power 403 AV12-4030	12. Berth 403
13. Alternate Marine Power 404 AV13-4220	13. Berth 404
14. Alternate Marine Power 404 AV14-4700	14. Berth 404
15. Alternate Marine Power 404 AV15-4820	15. Berth 404
16. Alternate Marine Power 404 AV16-5025	16. Berth 404
17. Alternate Marine Power 405 AV17-5720	17. Berth 405
18. Alternate Marine Power 405 AV18-6030	18. Berth 405
19. Alternate Marine Power 405 AV19-6320	19. Berth 405
20. Alternate Marine Power 405 AV20-6640	20. Berth 405
21. Alternate Marine Power Extended Assembly 401 - 457	21. Berth 401
22. Alternate Marine Power Extended Assembly 403 - 2725	22. Berth 403
23. Alternate Marine Power Extended Assembly 405 - 6840	23. Berth 405

Number of **vessels** expected to use this strategy (annual): 65

It is expected that 85% of vessels equipped with shore power will use shore power as a compliance strategy. Most vessels that call Pier 400 at this time are equipped with shore power. However, the global pandemic has made supply chains and vessel schedules much more unpredictable. Vessel schedules and the specific vessels that call on Pier 400 will likely change by the time the rule goes into effect.

Number of vessel **visits** expected to use this strategy (annual): #284

Berths where equipment will be used:

1. Port of Los Angeles Berth 401
2. Port of Los Angeles Berth 402
3. Port of Los Angeles Berth 403
4. Port of Los Angeles Berth 404
5. Port of Los Angeles Berth 405

Schedule for installing equipment:

Project:	Estimated Completion Date:

3. Alternative Marine Power 401-405	3. Complete
4. Alternate Marine Power Extended Assembly 401 - 457	4. 2022
5. Alternate Marine Power Extended Assembly 403 - 2725	5. 2022
6. Alternate Marine Power Extended Assembly 405 - 6840	6. 2022

3. TERMINAL OPERATOR/PORT BERTHING RESTRICTIONS

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

AMP connections are fixed. Vessels must be configured to line up with AMP or be within range of alternate marine power extended assembly. Coast guard regulations on distance between vessels have potential to restrict access to connections.
AMP connection assemblies on vessels are typically on one side of the vessel and often near the house. Each vessel is unique and these restrictions must be identified prior to arrival. A vessel's AMP connection must be lined up on the wharf side in order to connect to shore power.

4. DIVISION OF ROLES AND RESPONSIBILITIES

Division of responsibilities for enacting infrastructure:
Port:

- Alternate Marine Power 401-405 construction currently planned, maintenance and operation inclusive of power supply and availability.
- 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 Operator:

- Alternate Marine Power Extended Assembly installation, maintenance and operation.
- Initiation of new construction through the Application for Port Permit (APP) process.
- 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 Terminal owned shore power infrastructure/equipment.

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

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:	11/15/2021

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:	Steven M. Trombley	Title:	Managing Director
Signature:	Steven M. Trombley	Date:	11/2/2021

ATTACHMENT B

West Basin Container Terminal (CS)
At Berth Terminal Plan

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: Quentin Yang	
Phone Number: (310) 519-2307	Email: quentinya@wbct.us
Berths included in this Plan: Name: 1. Berth 100 2. Berth 102	Approximate Geographic Boundary Coordinates:* 1. 100', 280', 350', 550', 975' 2. 1275', 1550', 2125', 2300'
**The number of berths on a terminal and the spatial positioning of berths are dependent on vessel size; thus, the geographic boundary coordinates are approximates only.*	
2. STRATEGY DETAILS	
Strategy used to comply with the requirements for ocean-going vessels visiting each berth: WBCT plans to provide shore power connection	
2.1 **[Strategy 1]**	
Identification and description of all necessary equipment: Equipment: Shore power AMP connection	Location: Located on berth dock
Number of vessels expected to use this strategy (annual): 200 plus	
Number of vessel visits expected to use this strategy (annual): 200 plus	
Berths where equipment will be used: 1. Berth 100 2. Berth 102	
Schedule for installing equipment: Project: 1. Shorepower Connection	Estimated Completion Date: 1. Completed

3. TERMINAL OPERATOR/PORT BERTHING RESTRICTIONS
Are there any terminal or port specific berthing restrictions? If yes, please describe. No vessels larger than 14k vessel can call to our terminal because they cannot clear the Vincent Thomas Air gap.

4. DIVISION OF ROLES AND RESPONSIBILITIES

Division of responsibilities for enacting infrastructure:

Port:

- 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 Responsibilities

- Initiation of construction through the Application for Port Permit (APP) process
- 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 Terminal owned shore power infrastructure/equipment

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

N/A

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:	11/15/2021

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: Quentin Yarish	Title: Vice President
Signature:	Date: 9/17/2021

ATTACHMENT C

Phillips 66 Company Los Angeles Marine Terminal
At Berth Terminal Plan

This terminal plan has been prepared pursuant Section to 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:*
15. Port of Los Angeles Berths 148 / 149	15. 33.755776, -118.273676
16. Port of Los Angeles Berths 150 / 151	16. 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 approximates 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 CARB and IMO (International Maritime Organization) 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 and IMO approved and accepted for safe interfacing with tanker vessels	1. Spudded (for station keeping) barge at vessel stern

Number of **vessels** expected to use this strategy (annual): Up to 40

Number of vessel **visits** expected to use this strategy (annual): Up to 40

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:

1. Third party vendor

Estimated Completion Date:

1. Within 6 months of CARB certification of more than 2 vendors

3. TERMINAL OPERATOR/PORT BERTHING RESTRICTIONS

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

Port of Los Angeles Berths 148 / 149 are not expected to be in service by the effective date of control requirements of this regulation.

4. DIVISION OF ROLES AND RESPONSIBILITIES

Division of responsibilities for enacting infrastructure:

Port:

- Construction/permit approval through the Application for Port Permit (APP) process
- 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 infrastructure/equipment

Terminal:

- Initiation of construction through the Application for Port Permit (APP) process
- 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 terminal-owned infrastructure/equipment

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

There need to be at least two CARB and IMO approved and accepted for safe interfacing with tanker vessels third-party vendors to ensure competitive bids can be obtained before executing a contract with the successful bidder. Due to topside space limitations, land-based systems are not feasible, and electrification is not feasible due to tanker incompatibility and safety concerns.

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: 11/15/2021

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: Tim Seidel	Title: G.M. Phillips 66 Los Angeles Refinery
Signature:	Date: 10/27/21

ATTACHMENT D

EVERPORT Terminal Services
At Berth Terminal Plan

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: Thinh Vo

Phone Number:310-221-4810 | Email:tvo@everport-terminals.com

Berths Included in this Plan:

Name:	Approximate Geographic Boundary Coordinates:*
15. Berth 227	15. 33.747130 -118.269924
16. Berth 230	16. 33.743034 -118.272757
17.	17.

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

2. STRATEGY DETAILS

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

1. Work with our parent company, Evergreen Shipping Line to ensure that all vessels are equipped with shore power (Alternative Maritime Power, or AMP) capabilities.
2.

2.1 [Strategy 1]

Identification and description of all necessary equipment:

Equipment:	Location:
1. AMP vaults	1. Wharf of berths 227 & 230

Number of **vessels** expected to use this strategy (annual): 104

Number of vessel **visits** expected to use this strategy (annual):104

Berths where equipment will be used:

1. Berth 227
2. Berth 230

Schedule for installing equipment:

Project:	Estimated Completion Date:
1. Five additional AMP vaults	1. Completed August 2021

3. TERMINAL OPERATOR/PORT BERTHING RESTRICTIONS

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

None

4. DIVISION OF ROLES AND RESPONSIBILITIES

Division of responsibilities for enacting infrastructure:

Port:

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 Operator:

Initiation of construction through the Application for Port Permit (APP) process

Provide equipment or necessary infrastructure at terminal as determined through Terminal's Permit (lease) with Port.

Responsibility of uncontrolled emissions due to construction as determined by the terminal's Permit (lease) with the Port.

Are there any contractual limitations applicable to the terminal relevant to enacting the infrastructure?

None.

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: 11/15/2021

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: Thinh Vo	Title: Terminal Manager
Signature:	Date: 8/26/2021

ATTACHMENT E

FENIX MARINE SERVICES

At Berth Terminal Plan

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: Jeffrey Brown

Phone Number: (310) 548-8956	Email: jbrown@fmslax.com

Berths Included in this Plan:

Name:	Approximate Geographic Boundary Coordinates:*
1. **TI 302**	1. **33°43'53.7"N 118°15'36.4"W**
2. **TI 303**	2. **33°43'58.1"N 118°15'21.4"W**
3. **TI 304**	3. **33°44'01.3"N 118°15'10.8"W**
4. **TI 305**	4. **33°44'05.8"N 118°14'58.5"W**

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

2. STRATEGY DETAILS

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

1. Shore Power (AMP)

2.1 [Strategy 1]

Identification and description of all necessary equipment:

Equipment:	Location:
1. **4 DWP Transformers**	1. **Shore**
2. **4 Sub-Stations**	2. **Wharf**
3. **15 Vaults**	3. **Wharf**
4. **Cavotec AMP Reel Caddy**	4. **Wharf**
5. **Cavotec AMP Extension Box**	5. **Wharf**
6. **AMP Connection Container**	6. **Vessel**

Number of **vessels** expected to use this strategy (annual): 25

Number of vessel **visits** expected to use this strategy (annual): 110

Berths where equipment will be used:

1. **TI 302**
2. **TI 303**
3. **TI 304**
4. **TI 305**

Schedule for installing equipment:

Project:	**Estimated Completion Date:**
1. **4 DWP Transformers**	1. **Installed**
2. **4 Sub-Stations**	2. **Installed**
3. **15 Vaults (4 vaults each at TI 302, 303, 304 & 3 vaults at TI 305)**	3. **Installed**

3. TERMINAL OPERATOR/PORT BERTHING RESTRICTIONS

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

Vessels berth starboard-side to

4. DIVISION OF ROLES AND RESPONSIBILITIES

Division of responsibilities for enacting infrastructure:

Port:

- **Provide equipment or necessary infrastructure at terminal as determined through FMS Permit (lease) with the Port (shared with Terminal)**
- **Responsibility of uncontrolled emissions due to construction as determined by the Terminal's Permit (lease) with the Port (shared with Terminal)**
- **Responsibility of uncontrolled emissions from repair of Port owned shore power infrastructure/equipment**

Terminal Operator:

- **Initiation of construction through the Application for Port Permit (APP) process**
- **Provide equipment or necessary infrastructure at terminal as determined through FMS Permit (lease) with the Port (shared with the Port)**
- **Responsibility of uncontrolled emissions due to construction as determined by the Terminal's Permit (lease) with the Port (shared with the Port)**
- **Responsibility of uncontrolled emissions from repair of Terminal owned shore power infrastructure/equipment**

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:** 11/15/2021

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 Fenix Marine Services compliance strategy for the At Berth Regulation. Fenix Marine Services understands this plan is subject to verification by CARB staff.

Name: Jeffrey Brown	**Title: Senior Manager – HSSE / FSO**
Signature:	**Date:** 10/12/2021

ATTACHMENT F

L.A. Harbor Terminal (Kinder Morgan)
At-Berth Terminal Plan

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: Casey Alleman

Phone Number: 337-852-5548 | Email: casey_alleman@kindermorgan.com

Berths Included in this Plan:

Name:	Approximate Geographic Boundary Coordinates:*
1. Berth 118/119	1. [33° 45'22.39"N 118° 16'52.03"W]

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

2. STRATEGY DETAILS

Strategy/strategies used to comply with the requirements for ocean-going vessels visiting each berth:

1. Emissions Capture and Control - Barge Based

2.1 Strategy 1 - Emissions Control Barge (3rd Party Service Provider)

Identification and description of all necessary equipment:

Equipment:	Location:
1. Preconditioning Chamber.	1. Barge
2. Cloud Generation Chambers.	2. Barge
3. System ID Fan.	3. Barge
4. Selective Catalytic Reduction (SCR).	4. Barge
5. Heater (Burner).	5. Barge
6. Heat Exchanger.	6. Barge
7. Exhaust Intake Bonnet (EIB).	7. Barge
8. Articulating Arm.	8. Barge
9. Placement Tower.	9. Barge

Number of vessels expected to use this strategy (annual): 40

Berths where equipment will be used:

Berth 118/119

Schedule for installing equipment:

Project:	Estimated Completion Date:
1. Emission Control Barge	1. Kinder Morgan will contract with a 3rd party service upon CARB certification of a barge based CAECS for liquid bulk vessels.

3. TERMINAL/PORT BERTHING RESTRICTIONS

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

N/A

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 service provider.
Are there any contractual limitations applicable to the terminal relevant to enacting the infrastructure? If yes, describe. **N/A**
Port approval of responsibilities: By signing below, the port's responsible officer confirms that he/she has reviewed the division of responsibilities and agrees to them under penalty of perjury.
Name: Michael DiBernardo Title: Deputy Executive Director
Port: Port of Los Angeles
Signature: Michael DiBernardo Date: 11/15/2021

5. SIGNATURES
By signing below, the terminal'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: John R. RIE Title: Director, Engineering
Signature: Date: 10/12/21

ATTACHMENT G

Ultramar, Inc. dba the Valero Wilmington Marine Terminal and Shore Terminals LLC dba NuStar At Berth Terminal Plan

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

Ultramar Contact Name: Richard Vasquez

Shore Terminals Contact Name: Jerome Jackson

Ultramar Phone Number: 562-491-6753	Ultramar Email: Richard.Vasquez@valero.com
Shore Terminals Phone Number: 916-317-0799	Shore Terminals Email: jerome.jackson@nustarenergy.com

Berths Included in this Plan:

Name:	Approximate Geographic Boundary Coordinates:*
1. Berth 163	1. Coordinates: 33' 45' 36.67" N, 118' 16' 02.65" W

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

2. STRATEGY DETAILS

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

Ultramar, Inc. and Shore Terminals LLC have consulted with industry and third-party experts, such as Moffatt Nichols and DNV GL USA, Inc. Maritime, who have evaluated various technologies such as shore power and shore and barge capture and control. They both independently determined that there is currently no commercially available means to comply with the regulation. Hence, it is unlikely that anyone will be able to comply with the 2020 At-berth Regulation timeline. Shore Terminals and Ultramar reserve the right to continue to evaluate technologies as they become available. Even as technologies become available they must be approved by multiple agencies before they can be implemented to comply with the regulation. Once an available strategy has been identified and received all required approvals, Ultramar and Shore Terminals will update this plan and provide it to the Port. Shore Terminals and Ultramar also reserve the right to evaluate all innovative compliance options as the terminal continues to plan for CARB compliance.

2.1 CAECS (CARB Approved Emission Control System) – once one is approved

Identification and description of all necessary equipment:

Equipment:	Location:
1. CAECS	1. Berth 163

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

As there is currently no commercially available means to comply with the regulation, it is not known what vessels will use which specific strategy annually. Vessel traffic for 2019 was as follows:

Shore Terminals: 23 tankers

Ultramar: 41 tankers

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

As there is currently no commercially available means to comply with the regulation, it is not known what vessels will use which specific strategy annually. Vessel traffic for 2019 was as follows:

Shore Terminals: 23 tankers

Ultramar: 41 tankers

Berths where equipment will be used:

1. Berth 163

Schedule for installing equipment:

Project:	Estimated Completion Date:
1. CAECS	1. Dependent on CARB certification date

3. TERMINAL OPERATOR/PORT BERTHING RESTRICTIONS

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

Berthing restrictions are regulated by the existing MOTEMS terminal operating limits.

4. DIVISION OF ROLES AND RESPONSIBILITIES

Division of responsibilities for enacting infrastructure:

Port:

- Provide equipment or necessary infrastructure at terminal as negotiated by the parties
- Responsibility of uncontrolled emissions due to construction as negotiated by the parties
- Responsibility of uncontrolled emissions from repair of Port owned infrastructure/equipment as required by law

Terminal Operator:

- Initiation of construction through the Application for Port Permit (APP) process
- Provide equipment or necessary infrastructure at terminal as negotiated by the parties
- Responsibility of uncontrolled emissions due to construction as negotiated by the parties
- Responsibility of uncontrolled emissions from repair of Terminal owned infrastructure/equipment as required by law

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

None.

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:	Title:
Michael DiBernardo	Deputy Executive Director

Port: Port of Los Angeles

Signature:	Date:
Michael DiBernardo	11/15/2021

5. SIGNATURES

By signing below, the terminal'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.

Shore Terminals LLC Name: Jerome Jackson Title: GM Pipeline & Terminal Operations, West Coast, for Shore Terminals LLC

Signature: _____ Date: 11/4/2021

Ultramar, Inc. Name: Ui An for Mark Phair Title: Director Technical Services

Signature: _____ Date: 11/4/21

ATTACHMENT H

PBF Energy – Southwest Terminal
At-Berth Terminal Plan, Initial Submission

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: Steve Brett	
Phone Number: (310) 241-5028	Email: steve.brett@pbfenergy.com
Berths Included in this Plan: Name: 1. LA – B238 2. LA – B239	Approximate Geographic Boundary Coordinates:* 3. 33°43'04.47 N, 118°16'24.99 W 4. 33°43'59.41 N, 118°16'22.28 W
**The number of berths on a terminal and the spatial positioning of berths are dependent on vessel size; thus, the geographic boundary coordinates are approximates only.*	
2. STRATEGY DETAILS	
Strategy/strategies used to comply with the requirements for ocean-going vessels visiting each berth: 1. No controls are planned; 193130.10 (a)(2) Terminal Exceptions / Low Activity Terminal.	
2.1 [Strategy 1]	
Identification and description of all necessary equipment: Equipment: 1. None - Terminal Exception / Low Activity Terminal	Location: 1. 33°43'04.47 N, 118°16'24.99 W
Number of vessels expected to use this strategy (annual): 19	
Berths where equipment will be used: 1. N/A	
Schedule for installing equipment: Project: 1. None - Terminal Exception / Low Activity Terminal.	Estimated Completion Date: 1. N/A
2.2 [Strategy 2, if needed]	
Identification and description of all necessary equipment: Equipment: 1. If technically feasible, the control equipment could consist of:	Location: 1. 33°43'04.47 N, 118°16'24.99 W

a. a barge-based emissions capture unit consisting of a barge mounted, crane/boom, stack adaptor, and flexible ducting: or
b. Barge-based emissions control system including inlet ducting, treatment system, exhaust fan, and power supply to meet terminal maximum flow rates.

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

Berths where equipment will be used:

Not Applicable

Schedule for installing equipment:

Project:	Estimated Completion Date:
Not Applicable	Not applicable at this time but ultimately would be dependent on availability of equipment verses demand in the Port of Los Angeles.

3. TERMINAL/PORT BERTHING RESTRICTIONS

Are there any terminal or port specific berthing restrictions? If yes, please describe.
[May include requirements to berth starboard- or port-side, channel constrictions, etc.]

All vessels must currently moor port side to the berth. If technically feasible, barge-based systems would sit at Starboard side and Aft of the vessel due to traffic in the main channel. We are currently evaluating the draft DNV-GL Technology Assessment for technical feasibility of potential emission control equipment and safety mitigations for risks associated with barges operating and/or moored alongside a ship actively loading or unloading hazardous cargos.

3. DIVISION OF ROLES AND RESPONSIBILITIES

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

Terminal:

- Initiation of construction through the Application for Port Permit (APP) process
- If technically feasible, provide equipment or necessary infrastructure at terminal as

• 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 • Responsibility of uncontrolled emissions due to construction as determined by the Terminal's Permit (lease) with the Port •
Are there any contractual limitations applicable to the terminal relevant to enacting the infrastructure? If yes, describe. No
Port approval of responsibilities: By signing below, the port's responsible officer confirms that he/she has reviewed the division of responsibilities and agrees to them under penalty of perjury. Name: Michael DiBernardo Title: Deputy Executive Director Port: Port of Los Angeles Signature: Michael DiBernardo Date: 11/15/2021

4. SIGNATURES
By signing below, the terminal'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: Joshua Briscoe Title: Area Manager Signature: Date: 9-29-2021

ATTACHMENT I

Shell Mormon Island -Berths 167-169
At-Berth Terminal Plan

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: Lee Cheatham

Phone Number: 832.337.7040	Email: Lee.Cheatham@SHELL.com

Berths Included in this Plan: ***Shell Mormon Island Terminal***

Name:

15. Berth 168

Approximate Geographic Boundary Coordinates:*

1. Latitude 33 degrees 45.242 minutes N
   Longitude 118 degrees 16.072 minutes W

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

2. STRATEGY DETAILS

Strategy/strategies used to comply with the requirements for ocean-going vessels visiting each berth:

1. CARB Approved Emission Capture and Control Equipment (barge or land based to be determined)
2. Innovative Concept- Use of CAECS to control non-regulated OSV emissions to develop emissions credits. These credits would be available for use in situations where the tanker emissions could not be controlled due to availability of CAECS operator, tanker stack configuration, etc.

2.1 **[Strategy 1]**

Identification and description of all necessary equipment:

Equipment:

1. CAECS Third Party operator provided emission capture and control equipment

Location:

1. Berth 168

Number of vessels expected to use this strategy (annual): 100

Berths where equipment will be used:

1. Berth 168

Schedule for installing equipment:

Project:

1. Tanker Capture and Control Equipment

Estimated Completion Date:

1. Contingent upon technology development for safe tanker operations and certified by CARB

2.2 **[Strategy 2, if needed]**

Identification and description of all necessary equipment:

Equipment:	Location:
1. CAECS Third Party operator provided emission capture and control equipment	1. Various locations in Port

Number of vessels expected to use this strategy (annual): 20

Berths where equipment will be used:

1. Oil Terminals
2. Anchorage
3. Bulk Terminals

Schedule for installing equipment:

Project:	Estimated Completion Date:
2. Tanker Capture and Control Equipment	2. Contingent upon technology development for safe tanker operations and CARB certification

3. TERMINAL/PORT BERTHING RESTRICTIONS

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

If a barge based CAECS is used, CAECS Equipment will be located aft of the stern or along starboard side of tanker. For larger tankers 50- 80K DWT tankers, CAECS Equipment may impinge on Rio Tinto lease or navigation lines in the channel.

4. DIVISION OF ROLES AND RESPONSIBILITIES

Division of responsibilities for enacting infrastructure:

Port:

- 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 infrastructure/equipment

Terminal:

- Initiation of construction through the Application for Port Permit (APP) process
- 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 Terminal owned infrastructure/equipment

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

Tanker Berthing is currently restricted by pilots to port side docking which does not allow for the use of waterfront at B169 for CAECS equipment placement. For larger vessels, placing the CAECS equipment aft of the stern or starboard side may cause the equipment to impinge on navigation or Rio Tinto Lease lines.

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

Name: Michael DiBernardo	Title: Deputy Executive Director
Port: Port of Los Angeles	
Signature: Michael DiBernardo	Date: 11/16/2021

5. SIGNATURES

By signing below, the terminal'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: Lee Cheatham	Title: Distribution Operations Manager
Signature: Lee Cheatham	Date: November 16, 2021

ATTACHMENT J

TraPac
At Berth Terminal Plan

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: Bana James/Bill Schopp

Phone Number:	Email:

Berths Included in this Plan:

Name:	Approximate Geographic Boundary Coordinates:*
1. Berth 139	1. 33.766635N Lat., 118.273935W Long
2. Berth 144	2. 33.764030N Lat., 118.271832W Long
3. Berth 147	3. 33.760748N Lat., 118.273076W Long

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

2. STRATEGY DETAILS

Strategies used to comply with the requirements for ocean-going vessels visiting each berth:

1. AMP- The primary strategy for compliance by the terminal will be connection to shore-side power. All berths operated by TraPac have been equipped with AMP vaults, as indicated in Section 2.1 below. TraPac will take all necessary and reasonable steps within its control to ensure the berth is ready and available to connect all vessels to shore power.

   Note that some vessels are not equipped with AMP capabilities onboard, so the shipping line has acquired AMP containers to enable the vessel to connect to shore power. These containers are stored on the terminal property, and TraPac will assist the vessel in loading the container onto the vessel. The vessel is responsible for connecting the AMP container to the vessel.
2. Bonnet Barge- For those vessels that are not equipped with the ability to connect to shore power and when an AMP container is not available, and for which CARB has approved use of this CAESC strategy, the Bonnet Barge may be utilized. While it is the primary responsibility of the vessel to arrange for this service, TraPac will assist the vessel in acquiring and connecting to the barge, if necessary and agree to by the parties.

2.1 **[Strategy 1]**

Identification and description of all necessary equipment:

Equipment:	Location:
1. AMP Vault	1. Berth 139 710’ mark
2. AMP Vault	2. Berth 139 938’ mark
3. AMP Vault	3. Berth 139 1214’ mark
4. AMP Vault	4. Berth 139 1718’ mark
5. AMP Vault	5. Berth 144 890’ mark
6. AMP Vault	6. Berth 144 1096’ mark
7. AMP Vault	7. Berth 147 2203’ mark

8. AMP Vault 9. AMP Vault 10. AMP Vault	8. Berth 147 2483' mark 9. Berth 147 2716' mark 10. Berth 147 2945' mark
Number of **vessels** expected to use this strategy (annual): 40	
Number of vessel **visits** expected to use this strategy (annual): 90	
Berths where equipment will be used: 1. 139 2. 144 3. 147	
Schedule for installing equipment: None, all equipment is in place. Project: N/A	Estimated Completion Date: N/A
2.2 **[Strategy 2, if needed]**	
Identification and description of all necessary equipment: Equipment: 1. Bonnet Barge	Location: 1. Stored location is berth 136
Number of **vessels** expected to use this strategy (annual): 15	
Number of vessel **visits** expected to use this strategy (annual): 20	
Berths where equipment will be used: 1. 139 2. 144 3. 147	
Schedule for installing equipment: N/A Project:	Estimated Completion Date:

3. TERMINAL OPERATOR/PORT BERTHING RESTRICTIONS

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

Some vessels must berth starboard or port-side to facilitate AMP. Locations of AMP connections on board varies from ship to ship however vault locations are fixed. TraPac is unable to use AMP extension cords to connect a vessel, as currently the Port of LA has not approved anyAMP extension cords for TraPac.

TraPac assigns a vessel arrival time to ensure a trained ILWU crew is available to connect the vessel to shore power. The vessel then arranges 3rd party tug services to assist the vessel in berthing. Harbor tug shortages may impact vessel arrival as well as departure times. If a vessel misses the connection window, it may conflict with automation at the berth and thus impact AMP connection or disconnection.

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Vessel arrival times may conflict with gang availability times to load AMP containers (see contractual limitations below).

The terminal must await POLA staff to facilitate AMP connection. (See contractual limitations, below.)

The terminal is obligate to utilize power supplied power. (See contractual limitations, below.) If there is a power outage, or in the case of a Governor's Executive Order requiring to a reduction in electricity usage, the terminal will not be able to provide a shore power connection.
If vessel is too tall or too wide, cannot use Bonnet Barge.

4. DIVISION OF ROLES AND RESPONSIBILITIES

Division of responsibilities for enacting infrastructure:
https://www.portoflosangeles.org/environment/environmental-documents

Port:
Provides functional berths and ensures a reliable supply of electricity for AMP use
Constructs and maintains equipment to supply electricity AMP vaults
Provides qualified staff to provide timely hook up of AMP equipment
Provides alternative CAESC when port construction interferes with berth availability and/or electricity supply

Terminal Operator:
Provides the AMP vault infrastructure for vessel plug-in.
Provides ILWU labor to load and unload AMP containers.
Provides ILWU labor to perform vessel plug-in.
Coordinate vessel operator with POLA AMP connection staff.
Coordinate vessel operator with Bonnet Barge, when feasible.
Provides alternative CAESC when terminal construction interferes with berth availability

Vessel:
Ensure vessel crew are fully trained for AMP processes.
Engage outside consultant when training required.
Have crew on hand for all vessel plug/unplug.
Ensure all vessels systems have been inspected and in good working order prior to arrival.
Engage tugboat services to meet designated arrival times.
Purchase and ensure AMP containers are available and in good working order.
Ensure Bonnet Barge services are properly arranged.

Are there any contractual limitations applicable to the terminal relevant to enacting the infrastructure? If yes, describe.
TraPac has contractual obligations to the ILWU regarding hours of availability and work stoppages. (See e.g., Pacific Coast Longshore Contract.)

Some vessel lines have arranged for AMP cable reel containers to be used on vessels that do not have built in cable reels. TraPac stores the AMP containers on site and will help to load the containers on

the vessel. The shipping lines are responsible for maintenance of the containers and connection to the vessel.

In accordance with Mitigation Measure MM AQ-6: Ship Measures - Alternative Maritime Power (AMP), of the TraPac EIR/EIS and the Port Environmental Compliance Plan, TraPac is required to use electrical power as supplied from the port. In addition, no connection to the Port power supply is allowed without the presence of Port Engineers. Thus, any failure of electrical power or delay in the attendance of Port Engineers is the responsibility of the Port. See MM AQ-6:

- Only AMP-Approved Vessels will be allowed to connect to Port AMP Infrastructure. Accordingly, only AMP-Approved Vessels will be allowed to register AMP hours for MM AQ-6 compliance.
- Notwithstanding the provision of MM AQ-18b, when AMP Approved Vessels call at the Terminal, such vessels shall exclusively utilize electrical power supplied by the Port AMP Infrastructure, as opposed to bunker or other fuels, while berthed at the Terminal."

TraPac is obligated to use port engineers to connect the vessel to the AMP vault pursuant to in accordance with Exhibit L 1.4.B to Permit No. 881.

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:	11/15/2021

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 TraPac's compliance strategy for the At Berth Regulation. TraPac understands this plan is subject to verification by CARB staff.

Name:	BANA JAMES	Title:	VP Operations
Signature:	Bana James	Date:	Nov 15, 2021

ATTACHMENT K

Vopak Terminal Los Angeles
At Berth Terminal Plan

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: Michael LaCavera	
Phone Number: 310 549 0961	Email: michael.lacavera@vopak.com

Berths Included in this Plan:

Name:	Approximate Geographic Boundary Coordinates (Lat/Long):*
1. Berth 187-188	1. 33.766252 / -118.259959 to 33.764062 / -118.259786
2. Berth 189-190	2. 33.764062 / -118.259786 to 33.761149 / -118.259562

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

2. STRATEGY DETAILS

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

1. Other CARB-approved emission control strategy, using marine diesel exhaust capture & treatment similar to that currently being used, provided such maintains CARB certifications and is compatible with marine oil terminal operations. Final decision on equipment selected will be based only upon successful proof-of-concept testing underway.

2.1 Land-based exhaust capture & treatment

Identification and description of all necessary equipment:

Equipment:	Location:
1. Land-based exhaust capture & treatment	1. B187-188
2. Land-based exhaust capture & treatment	2. B189-190

Number of **vessels** expected to use this strategy (annual): 18

Number of vessel **visits** expected to use this strategy (annual): 112

Berths where equipment will be used:

1. Berth 187-188
2. Berth 189-190

Schedule for installing equipment:

Project:	Estimated Completion Date:
1. Land-based exhaust capture & treatment	1. January 1, 2025*
2. Land-based exhaust capture & treatment	2. January 1, 2025*

2.2 Barge-based exhaust capture & treatment (or in combination w/ 2.1)

Identification and description of all necessary equipment:

Equipment:	Location:
1. Barge-based exhaust capture & treatment	1. B187-188
2. Barge-based exhaust capture & treatment	2. B189-190

Number of **vessels** expected to use this strategy (annual): 18

Number of vessel **visits** expected to use this strategy (annual): 112

Berths where equipment will be used:

1. Berth 187-188
2. Berth 189-190

Schedule for installing equipment:

Equipment:	Estimated Completion Date:
1. Barge-based exhaust capture & treatment	1. January 1, 2025*
2. Barge-based exhaust capture & treatment	2. January 1, 2025*

3. TERMINAL OPERATOR/PORT BERTHING RESTRICTIONS

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

Land-based equipment requires berthing port-side-to at all locations. This is typically done to date but will be required when equipment is installed. All berthings must comply with MOTEMS regulations and VTLA Terminal Operating Limits. Land-based systems must be designated as intrinsically safe. A barge-based system will need a stand-off distance from the tanker at berth.

4. DIVISION OF ROLES AND RESPONSIBILITIES

Division of responsibilities for enacting infrastructure:

Port:

- 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 infrastructure/ equipment

Terminal Operator:

- Initiation of construction through the Application for Port Permit (APP) process
- 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 Terminal owned infrastructure/equipment

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

POLA and Vopak are currently in negotiations for lease extensions starting approximately Q1 2023. An Environmental Impact Report is underway to include the lease extension, MOTEMS upgrade project, and cement terminal projects. Any permanent equipment installations for exhaust capture may also need to be included in the EIR. The construction of any permanent land-based system must be coordinated with the MOTEMS Upgrade project scheduled to begin no earlier than Q1 2023.

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: 11/15/2021

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 Vopak Terminal Los Angeles compliance strategy for the At Berth Regulation. Vopak Terminal Los Angeles understands this plan is subject to verification by CARB staff.

Name: Michael LaCavera	Title: Managing Director
Signature:	Date: October 4, 2021

*Vopak is exploring the use of land-based capture and treatment systems, barge-based capture and treatment systems and a combination of both. The safety of the use of these systems on bulk liquid tankers handling hazardous materials needs to be established. The estimated completion dates listed above are contingent upon favorable results of a hazardous operations analysis, scheduled to start in 2022.

ATTACHMENT L

Wallenius Wilhelmsen Solutions
At-Berth Terminal Plan

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: Peter Bresnee

Phone Number: 310-847-4545 | Email: peter.bresnee@walwil.com

Berths Included in this Plan:

Name:	Approximate Geographic Boundary Coordinates:*
1. Berth 196-199	1. Lat: 33.7689 Lon: 118.2522

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

2. STRATEGY DETAILS

Strategy/strategies used to comply with the requirements for ocean-going vessels visiting each berth:

1. Shore Power emission control strategy using conventional power from LADWP

2.1 [Strategy 1]

Identification and description of all necessary equipment:

Equipment:	Location:
1. Underground conduit from power source	1. Substation to Wharf
2. Dual Voltage Switchgear & Transformer	2. Wharf
3. Moveable Power Connection Point	3. Wharf

Number of vessels expected to use this strategy (annual): 35~40

Berths where equipment will be used:

1. Berth 196-199

Schedule for installing equipment:

Project:	Estimated Completion Date:
1. Underground conduit from power source	1. Q3 2024
2. Dual Voltage Switchgear & Transformer	2. Q4 2024
3. Moveable Power Connection Point	3. Q1 2025

3. TERMINAL/PORT BERTHING RESTRICTIONS

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

All vessels required to berth starboard-side to.
Only one Berth will have power therefore scheduling FIFO starting 2025.

4. DIVISION OF ROLES AND RESPONSIBILITIES	
Division of responsibilities for enacting infrastructure:	
Port: Initiation of shore power construction including design and permits. Installation of all material for an end to end solution from LADWP substation to Vessel connection point.	Terminal: Inform Port when the PCC voltage requirements are agreed upon by the International community.
Are there any contractual limitations applicable to the terminal relevant to enacting the infrastructure? If yes, describe. As of 2021 there is no international standard regarding PCC voltage requirements.	
Port approval of responsibilities: By signing below, the port's responsible officer confirms that he/she has reviewed the division of responsibilities and agrees to them under penalty of perjury.	
Name: Michael DiBernardo	Title: Deputy Executive Director
Port: Port of Los Angeles	
Signature: Michael DiBernardo	Date: 11/15/2021

5. SIGNATURES	
By signing below, the terminal'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: Peter Bresnee	Title: General Manager Los Angeles VPC
Signature:	Date: 9/8/2021

ATTACHMENT M

Everglades Terminal (B126-121)
At Berth Terminal Plan

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:

Phone Number: 310 732-2456 | Email: giuseppena@wbct.us

Berths included in this Plan:

Name:	Approximate Geographic Boundary Coordinates:*
1. Berth 126	1. 450', 875'
2. Berth 121	2. 700', 125'

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

2. STRATEGY DETAILS

Strategy used to comply with the requirements for ocean-going vessels visiting each berth:
Everglades plans to provide shore power connection.

2.1 [Strategy 1]

Identification and description of all necessary equipment:

Equipment:	Location:
Shore power AMP connection	Located on berth dock

Number of vessels expected to use this strategy (annual): 100

Number of vessel visits expected to use this strategy (annual): 100

Berths where equipment will be used:

1. Berth 126
2. Berth 121

Schedule for installing equipment:

Project:	Estimated Completion Date:
1. Shorepower Connection	1. Completed

3. TERMINAL OPERATOR/PORT BERTHING RESTRICTIONS

Are there any terminal or port specific berthing restrictions?

No vessels larger than 6500 TEU can call to berth 126 because of overall length.
No vessels larger than 4600 TEU can call to berth 121 because of overall length.

4. DIVISION OF ROLES AND RESPONSIBILITIES

Division of responsibilities for enacting infrastructure:

Port:

- **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 Responsibilities

- **Initiation of construction through the Application for Port Permit (APP) process**
- **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 Terminal owned shore power infrastructure/equipment**

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

N/A

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: 11/15/2021

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: Giuseppe Napoli	Title: Terminal Manager
Signature:	Date: 11/3/21

In line with the Management Agreement between Everglades Company Terminal, Inc ("ECT") and West Basin Container Terminal LLC ("WBCT"), dated October 16, 2021, WBCT was appointed as operator for the operation of the facility under Permit 953.
ECT, as Tenant of Permit 953, hereby authorizes WBCT to represent ECT for the purpose of submitting this At Berth Terminal Plan for Berths 126 - 121.

Tom Van Eynde
President Everglades Company Terminal, Inc

ATTACHMENT N

YUSEN TERMINALS LLC
At Berth Terminal Plan

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: KEN FLETCHER	
Phone Number: 310-427-2295	Email: KFLETCHER@YTI.COM
Berths Included in this Plan:	
Name:	Approximate Geographic Boundary Coordinates:*
1. TI212	1. 33.45.35N 118.15.24W
2. TI214	2. 33.45.25N 118.15.36W
3. TI218	3. 33.45.12N 118.15.49W
**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. AMP- The primary strategy for compliance by the terminal will be connection to shore-side power. All berths operated by Yusen have been equipped with AMP vaults, as indicated in Section 2.1 below. Yusen will take all necessary and reasonable steps within its control to ensure the berth is ready and available to connect all vessels to shore power.
2. Note that some vessels are not equipped with AMP capabilities onboard, so the shipping line has acquired AMP containers to enable the vessel to connect to shore power. These containers are stored on the terminal property, and Yusen will assist the vessel in loading the container onto the vessel. The vessel is responsible for connecting the AMP container to the vessel.

Bonnet Barge- For those vessels that are not equipped with the ability to connect to shore power and when an AMP container is not available, and for which CARB has approved use of this strategy, the Bonnet Barge may be utilized. While it is the primary responsibility of the vessel to arrange for this service, Yusen will assist the vessel in connecting to the barge, if necessary and agreed to by the parties.

2.1 [Strategy 1]

Identification and description of all necessary equipment:

Equipment:	Location:
1. AMP VAULTS QTY 2	1. TI212
2. AMP VAULTS QTY 4	2. TI214
3. AMP VAULTS QTY 3	3. TI218

Number of **vessels** expected to use this strategy (annual): 156

Number of vessel **visits** expected to use this strategy (annual): 141

Berths where equipment will be used:

1. TI212
2. TI214
3. TI218

Schedule for installing equipment: N/A

1.

2.2 [Strategy 2, if needed]

Identification and description of all necessary equipment: N/A

Equipment:	Location:
1. Bonnet Barge	1. Stored location is berth 136

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

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

Berths where equipment will be used:

1. TI212
2. TI214
3. TI218

Schedule for installing equipment: N/A

1.

3. TERMINAL OPERATOR/PORT BERTHING RESTRICTIONS

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

Some vessels must berth starboard or port-side to facilitate AMP. Locations of AMP connections on board varies from ship to ship however vault locations are fixed.
Yusen assigns a vessel arrival time to ensure a trained ILWU crew is available to connect the vessel to shore power. The vessel then arranges 3rd party tug services to assist the vessel in berthing. Harbor tug shortages may impact vessel arrival as well as departure times.

Vessel arrival times may conflict with gang availability times to load AMP containers (see Contractual limitations below).

The terminal must await POLA staff to facilitate AMP connection. (See Contractual limitations, below.)

The terminal is obligate to utilize power supplied power. (See contractual limitations, below.) If there is a power outage, or in the case of a Governor's Executive Order requiring to a reduction in electricity usage, the terminal will not be able to provide a shore power connection.
If vessel is too tall or too wide, cannot use Bonnet Barge.

4. DIVISION OF ROLES AND RESPONSIBILITIES

Division of responsibilities for enacting infrastructure: TBD

Port:

Provides the AMP vault infrastructure for vessel plug ins

Provides functional berths with supply of electricity for AMP use
Provides qualified staff to provide timely hook up of AMP equipment

Terminal Operator:
Provides ILWU labor to load and unload AMP containers.
Provides ILWU labor to perform vessel plug-in.
Coordinate vessel operator with POLA AMP connection staff.
Assist vessel operator with Bonnet Barge, when feasible.

Vessel:
Ensure vessel crew are fully trained for AMP processes.
Engage outside consultant when training required.
Have crew on hand for all vessel plug/unplug.
Ensure all vessels systems have been inspected and in good working order prior to arrival.
Engage tugboat services to meet designated arrival times.
Purchase and ensure AMP containers are available and in good working order.
Ensure Bonnet Barge services are properly arranged.

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

Yusen has contractual obligations to the ILWU regarding hours of availability and work stoppages. (See e.g. Pacific Coast Longshore Contract)

Some vessel lines have arranged for AMP cable reel containers to be used on vessels that do not have built in cable reels. Yusen stores the AMP containers on site and will help to load the containers on the vessel. The shipping lines are responsible for maintenance of the containers and connection to the vessel.

Yusen is required to use electrical power as supplied from the Port of Los Angeles. In addition, no connection to the Port of Los Angeles power supply is allowed without the presence of Port Engineers. Thus, any failure of electrical power or delay in the attendance of Port Engineers is the responsibility of the Port.

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:	11/15/2021

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: Ken Fletcher	Title: General Manager - SSE
Signature:	Date: 11/11/21

Los Angeles World Cruise Center
At Berth Terminal/Port Plan

This terminal/port plan has been prepared pursuant Sections 93130.14(a)(3) and 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.

1. GENERAL INFORMATION

Terminal Contact Name: Amber Coluso

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

Berths Included in this Plan:

Name:	Approximate Geographic Boundary Coordinates:*
1. Berth 90-92	1. 33°44'44.0"N, 118°16'33.5"W
2. Berth 93A-C	2. 33°44'52.0"N, 118°16'37.5"W

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

2. STRATEGY DETAILS

Strategy used to comply with the requirements for ocean-going vessels visiting each berth:

1. Shore Power connections to cruise ships using managed cable systems

2.1 **Strategy 1 – Shore Power**

Identification and description of all necessary equipment:

Equipment:	Location:
1. Two 11 kV vaults	1. Berth 91
2. One 11 kV vault	2. Berth 93A
3. One 11 kV vault	3. Berth 93B
4. One 6 kV vault	4. Berth 93A
5. One 6 kV vault	5. Berth 93B
6. One 6.6 kV mobile connection unit	6. Berths 90-93C
7. Two 11 kV mobile connection units	7. Berths 90-93C

Number of **vessels** expected to use this strategy (annual): 60

Number of vessel **visits** expected to use this strategy (annual): 115

Berths where equipment will be used:

1. B90-92
2. B93A-C

Schedule for installing equipment:

All equipment is in place and no other improvements are necessary at this time to achieve compliance.

3. TERMINAL OPERATOR/PORT BERTHING RESTRICTIONS

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

No port specific berthing restrictions.

4. DIVISION OF ROLES AND RESPONSIBILITIES

Division of responsibilities for enacting infrastructure:

There are no division of responsibilities as the Port of Los Angeles is the port authority and the terminal operator of the Los Angeles World Cruise Center.

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

Not Applicable

5. SIGNATURE OF TERMINAL OPERATOR & PORT AUTHORITY

By signing below, the Port of Los Angeles, as the Port Authority and Terminal Operator, confirms under penalty of perjury that he/she has reviewed this At Berth Terminal Plan and is submitting this At Berth Terminal and Port Plan as the Los Angeles World Cruise Center compliance strategy for the At Berth Regulation. The Los Angeles World Cruise Center understands this plan is subject to verification by CARB staff.

Name: Michael DiBernardo	Title: Deputy Executive Director
Signature: Michael DiBernardo	Date: 11/15/2021