

August 21, 2023

K.J. May, Engineering Manager
The Port of Hueneme, Oxnard Harbor District
333 Ponomo Street
Port of Hueneme, California 93041

Dear K.J. May:

On December 1, 2021, the Port of Hueneme submitted an application (Application) for an Innovative Concept, pursuant to California Code of Regulations, title 17, section 93130.17 (2020 Regulation or Control Measure). The proposed concept consists of a capture and control system to be used as an approved compliance mechanism prior to the January 1, 2025 Regulation implementation date.

On September 21, 2022, California Air Resources Board (CARB) staff notified the Port of Hueneme by letter that the Application was not complete as it did not contain the minimum information required for Innovative Concept applications as described in section 93130.17(b)(1). CARB's letter requested Port of Hueneme to resubmit a revised, completed Application addressing the missing information by October 17, 2022. To date, CARB has not received the requested revised Application.

Without a response, CARB staff is unable to complete the evaluation of the Innovative Concept, and the Application is incomplete. Section 93130.17 (b)(5) of the Regulation allows for you to respond within 30 days of this letter and provide us with the information that we have outlined in the attachment called "Attachment A–Port of Hueneme–Innovative Concept Evaluation–Request for More Information."

Once we receive your response to this email, we will re-evaluate your Application according to Section 93130.17 (b)(3). We look forward to your response by September 20, 2023. If CARB does not receive a corrected application within 30 days, Section 93130.17(b)(5) of the Regulation provides the Application will be denied.

If you have any additional questions or would like to further discuss the content of this letter and Attachment A, please contact Elizabeth Melgoza, Air Pollution Specialist, Marine Strategies Section, at Elizabeth.Melgoza@arb.ca.gov or Angela Csondes, Section Manager, Marine Strategies Section, at Angela.Csondes@arb.ca.gov. If you would like to discuss CARB staff's feedback via conference call or a virtual meeting, we would be happy to accommodate a meeting.

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Sincerely,

A handwritten signature in blue ink, appearing to read "Bonnie Soriano". The signature is fluid and cursive, with the first name "Bonnie" written in a larger, more prominent script than the last name "Soriano".

Bonnie Soriano, Branch Chief, Freight Activity Branch, Transportation and Toxics Division

Attachment - "Attachment A-Port of Hueneme-Innovative Concept Evaluation-Request for More Information"

cc: Elizabeth Melgoza, Air Pollution Specialist, Marine Strategies Section

Attachment A

Port of Hueneme Innovative Concept Evaluation

Request for More Information – Using Capture and Control Prior to the Control Measure Implementation Date

The California Air Resources Board (CARB) Control Measure for Ocean-Going Vessels At Berth (2020 Regulation or Control Measure) section 93130.17 provides that Applications for Innovative Concepts must contain, at a minimum, the specific information detailed under section 93130.17 (b)(1). Your Application submitted on December 1, 2021 (Application), did not contain the minimum information identified by the 2020 Regulation.

In general, applications for Innovative Concepts must contain any information necessary to demonstrate that the proposed Innovative Concept will “reduce NO_x, PM 2.5, and ROG emissions equivalent to or greater than the level that would have been achieved by the Control Measure, while not increasing GHG,”¹ (See section 93130.17 (a)(2)).

To establish equivalency, the Application should provide three main components:

1. Baseline Emissions Estimates per section 93130.17 (b)(1)(C): “Estimate of the vessel emissions planned to be covered under the Innovative Concept for each pollutant (NO_x, PM 2.5, and ROG) by multiplying the emission factor for a pollutant found in section 93130.5(d) of this Control Measure by the expected number of vessel visits, average visit duration, and expected power used during an average visit.”
2. Direct Compliance Estimates: An estimate of reductions that would be achieved under direct compliance with the regulation with a CAECS, in absence of any Innovative Concept.
3. Innovative Concept Estimates: An estimate of reductions achieved by the proposed Innovative Concept.

These estimates must identify any assumptions such as activity, emission factors, energy consumed by the Innovative Concept during an average visit, and provide estimates for NO_x, PM 2.5, and ROG reductions. Please provide an Excel spreadsheet that provides these calculations, assumptions, emission factors, activity, etc.

See Items 2, 3, 6, and 7 below for more details.

Below, CARB Staff has outlined the specific areas required by the 2020 Regulation which are missing or incomplete in your Application (see underlined text below).

¹ NO_x is oxides of nitrogen. PM2.5 is particulate matter that is 2.5 micrometers in diameter or smaller. ROG is reactive organic compounds. GHG is greenhouse gases.

Item 1:

Section 93130.17 (b)(1)(B): “[Applications shall contain a...] *Description of proposal including an overview of the source and scope of emission reductions, and a project site plan and location map.*”

Please describe the Innovative Concept “scope” in more detail.

Here are some examples of the type of details to include in the updated Application as part of the “scope” of the proposal:

- The Application indicates that the Innovative Concept will use an Emissions Capture and Control System. Will this be a barge-based system or a land-based system?
- Similar to Item 6 below, your updated Application should detail how the emission reductions will be calculated and banked for future visit compliance.
- The operational scope of the project, i.e., how many capture and control units will be operating?

Please provide a layout/map of the proposed wharf/berth location of the Capture and Control system(s) when servicing the vessels at berth.

Item 2:

Section 93130.17 (b)(1)(C): “*Applications for innovative concepts shall contain ... [an estimate] of the vessel emissions planned to be covered under the innovative concept for each pollutant NO_x, PM_{2.5}, and ROG by multiplying the emission factor for a pollutant found in section 93130.5(d) of this Control Measure by the expected number of vessel visits, average visit duration, and expected power used during an average visit.*”

The table in Section 2.A. of the Application does not use the correct values for emissions reductions based on the emissions factors specified in section 93130.5(d). Although the description of the table is described as “emissions reductions,” it appears that the values and calculations are intended to represent the resultant emissions *after* the reductions were applied. However, this is not clear. The Direct Compliance Estimates are the difference between the default values for emission rates and the maximum allowable emissions rates to qualify as a CAECS as outlined in 93130.5(d) and 93130.17 (d)(1)(B). Based on these values, the Direct Compliance Estimates for emissions *reductions* from the default rates is:

- 11 grams per kilowatt hour (g/kW-hr) (13.8 g/kW-hr – 2.8 g/kW-hr) of nitrogen oxides (NO_x),
- 0.14 g/kW-hr (0.17 g/kW-hr – 0.03 g/kW-hr) of fine particulate matter that are 2.5 microns or less in diameter (PM_{2.5}), and
- 0.42 g/kW-hr (0.52 g/kW-hr – 0.10 g/kW-hr) of reactive organic gas (ROG).

Please update the values listed in the column labeled “g/kw-hr” and the associated values in the columns labeled “Grams per call” and “Total (g).” Also, our assumption is that 52,500 kilowatt hours (kW-hr) is based on a two megawatt (MW) engine output (for

26.25 hours). Please confirm that our understanding is correct and provide a source for this engine output. These updates should also be reflected in the calculations to establish emissions reductions equivalency.

Item 3

Section 93130.17 (b)(1)(D): “[Applications shall contain...] *The proposed recordkeeping, reporting, monitoring, and testing procedures that the applicant plans to use to demonstrate reductions.*”

Please explain how the Port of Hueneme intends to monitor, calculate, log, and report emissions reductions.

Section 1.B. of your Application indicates that “the record keeping related to the number of calls and hours of emissions controlled will be maintained by the bonnet owner/operator and the Port of Hueneme.” The capture and control owner/operator will track and monitor the emissions that their equipment captures and controls and record that information as part of their service. However, it is ultimately incumbent upon the Port of Hueneme to track and monitor emission reductions that are associated with an Innovative Concept and match those reductions with vessel visits that use this Innovative Compliance option for compliance. The application should include an estimate of these reductions. Please provide more specific details of how the recordkeeping requirements of this item (Item 3) and Item 11 (Section 93130.17 (a)(13)) will be met and how this information will be used to fulfill the annual reporting requirements in Section 93130.17 (d). Specifically, provide a clear example for what information Hueneme will be keeping as records, and how those records will be used to calculate a vessel’s visit emissions and how this will equate to the reductions achieved by the Innovative Concept. The methodology described in the application must be clean enough for CARB to understand what annual reporting per Section 93130.17 (d)(2) will entail. Staff recommends including a sample spreadsheet of the information that will be reported to CARB annually. CARB recommends using spreadsheets similar to those developed to establish emissions reduction equivalency. For reporting, actual activity and vessel data can be supplied as a means to track emissions reductions.

Item 4:

Section 93130.17 (b)(1)(E): “[Applications shall contain...] A Memorandum of Understanding (MOU) or similar agreement between the applicant, any funding partners (if more than one entity is providing funding), owners and operators of controlled equipment for the innovative concept that shows agreement regarding the innovative concept’s scope and requirements for using the innovative concept in compliance with this Control Measure. The Memorandum of Understanding or similar agreement must be approved by the Executive Officer and must be in place prior to the start date of the innovative concept compliance period.”

Please provide us with a plan of which entities you plan or may plan on working with and if there are any agreements in place. If you have not entered into an MOU, please so state.

Item 5:

Section 93130.17 (b)(1)(G): “[Applications shall contain...] A summary of all governmental approvals necessary to enable development of the innovative concept.

Please provide us with a list of any governmental approvals that may be required to enable the development of the Innovative Concept.

In your Application you indicate that, “If required, the Port of Hueneme or bonnet system owner/operator will secure a Ventura County Air Pollution Control District permit for the system prior to operation.” Please determine if this is required and indicate that in your response to this letter. Also, if there are any other governmental approvals that you may have inquired about, please list those agencies.

Item 6:

Section 93130.17 (b)(1)(I)/(a)(2): “[Applications shall contain any information necessary to demonstrate that...] *The proposed innovative concept [reduces] NO_x, PM 2.5, and ROG emissions equivalent to or greater than the level that would have been achieved by the Control Measure, while not increasing GHG. Emission reductions are verified each year through annual reporting in section 93130.17(d) of this Control Measure.*”

Please respond to this letter showing how your Innovative Concept will achieve the necessary emissions reductions.

Item 2 requires the quantity of planned estimated emissions reductions. This requirement in Item 6 is to explain *how* that will be achieved. For example, what third party control and capture system do you plan on using? What are their estimated reduction levels? Please describe in detail how you will achieve the required reductions. CARB also recommends providing an Excel spreadsheet as described in the emissions reductions equivalency description above.

Item 7:

Section 93130.17 (b)(1)(I)/(a)(3): “[Applications shall contain any information necessary to demonstrate that...] *The proposed innovative concept [achieves] emissions reductions of NO_x, PM 2.5, and ROG that, as of the date the compliance period begins, are early or in excess of: (1) any other state, federal or international rule, regulation, statute, or any other legal requirement (including any requirement under a Memorandum of Understanding with a government entity), that is in effect, has been approved, or has been noticed; or (2) of an emission reduction strategy identified in an AB 617 Community Emissions Reduction Program that has been approved by CARB’s Governing Board.*”

Please describe how your Innovative Concept will achieve emissions reductions of NO_x, PM 2.5, and ROG that are earlier than, or in excess of, other requirements. Please indicate which other requirements were considered in your study of this requirement.

To meet this requirement, the applicant should demonstrate that the emissions reductions will be in excess of other state, federal or international rule, regulation, statute, or any other legal requirement (including any requirement under a Memorandum of Understanding with a government entity)." To demonstrate this, applicable rules, regulations, or statutes, should be listed. If none are found, then please indicate the rules, regulations, or statutes that may have been considered.

Item 8:

Section 93130.17 (b)(1)(I)/(a)(7): *See Section 93130.17 (a)(7) for complete 2020 Regulation text.*

Please describe your intent for compliance with this requirement.

Item 9:

Section 93130.17 (b)(1)(I)/(a)(9): "[Applications shall contain any information necessary to demonstrate that...] *Visits made under an innovative concept are not counted toward a fleet's VIEs or terminal operator's TIEs in section 93130.11 of this Control Measure and are ineligible for using the remediation fund provisions in section 93130.15 of this Control Measure.*"

Please describe your understanding that visits made under the Innovative Concept are not eligible for vessel incident events (VIE), terminal incident events (TIE), or the remediation fund.

Item 10:

Section 93130.17 (b)(1)(I)/(a)(12): "[Applications shall contain any information necessary to demonstrate that the...] *innovative concept [is not] partially or fully funded with a public incentive program.*

Please describe how this project will be funded.

Item 11:

Section 93130.17 (b)(1)(I)/(a)(13): "[Applications shall contain any information necessary to demonstrate that the applicant will comply...] *with this Control Measure using an approved innovative concept [and] maintain records in a manner and form as specified by the Executive Officer in the approved innovative concept. Required records include, but are not limited to, information on fuel usage, routes, port calls, maintenance procedures, and emissions test results. Such records and reports shall be retained for a period of not less than five years and*

shall be submitted to the Executive Officer in the manner specified in the approved innovative concept and upon request by the Executive Officer, either within 10 calendar days or by a later date approved by the Executive Officer on a case-by-case basis."

Similar to Item 3, please describe your plans for obtaining and maintaining records on fuel usage, routes, port calls, maintenance procedures, and emissions test results for a period of not less than five years.

Item 12:

Section 93130.17 (b)(1)(I)/(a)(15): "[Applications shall contain any information necessary to demonstrate that...] *The innovative concept [is] implementable within the timeframe needed to be used for compliance with this Control Measure, including any time needed for environmental review (if applicable).*"

Please provide more details regarding the timeline including critical project milestones. Please describe the steps that will be required to meet the January 1, 2024 project implementation date.

Your Application indicates that the anticipated start date of the Innovative Concept will be about January 1, 2024. Please provide more details regarding the timeline including critical project milestones that will be met to meet that date. For example, what are the timelines associated with choosing a capture and control technology provider, obtaining any permits, developing logistical plans, etc.