

July 3, 2020

Jason Cashman
Environmental and Regulatory Affairs Manager
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Submitted via email: jcashman@stocktonport.com

Governor's Office of Planning & Research

Jul 03 2020

STATE CLEARINGHOUSE

Dear Jason Cashman:

Thank you for providing California Air Resources Board (CARB) staff the opportunity to comment on the Draft Environmental Impact Report (DEIR) for the Lehigh Southwest Stockton Terminal Project (Project), State Clearinghouse No. 2019100510. The Project involves redeveloping the existing bulk cementitious material receiving and distribution terminal, located at Berth 2, to support larger bulk marine vessels. If approved, the number of bulk vessels calling to the terminal would increase from 9 in the baseline year of 2018 to an expected maximum of 48 per year, and the number of barges would increase from zero to 40. Annual truck calls would increase from the 2018 baseline of 18,720 to an expected maximum of 42,500, annual rail cars would increase from 587 to an expected maximum of 4,762, and annual rail trips would increase from 117 to 238. The Project is located in the City of Stockton, California, and the Port of Stockton (Port) is the lead agency for California Environmental Quality Act (CEQA) purposes.

CARB submitted comments on the Notice of Preparation (NOP) for the DEIR released in October 2019, which is included as Attachment A of this letter. Those comments highlighted the need for a health risk assessment (HRA) to be prepared for the Project and encouraged the Port and applicant to implement all existing and emerging zero-emission technologies to minimize exposure to diesel particulate matter (diesel PM) and nitrogen oxides (NO_x) emissions to all neighboring communities, as well as minimize the greenhouse gases (GHG) that contribute to climate change. Furthermore, CARB's comments emphasized the potential cumulative health impacts should the Port allow the construction of the proposed Project near communities which score within the top 1 percent of California census tracts using the California Communities Environmental Health Screening Tool Version 3.0 (CalEnviroScreen).¹

CARB has reviewed the DEIR and has the following concerns.

¹ "CalEnviroScreen 3.0." California Office of Environmental Health Hazard Assessment, June 2018, <https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30>.

I. The DEIR Does Not Discuss the Project's Potential Increase in Exposure to Air Pollution in Disadvantaged Communities

The Project is located within the southern region of Stockton around the Port, which has been classified as a disadvantaged community under Assembly Bill 617 (AB 617) (Garcia, Chapter 136, Statutes of 2017).² CARB selected the Stockton community for both community air monitoring and the development of an emissions reduction program due to its high cumulative exposure burden, the presence of a significant number of sensitive receptors (children, elderly, and individuals with pre-existing conditions), and the socioeconomic challenges experienced by its residents. The community has high rates of poverty and unemployment, and in some portions of the community there are schools in close proximity to air pollution sources.³ The San Joaquin Valley Air Pollution Control District (SJVAPCD) in consultation with a community steering committee is in the process of preparing a community emissions reduction program (CERP) for the Stockton community, which is anticipated to be submitted to CARB by December 31, 2020.

CARB's comment letter on the NOP referred to 3 pieces of legislation to be considered and included in the DEIR. These pieces of legislation include Senate Bill 535 (De León, Chapter 830, 2012), Senate Bill 1000 (SB 1000) (Leyva, Chapter 587, Statutes of 2016), and Assembly Bill 617 (Garcia, 2017).⁴⁵ Although the Project is located within the disadvantaged community of Stockton, these statutory considerations were not included in the DEIR. Further, CARB's comments on the NOP indicated that the Port should engage with CARB, SJVAPCD, and community residents to address community concerns and mitigate air quality and GHG impacts. In the DEIR, it is unclear what, if any, actions the Port has taken to engage CARB, SJVAPCD, and, most critically, the residents of the nearby disadvantaged communities.

As with our NOP comments, CARB urges the Port and applicant to include SB 535, SB 1000, and AB 617 statutory language in the FEIR. The Port should also engage with relevant regulatory agencies and residents of the Stockton community before releasing

³ CARB, 2019. 2019 Community Recommendations Staff Report. Accessed at: https://ww2.arb.ca.gov/sites/default/files/2019-12/2019_community_recommendations_staff_report_november_8_acc_3.pdf. Accessed on June 23, 2020.

the FEIR. This is a critical part of a transparent, public process to ensure that the Project does not adversely impact nearby disadvantaged communities.

II. The DEIR Does Not Include an Adequate Quantitative Analysis of the Project's Potential Health Risk Impacts

According to Table 4 of the DEIR, the Project would result in an annual net increase over baseline conditions of 21,002 heavy-duty truck trips and 121 rail trips that will transit near existing residences. As mentioned earlier, the residents in the surrounding area live in a census tract that scores within the top 1 percent for Pollution Burden.

The DEIR does not discuss the conduct of an HRA or any other adequate analyses, to evaluate the Project's potential impact on public health. Instead, the DEIR concludes that since the nearest residences are located approximately 1,300 feet south of Berth 2, Project operations at Berth 2 would not expose these residences to diesel PM concentrations that would result in a significant health impact.

Concentrations of air pollutants are not solely a function of distance from the source. Pollutant release characteristics from a source such as temperature, velocity, and height as well as meteorological conditions all play a role. The concentrations that result from the combination of these factors can only be determined through proper air dispersion modeling.

Considering the proximity of the Project to existing disadvantaged communities, the DEIR must, at a minimum, include a quantitative analysis that demonstrates the extent of the Project's impact on public health.⁶ To address this requirement, CARB recommends that the Port prepare an HRA for the Project. The HRA prepared in support of the Project should be based on a representative emissions inventory and the latest Office of Environmental Health Hazard Assessment (OEHHA) guidance (2015 Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments).⁷

III. The Applicant and Port Must Do More to Reduce the Project's Cumulatively Significant Impact on Air Quality and Public Health

⁶ In fact, the California Supreme Court recently addressed this issue in its landmark ruling in *Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502 (*Friant Ranch*). In *Friant Ranch*, the Court held that an EIR is inadequate if it does not make "a reasonable effort to discuss relevant specifics regarding the connection between two segments of information already contained in the EIR, the general health effects associated with a particular pollutant and the estimated amount of that pollutant the project will likely produce." (*Id.*, at p. 521.)

⁷ Office of Environmental Health Hazard Assessment (OEHHA). Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments. February, 2015. Accessed at: <https://oehha.ca.gov/media/downloads/cmr/2015guidancemanual.pdf>.

The DEIR concludes that the Project's air pollutant emissions and cancer risks, when combined with other projects within the Port, would result in a cumulatively significant impact (Section 4.2.2, Cumulative Impact for Affected Environmental Resource Areas). This impact conclusion is reached by listing 22 present or reasonably foreseeable future related projects, and identifying 15 of those projects that would occur in the same general area as the Project and that would generate new rail, truck, and/or vessel calls or on-terminal equipment emissions.

The DEIR includes a list of five mitigation measures (MM-AQ-1 through MM-AQ-5) to reduce the Project's cumulatively considerable impact on air quality. These mitigation measures include limiting on-site construction equipment and truck idling durations to two minutes, encouraging the use of cleaner trucks (defined as model year 2017 or newer), and selecting clean yard equipment anytime new or replacement equipment is purchased. Although these mitigation measures would reduce Project air pollutant emissions, the DEIR concludes that the Project's cumulative impact would remain significant after mitigation. This significance conclusion was reached without modeling the Project's mitigated air pollutant and cancer risks, as recommended in CARB's prior Comment II to this DEIR.

Since the Project, in conjunction with existing and planned facilities at the Port, would result in cumulatively considerable impacts on air quality and public health, CARB staff urges the Port and applicant to implement all feasible mitigation measures to reduce the Project's impact on public health. Even where impacts will remain significant and unavoidable after mitigation, CEQA nevertheless requires that all feasible mitigation measures be incorporated (see California Public Resources Code § 21081; 14 CCR § 15126.2(b)). To meet the requirements of CEQA, CARB staff strongly urges the Port and applicant to implement the following emissions reduction measures.

1. Include language that requires all off-road diesel-powered equipment used during construction and operation of the Project to be equipped with Tier 4 or cleaner engines, except for specialized equipment in which Tier 4 engines are not available. In place of Tier 4 engines, off-road equipment can incorporate retrofits such that emission reductions achieved equal or exceed that of a Tier 4 engine.
2. Include contractual language in tenant lease agreements that requires tenants to use the cleanest technologies available, and to provide the necessary infrastructure to support zero-emission vehicles and equipment that will be operating on site.
3. Include contractual language in tenant lease agreements that requires all service equipment (e.g., yard hostlers, yard equipment, forklifts, and pallet jacks) used within the Project site to be zero-emission. This equipment is widely available.

4. Include contractual language in tenant lease agreements that requires all heavy-duty trucks entering or on the Project site to be model year 2014 or later, expedite a transition to zero-emission vehicles, and be fully zero-emission beginning in 2030.
5. Include contractual language in tenant lease agreements that requires the tenant be in and monitor compliance with all current air quality regulations for on-road trucks including CARB's Heavy-Duty (Tractor-Trailer) Greenhouse Gas Regulation,⁸ Periodic Smoke Inspection Program (PSIP),⁹ and the Statewide Truck and Bus Regulation.¹⁰

IV. Conclusion

CARB is concerned about the Project's potential public health impacts, the lack of mitigation measures presented in the DEIR, the omission of statutory considerations that address the disproportionate impacts of air pollution on disadvantaged communities, and the absence of information related to public outreach. The DEIR fails to quantify cancer risks at residences located adjacent to rail lines and roadways that will serve the Project. CARB urges the Port and applicant to carefully evaluate the Project's cancer risk impacts in the FEIR through an HRA. The HRA should quantify the Project's individual and cumulative cancer risks to residences located near the Port, which includes a community boundary classified under AB 617 as disadvantaged, and inform mitigation measure selection. To reduce the Project's contribution to diesel PM and NO_x emissions emitted within the Port, the final design of the Project should include the emission reduction measures listed under Section III of this comment letter.

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

⁸ In December 2008, CARB adopted a regulation to reduce greenhouse gas emissions by improving the fuel efficiency of heavy-duty tractors that pull 53-foot or longer box-type trailers. The regulation applies primarily to owners of 53-foot or longer box-type trailers, including both dry-van and refrigerated-van trailers, and owners of the heavy-duty tractors that pull them on California highways. CARB's Heavy-Duty (Tractor-Trailer) Greenhouse Gas Regulation is available at <https://www.arb.ca.gov/cc/hdghg/hdghg.htm>.

⁹ The PSIP program requires that diesel and bus fleet owners conduct annual smoke opacity inspections of their vehicles and repair those with excessive smoke emissions to ensure compliance. CARB's PSIP program is available at <https://www.arb.ca.gov/enf/hdvp/hdvp.htm>.

¹⁰ The regulation requires newer heavier trucks and buses must meet PM filter requirements beginning January 1, 2012. Lighter and older heavier trucks replaced starting January 1, 2015. By January 1, 2023, nearly all trucks and buses will need to have 2010 model year engines or equivalent. CARB's Statewide Truck and Bus Regulation is available at <https://www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm>.

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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 appreciates the opportunity to comment on the DEIR for the Project and can provide assistance on zero-emission technologies and emissions reduction strategies, as needed. If you have questions, please contact Skott Wall, Air Pollution Specialist, at (916) 323-0787 or via email at skott.wall@arb.ca.gov.

Sincerely,



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Enclosure: Attachment A

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January 10, 2020

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Dear Mr. Cashman:

Thank you for providing California Air Resources Board (CARB) staff the opportunity to comment on the Notice of Preparation (NOP) for the Lehigh Southwest Stockton Terminal Project (Project) Draft Environmental Impact Report (DEIR), State Clearinghouse No. 2019100510. The Project involves redeveloping the existing bulk cementitious material receiving and distribution terminal (berth 2) to support larger bulk marine vessels. If approved, the number of bulk vessels calling to the terminal would increase from 20 in the baseline year of 2018 to an expected maximum of 50 per year, and the number of barges would increase from zero to 40. Annual truck calls would increase from the 2018 baseline of 16,730 to an expected maximum of 42,000, annual rail cars would increase from 534 to an expected maximum of 4,700, and annual rail trips would increase from 27 to 300. The Project is located in the City of Stockton, California, and the Port of Stockton (Port) is the lead agency for California Environmental Quality Act (CEQA) purposes. Given the substantial net increase in traffic at the terminal, CARB staff urges the Port and applicant to adequately analyze and mitigate the Project's potential impact on air quality and public health in the DEIR.

CARB staff is concerned about the air pollution and health risk impacts that may result from the Project. If the throughput maximum occurs on a regular basis, the Project would result in more than doubling of the number of bulk marine vessels, heavy-duty trucks, and trains visiting the Project site over existing conditions. This net increase in activity could negatively impact local air quality by the health-harming emissions, including particulate matter, toxic air contaminants, and diesel emissions generated during the construction and operation of the Project. These emissions also contribute to regional air pollution by emitting precursors that lead to the formation of secondary air pollutants, like ozone, and contribute to an increase in greenhouse gas (GHG) emissions.

There are residences, schools and senior centers located near the Project. The communities near the Project are surrounded by existing emission sources, which include warehouses, other industrial uses, and vehicular traffic along Interstate 5 (I-5) and the Ort J. Lofthus/Crosstown Freeway. Due to the Project's proximity to

residences, schools and senior centers already disproportionately burdened by multiple sources of pollution, CARB staff is concerned with the potential cumulative health impacts associated with the buildout of the Project.

I. Statutory Considerations

Addressing the disproportionate impacts that air pollution has on disadvantaged communities is a pressing concern across the State, as evidenced by statutory requirements compelling California's public agencies to target these communities for clean air investment, pollution mitigation, and environmental regulation. The following three pieces of legislation need to be considered, and included in the DEIR, when developing a project like this, in the Stockton community.

Senate Bill 535 (De León, 2012)

Senate Bill 535 (De León, Chapter 830, 2012)¹ 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 percent of the census tracts, as analyzed by the California Communities Environmental Health Screening Tool Version 3.0 (CalEnviroScreen).² According to CalEnviroScreen, Stockton communities near the Project score within the top 1 percent of California census tracts. Therefore, CARB urges the Port to ensure that the Project does not adversely impact neighboring disadvantaged communities.

Senate Bill 1000 (Leyva, 2016)

Senate Bill 1000 (SB 1000) (Leyva, Chapter 587, Statutes of 2016)³ amended the Planning and Zoning Law. SB 1000 requires local governments that have identified

¹ 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.

² "CalEnviroScreen 3.0." Oehha.ca.gov, California Office of Environmental Health Hazard Assessment, June 2018, oehha.ca.gov/calenviroscreen/report/calenviroscreen-30.

³ Senate Bill 1000, Leyva, S., Chapter 587, Statutes of 2016, amended the California Health and Safety Code, § 65302.

disadvantaged communities to incorporate the addition of an environmental justice element into their general plans upon the adoption or next revision of two or more elements concurrently on or after January 1, 2018. SB 1000 requires environmental justice elements to identify objectives and policies to reduce the unique or compounded health risks in disadvantaged communities. Generally, environmental justice elements will include policies to reduce the community's exposure to pollution through air quality improvement. SB 1000 affirms the need to integrate environmental justice principles into the planning process to prioritize improvements and programs that address the needs of disadvantaged communities, such as the Stockton communities surrounding the Project site. Since the City of Stockton has not yet adopted an environmental justice element, it is imperative that the Port consult with the City to determine how it can best integrate air quality elements into its Project that reduce local disadvantaged communities' exposure to the Project's pollutants. This will ensure that the Port is acting in a manner consistent with the City's efforts in developing policies for its environmental justice element.

Assembly Bill 617 (Garcia, 2017)

The State of California has emphasized protecting local communities from the harmful effects of air pollution through the passage of Assembly Bill 617 (AB 617) (Garcia, Chapter 136, Statutes of 2017).⁴ AB 617 requires new community-focused and community-driven action to reduce air pollution and improve public health in communities that experience disproportionate burdens from exposure to air pollutants. In response to AB 617, CARB established the Community Air Protection Program with the goal of reducing exposure in communities heavily impacted by air pollution. This Project falls within the boundaries of the Southwest Stockton community, which is one of three statewide communities chosen for inclusion in the second year of the Community Air Protection Program.

Southwest Stockton was selected for both community air monitoring and the development of an emissions reduction program 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. The average overall CalEnviroScreen score for the Southwest Stockton community is in the top 1 percent, indicating that the area is home to some of the most vulnerable neighborhoods in the State. The air pollution levels in Southwest Stockton routinely exceed State and federal air quality standards,

⁴ 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.

and the community was also prioritized by the San Joaquin Valley's AB 617 Environmental Justice Steering Committee.⁵

Health-harming emissions, including particulate matter, toxic air contaminants, and diesel emissions generated during the construction and operation of the Project may negatively impact the community, which is already disproportionately impacted by air pollution from existing freight facilities and other stationary sources of air pollution. Part of the AB 617 process requires CARB and the San Joaquin Valley Air Pollution Control District (SJVAPCD) to create a highly-resolved inventory of air pollution sources within this community. CARB will be more than happy to share this community emissions inventory with the Port of Stockton to aid in the EIR process.

The Health Risk Assessment (HRA) prepared in support of the Project should be based on the latest Office of Environmental Health Hazard Assessment (OEHHA) guidance (2015 Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments).⁶ The HRA should evaluate and present the existing baseline (current conditions), future baseline (full build-out year, without the Project), and future year with the Project. The health risks modeled under both the existing and the future baselines should reflect all applicable federal, State, and local rules and regulations. By evaluating health risks using both baselines, the public and city planners will have a complete understanding of the potential health impacts that would result from the Project. CARB staff is more than willing to share any inventory, air quality, or regulatory data that may assist during the HRA process.

In addition to the health risk associated with operations, construction health risks should be included in the air quality section of the DEIR and the Project's HRA. Construction of the Project would result in short-term emissions from the use of both on-road and off-road diesel equipment. OEHHA's guidance recommends assessing cancer risks for construction projects lasting longer than two months. Since construction would very likely occur over a period lasting longer than two months, the HRA prepared for the Project should include health risks for existing residences near the Project site during construction.

⁵ California Air Resources Board (2018). 2018 Community Recommendations Staff Report. Sacramento, California: Community Air Protection Program. <https://ww2.arb.ca.gov/resources/documents/2018-community-recommendations-staff-report>

⁶ Office of Environmental Health Hazard Assessment (OEHHA). Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments. February 2015. Accessed at: <https://oehha.ca.gov/media/downloads/cnr/2015guidancemanual.pdf>

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II. The DEIR Should Include Mitigation Measures to Protect Nearby Disadvantaged Communities

To reduce the exposure of emissions in disadvantaged communities already disproportionately impacted by air pollution, the final design of industrial uses proposed under the Project should include all existing and emerging zero-emission technologies to minimize exposure to all neighboring communities, as well as the GHGs that contribute to climate change. CARB encourages the Port to implement the measures listed in Attachment A of this comment letter. During the Project's development, the Port should engage with CARB, SJVAPCD, and community residents to address community concerns and mitigate air quality and GHG impacts.

III. Mobile Source Air Pollutant Emissions Should be Estimated Using CARB's Latest Emission Factor Model (EMFAC)

Project-related air pollutant emissions from mobile sources should be modeled using CARB's latest Emission Factor Model (EMFAC2017).⁷ One of the many updates made to EMFAC included an update to the model's heavy-duty emission rates and idling emission factors, which results in higher PM emissions as compared to EMFAC2014. Since EMFAC2017 generally shows higher emissions of particulate matter from trucks than EMFAC2014, the Project's mobile source NO_x and diesel PM emissions are likely underestimated. CARB staff urges the Port and applicant to model and report the Project's air pollution emissions from mobile sources using emission factors found in CARB's latest EMFAC2017.

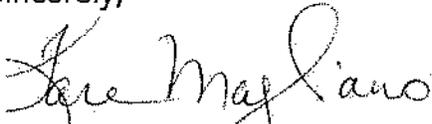
CARB staff appreciates the opportunity to comment on the NOP for the Project and can provide assistance on zero-emission technologies and emission reduction strategies, as needed. Please include CARB on your State Clearinghouse list of selected State agencies that will receive the DEIR as part of the comment period. If

⁷ [www3.arb.ca.gov](https://www.arb.ca.gov). (2018). Home | EMFAC2017 Web Database. [online] Available at: <https://www.arb.ca.gov/emfac/2017/> [Accessed 17 December. 2019].

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you have questions, please contact Skott Wall of CARB's Community Air Protection Program at (916) 323-0787 or Skott.Wall@arb.ca.gov.

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ATTACHMENT A

Recommended Air Pollution Emission Reduction Measures for Seaports

California Air Resources Board (CARB) staff recommends developers and government planners use all existing and emerging zero to near-zero emission technologies during project construction and operation to minimize public exposure to air pollution. Below are some measures, currently recommend by CARB staff, specific to seaport projects. These recommendations are subject to change as new zero-emission technologies become available.

Recommended Construction Measures

1. Ensure the cleanest possible construction practices and equipment are used. This includes eliminating the idling of diesel-powered equipment and providing the necessary infrastructure (e.g., electrical hookups) to support zero and near-zero equipment and tools.¹
2. Implement, and plan accordingly for, the necessary infrastructure to support the zero and near-zero emission technology vehicles and equipment that will be operating onsite. Necessary infrastructure may include the physical (e.g., needed footprint), energy, and fueling infrastructure for construction equipment; onsite vehicles and equipment; and medium-heavy and heavy-heavy duty trucks.²
3. In construction contracts, include language that requires all off-road diesel-powered equipment used during construction to be equipped with Tier 4 or cleaner engines, except for specialized construction equipment in which Tier 4 engines are not available. In place of Tier 4 engines, off-road equipment can incorporate retrofits such that emission reductions achieved equal or exceed that of a Tier 4 engine.
4. In construction contracts, include language that requires all off-road equipment with a power rating below 19 kilowatts (e.g., plate compactors, pressure washers) used during project construction be battery powered.
5. In construction contracts, include language that requires all heavy-duty trucks entering the construction site during the grading and building construction

¹ ww3.arb.ca.gov. (2019). *Home | The Off-Road Zone*. [online] Available at: <https://ww3.arb.ca.gov/msprog/offroadzone/offroadzone.htm> [Accessed 27 Nov. 2019].

² ww2.arb.ca.gov. (2019). *CARB announces more than \$200 million in new funding for clean freight transportation | California Air Resources Board*. [online] Available at: <https://ww2.arb.ca.gov/news/carb-announces-more-200-million-new-funding-clean-freight-transportation> [Accessed 27 Nov. 2019].

phases be model year 2014 or later. All heavy-duty haul trucks should also meet CARB's lowest optional low-NO_x standard starting in the year 2022.³

6. In construction contracts, include language that requires all construction equipment and fleets to be in compliance with all current air quality regulations. CARB staff is available to assist in implementing this recommendation.

Recommended Operation Measures

1. Include contractual language in tenant lease agreements that requires all cargo handling equipment be zero-emission and the terminal has sufficient infrastructure to such equipment.
2. Include contractual language in tenant lease agreements requiring all terminals be shore power capable.
3. Include contractual language in tenant lease agreements requiring all cargo and bulk container marine vessels accessing the terminal be shore power capable.
4. Include contractual language in tenant lease agreements that requires future tenants to exclusively use zero-emission light and medium-duty delivery trucks and vans.
5. Include contractual language in tenant lease agreements that requires all heavy-duty trucks entering or on the project site to be model year 2014 or later, expedite a transition to zero-emission vehicles, and be fully zero-emission beginning in 2030.
6. Include contractual language in tenant lease agreements that requires the tenant be in, and monitor compliance with, all current air quality regulations for on-road trucks including CARB's Heavy-Duty (Tractor-Trailer) Greenhouse Gas Regulation,⁴ Periodic Smoke Inspection Program (PSIP),⁵ and the Statewide Truck and Bus Regulation.⁶

³ In 2013, CARB adopted optional low-NO_x emission standards for on-road heavy-duty engines. CARB staff encourages engine manufacturers to introduce new technologies to reduce NO_x emissions below the current mandatory on-road heavy-duty diesel engine emission standards for model years 2010 and later. CARB's optional low-NO_x emission standard is available at <https://www.arb.ca.gov/msprog/onroad/optionnox/optionnox.htm>.

⁴ In December 2008, CARB adopted a regulation to reduce greenhouse gas emissions by improving the fuel efficiency of heavy-duty tractors that pull 53-foot or longer box-type trailers. The regulation applies primarily to owners of 53-foot or longer box-type trailers, including both dry-van and refrigerated-van trailers, and owners of the heavy-duty tractors that pull them on California highways. CARB's Heavy-Duty (Tractor-Trailer) Greenhouse Gas Regulation is available at: <https://www.arb.ca.gov/cc/hdqhg/hdqhg.htm>.

⁵ The PSIP program requires that diesel and bus fleet owners conduct annual smoke opacity inspections of their vehicles and repair those with excessive smoke emissions to ensure compliance. CARB's PSIP program is available at: <https://www.arb.ca.gov/enf/hdvp/hdvp.htm>.

⁶ The regulation requires newer heavier trucks and buses must meet particulate matter filter requirements beginning January 1, 2012. Lighter and older heavier trucks replaced starting January 1, 2015. By January 1, 2023, nearly all trucks and buses will need to have 2010 model year engines or equivalent. CARB's Statewide Truck and Bus Regulation is available at: <https://www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm>.