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*Sent via email*

Dear Khamly Chuop:

Thank you for providing the California Air Resources Board (CARB) with the opportunity to comment on the Oakland Harbor Turning Basins Widening Project (Project) Draft Environmental Impact Report (DEIR), State Clearinghouse No. 2022050647. The Project is proposed within the Port of Oakland (Port), California, which is the lead agency for California Environmental Quality Act (CEQA) purposes.

CARB applauds the Port for proposing the use of zero-emission infrastructure to support electric dredgers during the construction of the Project. However, CARB is concerned the Project would result in an increase in larger vessels calling at the Port, resulting in increased TEU throughput. The increase in twenty-foot equivalent unit (TEU) throughput at the Port may result in increased landside operations and the construction of new landside facilities, leading to increased onsite equipment operations and heavy-duty truck and train traffic serving the Port that would negatively impact the residents of the West Oakland Community. To address this concern, the Port should fully evaluate the potential air quality impacts resulting from the Project's contribution to increased landside operations and require the use of zero-emission technologies during the construction and operation of the Project. As discussed in this letter, the Port should evaluate the Project's impacts on the Port's landside operations using an existing-conditions baseline or provide adequate evidence demonstrating that an existing-conditions baseline would be inappropriate.

California has established clear requirements and goals to combat climate change and adverse health outcomes from criteria and toxics pollution. For example, CARB's Scoping Plan, Sustainable Freight Strategy, and State Implementation Plan Strategy chart a course to meet the state's climate goals and State Implementation Plan commitments. Additionally, Governor Gavin Newsom has taken action to help meet the state's air pollution and climate challenges, including the signing of Executive Order N-79-20 on September 23, 2020. The Executive Order states: "It shall be a goal of the State that 100% of in-state sales of new passenger cars and trucks will be zero-emission by 2035. It shall be a further goal of the State that 100% of medium and heavy-duty vehicles in the State Local agencies like the Port are essential partners in achieving these goals. be zero-emission by 2045 for all operations

where feasible and by 2035 for drayage trucks. It shall be further a goal of the State to transition to 100% zero-emission off-road vehicles and equipment by 2035 where feasible.” The Executive Order further directs the development of regulations to help meet these goals.

To ensure that lead agencies, like the Port, stay in step with evolving scientific knowledge to protect public health from adverse air quality and greenhouse gas impacts from the transportation sector, which serves as the basis of the Governor’s Executive Order N-79-20, CARB staff urges the Port to adopt the zero-emission technologies within the Project area recommended in this letter.

## Project Description & Background

The Project proposes widening the Port's existing Outer Harbor Channel Turning Basin (OHTB) and Inner Harbor Turing Basin (IHTB) to accommodate larger vessels. The OHTB and IHTB were originally designed and constructed to accommodate vessels with a 1,139-foot overall length, 140-foot beam, and 48-foot draft. According to the DEIR, in recent years, the lengths and widths of the vessels calling at the Port have exceeded the maximum vessel dimensions required to safely transit through the two existing turning basins; this has resulted in transit restriction limits on larger vessels accessing the Port. To address this, the Port proposes to increase the width of existing turning basins to accommodate vessels with a capacity of 19,000 TEU and a length of 1,310 feet. The Port states in the DEIR that the proposed modifications to the OHTB and IHTB would increase the TEU carrying capacity of vessels calling at the Port from 6,500 to 19,000 TEU, resulting in a 192% increase in per vessel TEU carrying capacity compared to the vessels currently serving the Port.<sup>1</sup> Although the Project could double the Port's TEU throughput, the Port claims in the DEIR (without substantial evidence) that the increase in higher TEU capacity vessels would not increase freight throughput or induce growth at the Port.

According to the DEIR, the widening of the OHTB and IHTB would begin in July 2027 and would be completed over 2.5 years. The widening of the IHTB would require dredging the enlarged basin to 50 feet below mean lower low water (MLLW), removing dryland, structures, pavement, and pile-support structures adjacent to the existing, and installing a new bulkhead. The widening of the OHTB would require dredging the enlarged basin to 50 feet but would not impact dryland. Dredging would be performed during approved environmental windows with an electric-powered barge-mounted clamshell/excavator dredge. Overall, modifying the OHTB and IHTB would result in the installation of approximately 2,450 linear feet of bulkhead and the removal and placement of approximately 2.5 million cubic yards of aquatic dredged and excavated land-based

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<sup>1</sup> Port of Oakland. Oakland Harbor Turning Basins Widening Project Draft Environmental Impact Report. Page ES-2 through ES-3. Accessible at [https://files.ceqanet.opr.ca.gov/279066-2/attachment/S-egjB4bkl\\_QzISDOsK0G82-O2KGgasR5fGpLcEdxxZoP89zwhkrEbpaHam9CsTCidlbVNJrZMo8j6Ys0](https://files.ceqanet.opr.ca.gov/279066-2/attachment/S-egjB4bkl_QzISDOsK0G82-O2KGgasR5fGpLcEdxxZoP89zwhkrEbpaHam9CsTCidlbVNJrZMo8j6Ys0).

materials.<sup>2</sup> The DEIR states most of the dredged material would be placed at a beneficial-use site to protect, restore, or create aquatic wetland habitats. Some excavated and dredged material may require disposal at a Recycler, or a Class I or II landfill. Ultimately, the DEIR estimates project construction would result in 32,280 heavy-duty truck trips through the neighboring West Oakland Community.<sup>3</sup>

## **It is Reasonably Foreseeable that the Project Will Increase Freight Throughput and Associated Freight Activity and Emissions at the Port of Oakland**

The DEIR indicates that allowing large capacity vessels to call is a major goal of the proposed widening of the OHTB and IHTB. The Port claims that this increase in individual vessel capacity would not result in any increases in freight throughput. However, this claim is not supported by evidence in the record, and the capacity-related increases resulting from the proposed project could reasonably be expected to result in an increase in TEU throughput at the Port. This increase in TEU throughput, in turn, may result in higher volumes of related activity, including heavy-duty diesel truck and locomotive traffic, and operation of on-site cargo handling equipment (e.g., forklifts and yard tractors) that emit toxic diesel emissions and contribute to regional air pollution and global climate change at the Port and in the surrounding community. Critically, this reasonably foreseeable increase was not evaluated in the DEIR.

As provided in the DEIR, the Project would effectively increase the freight capacity of vessels calling at the Port from 6,500 to 19,000 TEU, resulting in a 192% increase in per vessel TEU carrying capacity over baseline levels. The DEIR does not adequately explain how facilitating calls from larger-capacity vessels would not increase landside operations at the Port. The DEIR also does not discuss the reasonably foreseeable construction of new landside facilities to process any additional influx of TEUs.

In Section 3.3 (Air Quality) of the DEIR, the Port states, "the Proposed Project is not expected to increase freight throughput or change landside operations at the Seaport, and there would be negligible changes in criteria pollutant emissions associated with landside operations as a result of the Proposed Project."<sup>4</sup> Although the Port states the effect of the Project on the operations at landside facilities would be negligible, the Port evaluated

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<sup>2</sup> Port of Oakland. Oakland harbor Turning Basins Widening Project Draft Environmental Impact Report. Page 2-37. Table 2.5-3. Accessible at [https://files.ceqanet.opr.ca.gov/279066-2/attachment/S-egjB4bkl\\_QzISDOsK0G82-O2KGgasR5fGpLcEdxxZoP89zwhkrEbpaHam9CsTCidlbVNJrZMo8j6Ys0](https://files.ceqanet.opr.ca.gov/279066-2/attachment/S-egjB4bkl_QzISDOsK0G82-O2KGgasR5fGpLcEdxxZoP89zwhkrEbpaHam9CsTCidlbVNJrZMo8j6Ys0).

<sup>3</sup> Port of Oakland. Oakland harbor Turning Basins Widening Project Draft Environmental Impact Report. Page 2-38. Table 2.5-4. Accessible at [https://files.ceqanet.opr.ca.gov/279066-2/attachment/S-egjB4bkl\\_QzISDOsK0G82-O2KGgasR5fGpLcEdxxZoP89zwhkrEbpaHam9CsTCidlbVNJrZMo8j6Ys0](https://files.ceqanet.opr.ca.gov/279066-2/attachment/S-egjB4bkl_QzISDOsK0G82-O2KGgasR5fGpLcEdxxZoP89zwhkrEbpaHam9CsTCidlbVNJrZMo8j6Ys0).

<sup>4</sup> Port of Oakland. Oakland harbor Turning Basins Widening Project Draft Environmental Impact Report. Page 3.3-45. Accessible at [https://files.ceqanet.opr.ca.gov/279066-2/attachment/S-egjB4bkl\\_QzISDOsK0G82-O2KGgasR5fGpLcEdxxZoP89zwhkrEbpaHam9CsTCidlbVNJrZMo8j6Ys0](https://files.ceqanet.opr.ca.gov/279066-2/attachment/S-egjB4bkl_QzISDOsK0G82-O2KGgasR5fGpLcEdxxZoP89zwhkrEbpaHam9CsTCidlbVNJrZMo8j6Ys0).

water-side air quality impacts using a future baseline of 2030, 2040 and 2050. As presented in Table 3.3-10 (In-Water Operation Emissions Summary - Tons per Year) of the DEIR, the Port evaluated in-water operation emissions in 2030, 2040, and 2050 under a future with- and without-project scenario. Based on this analysis, the Port found that the vessel fleet mix and vessel call quantities resulting from the Project would not result in a net increase in air pollutants for the future years evaluated.

The Port goes on to state that "the existing activities at the impacted land and waterside areas would be relocated or consolidated, and there would be negligible changes in air quality emissions associated with the relocation or consolidation of existing activities outside of the physical change in location where they are released, if relocated."<sup>5</sup> The Port justifies not evaluating increases in landside operations by stating: "the specific locations and extent of consolidation that would occur are unknown, which prevents a detailed analysis from occurring; but in general, any change due to differences in minor trip lengths and activity would be minimal overall, assuming no other changes to demand and growth." Since the Project would allow larger TEU capacity vessels to access the Port, CARB staff urges the Port to evaluate the potential air quality impacts associated with the increase in off-road equipment operations, heavy-duty on-road truck traffic and rail traffic required to transport TEUs from the Port during its operation after construction is complete.

Although CARB urges the Port to evaluate the Project's operational air quality impacts using an existing-conditions baseline, as discussed in the section below, CARB staff compared TEU throughput between a future with- and without-project scenario for the years 2030, 2040, and 2050 using the data provided in the DEIR. This comparison is meant to demonstrate that the Project will increase TEU throughput at the Port even when using a future-conditions baseline. This analysis is based on container vessel TEU capability data presented in Table 2.3-1 (Container Vessel Class Summary) of the DEIR and future vessel calls data presented in Table 3.1 (Future Vessel Calls by Vessel Class) of the DEIR. As shown in Table 1, below, by using the vessel trip and TEU capacity presented in the DEIR, CARB staff have found that the minimum and maximum TEU throughput at the Port would increase from 640,622 to 965,836 TEU in the year 2040 and 92,245 to 1,040,520 to in the year 2050. Since both the future baseline and future with-Project scenarios account for the same projected freight throughput and an annual growth rate of 2.1%, these increases in TEU throughput can only be attributed to larger vessels facilitated by the proposed widening of the IHTB and OHTB. CARB urges the Port to further evaluate the increase in TEU throughput using an existing-conditions baseline.

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<sup>5</sup> Port of Oakland. Oakland harbor Turning Basins Widening Project Draft Environmental Impact Report. Page 3.3-39. Accessible at [https://files.ceqanet.opr.ca.gov/279066-2/attachment/S-egjB4bkl\\_QzISDOsK0G82-O2KGasR5fGpLcEdxxZoP89zwhkrEbpaHam9CsTCidlbVNJrZMo8j6Ys0](https://files.ceqanet.opr.ca.gov/279066-2/attachment/S-egjB4bkl_QzISDOsK0G82-O2KGasR5fGpLcEdxxZoP89zwhkrEbpaHam9CsTCidlbVNJrZMo8j6Ys0).

**Table 1: Comparison of TEU throughput Under a Future Baseline and Future with Project Scenario**

Scenario	Minimum Total TEU Throughput <sup>1</sup>	Maximum Total TEU Throughput <sup>1</sup>
Future Baseline 2030	11,635,177	16,794,852
Future With Project 2030	10,988,371	15,895,124
Change	-646,806	-899,728
Future Baseline 2040	14,318,449	20,544,069
Future With Project 2040	15,184,285	21,184,691
Change	865,836	640,622
Future Baseline 2050	18,562,977	25,464,557
Future With Project 2050	19,603,497	25,556,802
Change	1,040,520	92,245

1. Total TEU throughputs were calculated using container vessel TEU capability data presented in Table 2.3-1 (Container Vessel Class Summary) of the DEIR and future vessel calls data presented in Table 3.1 (Future Vessel Calls by Vessel Class) of the DEIR.

Based on the minimum and maximum TEU throughputs provided in Table 1, it is difficult to understand how the proposed widening of the IHTB and OHTB would not increase landside operations at the Port. If the analysis shows the Project would result in a net increase in air pollutant emissions that exceed the Bay Area Air Quality Management District’s (BAAQMD) significance thresholds, the Port must disclose that finding, and it must incorporate all feasible mitigation, including requiring the use of zero-emission trucks and onsite equipment and cleanest available locomotives during the construction and subsequent operation of the Project, as further discussed in the section below.

## The Project Will Expose West Oakland Community Residents to Increased Air Pollution

As discussed above, despite the DEIR’s unsupported assertions to the contrary, it is reasonably foreseeable that the Project will increase freight throughput at the Port, as well as intermodal and cargo handling activity. Consequently, the Project will increase air pollution exposure for the people living and working in the West Oakland Community.<sup>6</sup>

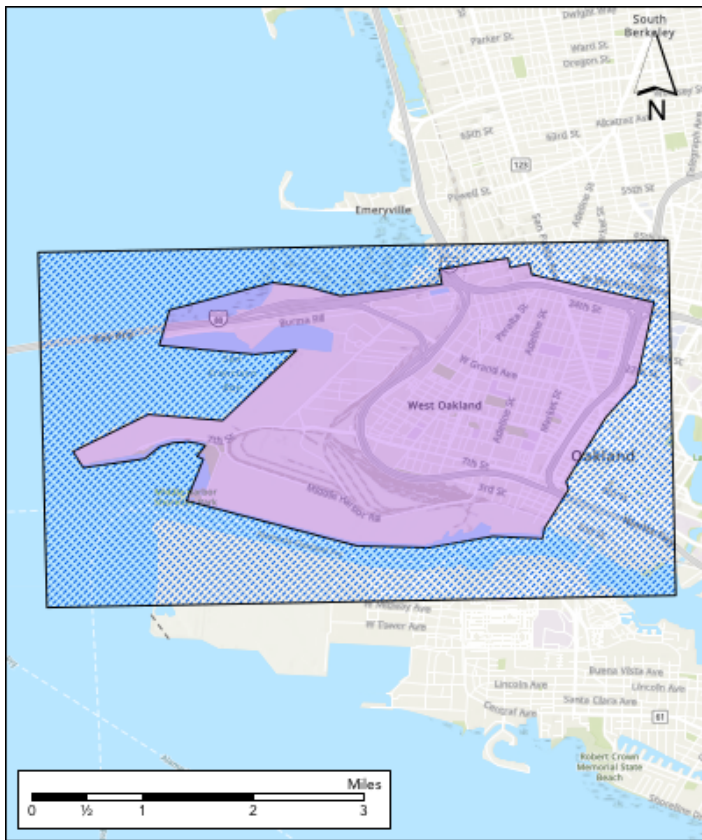
The West Oakland Community has a high density of sensitive populations including children and the elderly; these populations are at schools, hospitals, and daycare centers located near mobile and stationary emissions sources of concern. These sensitive receptors have been burdened with disproportionate health impacts from air pollution. The West Oakland Community experiences some of the highest rates of asthma, poverty, and unemployment in the region. Health impacts from air pollution include increased rates, risk, and severity of

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<sup>6</sup> This community is defined within CARB’s Office of Community Air Protection Program. See community boundary image and supporting data files at <https://ww2.arb.ca.gov/our-work/programs/community-air-protection-program/communities/west-oakland>



many illnesses like asthma, bronchitis, emphysema, pneumonia, coronary heart disease, abnormal heart rhythms, congestive heart failure, cancer, stroke, and premature death.



The West Oakland Community's cumulative air pollution sources include pollution from vehicle traffic along Interstates 880, 580, and 980, as well as existing freight operations, industrial facilities, and the Port. Because of the exposure to these cumulative air pollutants and other health-related disadvantages, residents of West Oakland Community have lower life expectancies (seven years fewer than residents in the Oakland hills)<sup>7</sup> and higher mortality rates from lung diseases, which can be partially attributed to constant exposure to air pollution.

To protect the people living and working near the Project, the Port should evaluate the Project's operational air quality impacts associated with the increase in TEU throughput and implement all feasible mitigation measures in the Project's final design to reduce those

impacts. The Port should also recirculate the DEIR if this further analysis triggers any of the recirculation criteria set forth in CEQA Guidelines section 15088.5.

## The Port Should Use an Existing-Conditions Baseline when Evaluating the Project's Operational Air Quality Impacts

In Section 3.1.1 (Baseline Environmental Conditions) of the DEIR, the Port states that the "Draft EIR will identify when historic or projected future baseline conditions—rather than the May 31, 2022, baseline—are used in the respective environmental topic analysis for a particular resource topic; where historic or projected future baseline conditions are used for a resource topic, it is noted in the respective resource section."<sup>8</sup> Although an

<sup>7</sup> Environmental Defense Fund, "How pollution impacts health in West Oakland," 2019, <https://www.edf.org/airqualitymaps/oakland/pollution-and-health-concerns-west-oakland>, accessed December 5 2023.

<sup>8</sup> Port of Oakland. Oakland harbor Turning Basins Widening Project Draft Environmental Impact Report. Page 3-2. Accessible at [https://files.ceqanet.opr.ca.gov/279066-2/attachment/S-egjB4bkl\\_QzISDOsK0G82-O2KGgasR5fGpLcEdxxZoP89zwhkrEbpaHam9CsTCidlbVNjRZMo8j6Ys0](https://files.ceqanet.opr.ca.gov/279066-2/attachment/S-egjB4bkl_QzISDOsK0G82-O2KGgasR5fGpLcEdxxZoP89zwhkrEbpaHam9CsTCidlbVNjRZMo8j6Ys0).

existing-conditions baseline was used to evaluate environmental impacts for other resource area sections in the DEIR, such as noise, the Port chose to evaluate the Project's operational air quality impacts by comparing a future without-project (future baseline) to a future with-project vessel call scenarios for the years 2030, 2040 and 2050. In the DEIR the Port states, "the use of the future operational baseline rather than the existing baseline is appropriate for this situation, and allowed under CEQA because the vessel fleet will likely change in the future as a result of other economic and global influences to the shipping industry, including growth, efficiency improvements, and vessel emission improvements as well as the physical change to the turning basins."<sup>9</sup>

To evaluate the Project's effects on the Port's operations, the Sym Modeling Suite of Tools (HMST), developed by the Institute for Water Resources, was used by the United States Army Corps of Engineers (Army Corps) to forecast the number of vessel calls for the future without project, and future with project, scenarios for years the 2030, 2040 and 2050. Based on this analysis, the Army Corps found that the Project would result in a reduction of 138 container vessel calls in 2030, 330 container vessels in 2040, and 477 container vessel calls in 2050.<sup>10</sup> The Port also evaluated the increase in air pollutant emissions using a future baseline in Table 3.3-10 of the DEIR. The Port's air quality analysis found, using a future baseline, that the increase of larger vessels calling at the Port would result in a reduction in air pollutant emissions.

Using a future-conditions baseline to evaluate the Project's operational air quality impacts is inappropriate because the agency fails to disclose the impacts the Project would have on the existing environmental conditions in the area. Pursuant to Section 15125(a) of the CEQA Guidelines, the baseline should consist of conditions that exist at the time the NOP is published.<sup>11</sup> To evaluate the air quality impacts associated with the change in vessel calls at the Port, the DEIR should have evaluated the Project's operational air quality impacts using a 2022 baseline year, which is the year the Project's NOP was released. The use of a future baseline is, at times, allowed under CEQA in unique circumstances where an agency can show that an analysis based on existing conditions would tend to be "misleading or without informational value" or that the use of a future baseline is "justified by unusual aspects of the project or the surrounding conditions." (See *Neighbors for Smart Rail v. Exposition Metro Line Construction Authority* (2013) 57 CA4th 439). Based on CARB's review of the DEIR, the Port does not provide enough clear analysis or discussion as to why an existing conditions baseline would be misleading or without informational value. The Port may already be operating at full capacity. Perhaps the only driver for increased growth at the Port is a

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<sup>9</sup> Port of Oakland. Oakland harbor Turning Basins Widening Project Draft Environmental Impact Report. Page 3-4. Accessible at [https://files.ceqanet.opr.ca.gov/279066-2/attachment/S-egjB4bkl\\_QzISDOsK0G82-O2KGgasR5fGpLcEdxxZoP89zwhkrEbpaHam9CsTCidlbVNJrZMo8j6Ys0](https://files.ceqanet.opr.ca.gov/279066-2/attachment/S-egjB4bkl_QzISDOsK0G82-O2KGgasR5fGpLcEdxxZoP89zwhkrEbpaHam9CsTCidlbVNJrZMo8j6Ys0).

<sup>10</sup> Port of Oakland. Oakland harbor Turning Basins Widening Project Draft Environmental Impact Report. Page 3-4. Table 3.1-1 Accessible at [https://files.ceqanet.opr.ca.gov/279066-2/attachment/S-egjB4bkl\\_QzISDOsK0G82-O2KGgasR5fGpLcEdxxZoP89zwhkrEbpaHam9CsTCidlbVNJrZMo8j6Ys0](https://files.ceqanet.opr.ca.gov/279066-2/attachment/S-egjB4bkl_QzISDOsK0G82-O2KGgasR5fGpLcEdxxZoP89zwhkrEbpaHam9CsTCidlbVNJrZMo8j6Ys0).

<sup>11</sup> Title 14 CCR § 15125 (a) Accessible at [https://www.califaep.org/docs/CEQA\\_Handbook\\_2023\\_final.pdf](https://www.califaep.org/docs/CEQA_Handbook_2023_final.pdf)

capacity-expanding project like the proposed Project. To this end, CARB urges the Port to evaluate and disclose the potential increase in freight activities at the Port using an existing baseline.

To better understand the Project's potential impact on freight activities at the Port, CARB staff estimated the Project's container vessel calls at the Port under a 2022 baseline year and 2030 future with Project scenario, as shown in Table 2 below. The 2022 baseline vessel calls presented in the table are based on data extracted from the Marine Exchange Data. The 2030 future with project vessel calls is based on vessel call data provided in Table 3.1-1 (Future Vessel Calls by Vessel Class) of the DEIR. As shown in Table 2, the Project would result in an increase of 1,191 vessel calls between a 2022 baseline year and a 2030 with Project scenario. To fully evaluate the Project's potential operational impacts, CARB urges the Port to evaluate the Project's air quality impacts using an existing conditions baseline. To this end, the Port must also evaluate the Project's operational impacts, which may increase onsite equipment operations and truck and train trips.

**Table 2: Comparison Vessel Calls between Baseline Year 2022 to Future With Project Year 2030**

Vessel Class	Baseline Year 2022 <sup>1</sup>	Future With Project Year 2030 <sup>2</sup>
Sub Panamax	274	150
Panamax	132	231
Post-Panamax Generation I	121	532
Post-Panamax Generation II	167	563
Post-Panamax Generation III	134	321
Post-Panamax Generation IV	2	24
Total	830	1821

1. 2022 baseline vessel calls are based on Marine Exchange Data
2. 2030 future with project vessel calls are based on trip estimates provided in Table 3.1-1 of the DEIR.

## **The Port Must Include More Mitigation Measures to Reduce the Project's Significant Impact on Air Quality and Public Health During Project Construction**

The Port concluded in Section 3.3 (Air Quality) of the DEIR that the construction of the Project would result in a potentially significant impact on air quality. According to Table 3.3-9 (Unmitigated Construction Emissions Summary - Average Pounds per Day by Year), the construction of the Project would result in 82 pounds per day of oxides of nitrogen (NOx) in 2028, and 77 pounds per day of NOx in 2029, exceeding the BAAQMD's significance threshold of 54 pounds per day of NOx. The construction of the Project was also found to expose the nearest residences at the Waterfront Ballpark to diesel PM that would result in a cancer risk of 124 in one million, as shown in Table 3.3-14 of the DEIR, which is over 12 times the BAAQMD significance threshold.

To mitigate the Project's air quality impacts, the DEIR included a mitigation measure, referred to as MM AIR-1 (Construction Air Quality Mitigation), to reduce the Project



emissions of NO<sub>x</sub> and diesel PM. Mitigation Measure AIR-1 includes requiring all diesel-fueled off-road construction equipment to be equipped with a US EPA Tier 4 final compliant engine, requiring all on-road heavy-duty trucks to conform to the most stringent emissions standards, restricting truck idling to two minutes, requiring all haul trucks transporting soil, sand, or other loose material off-site to be covered, and other measures to reduce the emissions of fugitive dust. Even after implementing these measures, the Port concluded the impact on air quality associated with the construction of the Project would remain significant and unavoidable.

Although CARB commends the Port for including mitigation measures that require the use of Tier 4 off-road construction equipment and a project design measure requiring the use of an electric dredger during the construction of the Project, more mitigation measures must be included in the DEIR to reduce the Project's significant and unavoidable impact on air quality. Even where impacts will remain significant and unavoidable after mitigation, CEQA requires that all feasible mitigation measures be incorporated (see California Public Resources Code § 21081; 14 CCR § 15126.2(b)). To meet this requirement, CARB urges the Port to include measures in MM AIR-1 that require zero-emission trucks to transport the sediment from the Project site during onsite dredging activities and to require tugboats equipped with Tier 4 engines. As shown in Table 2.5-4 (Truck Trips for Hauling Demolished, Excavated, and Dredged Materials) of the DEIR, 322,800 cubic yards of dredged sediment will have to be transported to either a Class I or II landfill, or a recycler facility, which would result in approximately 32,280 heavy-duty truck trips. These trucks, which would be one of the highest diesel PM and NO<sub>x</sub> emission sources associated with the Project, would travel through the West Oakland Community. Requiring the use of zero-emission trucks during the transport of the dredged sediment would significantly reduce the diesel PM emissions in the West Oakland Community.

As presented below, CARB has many regulations that promote, and that will require, a transition to the use of zero-emission trucks at freight facilities. Specifically, the Advanced Clean Fleet Regulation would require all drayage trucks in California to be zero-emission by 2035. A list of commercially available zero-emission trucks can be obtained from the Hybrid and Zero-emission Truck and Bus Voucher Incentive Project (HVIP).<sup>12</sup> The HVIP is a part of California Climate Investments to incentivize the purchase of zero-emission trucks. Based on CARB's review of the zero-emission trucks listed in the HVIP, there are commercially available zero-emission trucks that can meet the freight transportation needs of individual industrial uses proposed in the Port today. CARB has implemented or is developing regulations that will require the use of zero-emission trucks.

The list below details the CARB regulations that will result in the reduction of diesel PM and NO<sub>x</sub> emissions from trucks within California:

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<sup>12</sup> Zero-Emission Truck and Bus Voucher Incentive Project. Accessible at: <https://californiahvip.org/>

- **Drayage Truck Regulation:** The existing Drayage Truck Regulation requires all drayage trucks to operate with an engine that is a 2007 model year or newer.
- **Truck and Bus Regulation:** The Truck and Bus Regulation requires all trucks, including drayage, to have 2010 or newer model year engines by January 1, 2023.
- **Heavy-Duty Low-NOx Omnibus Rule:** The Heavy-Duty Low-NOx Omnibus Rule that requires truck emission standards to be reduced from 0.20 to 0.05 grams per brake horsepower-hour (g/bhp-hr) from 2024 to 2026, and to 0.02 g/bhp-hr in 2027.
- **Advanced Clean Trucks Regulation:** The Advanced Clean Trucks Regulation, approved by CARB on June 25, 2020, requires manufacturers to start the transition from diesel trucks and vans to zero-emission trucks beginning in 2024. The rule is expected to result in about 100,000 zero-emission trucks in California by the end of 2030 and about 300,000 by 2035. The Advanced Clean Trucks regulation is part of CARB's overall approach to accelerate a large-scale transition to zero-emission medium- and heavy-duty vehicles. CARB approved amendments to the Advanced Clean Trucks regulation in March 2021; the amendments help ensure that more zero-emission vehicles are brought to market. CARB directed staff to ensure that fleets, businesses, and public entities that own or direct the operation of medium- and heavy-duty vehicles in California purchase and operate ZEVs to achieve a smooth transition to ZEV fleets by 2045 everywhere feasible, and specifically to reach:
  - 100% zero-emission drayage trucks, last mile delivery, and government fleets by 2035
  - 100% zero-emission refuse trucks and local buses by 2040
  - 100% zero-emission capable utility fleets by 2040
- **Advanced Clean Fleets Regulation:** The Advanced Clean Fleets Regulation is part of CARB's overall strategy to accelerate a large-scale transition to zero-emissions medium- and heavy-duty vehicles. This regulation works in conjunction with the Advanced Clean Trucks regulation. The regulation applies to trucks performing drayage operations at seaports and railyards, fleets owned by State, local, and federal government agencies, and high priority fleets. High priority fleets are those entities that own, operate, or direct at least one vehicle in California, and that have either \$50 million or more in gross annual revenue, or that own, operate, or have common ownership or control of a total of 50 or more vehicles. The regulation affects medium- and heavy-duty on-road vehicles with a gross vehicle weight rating greater than 8,500 pounds, off-road yard tractors, and light-duty mail and package delivery vehicles. All drayage trucks entering seaports and intermodal railyards would be required to be zero-emission by 2035.

With the implementation of these regulations, specifically the Advanced Clean Trucks Regulation, zero-emission trucks have become more commercially available. However, many of CARB's regulations that require the use of zero-emission trucks at freight facilities

would not go into effect once the Project is completed. To this end, to protect the air quality of residents and the children at schools within the West Oakland Community, CARB urges the Port to include a measure in MM AIR-1 that would require zero-emission trucks during the construction of the Project.

## **Multiple State Laws Demand Further Analysis and Protection for Communities Impacted By The Project**

Because West Oakland is legally recognized by the state as a disadvantaged community, and as an environmental justice community by the City of Oakland and was selected for the CARB Community Air Protection Program, the following three pieces of applicable legislation need to be seriously considered; they also demonstrate the particular need for adequately analyzing and mitigating the Project's impacts.

### **Senate Bill 535 (De León, 2012); Disadvantaged Communities, including West Oakland**

Senate Bill 535 (De León, Chapter 830, 2012)<sup>13</sup> recognizes the potential vulnerability of low-income and disadvantaged communities to poor air quality and requires funds to be spent to benefit disadvantaged communities. The California Environmental Protection Agency (CalEPA) is charged with the duty to identify disadvantaged communities. CalEPA bases its identification of these communities on geographic, socioeconomic, public health, and environmental hazard criteria (Health and Safety Code, section 39711, subsection (a)).

In this capacity, CalEPA currently defines a disadvantaged community, from an environmental hazard and socioeconomic standpoint, as a community that scores within the top 25% of the census tracts, as analyzed by the California Communities Environmental Health Screening Tool Version 4.0 (CalEnviroScreen).<sup>14</sup>

The Project is located near a census tract in the West Oakland Community having a CalEnviroScreen 4.0 overall score of 93%. The West Oakland Community is located in census tracts within a maximum score in the top 10%, indicating that the area is home to some of the most vulnerable neighborhoods in the State. The air pollution levels in this community routinely exceed state and federal air quality standards. To this end, the Port must ensure the implementation of all feasible mitigation, including utilization of

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<sup>13</sup> Senate Bill 535, De León, K., Chapter 800, Statutes of 2012, modified the California Health and Safety Code, adding §39711, §39713, §39715, §39721 and §39723.

<sup>14</sup> "CalEnviroScreen 4.0." Oehha.ca.gov, California Office of Environmental Health Hazard Assessment, June 2018, <https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40>

zero-emission technologies, to limit the Project's air quality and public health impact on disadvantaged communities.<sup>15</sup>

### **Senate Bill 1000 (Leyva, 2016); West Oakland's Environmental Justice Element for Land Use Planning**

Senate Bill (SB) 1000 (Leyva, Chapter 587, Statutes of 2016)<sup>16</sup> affirms the need to integrate environmental justice principles into the planning process to prioritize improvements and programs that address the needs of disadvantaged communities, like the West Oakland Community. SB 1000 amended California's Planning and Zoning Law to require local governments with identified disadvantaged communities to incorporate an environmental justice element into their general plans to identify objectives and policies to reduce unique or compounded health risks in disadvantaged communities. Generally, environmental justice elements include policies to reduce the community's exposure to air pollution through air quality improvement.

Oakland adopted its first Environmental Justice Element in September 2023.<sup>17</sup> The element "serves as the foundation for achieving equity and environmental justice when planning for future growth and development in Oakland" and it identifies the communities within and surrounding the Port as being "disproportionately impacted by inequitable and unjust environmental harms". This element is built upon the City of Oakland Municipal Code Section 2.29.170 and other City policies that aim for fair and just policies to achieve equity while recognizing the severe impacts of racism on public health. The goal of general plan element EJ-1 is to "reduce pollution, mitigate the impacts of pollution on existing sensitive land uses, and eliminate associated public health disparities." More specifically, in EJ-1-10, the goal is to reduce emissions from Port operations. However, without the Port evaluating the Project's potential air quality impacts associated with the increased throughput to the Port, facilitated by the increase in larger vessels calling at the Port, the DEIR is not consistent with the goals established in EJ-1-10.

### **Assembly Bill 617 (Garcia, 2017); CARB Community Air Protection in West Oakland**

The State of California has emphasized protecting local communities from the harmful effects of cumulative air pollution through the passage of Assembly Bill (AB) 617

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<sup>15</sup> With regard to greenhouse gas emissions from this project, CARB has been clear that local governments and project proponents have a responsibility to properly mitigate these impacts. CARB's guidance, set out in detail in the Scoping Plan issued in 2022, makes clear that in CARB's expert view, local mitigation is critical to achieving climate goals and reducing greenhouse gases below levels of significance. CARB, 2022 Scoping Plan for Achieving Carbon Neutrality, November 16, 2022. Accessible at [https://ww2.arb.ca.gov/sites/default/files/2022-12/2022-sp\\_1.pdf](https://ww2.arb.ca.gov/sites/default/files/2022-12/2022-sp_1.pdf)

<sup>16</sup> Senate Bill 1000, Leyva, S., Chapter 587, Statutes of 2016, amended the California Health and Safety Code §65302.

<sup>17</sup> Oakland 2045 General Plan - Environmental Justice Element Accessed at <https://www.oaklandca.gov/topics/oakland-2045-general-plan-environmental-justice-element>

(Garcia, Chapter 136, Statutes of 2017).<sup>18</sup> To translate AB 617 into action, CARB established the Community Air Protection Program (Program). The Program is administered by CARB's Office of Community Air Protection (OCAP) and implemented by CARB and air districts. The Program is guided by the Blueprint which is based on statute and informed by input from environmental justice leaders, the public, businesses, and industry in addition to state and local agencies and tribes.<sup>19</sup> The Program works with communities affected by a high cumulative exposure burden to develop actions to reduce air pollution exposure and emissions of toxic air contaminants and criteria air pollutants.

As part of its role in implementing AB 617, CARB must annually consider the selection of communities for the development and implementation of community air monitoring plans and/or community emission reduction programs. The West Oakland Community was selected to develop a Community Emissions Reduction Plan (CERP) due to its high cumulative exposure burden, the presence of a significant number of sensitive populations (children, elderly, and individuals with pre-existing conditions), and the socioeconomic challenges experienced by its residents.<sup>20</sup> CARB approved the CERP, called the West Oakland Community Action Plan (WOCAP), in December 2019, which included 89 strategies to achieve emission and exposure reductions throughout this community, including significantly reducing or eliminating emissions from heavy-duty mobile sources and industrial stationary sources.<sup>21</sup> Given the concerns outlined in this letter (which require further analysis by the Port), the Project could negatively impact the work that the community has done towards fulfilling their CERP.

OCAP supports the West Oakland Community, which has expressed significant opposition to the Project. CARB is concerned the Project would result in an increase in operations at the Port that would elevate the exposure of diesel PM emissions and add to the cumulative exposure burden already faced by West Oakland Community.

## Conclusion

Although CARB applauds the Port for proposing the use of zero-emission infrastructure to support electric dredgers during the construction of the Project, CARB remains concerned that the Project would result in an increase in larger vessels calling at the Port, resulting in

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<sup>18</sup> Assembly Bill 617, Garcia, C., Chapter 136, Statutes of 2017, modified the California Health and Safety Code, amending §40920.6, §42400, and §42402, and adding §39607.1, §40920.8, §42411, §42705.5, and §44391.2.

<sup>19</sup> CARB, 2023. Community Air Protection Blueprint 2.0. Available from the Community Air Protection Program website: <https://ww2.arb.ca.gov/blueprint-20>. Accessed December 6, 2023 at [https://ww2.arb.ca.gov/sites/default/files/2023-09/BP2.0\\_Final\\_Draft\\_9.24.2023\\_FD.pdf](https://ww2.arb.ca.gov/sites/default/files/2023-09/BP2.0_Final_Draft_9.24.2023_FD.pdf)

<sup>20</sup> CARB, West Oakland. Accessed December 7, 2023 at <https://ww2.arb.ca.gov/our-work/programs/community-air-protection-program/communities/west-oakland>

<sup>21</sup> West Oakland Community Action Plan. Accessed December 6, 2023 at <https://www.baaqmd.gov/community-health/community-health-protection-program/west-oakland-community-action-plan>



increased TEU throughput. The increase in TEU throughput at the Port may result in increased landside operations or the construction of new landside facilities, leading to increased onsite equipment operations and heavy-duty truck and train traffic serving the Port. This increase in Port operations would result in the residents of the West Oakland Community, a disadvantaged community, being exposed to higher diesel PM emissions and their associated cancer risks, and increasing other negative health effects, as well as contributing to nonattainment of federal air quality requirements and to climate change impacts.

The Port should fully evaluate the potential air quality impacts resulting from the Project's contribution to increased landside operations and should include additional mitigation measures to reduce those impacts by requiring the use of zero-emission off-road equipment and heavy-duty trucks and the cleanest available locomotives at the Port. The Port should also evaluate the Project's impacts on the Port's landside operations using an existing-conditions baseline or provide adequate evidence demonstrating that an existing-conditions baseline would be misleading. Lastly, CARB urges the Port to include a measure in MM AIR-1 that requires all heavy-duty trucks transporting dredged sediment from the Project site to be zero-emission and to require tugs equipped with Tier 4 engines during Project operations.

CARB appreciates the opportunity to comment on the DEIR for the Project. Given the breadth and scope of projects subject to CEQA review throughout California that have air quality and greenhouse gas impacts, coupled with CARB's limited staff resources to substantively respond to all issues associated with a project, CARB must prioritize its substantive comments here based on staff time, resources, and its assessment of impacts. CARB's deliberate decision to substantively comment on some issues does not constitute an admission or concession that it substantively agrees with the lead agency's findings and conclusions on any issues on which CARB does not substantively submit comments.

CARB staff can provide assistance with zero-emission technologies and emission reduction strategies, as needed. Please include CARB on your list of selected State agencies that will receive the FEIR. If you have questions, please contact Stanley Armstrong, Air Pollution Specialist via email at [stanley.armstrong@arb.ca.gov](mailto:stanley.armstrong@arb.ca.gov).

Sincerely,



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