

At Berth Frequently Asked Questions

Substantive changes to this document (first published in November 2021) are noted throughout in green text.

Revised January 9, 2023

Table of Contents

At Berth Frequently Asked Questions	1
Introduction and Disclaimer	7
General Questions & Applicability	7
1. What is this FAQ document, and how should I use it?	7
2. Why did CARB develop the 2020 At Berth Regulation?	8
3. How is the 2020 Regulation different from the 2007 At-Berth Regulation?	8
4. Who must comply with the 2020 Regulation?	8
5. When do requirements for the 2020 Regulation begin?	9
6. Do any requirements of the 2007 Regulation remain in effect past January 1, 2021?	10
7. How are regulated entities expected to comply with the 2020 Regulation?	10
8. What happens if a vessel cannot connect to shore power or another CAECS?.....	11
9. Who is responsible for providing shore-side emissions control equipment and/or infrastructure?	11
10. What is the trigger for adding a new terminal into the 2020 Regulation?.....	11
11. Are vessel operators required to submit compliance plans to CARB?.....	12
12. Can regulated entities rely on commercial arrangements with third-party CAECS operators to meet the requirements of the 2020 Regulation?.....	12
Vessel Operator Requirements	12
13. What is a vessel operator?.....	12
14. Which vessels are required to control emissions at berth?	13
15. Do bulk and general cargo vessel operators have any obligations under this Regulation?	13
16. What defines a vessel fleet and a vessel fleet operator?.....	13
17. What defines a “visit”?.....	13
18. Can a vessel without shore power visit California?	14
19. If a vessel has shore power, is it required to use shore power during a visit to a regulated terminal?.....	14
20. Does a vessel have to use shore power or a capture and control system to comply with the 2020 Regulation?	14
21. What if a vessel cannot control emissions while at berth?.....	14
22. What are the compliance options for a non-shore power vessel that needs to call a terminal that has no CAECS?.....	15
23. What if a vessel has to commission shore power equipment during a visit to a regulated terminal?.....	15
24. What is required of regulated vessel operators?.....	15
25. What is the compliance checklist for vessel operators?	16
26. How long does a vessel have to connect and disconnect to shore power?.....	16
27. Can a vessel use onboard technologies to comply with the 2020 Regulation?	16

28. Can vessels change which compliance option they will be using after a terminal/port plan is submitted?.....	17
29. Are fleets required to submit vessel fleet plans?.....	17
30. Does a vessel need to reduce emissions if it is at a lay berth for repair or equipment installation?	17
31. Who is responsible for compliance if a vessel’s shore power equipment cannot be commissioned?.....	17
32. What happens if a vessel operator brings a vessel with an 11 kilovolt (kv) shore power connection to a regulated California marine terminal, but that terminal has only a 6.6kv connection?.....	18
Terminal Operator and Port Requirements.....	18
33. Do all California terminal operators have requirements under the 2020 Regulation?.....	18
34. What defines a berth?	18
35. What is required of affected terminal operators under the 2020 Regulation?	19
36. What is the compliance checklist for terminal operators?	19
37. Why do terminals and ports have obligations to reduce emissions if the vessels are the source of the emissions?.....	19
Port Requirements	19
38. Do all California ports have requirements under the 2020 Regulation?	19
39. What are a port’s obligations under the 2020 Regulation?.....	19
40. Are ports required to submit annual Wharfinger data?.....	20
CARB Approved Emissions Control Strategy (CAECS) Operator Requirements.....	20
41. What is a CARB Approved Emission Control Strategy?	20
42. Who is considered a CAECS operator?	20
43. What is required of a CAECS operator under the 2020 Regulation?.....	21
44. When are CAECS test plans required to be submitted to CARB?	21
45. What is the default emission rate baseline used for auxiliary engines on ocean-going vessels?	21
46. What is the default emission rate baseline for ocean-going tanker vessel auxiliary boilers?	21
47. What are the emission rates that must be achieved for a CAECS to be approved for use for compliance with the 2020 Regulation?.....	21
48. Can a vessel achieve compliance with the 2020 Regulation by using cleaner technologies onboard?.....	22
49. Would applications submitted for CAECS prior to 2023 have to meet the new Regulation’s ROG and greenhouse gas (GHG) neutral requirement or would they fall under the 2007 Regulation requirements?	22
50. How can an applicant test for ROG emissions on alternative fuels?	22
51. How does CARB determine if a CAECS meets the grid-neutral requirement?	22
52. Where can a CAECS operator find the carbon intensity of standard fuel if the operator decides to use a fuel with a CARB Low Carbon Fuel Standard certified pathway to apply a reduction to CO ₂ E?.....	23
53. What are the steps CAECS operators must follow to get an emissions reductions technology approved by CARB?.....	23
54. Can an identical CAECS system be built without a CAECS operator having to seek a separate approval?.....	23

55. What are CAECS operator reporting and recordkeeping obligations?	24
56. What do CAECS operators do if there is an equipment malfunction while servicing a vessel for compliance with the 2020 Regulation?	24
57. If a company is undergoing an Executive Order approval process for a CAECS, can their vessels use that system for compliance under the 2007 or 2020 Regulations while it is undergoing testing for durability and capture efficiency?.....	24
Exceptions and Remediation	24
58. What circumstances qualify for an exception, VIE/TIE, or remediation fund use?.....	24
59. What is a safety and emergency event and how do they impact compliance?	24
60. Do utility power shutoffs count as a safety or emergency event?.....	25
61. How is compliance handled during a utility power shutoff?.....	25
62. How is compliance handled if a utility blackout causes equipment damage at the terminal and/or onboard a vessel?	26
63. What happens when labor delays prevent a vessel from connecting to shore power or another CAECS?.....	26
64. What happens if the operator/equipment for a scheduled CAECS does not show up?	26
65. What if there are delays in equipment installation or construction (including permitting or equipment delivery delays, etc.)?	26
66. Who is required to use a VIE/TIE or pay remediation fees in the event a vessel cannot connect to a CAECS?.....	27
Vessel and Terminal Incident Events.....	27
67. What are Vessel Incident Events (VIE) and Terminal Incident Events (TIE)?.....	27
68. What is a vessel fleet?	27
69. How does a vessel fleet register with CARB?	27
70. How are VIEs/TIEs calculated?	28
71. How many VIEs/TIEs does a vessel fleet/terminal get each year?.....	28
72. When will vessel and terminal operators know how many VIEs or TIEs they have to use?.....	28
73. Are VIEs/TIEs port specific?.....	29
74. Do VIEs/TIEs expire?.....	29
75. Can terminal and vessel operators request additional VIEs/TIEs?.....	29
76. Can vessel or terminal operators request additional VIEs and TIEs for a current calendar year if a new vessel fleet starts calling a regulated California terminal mid-year?	30
77. Will CARB consider using a different baseline year for calculating VIEs and TIEs for the initial compliance year in order to account for lower than normal visits experienced by vessel fleets in 2021 due to COVID-related port congestion and labor shortages?.....	30
78. How do vessel and terminal operators report use of a VIE or TIE?.....	31
79. How will the use of VIEs/TIEs be assessed for accuracy?	31
Remediation Fund	31
80. What is the remediation fund?.....	31

81. Who can use the remediation fund?	31
82. What circumstances would qualify for use of the remediation fund?	31
83. How does a regulated entity apply to use the remediation fund?	32
84. How is the remediation fund calculated?.....	32
85. What pollutants are used to calculate the remediation fund hourly rate?	32
86. If a vessel does not have shore power and no alternative CAECS is available at a port, could the remediation fund be used for compliance?	32
Remediation Fund Administrator	33
87. What is a remediation fund administrator?.....	33
88. How does an entity become a remediation fund administrator?	33
89. Could one entity act as Remediation Fund administrator for all of California?	33
90. What are the obligations of a remediation fund administrator?	33
91. What projects would qualify for funding through use of the remediation fund and where must those projects be located?	34
92. Can remediation funds be administered as part of an existing incentive program?	34
93. Can remediation funds be combined with other funds to complete a project?	34
94. What if no applicants are approved to be a remediation fund administrator for a port or independent marine terminal? Can the remediation fund be used as a compliance method if there is no administrator established?	34
95. What emission reductions are required for projects to be eligible for funding?	35
96. Where can projects be funded?	35
97. What if there are no projects in the region that qualify?.....	35
98. What percentage of the remediation funds collected can the administrator retain for administration expenses?	36
99. Does the 10 percent for administration expenses come out of the total amount of funds collected or is it in addition to the amount of funds collected?.....	36
100. Does CARB intend to take a portion of the 10 percent for CARB’s administration process?	36
101. Who will be responsible for enforcement of the remediation fund?.....	36
Reporting Requirements	36
102. Who is required to report and how often?	36
103. Why do both ports and terminals have reporting requirements?	36
104. What visit information are vessel operators required to report to CARB?	37
105. What visit information are terminal operators required to report to CARB?.....	37
106. How long do vessels and terminal operators have to report visit information?.....	37
107. How do vessel and terminal operators submit visit reports to CARB?.....	37
108. How do I report an emergency or safety event?	37
109. How do I report use of a VIE/TIE?	37
110. How do I report use of the remediation fund?	37

111. How do I report use of an Innovative Concept?	38
112. If a vessel shifts to a new berth, when does the 30-day reporting requirement begin - on the shift from one berth to another or when the vessel departs the terminal completely?	38
113. Will there be a required or standardized reporting form or system on January 1, 2023?.....	38
114. What are recordkeeping requirements for vessels, terminals, ports, and operators of CAECS?.....	38
Port and Terminal Plans.....	38
115. What is a port plan?.....	38
116. What is a terminal plan?	39
117. Who is required to submit a port and/or terminal plan?	39
118. If a terminal’s berth operations are shared by multiple entities, who is responsible for submitting the port and/or terminal plan for the facility?	39
119. If a terminal operator operates more than one terminal at a port, does the operator need to submit a separate terminal plan for each terminal?.....	39
120. Should terminal operators and ports submit plans for a terminal that will not be in use by the implementation dates of the 2020 Regulation (i.e., the berths are being demolished or are no longer being used to berth regulated ocean-going vessels)?.....	40
121. Should ports provide information on behalf of a private marine terminal (if the port is not the landowner) as part of their port plan?.....	40
122. What does it mean to be a Responsible Official?	40
123. What information must be included in a port plan?	40
124. What information must be included in a terminal plan?.....	41
125. Why do Responsible Officials for both the terminal and port have to sign off on the division of responsibilities for port and terminal plans?	41
126. What kinds of berthing restrictions qualify as physical constraints in the 2020 Regulation (i.e., listed in terminal plan)?	41
127. When are port plans due?	42
128. When are terminal plans due?.....	42
129. If a port and/or terminal plan changes, is a revised plan needed?	42
130. What happens if port and/or terminal plan deadlines are not met?	43
131. What is the review process for port and terminal plans?.....	43
132. How does a regulated entity know if their port or terminal plan is approved?	43
133. Is there a CARB form available that can be used as a port or terminal plan?	43
134. How does a regulated entity submit a port or terminal plan?.....	43
Interim Evaluation	44
135. What is the Interim Evaluation?.....	44
136. What kind of information was analyzed during the Interim Evaluation?	44
137. How will CARB use the Interim Evaluation?	44
138. When was the Interim Evaluation made available for public review?.....	44

Innovative Concepts..... 44

139. What is the Innovative Concepts Compliance Option?..... 44

140. What level of emissions reductions must be achieved for an Innovative Concept project?..... 45

141. Is there a geographical limit to where an Innovative Concept can reduce emissions?..... 45

142. What kind of projects would be considered an Innovative Concept?..... 45

143. Who can use the Innovative Concepts Compliance Option? 46

144. How does a regulated entity report use of an Innovative Concept project for compliance?..... 46

145. Will CARB accept Innovative Concept applications now that the submittal deadline has passed? 46

146. What is the review process for the Innovative Concept? 46

147. How does an applicant know if an Innovative Concept application has been approved?..... 47

148. Are there annual reporting requirements for an Innovative Concept project?..... 47

149. How does an applicant estimate the vessel emissions covered under an Innovative Concept? 48

150. How will CARB ensure that Innovative Concepts projects are achieving the required emissions reductions? 48

151. How long are Innovative Concept project approvals good for? 48

152. What could result in an Innovative Concept compliance period not being extended?..... 48

153. What could result in an Innovative Concept being revoked by CARB? 49

154. Can reductions from an Innovative Concept be banked and used at a later date?..... 49

155. Can an Innovative Concept project be modified after approval? 49

156. Can CARB incentive funding or other funding sources be used to pay for an Innovative Concept project?..... 49

157. Do visits using an Innovative Concept count towards a vessel fleet’s VIEs or terminal’s TIEs? 49

158. Can visits using an Innovative Concept qualify to use the remediation fund?..... 50

Incentives..... 50

159. What incentive funding is available to support reducing vessel emissions at berth? 50

160. Where can I find more information on these programs?..... 50

Enforcement..... 50

161. What should I do if I know I will be in violation of the 2020 Regulation?..... 50

162. What is the policy or process for violations?..... 50

163. What is the penalty for not complying with the 2020 Regulation? 51

164. How does the timing associated with CARB’s U.S. EPA authorization request affect implementation of the At Berth Regulation?..... 51

Introduction and Disclaimer

The California Air Resources Board (CARB) has developed this Frequently Asked Questions (FAQ) document specific to the new At Berth Regulation (“2020 Regulation”), which appears in sections 93130 through 93130.22 of Title 17, California Code of Regulations.

Disclaimer: CARB staff has prepared this FAQ document to describe the regulatory requirements in a user-friendly format. Unlike the 2020 Regulation, this guidance document does not have the force of law. It is not intended to and cannot establish new mandatory requirements beyond those that are already in the 2020 Regulation, and it does not supplant, replace, or amend any of the legal requirements of the 2020 Regulation. Conversely, this document’s omission or truncation of regulatory requirements does not relieve any regulated entity (including a “responsible party” as defined in the 2020 Regulation) of their legal obligation to fully comply with all requirements of the 2020 Regulation and is not intended as a substitute for reading the 2020 Regulation.

CARB makes every effort to keep its documents up to date. However, CARB does not guarantee the accuracy of this document and shall not be responsible for any errors or omissions in content. CARB reserves the right to make changes without notice.

The latest revisions to this At Berth FAQ document were published on December 28, 2022. Both non-substantive and substantive changes were made to the document for clarity and guidance to address additional frequently asked questions that CARB staff have received since the publication of the original FAQ document. Additionally, several portions of this FAQ document have been revised to reflect that the application period for the Innovative Concepts closed on December 1, 2021, and no further applications will be accepted by CARB. Substantive changes to the document are noted throughout the document in green text.

You must ensure you have carefully reviewed and understand the 2020 Regulation, as reliance on this FAQ is not a substitute for understanding and complying with the requirements of the 2020 Regulation. Conformance with the 2020 Regulation requirements is the responsibility of each regulated entity, as applicable.

General Questions & Applicability

1. What is this FAQ document, and how should I use it?

CARB staff has prepared this FAQ document to describe the regulatory requirements of the new 2020 Regulation in a user-friendly format. It is not intended to and cannot establish new mandatory requirements beyond those that are already in the 2020 Regulation, and it does not supplant, replace, or amend any of the legal requirements of the 2020 Regulation.

Conversely, this document is not intended as a substitute for reading the 2020 Regulation and does not relieve any regulated entity’s legal obligation to fully comply with all requirements of the 2020 Regulation, which appears at sections 93130 through 93130.22 of Title 17, California Code of Regulations. You must ensure you have carefully reviewed and

understand the 2020 Regulation, as reliance on this FAQ is not a substitute for understanding and complying with the requirements of the 2020 Regulation.

2. Why did CARB develop the 2020 At Berth Regulation?

The purpose of the 2020 Regulation is to increase emissions reductions from ocean-going vessels (“vessels”) at berth in California ports to provide more air quality and health benefits to the people living and working in and around California’s busiest seaports (referred to in this FAQ document as “ports”).

3. How is the 2020 Regulation different from the 2007 At-Berth Regulation?

CARB built on the successful 2007 At-Berth Regulation (2007 Regulation) by expanding emissions control requirements to more vessels, including two new vessel categories: tanker and roll on-roll off (or “ro-ro”) vessels, and including new ports and terminals that serve these new vessel types. The 2020 Regulation will also further improve air quality and increase health benefits in port communities already covered under the 2007 Regulation by increasing the number of already-regulated vessel types (container, refrigerated cargo (“reefer”), and cruise vessels) subject to the 2020 Regulation by transitioning from a 25-visit fleet-based threshold to a more health-protective 20 visit terminal-based threshold.

The 2007 Regulation required a certain percentage of a fleet’s vessels to plug into shore power while at berth and only vessel operators had compliance obligations. With the 2020 Regulation, every container, reefer, cruise, ro-ro, and tanker vessel, and every regulated terminal operator will have an obligation to work together as necessary to meet the 2020 Regulation’s emissions reduction requirements on every single visit to any regulated terminal. Ports also have expanded responsibilities under the 2020 Regulation, including ensuring that any terminal customer operating at their port has the infrastructure needed to comply with the 2020 Regulation.

4. Who must comply with the 2020 Regulation?

Vessel operators, terminal operators, ports, and third-party CARB-Approved Emissions Control Strategy (CAECS) operators are all subject to the 2020 Regulation. (The 2020 Regulation also includes provisions relating to remediation fund administrators and Innovative Concept applicants.)

The following table identifies the primary regulated parties:

Regulated Party	Types
Vessel Operators*	All ocean-going vessels visiting any California marine terminal are subject to the 2020 Regulation; container, reefer, cruise, ro-ro, and tanker vessels have emissions control requirements under the 2020 Regulation.
Terminal Operators**	Any marine terminal in California receiving 20 or more visits from a regulated vessel category in any given calendar year.
California Ports	Any port with a regulated terminal is subject to the 2020 Regulation.

Regulated Party	Types
CAECS Operators	Any operator of a CAECS that is used to comply with the 2020 Regulation.

*All ocean-going vessels are subject to the 2020 Regulation, however, only container, refrigerated cargo, cruise, ro-ro, and tanker vessels have requirements to reduce emissions while at berth. For vessel categories not subject to emissions control requirements (e.g. bulk and general cargo vessels), vessel operators must still meet visit reporting and opacity obligations as required by the 2020 Regulation.

**Terminals that receive fewer than 20 vessel visits per calendar year in 2021 and 2022 are considered “low activity terminals”. If a low activity terminal sees an increase in vessel calls and has two consecutive years with 20 or more visits, they will become a regulated terminal for the purposes of this Regulation and must comply with all control and planning requirements.

5. When do requirements for the 2020 Regulation begin?

The 2020 Regulation took effect on January 1, 2021; however, emissions controls for the 2020 Regulation will not phase in until the following dates:

Compliance Start Date	Vessel Type
January 1, 2023	Container and refrigerated cargo vessels
January 1, 2023	Cruise (passenger) vessels
January 1, 2025	Roll-on roll-off vessels
January 1, 2025	Tanker vessels that visit the Ports of Los Angeles or Long Beach
January 1, 2027	All remaining tanker vessels

Reporting for all vessel types will begin January 1, 2023, regardless of whether a vessel or terminal has emissions control requirements. Government and military vessels are exempt from reporting and all other requirements of the Regulation.

A limited number of provisions in the 2020 Regulation, including certain provisions needed for planning, application, and approval purposes, would begin before January 1, 2023. These include, but are not limited to:

Provision	Location in Regulation	Effective Dates/ Description
CARB Approval of Emissions Control Strategies (CAECS)	Section 93130.5 (e) Application process (for a CAECS)	The provisions regarding applying for CAECS approval for compliance with the 2020 Regulation began January 1, 2021.
Terminal Plans	Section 93130.14 (a) Terminal Plans	Terminal plans were due for container, refrigerated cargo, cruise, ro-ro, and tanker terminals by December 1, 2021. Revised terminal plans are due for ro-ro and tanker terminals by: <ul style="list-style-type: none"> February 1, 2024 for all ro-ro terminals and all LA/LB tanker terminals February 1, 2026 for all other tanker terminals
Port Plans	Section 93130.14 (b) Port Plans	Port plans for container, refrigerated cargo, cruise, ro-ro,

Provision	Location in Regulation	Effective Dates/ Description
		and tanker terminals were due December 1, 2021.
Interim Evaluation	Section 93130.14 (d) Interim evaluation for new technologies and applications	CARB staff published their analysis and findings in a report that was made available for public review on December 1, 2022.
Approval of Entities to Administer a Remediation Fund	Section 93130.16 Remediation Fund Administration	The requirements for CARB approval of entities to administer a Remediation Fund begin January 1, 2021.
Application for Innovative Compliance Option	Section 93130.17 (b) Application and approval process (for the innovative concept compliance option)	Applications for container, refrigerated cargo, cruise, ro-ro, and tanker innovative concepts were due by December 1, 2021.

6. Do any requirements of the 2007 Regulation remain in effect past January 1, 2021?

All requirements of the 2007 Regulation will remain in effect for container, refrigerated cargo, and cruise vessels until January 1, 2023. A limited number of recordkeeping and reporting provisions in the Existing Regulation will extend through or past January 1, 2023.

These include, but are not limited to:

Provision	Location in Regulation	Description
Reporting and Recordkeeping Requirements	Reporting and recordkeeping requirements of section 93118.3 (g) of Title 17	Remains in effect for compliance years through December 31, 2022.
Annual Statements of Compliance	The annual statements of compliance for 2022 in section 93118.3 (g)(1)(A)(2) and (g)(2)(A)(3)	Due to the Executive Officer on March 1, 2023.
Wharfinger Data Reporting	Annual Wharfinger data from the ports under section 93118.3 (g)(3)	Due to the Executive Officer on April 1, 2023.
Compliance Recordkeeping	Recordkeeping of compliance records in section 93118.3 (g)(1)(B), (g)(2)(B), and (g)(3)(B)	Records required to be maintained for 5 years, through December 31, 2027.

7. How are regulated entities expected to comply with the 2020 Regulation?

Regulated entities can comply with the 2020 Regulation using any CAECS. This includes shore power, one of the capture and control systems currently approved for use with the 2007 Regulation, or a future CARB-approved shore- or vessel-based solution (including alternative fuels, etc.). If a vessel or terminal wishes to utilize a strategy for compliance with the 2020 Regulation that is not already approved for use with the 2007 Regulation, they must apply for CARB approval of that strategy as a CAECS by following the instructions in section 93130.5 of the 2020 Regulation.

Shore power is considered the “gold standard” in reducing emissions from ocean-going vessels in California and does not require any additional CARB approval to use for compliance with the 2020 Regulation.

8. What happens if a vessel cannot connect to shore power or another CAECS?

If a regulated vessel visiting a regulated California berth cannot connect to a CAECS, a Vessel or Terminal Incident Event (VIE or TIE) may be used to comply with the 2020 Regulation, or the vessel or terminal operator may apply to use the remediation fund if the lack of connection is due to a qualifying circumstance (as described in section 93130.15(b) of the 2020 Regulation). More information about VIEs/TIEs and the remediation fund can be found in the [Exceptions and Remediation](#) section of this document. A vessel/terminal may also comply with the 2020 Regulation using an approved Innovative Concept project. See the [Innovative Concepts](#) section of this document for more information about Innovative Concepts.

If a vessel and/or terminal operator does not comply with the 2020 Regulation through the direct reduction of emissions or the use of an exception, remediation fund, or an Innovative Concept project, an enforcement action may be taken. Please see the [Enforcement](#) section of this document for more information regarding enforcement of the 2020 Regulation.

9. Who is responsible for providing shore-side emissions control equipment and/or infrastructure?

Vessel operators, terminal operators, ports, and CAECS operators have shared obligations for reducing at berth emissions. Generally, terminals and ports will be responsible for installing shore-side emissions control equipment and/or infrastructure, while vessel operators are responsible for installing any necessary equipment onboard a vessel. The responsible party for shore-side installations will depend on how the terminal and port responsibilities are described in the terminal and port plans and how they are delineated in other agreements such as lease agreements. More information regarding terminal and port plans can be found in the [Port and Terminal Plans](#) section.

10. What is the trigger for adding a new terminal into the 2020 Regulation?

If a previously unregulated terminal receives 20 or more visits from a regulated vessel category for two consecutive years, that terminal will be considered a regulated terminal. Once a terminal has been classified as a regulated terminal, it will have emissions control requirements under the 2020 Regulation even if activity decreases below the threshold at any future point to ensure that investments made for infrastructure and emissions control systems do not become stranded assets. Terminals with fewer than 20 visits from a regulated vessel category are considered “low activity” and are exempt from the emissions control requirements of the 2020 Regulation.

If a terminal receives more than 20 visits for a calendar year, that one year (Year 1) exceedance triggers the obligation to submit a terminal plan to CARB by July 1 of the following year (Year 2) explaining how the terminal intends to comply with the At Berth

Regulation in the next calendar year (Year 3). If the terminal expects to receive fewer than 20 visits in Year 2, then the terminal operator may explain in their terminal plan that the chosen path to compliance is to remain below the visit threshold for inclusion in the Regulation. As long as the terminal does not exceed 20 visits in the following calendar year, then the terminal will not have emissions control requirements. However, if a terminal exceeds 20 visits from a regulated vessel category for a second consecutive year, then emissions control requirements will be in effect for that terminal.

11. Are vessel operators required to submit compliance plans to CARB?

No, vessel operators are not required to submit compliance plans. Vessel operators are encouraged to closely work with the terminals and ports to which their ships call in order to ensure that all parties are coordinating about how to comply with the 2020 Regulation, but there is no separate requirement for the shipping line to submit a plan.

12. Can regulated entities rely on commercial arrangements with third-party CAECS operators to meet the requirements of the 2020 Regulation?

A regulated entity is free to utilize a third-party operated CAECS for compliance with the 2020 Regulation as long as the system has received CARB approval. There are regulatory obligations for CAECS operators (including third-party providers), and not fulfilling the obligations of the regulation may result in enforcement actions against the CAECS operator. However, that does not necessarily excuse vessel and terminal operators from their obligation to reduce emissions from vessels at berth during regulation visits. Regulated entities should ensure that the CAECS they have selected for use for compliance with the 2020 Regulation is a reliable and appropriate pathway for compliance for their own individual operations.

Vessel Operator Requirements

13. What is a vessel operator?

A vessel operator is any person who is in direct control of the vessel. For the purpose of this Regulation, the person in “direct control” is the person who decides where a vessel is to call and is considered a responsible party, as set forth in section 93130.2(b)(87).

There is potential for the vessel owner, charterer, and shipper to each be considered a vessel operator, and, if so, all could have a responsibility to meet the requirements of the 2020 Regulation. In many cases, the owner of the vessel is not in control of where a vessel goes when chartered, and the shipper is not controlling the vessel’s movement but instead taking space on a planned vessel route. In general, the charterer is the one that decides the routes and brings the vessels to California. However, depending on the relationship between the owner, charterer, and shipper, the owner or shipper may also be considered the operator if they have direct control over the vessel’s decision to call a California port or marine terminal.

14. Which vessels are required to control emissions at berth?

All container, refrigerated cargo, cruise, ro-ro, and tanker vessels are required to control emissions at berth, unless the vessel is visiting a berth that is at a *low activity* terminal, as set forth in section 93130.10(a). terminal, as set forth in section 93130.10(a).

15. Do bulk and general cargo vessel operators have any obligations under this Regulation?

Bulk and general cargo vessels have visit reporting requirements that begin January 1, 2023 (section 93130.7(e)(4)), and all bulk and general cargo vessels must comply with opacity requirements (section 93130.6). Bulk and general cargo vessels do not have emissions control requirements under the 2020 Regulation. During the Interim Evaluation due to the Board in 2022, CARB staff will review potential requirements for control technologies for use with bulk and general cargo vessels. CARB staff published the Interim Evaluation Report on December 1, 2022 on CARB's website and will present the findings to CARB's Board tentatively in April or May 2023.

16. What defines a vessel fleet and a vessel fleet operator?

A vessel fleet under the 2020 Regulation is different from a vessel fleet under the 2007 Regulation. Under the 2020 Regulation, there are no fleet-based compliance requirements. Rather, a vessel fleet is defined as a group of vessels of the same vessel type at a single port or marine terminal that have agreed to utilize their combined Vessel Incident Events (VIEs) and are registered with CARB by a person who is designated as that fleet's representative, as set forth in section 93130.2(b)(32).

A fleet operator is any person who has the authority to authorize the use of a VIE for a visit by a vessel in the fleet. CARB does not dictate who the fleet operator is (it could be one person for one shipping company or a representative covering multiple companies that have agreed to pool their VIEs) as long as they have submitted to CARB in writing their request to register themselves as the operator for their specific fleet. A fleet operator does not have to provide a list of vessels registered in their fleet; rather, each vessel should report the fleet that it belongs to for each visit. Additionally, if a VIE is used for a visit, the fleet operator must confirm to CARB that the VIE is approved for use for that visit.

17. What defines a "visit"?

As set forth in section 93130.2(b)(91), a visit is defined as the time period from when the vessel is "Ready to Work" to "Pilot on Board". A vessel is considered "Ready to Work" when it is tied to the berth, the gangway has been lowered with netting down, and all government authorities with jurisdiction over the vessel visit have cleared the vessel, as set forth in section 93130.2(b)(63). And "Pilot on Board" occurs when the vessel's pilot has boarded the vessel to assume navigational control to prepare for vessel departure, as set forth in section 93130.2(b)(58). A vessel shift from one terminal to another or from one berth to another berth within the same terminal is considered a new visit at each subsequent berth for the purposes of this Regulation, as set forth in section 93130.2(b)(91).

18. Can a vessel without shore power visit California?

Yes, a vessel without shore power can visit California. Vessel operators are required to reduce auxiliary engine emissions to the performance standards set forth in section 93130.5(d)(1) of the 2020 Regulation through the use of a CAECS during each visit to a terminal unless the visit qualifies for an exception. The CAECS can be shore power or another type of CAECS, including capture and control technologies or any other CARB approved strategy. Additionally, vessel operators of tanker vessels with steam driven pumps are also required to reduce auxiliary boiler emissions (unless the tanker is using shore power to reduce emissions from auxiliary engines) to the performance standards set forth in section 93130.5(d)(2) of the 2020 Regulation through a CAECS during each visit to a terminal unless the visit qualifies for an exception.

19. If a vessel has shore power, is it required to use shore power during a visit to a regulated terminal?

Yes, if a shore power capable vessel visits a terminal where the port or terminal has commissioned that vessel's shore power equipment or the port or terminal has deemed the vessel to be compatible based on the vessel's previous commissioning to another berth, then that vessel must connect to shore power in order to comply with the 2020 Regulation. This requirement is designed to encourage usage of shore power while at berth in order to maximize emissions reductions during a visit, while also allowing for a better return on investment in shore power equipment due to increased usage.

20. Does a vessel have to use shore power or a capture and control system to comply with the 2020 Regulation?

No. There is a built-in pathway in the 2020 Regulation that allows for vessels to use solutions other than shore power or capture and control systems. The 2020 Regulation requires vessels to use a CARB-approved emissions control strategy (referred to as a CAECS) while at berth. Shore power is considered a CAECS, as are the barge-based capture and control systems that have already been issued a CARB Executive Order for container vessels under the 2007 Regulation. However, any solution that can meet the emissions standards laid out in section 93130.5(d) may apply for approval as a CAECS. CARB staff designed the 2020 Regulation in such a way that vessel-based solutions could be used. For example, if a vessel intends to run on liquified natural gas (LNG) and can provide testing data showing the vessel's emissions meet or exceed the standards provided by the 2020 Regulation, then that could potentially be approved as a CAECS and LNG could then be used as a compliance pathway for vessels with the same engine class.

21. What if a vessel cannot control emissions while at berth?

If the uncontrolled visit qualifies for an exception under section 93130, the visit may be considered compliant. If the reason is due to a vessel safety or emergency event as set forth in section 93130.2(b)(70), then the vessel operator could apply to use a safety or emergency event exception. A vessel could also comply using a VIE or TIE, or the remediation fund

option if it met the requirements under section 93130.15. If none of the exceptions in section 93130.8 of the 2020 Regulation apply to the visit, it will be referred to Enforcement, and penalties may be taken.

22. What are the compliance options for a non-shore power vessel that needs to call a terminal that has no CAECS?

Vessels calling California ports are expected to have a compliance option identified when scheduling port calls. If a vessel is calling a terminal that utilizes shore power as its primary pathway for compliance and an alternative CAECS (such as a capture and control system) is not available at the terminal, the vessel operator may use a VIE or TIE (if available) to remain in compliance with the 2020 Regulation. Vessels that have not made an investment in a control strategy are not eligible to utilize the remediation fund.

23. What if a vessel has to commission shore power equipment during a visit to a regulated terminal?

The first vessel commissioning visit made by a vessel to a terminal may be an exception as long as the vessel is able to successfully connect to shore power during that visit. Documentation of a successful vessel commissioning must be submitted with the vessel visit report. Additional commissioning visits may qualify for an exception if approved by CARB in writing where the vessel operator demonstrates that 1) the commissioning process could not be accomplished in a single visit or 2) the terminal requires that the vessel be recommissioned.

24. What is required of regulated vessel operators?

Any vessel visiting a terminal that receives 20 or more visits in a calendar year from container, reefer, cruise, ro-ro, and/or tanker vessels must:

- Reduce emissions using a CAECS while at berth;
- Control emissions within 2 hours of the vessel being “Ready to Work” and arriving at the berth;
- Continue to control emissions until no sooner than one hour before the pilot boards the vessel for departure from the berth;
- Follow the checklist in section 93130.7(e) of the 2020 Regulation, which includes reporting visit information for each visit for all vessel visits, including any visits without emissions reduction obligations; and
- Meet opacity limits as specified in section 93130.6 of the 2020 Regulation.

All vessel operators are required to reduce auxiliary engine emissions to the performance standards set forth in section 93130.5(d)(1) of the 2020 Regulation through use of a CAECS during each visit to a terminal unless the visit qualifies for an exception, use of a VIE/TIE, the use of the remediation fund, or an approved Innovative Concept. **Auxiliary engines include all engines on a vessel, as well as diesel electric engines, designed primarily to provide power for uses other than propulsion. Diesel electric engines, common on many cruise ships, power**

electric propulsion motors but also provide electricity to the vessel. Since the diesel electric engine is providing the hoteling load on the vessel, it is also considered an auxiliary engine in the Regulation. For clarification, auxiliary engines also include diesel engines that directly drive a process, including an engine used to directly drive a pump or as the power source for hydraulic pumps. Additionally, vessel operators of tanker vessels with steam driven pumps also are required to reduce auxiliary boiler emissions (unless the tanker is using shore power to reduce emissions from auxiliary engines) to the performance standards set forth in section 93130.5(d)(2) of the 2020 Regulation through a CAECS during each visit to a terminal, unless the visit qualifies for an exception.

If a vessel operator has a shore power equipped vessel, they are required to plug into shore power on each and every visit to a terminal where the port or terminal has commissioned the vessel's shore power equipment or the port or terminal has deemed the vessel to be compatible based on the vessel's previous commissioning to another berth.

If a vessel operator has on-board control strategies that are operated solely on the vessel, then they are required to confirm in writing with the terminal operator that the equipment is operational and will be used, prior to the vessel's arrival at the terminal's berth.

All vessel operators are also required to report visit information. For more detail on what information needs to be reported, see the [Reporting Requirements](#) section of this document.

25. What is the compliance checklist for vessel operators?

The compliance checklist for vessel operators is a checklist of items that vessel operators need to complete to ensure compliance with the 2020 Regulation. The checklist can be found in section 93130.7(e) of the regulation.

26. How long does a vessel have to connect and disconnect to shore power?

A vessel has to connect to shore power within 2 hours after the vessel is "Ready to Work" and it has a maximum time period of one hour after disconnecting from shore power until "Pilot is on Board" in order to comply with the 2020 Regulation. This time period cannot be averaged; for example, if a vessel takes only one hour to start using shore power after "Ready to Work," but ceases using shore power one and half hours prior to "Pilot on Board," this vessel visit will have missed the compliance obligation by disconnecting from shore power early. Such a situation might be eligible for use of the remediation fund for a "Delay with operation of existing control strategy," but eligibility will depend on specific qualifying circumstances. See [FAQ 82](#) for more information on the circumstances that qualify for use of the remediation fund.

27. Can a vessel use onboard technologies to comply with the 2020 Regulation?

Yes, vessel operators can use onboard technologies to control emissions and comply with the 2020 Regulation. The approval process is the same for onboard CAECS as land based or terminal based CAECS; the technology must be CARB -approved as detailed in section 93130.5 of the 2020 Regulation. In this case, the vessel operator would also need to

comply with the CAECS operator requirements, see the section titled CARB Approved Emissions Control Strategy (CAECS) Operator Requirements.

28. Can vessels change which compliance option they will be using after a terminal/port plan is submitted?

Yes. There is no requirement that a vessel has to commit to only one method of compliance. If a shipping line, terminal, or port wanted to pursue an Innovative Concept project in lieu of using a CAECS to directly reduce emissions from each visit, then that project application needed to be submitted by December 1, 2021. CARB set a time limit for these alternative projects to ensure that they could be completed and ready to reduce emissions by the time implementation dates begin. **No further applications for Innovative Concepts will be accepted by CARB now that the deadline for submittal has passed.** A CAECS, however, can be applied for at any time. If a shipping line plans to use shore power now, but decides, for example, to develop a fleet of LNG vessels in a few years, then there would be no issue with the shipping line submitting testing data **and an application** to seek CAECS approval.

29. Are fleets required to submit vessel fleet plans?

No. The 2020 Regulation does not require any plan submittals for vessel operators. CARB does, however, encourage vessel operators to coordinate with the operators of the terminals they intend to call in order to make sure their strategies for reducing emissions are aligned.

30. Does a vessel need to reduce emissions if it is at a lay berth for repair or equipment installation?

If the “lay” or “repair” berth is at a regulated terminal, then yes, the vessel will have to control emissions during the length of its stay or use an exception (VIE/TIE, remediation fund, etc.) for compliance. Only one VIE/TIE would need to be used for the visit, as long as the vessel remained at that berth for the entirety of its stay. If the lay berth is located at a terminal that falls below the 20-visit threshold, then that visit would not have emissions control requirements under the requirements of the 2020 Regulation.

31. Who is responsible for compliance if a vessel’s shore power equipment cannot be commissioned?

Ultimately, ports, terminals, and vessel operators are responsible for reducing emissions while the vessel is visiting a regulated berth. Terminal operators or ports (depending on the division of responsibilities outlined in the terminal and port plans) are responsible for commissioning vessels equipped with shore power that is installed on the side of the vessel facing the wharf when berthed (section 93130.9(a)).

If a vessel is unable to reduce emissions during a visit, a vessel operator may use a vessel incident event (VIE), or pay into the remediation fund, or use an Innovative Concept to comply with the regulation for an uncontrolled visit. If the terminal equipment is damaged or otherwise unprepared to commission a shore power capable vessel, then the terminal may be responsible for procuring an alternative CAECS or using a TIE, or paying into the

remediation fund, or using an Innovative Concept to comply with the Regulation. Communication between the vessel and terminal operators about the shore power needs for the vessel should be occurring in advance of the vessel's visit, giving vessel operators or terminal time to procure an alternative CAECS if a shore power commissioning is not possible.

32. What happens if a vessel operator brings a vessel with an 11 kilovolt (kv) shore power connection to a regulated California marine terminal, but that terminal has only a 6.6kv connection?

If the terminal is unable to commission a vessel due to a different equipment standard, then both the vessel and terminal operators would share responsibility for obtaining an alternative CAECS for use. Both parties are required to reduce emissions, and terminal operators are responsible for commissioning vessels with shore power connections while vessels are responsible for connecting to shore power or an alternative CAECS. Alternatively, either party may use a TIE or VIE, or pay into the remediation fund, or use an Innovative Concept to comply with the regulation for that visit. Communication between the vessel and terminal operators about the shore power needs for the vessel should be occurring in advance of the vessel's visit, giving time to procure an alternative CAECS if a shore power connection is not possible.

Terminal Operator and Port Requirements

33. Do all California terminal operators have requirements under the 2020 Regulation?

Yes, all terminal operators who receive ocean-going vessels at California berths are subject to regulatory requirements. Any berth located at a regulated terminal (meaning any terminal that received 20 or more visits during a calendar year from a regulated vessel type) is required to reduce emissions from vessel visits.

If a terminal operates as a "low activity" or "low -use" terminal, then the terminal does not have emissions control requirements. For the purposes of this Regulation, a "low activity" or "low use" terminal is defined as a terminal that does not receive 20 or more visits from a regulated vessel type per calendar year. However, opacity and visit reporting requirements set forth in sections 93130.6 and 93130.7(e)(4), respectively, pertain to all terminals, regardless of the number of visits or vessel types received.

34. What defines a berth?

For the purposes of this Regulation, as set forth in section 93130.2(b)(10), a "berth" is defined as a vessel's allotted place at a wharf, pier, or dock. This does not include anchorages such as at the offshore tanker terminal at El Segundo, or where passenger vessels tender at anchor such as at Santa Barbara, or Catalina.

35. What is required of affected terminal operators under the 2020 Regulation?

Operators of terminals receiving 20 or more visits from container, reefer, cruise, ro-ro, and/or tanker vessels in a calendar year must ensure that each berth has a CAECS available for use for each regulated vessel visit. Regulated terminal operators must follow the checklist in section 93130.9(d), which includes reporting visit information for each visit for all vessel visits, even those visits without emissions reduction obligations. Lastly, terminal operators were required to provide CARB with terminal plans by December 1, 2021, demonstrating how the terminal intends to comply with the 2020 Regulation. [All terminal plans and CARB's responses to each plan were posted to CARB's website at: *Terminal and Port Plan Submissions* | *California Air Resources Board*.](#)

All terminal operators are also required to report visit information for each vessel visit, even those terminals receiving less than 20 visits per calendar year. For more detail on what information needs to be reported, see the [Reporting Requirements](#) section of this document.

36. What is the compliance checklist for terminal operators?

The compliance checklist for terminal operators is a checklist of items that terminal operators need to complete to ensure compliance with the 2020 Regulation. The checklist can be found in section 93130.9(d) of the regulation.

37. Why do terminals and ports have obligations to reduce emissions if the vessels are the source of the emissions?

Terminal and port operators are responsible for vessel emissions while the vessels are located at the operator's terminals and ports. The process of reducing at-berth emissions through shore power or other CAECS typically involves both parties to successfully reduce emissions. Therefore, both entities share obligations under the 2020 Regulation to ensure that reductions occur.

Port Requirements

38. Do all California ports have requirements under the 2020 Regulation?

Yes, all ports in California that receive ocean-going vessels at their berths or terminals are subject to regulatory requirements. If a port operates terminals that all meet the definition of "low activity" or "low-use" as defined in section 93130.10(a) of the regulation, then that port will not have emissions control requirements. However, visit reporting requirements set forth in section 93130.9(d)(5) pertain to all terminal operators, regardless of the number of visits or vessel types received.

39. What are a port's obligations under the 2020 Regulation?

Ports with regulated terminals must ensure that each regulated terminal has the infrastructure needed to reduce emissions from each regulated vessel visiting every berth at that terminal. Ports are responsible for any equipment or necessary infrastructure that is

beyond a terminal operator's contractual ability to provide (i.e., vault installations if the port is responsible for all wharf modifications).

Ports with regulated terminals must also provide CARB with port plans demonstrating the actions the port intends to take to ensure their terminals can comply by the compliance dates in the 2020 Regulation. These port plans are detailed in the [Port and Terminal Plans](#) section of this document and include identification of terminal and port responsibilities. Ports are responsible for vessel emissions reductions at a terminal to the extent they are specified in the division of responsibilities included in the port's plan. [All port terminal plans and CARB's responses to each plan were posted to CARB's website at: Terminal and Port Plan Submissions | California Air Resources Board.](#)

If a terminal operator and/or vessel operator elects to purchase, install, and use CAECS equipment that does not need port assistance or infrastructure to operate in compliance with the 2020 Regulation, then the port has no additional responsibility for that equipment.

If a port has only low activity terminals or berths, there is no emissions control obligations as set forth in section 93130.10(a); however, the port and terminal still have an obligation to report visit information and annual Wharfinger data as set forth in sections 93130.9(d)(5) and 93130.13(d), respectively.

40. Are ports required to submit annual Wharfinger data?

Yes, all operators of a public or private California port or independent marine terminal must provide Wharfinger data to CARB's Executive Office annually by January 31, regardless of visit activity. Wharfinger information required to be reported for each visit to the port is set forth in section 93130.13(d).

CARB Approved Emissions Control Strategy (CAECS) Operator Requirements

41. What is a CARB Approved Emission Control Strategy?

A CARB approved emission control strategy or "CAECS" is an emission control strategy that has been approved for use to comply with the 2020 Regulation. Existing CAECS include shore power and the barge-based capture and control systems approved for use under the 2007 Regulation. Potential CAECS technologies can include, but are not limited to, capture and control systems, batteries, fuel cells, alternative fuels, etc. Regulated entities can apply to have additional technologies or strategies for reducing emissions to become CAECS by submitting an application with a test plan to CARB as detailed in section 93130.5 of the 2020 Regulation. There is no specified time limit or deadlines for when a regulated entity can apply to use a CAECS for the Regulation.

42. Who is considered a CAECS operator?

A CAECS operator is any party who operates a CAECS to reduce emissions for compliance with the 2020 Regulation. This could include a third-party operator, terminal operator, port,

or even a vessel operator if the emission control strategy is located solely on a vessel, such as using a cleaner fuel or onboard technology that allows the vessel to meet the required emission rates of the regulation.

43. What is required of a CAECS operator under the 2020 Regulation?

Operators of a CAECS must ensure they follow all requirements laid out in section 93130.12 of the 2020 Regulation, including following the CAECS checklist, reporting vessel visit information to CARB, properly maintaining a list of all subcontractor services and agreements in place, reporting any malfunctions of a CAECS and submitting corrective action reports to CARB as needed.

44. When are CAECS test plans required to be submitted to CARB?

A CAECS testing plan has no required submittal date. The technology just needs to receive approval prior to use for compliance with the 2020 Regulation. It would be preferred for parties interested in obtaining approval for a new CAECS to submit a testing plan as early as possible in advance of their vessel category's implementation start date in order for CARB staff to have ample time to evaluate the application, but there is no specific date it is due to CARB. The December 1, 2021, due date is only applicable to Innovative Concept applications and port/terminal plans.

45. What is the default emission rate baseline used for auxiliary engines on ocean-going vessels?

The current baseline assumes auxiliary engines on ocean-going vessels have default emission rates of 13.8 g/kW-hr for oxides of nitrogen (NO_x), 0.17 g/kW-hr for particulate matter (PM) 2.5, and 0.52 g/kW-hr for reactive organic gases (ROG), as set forth in section 93130.5(d)(1).

46. What is the default emission rate baseline for ocean-going tanker vessel auxiliary boilers?

The current baseline assumes ocean-going tanker vessel auxiliary boilers have default emission rates of 2.0 g/kW-hr for NO_x, 0.17 g/kW-hr for PM 2.5, and 0.11 g/kW-hr for ROG, as set forth in section 93130.5(d)(2).

47. What are the emission rates that must be achieved for a CAECS to be approved for use for compliance with the 2020 Regulation?

To be eligible as a CAECS, a strategy must meet the requirements specified in section 93130.5 of the 2020 Regulation. This means that the strategy must demonstrate that it is able to achieve emission rates less than 2.8 g/kW-hr for NO_x, 0.03 g/kW-hr for PM 2.5, and 0.1 g/kW-hr for ROG for auxiliary engines, as set forth in section 93130.5(d)(1).

For tanker vessels with steam driven pumps, unless the tanker is using shore power to reduce emissions from auxiliary engines, a person must also demonstrate that the CAECS achieves emission rates less than 0.4 g/kW-hr for NO_x, 0.03 g/kW-hr for PM 2.5, and 0.02 g/kW-hr for

ROG for tanker auxiliary boilers, as set forth in section 93130.5(d)(2). If a tanker vessel with steam driven pumps is using shore power to comply with the Regulation, then only the auxiliary engines are required to be controlled as there is no requirement to reduce boiler emissions if shore power is the CAECS being used.

48. Can a vessel achieve compliance with the 2020 Regulation by using cleaner technologies onboard?

Yes, a vessel can be considered compliant with the 2020 Regulation if the vessel uses cleaner engines, alternative fuels, or other onboard emissions control equipment (or a combination thereof), as long as the technology used meets the emissions reduction requirements and other requirements set forth in section 93130.5 and has been approved by CARB in advance of use for compliance. Vessel operators must perform all the requirements of a CAECS operator as specified in section 93130.12 of the Regulation in order to obtain approval for onboard technologies to be used in compliance.

49. Would applications submitted for CAECS prior to 2023 have to meet the new Regulation's ROG and greenhouse gas (GHG) neutral requirement or would they fall under the 2007 Regulation requirements?

CAECS applications submitted before 2023 must meet the requirements of the 2020 Regulation. These applications do not fall under the 2007 Regulation Requirements. Only technologies that have already received an Executive Order can use the provision for "already approved strategies" in section 93130.5 (d)(3) of the 2020 Regulation to continue to operate until 2025 before needing to update to the 2020 Regulation.

50. How can an applicant test for ROG emissions on alternative fuels?

Reactive Organic Gas (ROG) are a subset of Total Organic Gases but excluding some chemicals like methane, ethane, Chlorofluorocarbons (CFCs). In the regulation, ROG emissions are estimated as a percentage of total organic gas emissions (TOG). The regulation specifies that TOG is measured following method 25A using a flame ionization detector (FID). ROG is then estimated as a fraction of TOG using CARB's speciation profiles. If the fraction has not yet been determined for a specific fuel or source an applicant may use the factor 1.0. Alternative test methods or emission verifications may be used when specified in a test plan upon written approval from CARB's Executive Officer. Speciation profiles can be found at <https://ww2.arb.ca.gov/speciation-profiles-used-carb-modeling>.

51. How does CARB determine if a CAECS meets the grid-neutral requirement?

Greenhouse gas (GHG) emissions from a CAECS must be grid-neutral using the grid emission rate for the year that the technology is granted an Executive Order. To receive CARB approval, a person must demonstrate the carbon dioxide equivalent (CO₂E) of all GHG emitting sources from the CAECS (but excluding the vessel engine exhaust emissions) is less than or equal to the state output emission rate in (CO₂E) of the year the CAECS is granted

an Executive Order. The state output emission rate can be found at <https://www.epa.gov/egrid>.

52. Where can a CAECS operator find the carbon intensity of standard fuel if the operator decides to use a fuel with a CARB Low Carbon Fuel Standard certified pathway to apply a reduction to CO₂E?

As outlined in section 93130.5(g)(4), strategies that use a fuel with a CARB Low Carbon Fuel Standard certified pathway may apply a reduction to CO₂E by the factor of the carbon intensity of the fuel to the carbon intensity of the standard fuel. The carbon intensity of the standard fuel can be found on the [Current Fuel Pathways](https://ww2.arb.ca.gov/resources/documents/lcfs-pathway-certified-carbon-intensities) spreadsheet at <https://ww2.arb.ca.gov/resources/documents/lcfs-pathway-certified-carbon-intensities>.

53. What are the steps CAECS operators must follow to get an emissions reductions technology approved by CARB?

The first step is to submit a test plan to the Executive Officer for conducting the emissions reduction testing, durability testing, and a timeline for testing. After the applicant receives CARB approval for the test plan, the applicant needs to submit an application that includes all the source test data. CAECS operators should refer to section 93130.5(e) of the regulation for specific details on the CAECS approval process.

If the Executive Officer approves the application, the applicant's strategy will be considered a CAECS and shall become a compliance option for the type(s) of vessel visits for which the emission control strategy is approved, when used in a manner that is consistent in accordance with all the conditions of the approval.

Modifications to the design or operation of a CARB approved system cannot be made without informing CARB first. A CAECS operator may make modifications to its design or operation of the CAECS with CARB approval after CARB determines that the system will continue to meet the capture and control efficiencies specified in its Executive Order. When CARB is informed of a proposed modification, the applicant should include a detailed description of the design modification along with an explanation of how the modification will change the operation and performance of the strategy. Additional testing may be necessary to support to claims that the strategy's reductions are maintained or improved.

54. Can an identical CAECS system be built without a CAECS operator having to seek a separate approval?

Yes, it is possible for multiple systems to be built and used under a single CAECS approval, but the original approved system design and any new system must be identical. Any changes to the system must be approved following the regulation text in Section 93130.5 (i)(2) Modifications to a CAECS.

55. What are CAECS operator reporting and recordkeeping obligations?

Beginning on January 1, 2023, and thereafter, the operator of the CAECS shall report the information to CARB regarding each vessel visit within 30 calendar days of vessel departure, as set forth in section 93130.12(b)(3) of the regulation. Relevant records must be kept for a minimum of five years, as set forth in section 93130.12(e) of the regulation.

56. What do CAECS operators do if there is an equipment malfunction while servicing a vessel for compliance with the 2020 Regulation?

The operator of the CAECS shall report within 24 hours to CARB by electronic means, the following information regarding any malfunction that is expected to create emissions in excess of any applicable emissions limitation for a period greater than one hour. If electronic notification is not immediately possible, notification at the beginning of the next working day is acceptable. A CAECS operator must follow all requirements set forth in section 93130.12(c) for reporting a malfunction.

After the malfunction has been corrected, within seven days, the operator of the CAECS must follow all steps set forth in section 93130.12(d).

57. If a company is undergoing an Executive Order approval process for a CAECS, can their vessels use that system for compliance under the 2007 or 2020 Regulations while it is undergoing testing for durability and capture efficiency?

There is a research exception in the 2020 Regulation to accommodate testing for CAECS approval. Use of the system during the Executive Order approval process is not eligible for compliance unless the use falls under specific testing requirements in the CARB-approved test plan, such as durability testing or capture efficiency testing. If so, the visit may qualify for the research exception to maintain compliance. This provision applies to both vessel operators and terminal operators under sections 93130.8(d) and 93130.10(e) respectively.

Exceptions and Remediation

58. What circumstances qualify for an exception, VIE/TIE, or remediation fund use?

Vessel visits that do not achieve the emissions reductions as required by the 2020 Regulation may elect to use a number of different exceptions to comply with the Regulation. Table 6 in section 93130.18 of the Regulation identifies several situations that may be eligible for each compliance pathway and who is likely to be identified as responsible parties in the event of noncompliance.

59. What is a safety and emergency event and how do they impact compliance?

A safety and/or emergency event is defined as any situation where complying with the 2020 Regulation would endanger the safety of the vessel, crew, cargo, passengers, terminal, or terminal staff because of severe weather conditions, a utility event, or other extraordinary reasons beyond the control of the terminal operator or vessel operator. Any vessel or

terminal experiencing a safety or emergency event should include any documentation necessary to establish the conditions necessitating the safety and emergency event exception and the date(s), local time, and location with their regular visit report.

60. Do utility power shutoffs count as a safety or emergency event?

Yes, as specified in the 2020 Regulation. Utility events are considered a safety and/or emergency event. Should a utility event occur and the utility is unable to provide power to the port, vessels and terminals will be exempt from the 2020 Regulation's requirements for the time period in which the event occurs. These events include, but are not limited to, events such as excessive heat events with State of Emergency declarations or the inability of utilities to provide shore power due to requests by State or local governments to reduce load on the electrical grid. Once the event is over or as per the direction of the applicable declaration, all regulated entities must resume compliance with the 2020 Regulation.

61. How is compliance handled during a utility power shutoff?

Utility events are defined as a "safety and emergency event" in the 2020 Regulation, which means an event where a responsible official reasonably determines that compliance with this Control Measure would endanger the safety of the vessel, crew, cargo, passengers, terminal, or terminal staff because of severe weather conditions, a utility event, or other extraordinary reasons beyond the control of the terminal operator or vessel operator (see section 03130.2(b)(70) of the Regulation). A utility event is defined as "Utility event" the period of time during which any of the following events occurs; the utility event begins when such an event begins and ends when the event is over:

(A) The utility serving the port or terminal cannot provide electrical power to the port because of a failure of equipment owned and maintained by the utility, a transmission emergency, distribution emergency, a California Independent System Operator (CAISO) or Los Angeles Department of Water and Power (LADWP) Stage 3 emergency, or the utility needs to reduce power to the port and/or terminal because of a sudden and reasonably unforeseeable natural disaster, such as, but not limited to, an earthquake, flood, fire, or fire prevention (including electric utility shutdowns to mitigate fire risk during high winds); or

(B) When the utility providing electrical power notifies the terminal operator(s) to reduce the use of grid-based electrical power in response to a transmission or distribution emergency, a CAISO or LADWP Stage 3 emergency, or to avoid a Stage 3 emergency if one is anticipated. The emergency event ends when CAISO or LADWP cancels the Stage 3 emergency or the utility notifies the terminal operator(s) that reduction in the use of grid-based electrical power is no longer necessary. The port may contact the terminal operator(s) on behalf of the utility if such an agreement exists between the utility and the port.

CARB looks at each potential non-compliance event individually, and the outcome for each specific situation may differ based on specific facts of the issue. In general, a situation like a "utility surge" would be considered a safety and emergency event. If a utility power shutoff

impacts a vessel's ability to connect to shore power, the vessel and terminal operators may be compliant with exceptions under sections 93130.8 (a) "Vessel safety and emergency event" and 93130.10 (d) "Terminal safety and emergency event."

62. How is compliance handled if a utility blackout causes equipment damage at the terminal and/or onboard a vessel?

There are a few potential pathways for compliance for subsequent visits in the event that a utility blackout causes damage and the vessel or terminal is not able to be repaired immediately. An entity can use a VIE or TIE, as applicable, to comply with the visit. Alternatively, if an entity can remediate the uncontrolled visits through the use of the remediation fund, then the visit would be compliant. In limited circumstances, the following visit may qualify as a safety and emergency event. The specifics of this type of situation are highly case specific, and CARB will make a compliance determination as circumstances arise.

The requirement to reduce emissions under The Regulation applies to four regulated groups: vessel operators, terminal operators, ports operators, and CAECS operators. Utilities are not regulated entities responsible for reducing emissions under the At Berth Regulation. Any disputes between utilities and responsible parties under the At Berth Regulation related to blackouts may be addressed between those parties directly.

63. What happens when labor delays prevent a vessel from connecting to shore power or another CAECS?

Terminal operators providing shore power or any other CAECS to a vessel are required to provide the labor to connect the vessel to that CAECS within two hours of when the vessel is declared "Ready to Work" and may not disconnect the vessel until no sooner than one hour before the pilot boards the vessel for departure. If labor is delayed in connecting the vessel to a CAECS or disconnects the vessel early, a VIE/TIE may be used, or remediation fund payment made in order for that visit to remain compliant with the 2020 Regulation. Approved Innovative Concepts may also be used to comply with the Regulation in the event of labor delays.

64. What happens if the operator/equipment for a scheduled CAECS does not show up?

CAECS operators have an obligation to follow all requirements laid out in section 93130.12 of the 2020 Regulation, including following the CAECS checklist. If a vessel or terminal operator has a contract or written agreement with a CAECS operator to provide service for a visit, but the CAECS operator does not honor that agreement for any reason, CARB will investigate the situation and may find the CAECS operator in violation for that visit.

65. What if there are delays in equipment installation or construction (including permitting or equipment delivery delays, etc.)?

Delays in equipment installation or construction that result in a vessel not being able to connect to a CAECS can use a VIE/TIE or make a payment into the remediation fund to

remain compliant with the 2020 Regulation. Regulated entities may also use an approved Innovative Concept project to comply with the 2020 Regulation during the delay or construction.

66. Who is required to use a VIE/TIE or pay remediation fees in the event a vessel cannot connect to a CAECS?

The 2020 Regulation does not dictate when a vessel or terminal must use a VIE/TIE, or which party must pay the remediation fund in a qualifying event. It is up to the vessel and terminal operators to work together to decide this matter. In the event of a dispute, CARB enforcement staff may consider the visit noncompliant and investigate all responsible.

Vessel and Terminal Incident Events

67. What are Vessel Incident Events (VIE) and Terminal Incident Events (TIE)?

Vessel Incident Events (VIE) and Terminal Incident Events (TIE) are designed to provide regulated vessel fleets and terminal operators with a limited number of visits in which emissions are not reduced during a regulated vessel visit. A vessel or terminal operator may use a VIE or TIE in any situation where a party is unable to meet the emissions reduction requirements of the 2020 Regulation to remain in compliance. VIEs and TIEs provide regulated entities some limited amount of operational flexibility, while ensuring that emissions reductions from vessels at berth remain high. There are no qualifications that a regulated entity must meet to qualify for using one of their existing VIEs or TIEs – they are designed to be used however and whenever a regulated entity needs them.

68. What is a vessel fleet?

A vessel fleet means a group of vessels of the same vessel type that have agreed to utilize their combined Vessel Incident Events (VIEs) at a port or marine terminal and are registered with CARB by a person who is designated as that fleet’s representative. Fleets are only used in the 2020 Regulation for granting and using VIEs, **and VIEs cannot be sold or traded to companies outside of a vessel’s registered fleet.** There are no requirements as to what makes up a vessel fleet besides the fact that the vessels must be of the same vessel type. A fleet can consist of one or more vessel operators; all visits from a fleet to a port will be used to calculate the number of VIEs that fleet will receive each calendar year, and those VIEs will be shared across the entire fleet.

69. How does a vessel fleet register with CARB?

A vessel fleet may register at any point in time with CARB by submitting a request in writing to CARB staff via email (shorepower@arb.ca.gov) or in writing to:

Chief, Transportation and Toxics Division
California Air Resources Board
1001 I Street Sacramento, CA 95814

A vessel fleet may be defined consistent with the “fleet” definition under Section 93130.2(b)(32) under the At Berth Regulation as a vessel operator chooses. For example, if fleet A and fleet B wish to combine themselves as a single fleet for the purposes of compliance with the At Berth Regulation in order to pool their VIEs at a single port, that is acceptable. Vessel operators must register their fleet with CARB in writing and should do so prior to the deadline for granting VIEs (see *FAQ 72*) for the following calendar year so that CARB staff can assign the appropriate number of VIEs to the vessel fleet.

70. How are VIEs/TIEs calculated?

VIEs are calculated based on the number of visits a vessel fleet makes to a regulated marine terminal. A vessel fleet will receive 5 percent of their annual visits as “VIEs” for the next calendar year; in other words, if a vessel fleet makes 100 visits to a regulated terminal in a calendar year, that fleet would have 5 VIEs to use in the next calendar year. Additionally, berth shifts (i.e., when a vessel moves from one berth to another berth) will count as a visit towards the accumulation of a VIE/TIE, as shifts are considered a separate visit (see *FAQ 112* for more information on reporting vessel shifts). For the initial compliance date of the 2020 Regulation (2023), visit information for calendar year 2021 will be used for calculating VIEs and TIEs. VIEs/TIEs are calculated in whole amounts that cannot be used in hourly increments and they cannot be transferred and traded with other fleets or terminals.

Separately, TIEs are calculated based on the number of vessel visits to the terminal between January 1 and December 31 of the previous year.

71. How many VIEs/TIEs does a vessel fleet/terminal get each year?

Table 3 in section 93130.11 of the Regulation, identifies the rates that vessel fleets and terminals will receive VIEs and TIEs.

72. When will vessel and terminal operators know how many VIEs or TIEs they have to use?

For the initial compliance year of the 2020 Regulation (2023), CARB staff will grant VIEs and TIEs to each vessel fleet and terminal operator by January 1, 2023, using 2021 visit information. After that, VIEs and TIEs will be granted by CARB to each registered vessel fleet and each regulated terminal by February 1 of each calendar year, starting in 2024.

If there is expected to be significant growth in vessel activity in the upcoming year that would increase the number of VIEs or TIEs a vessel should get, then a vessel or terminal operator should request additional VIEs or TIEs based on the anticipated visit numbers by December 1. This deadline ensures CARB staff can review the request and provide the appropriate VIEs or TIEs by February 1.

73. Are VIEs/TIEs port specific?

Yes, VIEs and TIEs must be used at the port or independent marine terminal in which they were earned. VIEs can be used by a vessel fleet at any terminal within the port in which they were granted for, but TIEs may not be transferred to any other terminal.

Additionally, Los Angeles and Long Beach are considered separate ports. As such, VIEs that are generated at Los Angeles cannot be transferred or combined with VIEs at Long Beach, and vice versa.

74. Do VIEs/TIEs expire?

Yes. VIEs/TIEs will expire on January 31 following the calendar year for which they were granted. For example, if a vessel fleet or terminal was granted 10 VIEs or TIEs for use in 2023, those VIEs or TIEs would be eligible for use through January 31, 2024.

75. Can terminal and vessel operators request additional VIEs/TIEs?

Yes, instead of receiving TIEs and VIEs through the process set forth in section 93130.11(a)(1) of this Control Measure, a vessel fleet representative or terminal operator may request additional VIEs or TIEs by December 1 of the preceding year in order to accommodate a new terminal at a California port or a vessel fleet that is new to California service (or has recently returned after a period of not calling California ports) or when an anticipated growth in visits is expected for an existing fleet or terminal that is not reflected in the current year's visits. In other words, if a vessel fleet typically makes 100 visits to a terminal per year (equivalent to 5 VIEs per year) but expects the number of visits to increase to 150, the fleet can petition CARB to count those additional visits towards their VIE calculation for the following year. Separately, if a new fleet of vessels (or one that has not called California in the previous calendar year) wishes to call a regulated terminal in California, the operator can petition CARB to provide the fleet with VIEs based on their projected number of port calls for the following calendar year. The same examples would be true for a terminal operator. For any case, all requests for additional VIEs/TIEs must be made in writing to CARB by December 1 for consideration in the following year, and CARB will notify the requestor about CARB's approval or denial of the request in writing by February 1.

It is important for vessel fleets and terminals not to significantly overestimate the number of projected visits when requesting additional VIEs and TIEs, as actual visit numbers and VIEs used will be investigated by CARB staff on an annual basis. If a vessel fleet or terminal attempts to claim more VIEs or TIEs than the actual visits support, any visits not covered by a VIE or TIE will be considered noncompliant.

Additionally, if a fleet or terminal operator requests more VIEs/TIEs from CARB, it is important to note that the fleet/operator is foregoing the original CARB VIE/TIE default value and the use of VIEs/TIEs will be assessed using the actual number of visits made at the end of the year. For example:

- 1) VIEs: If a vessel fleet makes 100 visits to a regulated terminal in 2023, CARB would follow the formula under Section 93130.11(b) to automatically grant that fleet operator

five VIEs (5 percent) for use between February 1, 2024 through January 31, 2025. If that same fleet expects to make an additional 20 visits in 2024, they could submit a written request to CARB by December 1, 2023 to grant their fleet additional VIEs based on the projected activity for 2024 (5 percent of 120 visits, for a total of six VIEs in this case). As long as the vessel fleet makes the expected 120 visits, they may use all six VIEs; however, by requesting additional VIEs, the fleet is forgoing the CARB default VIE value. In this case, CARB is provisionally giving the fleet six VIEs, but the number of VIEs must be less than or equal to the VIE and TIE rate multiplied by the fleet or terminal activity. This means that any visits not covered by a VIE or TIE would be noncompliant (see section 93130.11(c) of the Regulation). For example, if a fleet requests 6 VIEs, but only makes 80 visits, then they are limited to using only 4 VIEs.

- 2) TIEs: If a regulated terminal receives 100 visits in 2023, CARB would follow the formula under Section 93130.11(b) to automatically grant that terminal 15 TIEs (15 percent) for use between February 1, 2024 through January 31, 2025. However, if that same terminal anticipates receiving 20 additional visits in 2024, they could make a written request to CARB by December 1, 2023 to grant their terminal additional TIEs to use in 2024 (15 percent of 120 visits, for a total of 18 TIEs in this case). If this terminal receives the expected 120 visits (or more), then all 18 TIEs may be used. However, similarly to the VIE example above, by requesting additional TIEs, the terminal is forgoing the CARB default TIE value. Compliance will be assessed based on the actual visits to the terminal; as such, if the terminal has only received 80 visits by the end of 2024, then only 12 TIEs would be allowed. If a visits attempts to use a TIE for compliance beyond the 12th instance, the visit would not be compliant. Note that for use in 2025 and beyond, the TIE rate decreases to 5 percent, and that the 15 percent value is only valid in 2023 and 2024.

76. Can vessel or terminal operators request additional VIEs and TIEs for a current calendar year if a new vessel fleet starts calling a regulated California terminal mid-year?

No, there is no pathway in the Regulation to request additional VIEs or TIEs for a calendar year mid-year. If a vessel fleet expects to begin calling California or a terminal operator expects to receive a new customer in a given year, then they may request additional VIEs or TIEs by December 1 of the previous year. There is no penalty for requesting additional VIEs or TIEs if the anticipated increase in vessel activity does not occur, as long as those additional VIEs or TIEs are not used.

77. Will CARB consider using a different baseline year for calculating VIEs and TIEs for the initial compliance year in order to account for lower than normal visits experienced by vessel fleets in 2021 due to COVID-related port congestion and labor shortages?

CARB staff are required to use 2021 as a base year for granting VIEs and TIEs for calendar year 2023 because it is set forth in the Regulation.

78. How do vessel and terminal operators report use of a VIE or TIE?

Vessel and terminal operators should report use of a VIE or TIE with their visit report. The visit will then be deducted from the vessel's registered fleet's bank of VIEs or the terminal's bank of TIEs for the year. Vessel fleet operators and terminal operators must report the use of a VIE or TIE with each visit report and are responsible for tracking the usage of the vessel fleet's or terminal's VIEs and TIEs, respectively. When a VIE is used, the fleet operator must approve the VIE in writing to CARB.

79. How will the use of VIEs/TIEs be assessed for accuracy?

The use of VIEs/TIEs is subject to audit at the end of each calendar year and when CARB staff reviews the actual activity by the fleet or to a terminal, the number of TIEs or VIEs used must be less than or equal to the VIE and TIE rate multiplied by the fleet or terminal activity. Any visits not covered by a VIE or TIE will be noncompliant.

Remediation Fund

80. What is the remediation fund?

The remediation fund is an additional compliance option that may be used in specific limited circumstances (as set forth in section 93130.15 of the Regulation) where vessel operators, terminal operators, CAECS operators, and/or ports have already made efforts to comply with the 2020 Regulation, but are unable to achieve emissions reductions. See [FAQ 82](#) for the specific limited circumstances in the Regulation. Regulated entities can pay into this fund to remediate their uncontrolled emissions and remain compliant with the 2020 Regulation, and the funds collected will go towards projects that reduce equivalent emissions in the same port communities that are impacted by the uncontrolled emissions.

81. Who can use the remediation fund?

Any vessel operator, terminal operator, CAECS operator, or port that has made an attempt to install and/or use infrastructure to comply with the 2020 Regulation, but is unable to due to a qualifying circumstance, may apply to pay into the remediation fund to remain in compliance with the 2020 Regulation. CARB does not specify which regulated entity pays the remediation fund when the required emissions reductions are not achieved; this decision is between the regulated entities (vessel operator, terminal operator, ports, and third-party CAECS operator, if applicable). CARB requires only that the emissions reductions are achieved or that the remediation fund monies are received in lieu of any excess emissions reductions (in qualifying circumstances as set forth in section 93130.15(b)).

82. What circumstances would qualify for use of the remediation fund?

The remediation fund is designed to be used when a vessel or terminal has made investments or taken steps to use a CAECS but is unable to reduce emissions during a visit to a regulated berth. This list of qualifying circumstances can be found in section 93130.15(b) of

the regulation, and the following circumstances may qualify for use of the remediation fund: equipment repairs, delays in connecting to a control strategy, construction-related activities at the terminal that prevent connection to a CAECS, or an unavoidable physical and/or operation constraint that was identified in a terminal plan that was submitted to and approved by CARB. For example, for vessels or terminals that have contracted shore power equipment to be installed, but there is a delay, the use of the remediation fund may be possible for compliance if the regulated entity can provide sufficient documentation to CARB proving that the equipment was ordered in a timely fashion and why delays are unavoidable.

83. How does a regulated entity apply to use the remediation fund?

As provided by Section 93130.15(d), regulated entities wishing to use the remediation fund for compliance with the 2020 Regulation should submit their request with supporting documentation to CARB within 30 calendar days after the affected vessel visit. CARB then has 30 calendar days of each request to notify the requestor whether the visit(s) are eligible to use the remediation for compliance. If approved, the requestor then has 30 days to transfer their payment to the CARB approved fund administrator, according to the specific payment provisions established by that administrator in its Memorandum of Understanding with CARB. CARB does not dictate which party pays into the remediation fund or how the cost is split as long as the appropriate amount is paid into the fund.

84. How is the remediation fund calculated?

The amount paid per hour for remediation is based on vessel type and engine classification and is set forth in Table 4 in section 93130.15 of the Regulation. Each partial hour of excess emissions shall be counted as a full hour for the purpose of calculating the payment. These payments are intended to cover the cost to achieve emission reductions through incentive activities in the communities exposed to the excess emissions, including 10 percent for administration expenses. See sections 93130.15(d)-(g) of the Regulation for more information about remediation fund payments.

85. What pollutants are used to calculate the remediation fund hourly rate?

The hourly rate was calculated based on the Carl Moyer Advanced Technology Limit for cost effectiveness for consistency with other CARB programs. Staff estimated the typical hourly emissions of pollutants that would need to be mitigated by vessel type, using default power and emission factors. The hourly pollutants were weighted in accordance with the Carl Moyer Program formula, $\text{NO}_x + \text{ROG} + 20 \cdot \text{PM}$ to determine an hourly rate. The rate was further increased by 10 percent to cover potential administrative costs.

86. If a vessel does not have shore power and no alternative CAECS is available at a port, could the remediation fund be used for compliance?

This situation will depend on the circumstances of each event. The use of the remediation fund is not triggered from there being no alternative CAECS available in a port. The Regulation under Section 93130.15(b) provides the five circumstances when the remediation fund may be used.

If a vessel has ordered shore power equipment in time to comply with the Regulation but there is a delay in receiving and installing that equipment, then that visit may qualify for use of the remediation fund under section 93130.15(b)(3). Similarly, as stated in section 93130.15(b)(3), the remediation fund could be used if the vessel has shore power, but that equipment is unavailable to be used for compliance due to a delay in operating the equipment (i.e., labor was delayed in plugging the vessel in or an approved capture and control system was late to connect to a vessel) or if the terminal has a physical and/or operational constraint that is identified in an approved terminal plan.

Remediation Fund Administrator

87. What is a remediation fund administrator?

A remediation fund administrator is an entity that has received approval from CARB to administer the remediation fund for individual ports and independent marine terminals. A remediation fund administrator may be the California Air Pollution Control Officers Association (CAPCOA), a local air quality management or air pollution control district, or a third-party non-profit organization (if no air district applies to administer the remediation fund).

88. How does an entity become a remediation fund administrator?

An entity must be CAPCOA, a local air quality management district or air pollution control district, or a qualified third-party non-profit to be eligible to apply. They must submit an application with all required information within 120 days of CARB notification for entities to apply. If they meet the eligibility and application requirements, they are eligible to receive CARB approval to be a remediation fund administrator. If approved, CARB will notify the applicant and execute a Memorandum of Understanding with the applicant to enable the applicant to serve as the remediation fund administrator.

89. Could one entity act as Remediation Fund administrator for all of California?

Yes, one entity could act as Remediation Fund administrator for all ports in California. CARB reached out to each Air District, as well as CAPCOA, to serve as administrator for the ports and marine terminals located within their jurisdiction. If one of these entities does not apply to be a remediation fund administrator, CARB will then solicit other Air Districts, CAPCOA, and other non-profit organizations to administer the remaining areas. If only one Air District, CAPCOA, or third-party entity opts to apply or is eligible to administer the Remediation Fund and they elect to administer the Remediation Fund for all districts, then one entity could administer funds statewide.

90. What are the obligations of a remediation fund administrator?

A remediation fund administrator agrees to use remediation funds for incentive activities that directly benefit communities impacted by excess emissions from activities covered by the At Berth Regulation and achieve emissions reductions consistent with CARB's most recent

applicable incentive program guidelines. The fund administrator is responsible for submitting to CARB semi-annual reports covering fiscal activity and remediation activities funded, including, but not limited to, recipient, type, location, and estimated emissions reductions achieved. Also, the fund administrator must retain all records for five years after a funded incentive activity has concluded.

91. What projects would qualify for funding through use of the remediation fund and where must those projects be located?

Remediation fund monies can be used to fund emissions reductions that are above and beyond those reductions required by any other state, federal, or international rule, regulation, statute, or other legal requirements (including requirements under a Memorandum of Understanding with a government entity) or an emission reduction strategy identified in an AB 617 Community Emissions Reduction Program that has been approved by CARB's Board. Projects funded by remediation monies could include, for example, an emissions capture and control system for nonregulated vessels (such as bulk or general cargo vessels), the replacement of certain pieces of cargo handling equipment with battery-electric equipment, or cleaner tugboats than what is required by existing regulations.

To use remediation fund monies for a project, the emission reductions resulting from the project must directly benefit the communities that are impacted by excess emissions generated by the port or independent marine terminal, and must also achieve emission reductions consistent with CARB's most recent applicable incentive program guidelines for Carl Moyer Program, Proposition 1B Program, or Community Air Protection Incentives Program, or similar programs for mobile and/or stationary sources of air pollution. Fund administrators shall seek to prioritize eligible activities in communities that are also identified by CARB under the AB 617 Community Air Protection Program or disadvantaged communities as defined by the Secretary for Environmental Protection.

92. Can remediation funds be administered as part of an existing incentive program?

Yes, remediation funds can be administered as part of an existing incentive program; however, the remediation funds cannot be used in place of any required match funding.

93. Can remediation funds be combined with other funds to complete a project?

Yes, however, remediation funds may only be combined with funds from other incentive programs to the extent that the emissions reductions achieved by the remediation fund are capable of being calculated and attributed to the remediation fund.

94. What if no applicants are approved to be a remediation fund administrator for a port or independent marine terminal? Can the remediation fund be used as a compliance method if there is no administrator established?

No. To utilize the remediation fund, there must be a third-party administrator with a Memorandum of Understanding (MOU) executed with CARB that permits the entity to manage the funds generated at that port or independent marine terminal. If no entity is

approved to serve as a remediation fund administrator for a port or marine terminal, then the remediation fund would not be available at that port or marine terminal. Regulated entities must comply with the 2020 Regulation by reducing emissions from a vessel at berth, through use of a VIE/TIE, or through use of an Innovative Concept project.

However, CARB has received applications from Air Districts representing all ports and marine terminals anticipated to be included in the Regulation, and CARB expects the remediation fund to be an available compliance option for all regulated entities.

95. What emission reductions are required for projects to be eligible for funding?

Incentive activities must achieve emission reductions consistent with CARB's most recent applicable incentive program guidelines for: Carl Moyer Program, Proposition 1B Program, or Community Air Protection Incentives Program; or similar programs for mobile and/or stationary sources of air pollution. For more information and program guidelines, see the links below:

- Carl Moyer Program: <https://ww2.arb.ca.gov/our-work/programs/carl-moyer-memorial-air-quality-standards-attainment-program>
- Community Air Protection Incentives: <https://ww2.arb.ca.gov/our-work/programs/community-air-protection-incentives>
- Proposition 1B Goods Movement Emission Reduction Program: <https://ww2.arb.ca.gov/our-work/programs/proposition-1b-goods-movement-emission-reduction-program>
- Clean Off-Road Equipment Voucher Incentive Project <https://ww2.arb.ca.gov/our-work/programs/clean-off-road-equipment-voucher-incentive-project>
- Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project <https://californiahvip.org/>

96. Where can projects be funded?

The remediation funds must be used for incentive activities that directly benefit the same communities impacted by excess emissions from the port or independent marine terminal. For example, remediation funds from excess emissions at the 10th avenue marine terminal in San Diego could be used for projects in the adjacent neighborhoods of Barrio Logan or Sherman Heights. However, funds paid to remediate these emissions could not be used to fund a project in South Coast or Bay Area. Fund administrators shall seek to prioritize eligible activities in communities that are also identified by CARB under the AB 617 Community Air Protection Program or disadvantaged communities as defined by the Secretary for Environmental Protection.

97. What if there are no projects in the region that qualify?

If there are no projects in the region that qualify, a remediation fund administrator may hold the funds in reserve for future projects unless otherwise stated in the Memorandum of Understanding (MOU) negotiated between CARB and the remediation fund administrator.

Because the remediation fund monies are not appropriated by the legislature, there is not an expiration date for the funds to be used.

98. What percentage of the remediation funds collected can the administrator retain for administration expenses?

The fund administrator may retain up to 10 percent of the remediation funds collected for its direct and reasonable expenses incurred to implement the incentive program.

99. Does the 10 percent for administration expenses come out of the total amount of funds collected or is it in addition to the amount of funds collected?

Yes, the hourly rate includes an additional 10 percent to cover potential administrative costs.

100. Does CARB intend to take a portion of the 10 percent for CARB's administration process?

No. Remediation funds go directly to a remediation fund administrator, not through or to CARB. A remediation fund administrator does not withhold any of their administration funds for CARB's administration.

101. Who will be responsible for enforcement of the remediation fund?

CARB enforcement division staff is responsible for enforcing compliance with the At Berth Regulation, including enforcement of the use of remediation fund for compliance.

Reporting Requirements

102. Who is required to report and how often?

Reporting for all vessel types will begin January 1, 2023, regardless of whether a vessel or terminal has emissions control requirements. Vessel and terminal operators (and third-party CAECS operators, if applicable) are responsible for reporting visit information for each visit made by a regulated vessel to a regulated marine terminal. Visit reports must be submitted to CARB within 30 calendar days of each vessel's departure. Separately, ports are responsible for providing wharfinger data on an annual basis.

103. Why do both ports and terminals have reporting requirements?

CARB staff recognizes the duplicative nature of required reporting but believes it is necessary. Because both the terminal and vessel operators have compliance obligations, reporting by each party is essential to providing accurate information in order to determine if compliance obligations are met without relying on the accuracy of a secondary entity reporting the information. Requiring each party to provide original information is intended to allow CARB staff to cross-check information and ensure that the reporting details are correct. An entity may designate another party to report on their behalf (such as a terminal giving

reporting rights to a port), but the reporting entity has the ultimate responsibility to ensure the accuracy of information provided.

104. What visit information are vessel operators required to report to CARB?

Beginning January 1, 2023, ALL vessel operators (or other authorized party) visiting any California port or marine terminal (including a low-use or exempt berth) must report the information set forth in section 93130.7(e)(4) to CARB within 30 calendar days of each vessel's departure. Please see the link to the reporting templates at: [At Berth Reporting Templates | California Air Resources Board](#).

105. What visit information are terminal operators required to report to CARB?

Beginning January 1, 2023, ALL California regulated terminal operators (or other authorized party) must report the information set forth in section 93130.9(d)(5) to CARB within 30 calendar days of each vessel's departure.

106. How long do vessels and terminal operators have to report visit information?

Vessel operators, terminal operators, and CAECS operators must submit visit reports to CARB within 30 calendar days of each vessel's departure.

107. How do vessel and terminal operators submit visit reports to CARB?

Visit reports can be submitted directly to CARB via electronic or written submission, as detailed in section 93130.19 of the 2020 Regulation. [Electronic submissions may be sent to shorepower@arb.ca.gov](mailto:shorepower@arb.ca.gov).

108. How do I report an emergency or safety event?

The emergency or safety report would include the visit information report and all documentation necessary to establish the conditions necessitating the safety and emergency event exception, including the date(s), local time, and location, along with documentation of the event.

109. How do I report use of a VIE/TIE?

To report a use of a VIE/TIE, one would include that a VIE/TIE was used for a visit and they would include the contact information of the responsible official who authorized the use of the VIE/TIE. This information would be included in the visit information report that the vessel operator or terminal operator submits.

110. How do I report use of the remediation fund?

The remediation fund would be reported with the visit information report and would need to include the approval of the request for the use of the remediation fund, including detailed

description of the applicable circumstance, the start and end times of using the remediation fund, and the tier rating of the auxiliary engine.

111. How do I report use of an Innovative Concept?

To report a use of an Innovative Concept one would include the usage in the visit information report that the vessel operator or terminal operator submits.

112. If a vessel shifts to a new berth, when does the 30-day reporting requirement begin - on the shift from one berth to another or when the vessel departs the terminal completely?

The 30-day reporting requirement begins when a vessel shifts to a new berth (see section 93130.7(e)(4)(l) of the Regulation). A berth shift means that a vessel unties from one berth and ties to a new berth for any reason. In the regulation, a vessel move from one berth to another berth is considered a new visit at each subsequent berth. For example, if a vessel shifts from berth A to berth B, the visit report for berth A should be sent within 30 days of the vessel's departure from berth A. A separate visit report should then be sent for the vessel's visit to berth B.

113. Will there be a required or standardized reporting form or system on January 1, 2023?

There is no required or standardized way that regulated entities must follow when submitting visit information to CARB. However, CARB staff provided a standardized template to assist regulated entities with reporting. Please see the link to the reporting templates at: [At Berth Reporting Templates | California Air Resources Board](#).

114. What are recordkeeping requirements for vessels, terminals, ports, and operators of CAECS?

Vessel terminal, port, and CAECS operators must keep all visit records for a minimum of five years.

Port and Terminal Plans

115. What is a port plan?

A port plan is a planning document that must be submitted to CARB discussing how a regulated terminal intends to comply with the requirements of the 2020 Regulation. As set forth in section 93130.14(b) of the Regulation, port plans must include a discussion of any necessary infrastructure modifications needed to ensure that each regulated terminal at that port is capable of achieving the required emissions reductions by the implementation dates established for each regulated vessel category.

116. What is a terminal plan?

Similarly, a terminal plan is a planning document that must be submitted to CARB by regulated marine terminal operators discussing how a regulated terminal intends to comply with the requirements of the 2020 Regulation. As set forth in section 93130.14(a) of the Regulation, terminal plans must include discussion of any necessary infrastructure modifications needed to ensure that each berth is capable of achieving the required emissions reductions by the implementation dates established for each regulated vessel category.

117. Who is required to submit a port and/or terminal plan?

All terminals receiving 20 or more visits from a regulated vessel category must submit a terminal plan, and all ports with regulated terminals must submit a port plan. All port and terminal plans must be signed by the applicable port's and terminal's Responsible Official under penalty of perjury and are subject to verification by CARB staff.

As an alternative, ports may submit plans for their terminal operators if both parties agree to that strategy.

118. If a terminal's berth operations are shared by multiple entities, who is responsible for submitting the port and/or terminal plan for the facility?

Each terminal operator or port entity that has any level of responsibility for compliance with the 2020 Regulation should be involved in the drafting of a port and/or terminal plan for the relevant berths. For the purposes of the port and terminal plan submittals, the 2020 Regulation language allows for flexibility for the plans to be submitted individually (one by each entity) or jointly, as long as the plan(s) contain(s) all information required by the 2020 Regulation, including clearly outlining the roles/responsibilities of each party and with each entity signing off on their approval of the plan. Alternatively, the 2020 Regulation allows for the Port to submit a plan on behalf of their terminal operators, as long as all have all signed off on agreeing to the plan.

If one plan is submitted on behalf of all parties, that plan should be sure to delineate the roles/responsibilities for each entity that plays a role in compliance for shoreside operations. For example, a joint port/terminal plan should specify which party (terminal operator or port) will be responsible for equipment repair/maintenance, labor arrangement, infrastructure upgrades/modification, etc. to ensure there's no question when it comes to determining compliance once implementation begins. If the port has no responsibilities (as in the case at some private oil terminals), then this should be clearly stated and agreed to in the port and terminal plans by all parties.

119. If a terminal operator operates more than one terminal at a port, does the operator need to submit a separate terminal plan for each terminal?

Yes, if a terminal operates two terminals under different leases, a separate terminal plan must be submitted to CARB for each terminal, regardless of any shared equipment or similar

operations. The port can turn in one plan for both terminals, but the division of responsibilities between the port and each terminal operator must be specified.

120. Should terminal operators and ports submit plans for a terminal that will not be in use by the implementation dates of the 2020 Regulation (i.e., the berths are being demolished or are no longer being used to berth regulated ocean-going vessels)?

If the plan is to demolish a berth(s), the company operating that terminal should advise CARB of their intentions by updating their terminal plan to inform CARB staff that they plan to demolish the berth and attest that it will not be used to service customers. Alternatively, the port can include this in their port plan, as long as all companies in charge of operating that facility endorse the plan by providing signed authorization on the terminal's submission to CARB.

121. Should ports provide information on behalf of a private marine terminal (if the port is not the landowner) as part of their port plan?

A port should consider if there are any aspects of the port's relationship with the private marine terminal that are not independent of the port's operations. For example, if the terminal is dependent on the port for any infrastructure, such as power lines or substations, that information must be clear in the Port plan. Even if the answer is no, and a terminal truly operates 100 percent independently from a port, it would be best to include the terminal in the Port's plan with a statement that the terminal is privately owned and operates as an independent marine terminal that will be submitting their own plan independently of the Port. To ensure that there is no confusion, it would be best if the private terminal stated the same in their own terminal plan. This would ensure a clear delineation of responsibility for that terminal.

122. What does it mean to be a Responsible Official?

A Responsible Official is defined as any person(s) with the authority to determine the existence of emergency and safety events, and to substantiate that a vessel, terminal, port, or control equipment complies with requirements of the 2020 Regulation. This could be a designated person(s) on staff at the port or terminal or a designated vessel operator. Ports, terminals, and vessel operators may identify any number of persons as a Responsible Official.

123. What information must be included in a port plan?

Port plans must include a list of any anticipated necessary infrastructure modifications needed to reduce emissions from ocean-going vessels at a terminal by the required implementation dates for the vessel category(s) received by that terminal. For each compliance strategy implemented at a berth, the plan must include the information set forth in section 93130.14(b)(3).

All port plans shall be signed by the applicable port's Responsible Official under penalty of perjury and are subject to verification by CARB staff. The division of responsibilities of the

terminal operator and the port, which is required to be submitted as part of a terminal plan, between must be signed by the terminal's Responsible Official.

124. What information must be included in a terminal plan?

Terminal plans must include a list of any anticipated necessary infrastructure modifications needed to reduce emissions from ocean-going vessels at a terminal by the required implementation dates for the vessel category(s) received by that terminal. For each emissions reduction strategy that the terminal intends to use for compliance, the terminal plan must include the information set forth in section 93130.14(a)(3).

A terminal operator claiming that a physical and/or operational constraint will delay its ability to implement its preferred CAECS to achieve emissions reductions from vessels at berth must also include with its terminal plan a technical feasibility study evaluating if there are any other emission control options that could be implemented more quickly at the terminal.

All terminal plans must be signed by the applicable terminal's Responsible Official under penalty of perjury and are subject to verification by CARB staff. The division of responsibilities of the terminal operator and the port, which is required to be submitted as part of a terminal plan, between must be signed by the port's Responsible Official.

125. Why do Responsible Officials for both the terminal and port have to sign off on the division of responsibilities for port and terminal plans?

Regardless of whether the terminal plan is submitted independently or as part of the port's plan, the division of responsibilities between the terminal and port (required as part of the terminal plan, see section 93130.14(a)(4) of the Regulation) must be signed off on by the Port's responsible official (as defined in the regulation). This is to ensure that all parties have the same understanding about the role each entity plays in compliance, which will assist CARB enforcement staff in determining responsibility in the case of noncompliance.

CARB staff recommends that terminal operators communicate with their port officials (and vice versa) in development of their terminal plan to ensure that both parties support and are in agreement with the terminal's intended path to compliance. If the terminal is independent of the port (i.e., the port is not obligated to provide any support for infrastructure, utilities, etc.), then the terminal plan should simply state that and have the port sign off on that information.

126. What kinds of berthing restrictions qualify as physical constraints in the 2020 Regulation (i.e., listed in terminal plan)?

If a terminal operator has a berth(s) with physical and/or operational constraints, such as narrow waterways or wharf designs that might prevent the use of a barge-based capture and control system, that will delay or prevent the terminal from implementing its preferred CARB approved control strategy to achieve emissions reductions from vessels at berth, the terminal operator must inform CARB of this constraint as part of their terminal plan. The terminal must also include with its terminal plan a technical feasibility study that evaluates if there are any other emission control options that could be implemented more quickly at the terminal. If the

terminal is unable to implement a strategy to control vessel emissions due to an unavoidable physical constraint, then they may be eligible to use the remediation fund to comply with the 2020 Regulation.

127. When are port plans due?

Port operators were required to submit port plans to CARB by December 1, 2021. [CARB has reviewed and responded to all received port plans, either to confirm completeness of the plan\(s\) or to request revisions. CARB has also posted all port plans and agency responses to CARB's website at: *Terminal and Port Plan Submissions | California Air Resources Board.*](#)

Ports must also submit an updated plan by July 1 the following year after any new terminal at the port exceeds the annual visit threshold, even if they do not anticipate remaining at or above the 20-visit threshold for a second consecutive year.

128. When are terminal plans due?

Terminal operators were required to submit terminal plans to CARB by December 1, 2021. [CARB has reviewed and responded to all received terminal plans, either to confirm completeness of the plan\(s\) or to request revisions. CARB has also posted all terminal plans and agency responses to CARB's website at: *Terminal and Port Plan Submissions | California Air Resources Board.*](#)

For vessel categories with compliance dates after 2023, a terminal operator must submit plans with the most likely control strategy and submit a revised plan the year before the compliance date reflecting any changes to the terminal operator's strategy, even if they do not anticipate remaining at or above the 20-visit threshold for a second consecutive year.

Ro-ro and tanker terminals are required to submit updated terminal plans as set forth in section 93130.(a)(2), which must reflect any changes to the terminal since the initial plan:

- Ro-ro terminals: February 1, 2024.
- LA/LB tanker terminals: February 1, 2024.
- All other tanker terminals: February 1, 2026.

Low-use or "low activity" terminals that exceed the terminal threshold are required to submit a terminal plan by July 1 the following year, even if they do not anticipate remaining at or above the 20-visit threshold for a second consecutive year.

129. If a port and/or terminal plan changes, is a revised plan needed?

Submitting a revised port and/or terminal plan is not required by the 2020 Regulation. However, if a port or terminal's main compliance strategy for the 2020 Regulation changes significantly or if the new strategy changes how the port and terminal responsibilities are defined, it would be important for the port and terminal to submit revised plans to ensure that CARB's enforcement team has the most updated information in the event CARB is required to investigate a non-compliant situation.

130. What happens if port and/or terminal plan deadlines are not met?

Any party subject to the 2020 Regulation who fails to comply with any provision or requirement in the 2020 Regulation is subject to enforcement action. See section 93130.20 of the 2020 Regulation for additional information and relevant Health and Safety Code references.

Additionally, without a port and/or terminal plan on file, CARB enforcement staff will have no proof either party was intending to comply with the 2020 Regulation, and no guidance as to the division of responsibilities between port and terminal operators. As such, both parties may be held liable for any failure to reduce emissions from a regulated vessel visit.

131. What is the review process for port and terminal plans?

Once a port or terminal plan ([initial or revised](#)) is received by CARB, CARB staff have up to 90 calendar days to review and notify the terminal operator or port of any deficiencies in the contents of the plan and/or to confirm acceptance of the plan. If CARB does not notify the applicable terminal operator or port of any deficiencies within that time period, the plan shall be deemed acceptable on the 90th calendar day following submittal to CARB.

132. How does a regulated entity know if their port or terminal plan is approved?

CARB will notify a port or terminal operator of any deficiencies in a port or terminal plan, respectively, within 90 calendar days following submittal, as stated in section 93130.14(c) of the regulation. If CARB does not notify the applicable port or terminal operator or port of any such deficiencies, the plan shall be deemed acceptable on the 90th calendar day following submittal. [Please note that CARB approval of a port or terminal plan means that the plan met the requirements of section 93130.14\(b\) of the Regulation and is deemed complete. Acceptance of a port or terminal plan does not constitute approval of a regulated entity's intended compliance pathway.](#)

133. Is there a CARB form available that can be used as a port or terminal plan?

No, CARB does not have any forms or templates to use for the port or terminal plan. There is no required form to submit port and/or terminal plans. However, submitters should ensure they have included all of the information required for terminal and port plans as detailed in section 93130.14(a)(3) and (b)(3), respectively.

134. How does a regulated entity submit a port or terminal plan?

Port and terminal plans ([including revised plans](#)) should be submitted to CARB in writing by mail or electronic submittal per Section 93130.19 of the 2020 Regulation. All submittals must be in the English language with the applicant attesting that all information submitted is true, accurate, and complete, signed under penalty of perjury by an individual(s) with the authority to certify that the regulated party complies with applicable requirements of the 2020 Regulation.

Written submittals may be sent to:

Interim Evaluation

135. What is the Interim Evaluation?

As set forth in section 93130.14(d), the *Interim Evaluation* is a report published by CARB that assesses the progress made in adopting control technologies for tankers and ro-ro vessels including the status of landside infrastructure improvements that may be needed to support emissions reductions at ro-ro and tanker terminals. The report assesses the feasibility of control requirements for bulk and general cargo vessels and vessels at anchor, and also evaluates the impacts of the global pandemic on the ability of the shipping industry and California ports to comply with the At Berth Regulation.

136. What kind of information was analyzed during the Interim Evaluation?

Staff utilized port and terminal plans and considered other public information provided to CARB including terminal specific engineering evaluations, logistical considerations, public engagement, and independent feasibility studies. All information submitted was considered in the drafting of the *Interim Evaluation Report*, including data on the state of technology, readiness to deploy, safety considerations, and cost-effectiveness.

137. How will CARB use the Interim Evaluation?

CARB staff plan to present the findings and recommendations from the Interim Evaluation Report to CARB's Board in Spring 2023 for their consideration and further direction regarding future amendments or rulemakings for ocean-going vessels.

138. When was the Interim Evaluation made available for public review?

The Interim Evaluation was made publicly available on CARB's website on December 1, 2022.

Innovative Concepts

139. What is the Innovative Concepts Compliance Option?

The Innovative Concepts Compliance Option ("Innovative Concepts") is a compliance pathway in the 2020 Regulation allowing regulated vessel fleets, terminal operators, and/or ports to comply with the 2020 Regulation through the use of a project that achieves equivalent emissions reductions in the port communities near where the vessels visit. Innovative Concepts must achieve equivalent or greater emissions reductions of the same pollutants within the same communities that would otherwise see benefits from direct emissions reductions from vessels at berth. All Innovative Concepts projects must be

approved through an Executive Order by CARB before being used as a compliance pathway for the 2020 Regulation.

140. What level of emissions reductions must be achieved for an Innovative Concept project?

Innovative Concept projects must achieve NO_x, PM 2.5, and ROG emissions equivalent to or greater than the level that would have been achieved by directly reducing emissions from a vessel at berth through the use of a CAECS, while not increasing GHGs. The total level of emissions reductions achieved by an Innovative Concept project will depend on the number of visits it is designed to replace.

141. Is there a geographical limit to where an Innovative Concept can reduce emissions?

There is no specific geographic limit to where emissions reductions from Innovative Concepts projects must occur, and each project will be assessed on a case-by-case basis. However, Innovative Concepts projects must achieve emissions reductions at the same port or marine terminal, within adjacent communities that are impacted by vessel emissions at berth, or overwater within three nautical miles of the port or marine terminal. The Innovative Concept project must not increase emissions at other ports or marine terminals.

142. What kind of projects would be considered an Innovative Concept?

CARB will evaluate any project that meets the regulatory requirements as set forth in section 93130.17 for approval as an Innovative Concept. However, applicants must note that because emissions reductions associated with an Innovative Concept are a substitute for reductions that would otherwise be occurring from ocean-going vessels at berth, emissions reductions must be early and above any existing state, federal, or international law (including, but not limited to rules, regulations, and statutes), or any emissions reduction strategy identified as part of an AB 617 Community Emissions Reduction Program (CERP) approved by CARB's Board.

Innovative Concept projects cannot include projects that are considered "business as usual" projects; in other words, projects that are reasonably expected to occur to provide benefits to impacted communities in the absence of this Regulation. Innovative Concept projects also cannot include plans that simply involve moving emissions sources to other ports or marine terminals (i.e., reducing emissions by relocating a percentage of a fleet to another port or terminal on the West Coast).

An example of an Innovative Concept project could be if ports elected to electrify trucks or cargo handling equipment that operate in or around the port to reduce NO_x and PM_{2.5} emissions that nearby communities are exposed to. An approved Innovative Concept for a regulated entity may include a sole pathway to compliance or part of a "hybrid approach" that combines direct compliance with reductions achieved by an alternative pathway. For an example of a "hybrid approach", a regulated terminal with no immediate plans to invest in zero-emission cargo handling equipment could install and utilize this technology at their

terminal as part of an approved Innovative Concept to achieve emissions reductions that are above and beyond any existing requirements for that equipment. Then, those emissions reductions could potentially be banked and used for compliance with the At Berth Regulation when the terminal is otherwise unable to reduce emissions directly from a vessel during a regulated vessel visit.

The Innovative Concepts applications must specify how the project will achieve the emissions reductions required by the regulation and how the project will be structured. For example, if a terminal operator wishes to enter into a long-term contract with a third-party CARB approved capture and control system operator as part of an Innovative Concept project designed to increase utilization of the system, the application must explain how that equivalent emissions credit system will work, how those credits will be tracked, and provide reasonable proof to CARB that the reductions are real, quantifiable, verifiable, and enforceable.

143. Who can use the Innovative Concepts Compliance Option?

Innovative Concepts were open for any regulated entity (i.e., vessel fleet, terminal operator, port, or third-party CAECS operator) to apply by December 1, 2021, to use for compliance with the 2020 Regulation, either as a primary compliance pathway or as a “hybrid approach” to supplement additional visits that cannot be controlled by directly reducing emissions from ocean-going vessels at berth. **However, approved Innovative Concepts can only be used by the applicant (i.e., fleets cannot use a fleet averaging concept if they did not submit an application to use that concept).**

144. How does a regulated entity report use of an Innovative Concept project for compliance?

Approved Innovative Concepts will be issued an Executive Order by CARB’s Executive Officer. Any vessel or terminal operator wishing to use an approved Innovative Concept project for compliance for a regulated visit would simply report that the approved Executive Order was used for that visit as part of their required visit report.

145. Will CARB accept Innovative Concept applications now that the submittal deadline has passed?

No. Applications for Innovative Concepts were required to be submitted to CARB for approval on or before December 1, 2021. Because this deadline has passed, no further applications will be accepted for new Innovative Concept projects as this was a one-time submittal opportunity. Regulated entities may continue to apply to use new future technologies as a CAECS for compliance with the 2020 Regulation at any time.

146. What is the review process for the Innovative Concept?

Innovative Concepts were due by December 1, 2021. CARB received 12 applications by the December 1, 2021 deadline, many of which contained multiple “sub-concepts” resulting in a 12 innovative concepts, that include a total of 63 sub-concepts. The applications were then

published on *CARB's website* for public review. Each of the applications had missing components that are required before the applications can be reviewed by CARB staff. As such, CARB staff reached out to applicants, notifying them about the information missing from their applications. These letters to applicants were then also posted on *CARB's website* alongside each application.

The At Berth Regulation requires a 45-day public comment period for all Innovative Concept applications. This was necessary to allow the public an opportunity to engage in a dialogue and be included in the process for Innovative Concept approval. A public comment docket was opened for each Innovative Concept application. After the public comment period, the applicants were required to respond to all public comments within 45 calendar days of the closing of the public comment period. The applicant responses to the public comments were then posted with the original applications.

CARB staff are in the process of reviewing the Innovative Concepts to determine if they meet the stipulations set forth in section 93130.17 of the regulation and are prioritizing evaluating applications based on applicants with earlier compliance dates. If the concept meets the criteria, CARB staff will recommend to CARB's Executive Officer that the Innovative Concept be approved, upon approval a notification will be sent to the applicant. Likewise, if the concept does not meet the criteria, CARB staff recommends to CARB's Executive Officer that the Innovative Concept not be approved, and if the Executive Officer agrees with staff's proposal, a notification of disapproval is then sent to the applicant. If, after thorough review, CARB staff or the Executive Officer need more information, the Executive Officer sends out a formal request for more information. The applicant then has 30 days to provide the additional information.

147. How does an applicant know if an Innovative Concept application has been approved?

When an application is approved, the Executive Officer will notify the applicant of approval to use the Innovative Concept for compliance with the 2020 Regulation and will publish the approval in an Executive Order, along with the application. An applicant can contact CARB staff by e-mailing shorepower@arb.ca.gov to check on the status of the application. If an application is incomplete, the Executive Officer will notify the applicant of any deficiencies. Applications will be denied after 30 calendar days unless the applicant corrects and resubmits the application for a new evaluation.

148. Are there annual reporting requirements for an Innovative Concept project?

Yes. By February 1 of each year, any Innovative Concept applicant must report any use of an Innovative Concept for the prior calendar year to CARB, as set forth in the subsections below. An annual report must provide a list of visits that used the Innovative Concept for compliance and the reductions achieved for each pollutant. The reductions of each pollutant achieved by the Innovative Concept must be equal to or exceed the emissions of each pollutant calculated from the cumulative vessel visits that reported using the Innovative Concept for compliance. If the annual report does not show that the Innovative Concept

achieved the promised emissions reductions, the parties using the Innovative Concept for compliance may be subject to enforcement action.

See Section 93130.17(d)(1) for more details on annual reporting, including how to calculate emissions using total fuel used for each visit and how to calculate reductions if an Innovative Concept affects the amount of fuel used during a vessel visit (i.e., shore power is used as part of an Innovative Concept, resulting in no fuel being burned).

149. How does an applicant estimate the vessel emissions covered under an Innovative Concept?

An applicant should estimate the vessel emissions planned to be covered under an Innovative Concept by multiplying the emission factor for each pollutant (NO_x, PM 2.5, and ROG from section 93130.5 (d) of the 2020 Regulation) by the expected number of vessel visits, average visit duration, and expected power used during an average visit.

150. How will CARB ensure that Innovative Concepts projects are achieving the required emissions reductions?

CARB will audit Innovative Concepts projects annually to ensure that the required emissions reductions are being met. See section 93130.17(d) for details on the annual reporting process for users of Innovative Concepts projects.

151. How long are Innovative Concept project approvals good for?

Innovative Concept projects may be approved for a compliance period of up to five (5) years. The approved compliance period will vary depending on the scope of the project. An Innovative Concept may be reapproved by CARB for an additional compliance period(s) of up to five years assuming the Innovative Concept is expected to continue meeting all the requirements found in Section 93130.17(a)(7).

152. What could result in an Innovative Concept compliance period not being extended?

Noncompliance with any of the circumstances listed in subsection 93130.17(f)(1) of the 2020 Regulation may result in a compliance period not being extended. An Innovative Concept compliance period may also not be extended if any new local, state, federal, or international law (including, but not limited to rules, regulations, and statutes), or any new emission reduction strategies identified in a CARB approved AB 617 CERP, is expected to require the emissions reductions achieved by the Innovative Concept, thus making them no longer “early and in excess”.

An applicant may also cancel an approved Innovative Concept for any reason, but all vessel and terminal operators that intended to rely on the canceled Innovative Concept are required to continue complying with the 2020 Regulation, and as such must have a backup plan for compliance. A canceled Innovative Concept project will have a compliance period end date effective on the date of cancellation.

153. What could result in an Innovative Concept being revoked by CARB?

CARB's Executive Officer may revoke or modify an approved Innovative Concept's Executive Order as set forth in section 93130.17(f). CARB will provide a 30 calendar day notice to the Innovative Concept holder of the revocation or modification. CARB's determination is final and not subject to review. Public notification of a revocation or modification of an approved Innovative Concept shall be made available on CARB's website.

154. Can reductions from an Innovative Concept be banked and used at a later date?

Early reductions achieved through an Innovative Concept that occur before a vessel or terminal's first compliance period can be used towards compliance during the first compliance period of up to five years. For example, if a ro-ro terminal elects to invest in an approved Innovative Concept project that involves purchasing and using a zero-emission locomotive that achieves emissions reductions at the port that go above and beyond any existing requirements starting in 2022, then that terminal may bank the emissions reductions credits from that Innovative Concept project from the time the equipment starts being used in 2022 until January 1, 2025, when the compliance date for ro-ro vessels begins. However, early reductions are only applicable for the initial compliance period and will expire when the initial compliance period ends. After the first compliance period, no early reductions achieved from Innovative Concepts can be used for compliance with the 2020 Regulation.

155. Can an Innovative Concept project be modified after approval?

No, Innovative Concept projects cannot be modified after approval. CARB staff may work with applicants on any necessary clarifying information needed after application submittal, but no modifications of the Innovative Concept plan will be permitted.

156. Can CARB incentive funding or other funding sources be used to pay for an Innovative Concept project?

No public incentive monies can be used to fund an Innovative Concept project, either partially or fully.

157. Do visits using an Innovative Concept count towards a vessel fleet's VIEs or terminal's TIEs?

No, visits complying with the 2020 Regulation through the use of an Innovative Concept will not be included in the calculation of a vessel fleet's number of VIEs or a terminal's number of TIEs for the next calendar year. VIEs and TIEs are designed to provide some operational flexibility to vessels and terminals that are complying with the 2020 Regulation by directly reducing emissions at berth. Because vessels using an Innovative Concept are outside of that structure, these visits do not count towards the number of visits that are counted in calculating the number of VIEs or TIEs a vessel fleet or terminal receives each year.

Any vessel visits not using an Innovative Concept will count towards the accumulation of VIEs and TIEs, including both visits that utilize a CAECS to directly comply with the

2020 Regulation, visits that utilize the remediation fund or any other exemption, and visits that do not reduce emissions.

158. Can visits using an Innovative Concept qualify to use the remediation fund?

No. Visits complying with the 2020 Regulation through the use of an Innovative Concept are not eligible to apply for use of the remediation fund.

Incentives

159. What incentive funding is available to support reducing vessel emissions at berth?

At this time incentive funding is available for shore power, capture and control, and cable reels through these programs (potential equipment that is eligible for funding through each program in parenthesis):

- Low Carbon Transportation - Advanced Technology Demonstration and Pilot Projects (capture and control systems for tankers);
- Carl Moyer Program (shore power, capture and control systems);
- VW Mitigation Trust (shore power);
- AB 617 Community Air Protection (shore power, capture and control systems);
- Clean Off-Road Equipment Voucher Incentive Project (cable reel management systems); and
- Prop 1B Good Movement Program (shore power).

160. Where can I find more information on these programs?

For more information on the various funding programs that are offered through CARB please go to <https://ww2.arb.ca.gov/our-work/topics/incentives>.

Enforcement

161. What should I do if I know I will be in violation of the 2020 Regulation?

In these circumstances, CARB encourages regulated entities to work with CARB's Enforcement Division in advance of any known violations. Questions regarding compliance can be directed to enforcement staff at shorepower@arb.ca.gov.

162. What is the policy or process for violations?

CARB follows its Enforcement Penalty Policy to resolve violations of any CARB regulation. CARB also considers eight statutory factors that could potentially reduce the maximum violation penalty amount. CARB's Enforcement Penalty Policy and a description of the eight factors can be found here <https://ww2.arb.ca.gov/resources/documents/enforcement-policy>.

163. What is the penalty for not complying with the 2020 Regulation?

Pursuant to the Health and Safety Code and the 2020 Regulation, each failure to meet any requirement of the At Berth Regulation constitutes a single, separate violation. Additionally, each item on the checklist is considered a separate action. Section 43016 of the Health and Safety Code states penalties shall not exceed \$37,500 for “each action” subject to this part of the code. The maximum penalty under HSC section 43016 increases by the California Consumer Price Index (CPI) each year and is listed in the Enforcement Division’s Annual Report. Also, each calendar day, or portion of, in which violations occur will be a separate daily violation, so if a visit occurred across two calendar days, it would be considered two days of violations for each action or each item violated in the checklist. All responsible parties may be held jointly and severally liable for non-compliance, depending on the findings made by CARB’s Enforcement Division.

164. How does the timing associated with CARB’s U.S. EPA authorization request affect implementation of the At Berth Regulation?

The new (2020) At Berth Regulation (2020 Regulation) was developed through an extensive public process, with a great deal of stakeholder outreach dating back to 2016. The 2020 Regulation has been approved by CARB and the California Office of Administrative Law, and was filed with the Secretary of State on December 30, 2020. Entities should comply with the law, and CARB will continue to process and implement the provisions of the 2020 Regulation for any entities that elect to comply with such provisions.

On September 27, 2022, CARB submitted a request that the United States Environmental Protection Agency (U.S. EPA) Administrator Michael Regan grant California an authorization for the 2020 Regulation pursuant to section 209(e) of the federal Clean Air Act. Administrator Regan has not yet acted on CARB’s authorization request. CARB will defer enforcement of the provisions of the 2020 Regulation that apply beginning January 1, 2023, until U.S. EPA grants California the requested authorization. Note, however, that this does not foreclose CARB’s discretion to initiate enforcement actions against entities that do not comply with the provisions of the 2020 Regulation that apply beginning January 1, 2023.