

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: <i>Shell Mormon Island Terminal</i>	
<u>Name:</u> 15. Berth 168	<u>Approximate Geographic Boundary Coordinates:</u> 1. Latitude 33 degrees 45.242 minutes N Longitude 118 degrees 16.072 minutes W
<i>*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.</i>	
2. STRATEGY DETAILS	
Strategy/strategies used to comply with the requirements for ocean-going vessels visiting each berth:	
<ol style="list-style-type: none"> 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]	
<i>Identification and description of all necessary equipment:</i>	
<u>Equipment:</u> 1. CAECS Third Party operator provided emission capture and control equipment	<u>Location:</u> 1. Berth 168
Number of vessels expected to use this strategy (annual): 100	
<i>Berths where equipment will be used:</i> 1. Berth 168	
<i>Schedule for installing equipment:</i>	
<u>Project:</u> 1. Tanker Capture and Control Equipment	<u>Estimated Completion Date:</u> 1. Contingent upon technology development for safe tanker operations and certified by CARB
2.2 [Strategy 2, if needed]	
<i>Identification and description of all necessary equipment:</i>	

<p><u>Equipment:</u></p> <ol style="list-style-type: none"> 1. CAECS Third Party operator provided emission capture and control equipment 	<p><u>Location:</u></p> <ol style="list-style-type: none"> 1. Various locations in Port 		
<p>Number of vessels expected to use this strategy (annual): 20</p>			
<p><i>Berths where equipment will be used:</i></p> <ol style="list-style-type: none"> 1. Oil Terminals 2. Anchorage 3. Bulk Terminals 			
<p><i>Schedule for installing equipment:</i></p> <table style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> <p><u>Project:</u></p> <ol style="list-style-type: none"> 2. Tanker Capture and Control Equipment </td> <td style="width: 50%; vertical-align: top;"> <p><u>Estimated Completion Date:</u></p> <ol style="list-style-type: none"> 2. Contingent upon technology development for safe tanker operations and CARB certification </td> </tr> </table>		<p><u>Project:</u></p> <ol style="list-style-type: none"> 2. Tanker Capture and Control Equipment 	<p><u>Estimated Completion Date:</u></p> <ol style="list-style-type: none"> 2. Contingent upon technology development for safe tanker operations and CARB certification
<p><u>Project:</u></p> <ol style="list-style-type: none"> 2. Tanker Capture and Control Equipment 	<p><u>Estimated Completion Date:</u></p> <ol style="list-style-type: none"> 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