Print Form

Notice of Exemption

Appendix E

To: Office of Planning and Research
P.O. Box 3044, Room 113
Sacramento, CA 95812-3044

County Clerk
County of: _____

From: (Public Agency): California Air Resources Board

1001 I Street, Sacramento, CA 95814
(Address)

Project Title: Capture and Control System for Oil Tankers Project

Project Applicant: South Coast Air Quality Management District

Project Location - Specific:

Either Port of Los Angeles or Port of Long Beach. See attachment.

Project Location - City: Long Beach Project Location - County: Los Angeles

Description of Nature, Purpose and Beneficiaries of Project:

The project involves the execution of a grant agreement to fund the development and demonstration of a barge-based emissions control technology for tanker vessels. See attachment for more information.

Name of Public Agency Approving Project: California Air Resources Board

Name of Person or Agency Carrying Out Project: South Coast Air Quality Management District

Exempt Status: **(check one):**

- ☐ Ministerial (Sec. 21080(b)(1); 15268);
- ☐ Declared Emergency (Sec. 21080(b)(3); 15269(a));
- ☐ Emergency Project (Sec. 21080(b)(4); 15269(b)(c));
- ☒ Categorical Exemption. State type and section number: 15301(a), 15303(d), 15306
- ☐ Statutory Exemptions. State code number: _____

Reasons why project is exempt:

The project consists of a barge-based emissions control system to be used for controlling emissions from tanker vessels. The project involves minor constuction of a barge-based system, and testing of that system on tanker vessels. See attachment.

Lead Agency
Contact Person: Rebecca Fancher Area Code/Telephone/Extension: (916) 327-1550

If filed by applicant:

1. Attach certified document of exemption finding.
2. Has a Notice of Exemption been filed by the public agency approving the project? ☐ Yes ☐ No

Signature: Rebecca Fancher Date: 3/30/2021 Title: Staff Air Pollution Specialist

☐ Signed by Lead Agency ☐ Signed by Applicant

Authority cited: Sections 21083 and 21110, Public Resources Code.
Reference: Sections 21108, 21152, and 21152.1, Public Resources Code.

Date Received for filing at OPR: _____

CEQA Notice of Exemption (NOE) Attachment: Capture and Control System for Oil Tankers Project

California Air Resources Board

March 30, 2021

Project Location – Specific:

The proposed project is located on water channels within one of the following two existing facilities of the San Pedro Bay ports in County of Los Angeles, California: 1) Port of Los Angeles, 425 South Palos Verdes Street, San Pedro, California, 90731 or 2) Port of Long Beach, 415 West Ocean Boulevard, Long Beach, California, 90802. While the original application contemplated the project would be located at one of the two potential locations listed above, CARB notes that the applicant has since indicated that the project will take place at the Port of Long Beach location listed above.

Description of Nature, Purpose and Beneficiaries of Project:

After a competitive solicitation process, the California Air Resources Board (CARB) has selected the South Coast Air Quality Management District (South Coast AQMD) to receive a grant award in the amount of $10,000,000 to implement the Capture and Control System for Oil Tankers Project. The South Coast AQMD is both the applicant and lead CEQA agency for this project. The South Coast AQMD is partnering with others to develop a capture and control system to demonstrate that certain commercially available emissions capture and control technologies currently used by container vessels can be adapted for oil tanker vessels at berth (proposed project). Additionally, the system will seek certification from CARB as an alternative control technology under CARB's Control Measure for Ocean-Going Vessels At Berth. The proposed project is expected to commence in March 2021 and end June 2023.

The proposed project is expected to include the following activities: 1) prepare a Tanker Safety Assessment Study to identify equipment and operational specifications to ensure vessel safety; 2) design the specifications and configuration for the emissions control system's power system; 3) prepare a CARB test plan that will be used to test the barge-based capture and control system on auxiliary engines and boilers for oil tanker vessels; 4) construct the emissions capture and control system, which includes two purification units, an emissions capture system, exhaust pipe connectors, and an emissions control unit; 5) assemble the capture and control system onto the barge; 6) install and integrate the power system onto a barge platform; 7) conduct a maximum of 1,000 hours of testing of the capture and control system on at least five unique oil tanker vessels to demonstrate the widest-feasible range of application and report testing data; 8) conduct an additional 100 hours of testing for auxiliary engine and boiler carbon capture demonstration on two tankers and report testing data; and 9) prepare and submit a final report to CARB.

The proposed project uses a single movable, self-powered barge that can be maneuvered alongside a vessel at berth. The proposed project will consist of solar

power, battery system, an emissions capture and control system, connectors, and purification units. The generated solar power will be used between oil tanker vessel calls as back-up power and to charge the battery during non-operational periods. Battery storage will be used to provide peak power during propulsion, to power instrumentation, and when the barge is at berth.[1] The barge will consist of a dual fuel power system which can be switched between renewable diesel and hydrogen fuel. Process operations of the capture and control system would be powered by a 400 kW hydrogen fuel cell system. There is an existing onsite renewable diesel refueling station and the hydrogen fuel would be supplied by a mobile re-fueler from a renewable source from an existing hydrogen fueling station within the City of Ontario. The barge will remotely connect, capture, and purify the exhaust emissions from the auxiliary engines and boilers of a berthed oil tanker vessel at the port.[2]

The barge will use four barge spuds to act as an anchor to position next to a tanker vessel. A spud barge, sometimes called a jack-up barge, is a specialized type of barge. The barge is moored by steel shafts or through-deck piling. Specifically, the spuds are pilings that are lowered to rest on the soil or sand at the bottom of the water to provide stability. For this project, these spuds are anticipated to anchor at a minimum of 60 feet to the channel sea floor, which has previously been dredged.

Once anchored, the capture and control system will extend a 250-foot hydraulic placement arm over the exhaust pipe of up to two operating exhaust pipes. The exhaust emissions will be drawn through the duct and sent to two purification units. Each purification unit is comprised of a diesel particulate filter, an electric heater, urea injection, a selective catalytic reduction system, a reactive organic gas elimination system, a fan, and a heat recovery heat exchanger. The SCR will require a delivery once every two months of two containers of urea, 330 gallons each, for a total of 660 gallons to be stored onboard the barge.[3] The proposed project is anticipated to eliminate 95 percent of emissions from the exhaust of auxiliary engines and boilers.

Reason Why Project is Exempt:

CARB and South Coast AQMD staff have reviewed the project pursuant to: 1) CEQA Guidelines Section 15002(k) - General Concepts, the three-step process for deciding which document to prepare for a project subject to CEQA; and 2) CEQA Guidelines

[1] South Coast Air Quality Management District Capture and Control System for Oil Tankers Project grant application, Project Narrative and Workplan, pages 2, 8, and 14.
[2] South Coast Air Quality Management District Capture and Control System for Oil Tankers Project grant application, Project Executive Summary.
[3] South Coast Air Quality Management District Capture and Control System for Oil Tankers Project grant application, Attachment 8, California Environmental Quality Act Worksheet, page 14.

Section 15061 - Review for Exemption, procedures for determining if a project is exempt from CEQA. The capture and control system demonstration portion of the proposed project is located within the existing port boundaries, within existing port facilities and infrastructure in industrial and heavily developed areas. The areas have also been disturbed through historical dredging and regularly accommodate vessel calls, trucks, and other on-dock rail operations. Installation and testing of a capture and control system that is installed on a single barge will require no physical reinforcements or modifications to the existing physical environment, including to the berth or terminal infrastructure. Because the barge will be self-powered, the proposed project is anticipated to require no system mounting or energy supply or re-fueling structures.

The proposed project is considered to be categorically exempt from CEQA pursuant to CEQA Guidelines Section 15301(a) – Existing Facilities, because the proposed project does not require the construction or installation of a capture and control system on land such as a terminal's wharf, and it involves negligible or no expansion of the existing uses of terminal-side facilities or infrastructure, or the existing uses of auxiliary engines and boilers on oil tanker vessels. The proposed project uses spuds to anchor the barge in the existing water channels that have been heavily dredged. The disturbance of the sea floor is a minor alteration of existing features. Maintenance spud barges equipped with heavy equipment also operate at the port, and the port's channels are periodically dredged. The proposed project implementation may require the installation of solar panels, fuel cell, and hydrogen storage on the barge, which may involve construction, assembling, and staging of limited numbers of small new equipment or structures on land for installation and commissioning which may include equipment such as a crane. The generated solar power will be used between oil tanker vessel calls as back-up power and charge the battery during non-operational periods.[4] Battery storage will be used to provide peak power during propulsion, to power instrumentation, and when the barge is at berth.[5] Given the minimal nature of the above project features, the proposed project is also considered to be categorically exempt from CEQA pursuant to CEQA Guidelines Section 15303(d) – New Construction or Conversion of Small Structures.

Finally, because the overarching purpose of this demonstration project is to collect data from testing to verify the emissions reduction benefits of the capture and control technologies on oil tanker vessels, and because such activities do not result in a serious or major disturbance to an environmental resource, the proposed project is also considered to be categorically exempt from CEQA pursuant to CEQA Guidelines Section 15306 – Information Collection.

[4] South Coast Air Quality Management District Capture and Control System for Oil Tankers Project grant application, Attachment 2, Project Narrative and Workplan page 2, and Attachment 8, California Environmental Quality Act Worksheet, page 17.

[5] South Coast Air Quality Management District Capture and Control System for Oil Tankers Project grant application, Attachment 2, Project Narrative and Workplan, Project Narrative, Project Overview, page 2.

Further, South Coast AQMD has determined that there is no substantial evidence indicating that any of the exceptions to the categorical exemptions apply to the proposed project pursuant to CEQA Guidelines Section 15300.2 – Exceptions. The project would not occur in a sensitive location, involve cumulative impacts considerations, or have the potential to significantly affect the environment due to unusual circumstances. It would not damage any scenic resources, as it would occur within an existing heavily-industrialized area. It would not occur at a hazardous waste site, or significantly change the significance of a historical resource.

Therefore, the proposed project is exempt from CEQA.