

July 23, 2020

7/17/2020

Max Castillo  
Associate Planner  
City of Carson  
Community Development Department  
Planning Division  
701 East Carson Street  
Carson, California 90745  
Submitted via email: [MCastillo@carson.ca.us](mailto:MCastillo@carson.ca.us)

Governor's Office of Planning & Research

**Jul 28 2020**

**STATE CLEARINGHOUSE**

Dear Max Castillo:

Thank you for providing the California Air Resources Board (CARB) with the opportunity to comment on the Panattoni Project (Project) Initial Study and Mitigated Negative Declaration (IS/MND), State Clearinghouse No. 2020060370. The Project includes the construction of 3 warehouse/industrial buildings totaling 292,400 square feet. When completed, the Project will be developed for either warehousing uses only or warehousing and manufacturing uses. Under the warehousing land-use option, the Project would introduce 506 daily vehicle trips (including 104 daily light, medium, and heavy-duty truck trips) along local roadways. Under the warehousing and manufacturing land-use option, the Project would introduce 788 daily vehicle trips (including 166 daily light, medium, and heavy-duty truck trips) along local roadways. The Project is located within the City of Carson (City), California, which is the lead agency for California Environmental Quality Act (CEQA) purposes.

In addition to the high volume of daily heavy-duty diesel truck traffic, industrial uses, such as warehousing and manufacturing, can result in high daily volumes of rail traffic, and operation of on-site equipment (e.g., forklifts, yard tractors, etc.) which emit toxic diesel emissions and contribute to regional air pollution and global climate change.<sup>1</sup> CARB has reviewed the IS/MND and is concerned about the air pollution impacts that would result should the City approve the Project.

## **I. The Project Would Increase Exposure to Air Pollution in Disadvantaged Communities**

The Project, if approved, will expose nearby disadvantaged communities to elevated air pollution. Addressing the disproportionate impacts that air pollution has on

---

<sup>1</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 2017, makes clear that in CARB's expert view local mitigation is critical to achieving climate goals and reducing greenhouse gases below levels of significance.

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 should have been considered and included in the IS/MND when developing a project like this in a disadvantaged community.

**a. Senate Bill 535 (De León, 2012)**

Senate Bill 535 (De León, Chapter 830, 2012)<sup>2</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 percent of the census tracts, as analyzed by the California Communities Environmental Health Screening Tool Version 3.0 (CalEnviroScreen).<sup>3</sup> This Project falls within the boundary of the Wilmington, Carson, West Long Beach Community. The maximum CalEnviroScreen score for the Wilmington, Carson, West Long Beach community is within the top 5 percent, indicating that the area is home to some of the most vulnerable neighborhoods in the State. The air pollution levels in Wilmington, Carson, West Long Beach Community routinely exceed State and federal air quality standards. CARB urges the City to ensure that the Project does not adversely impact neighboring disadvantaged communities.

**b. Senate Bill 1000 (Leyva, 2016)**

Senate Bill 1000 (SB 1000) (Leyva, Chapter 587, Statutes of 2016)<sup>4</sup> amended the State's Planning and Zoning Law. SB 1000 requires local governments that have identified disadvantaged communities to incorporate the addition of an environmental justice element into their general plans upon the adoption or next revision of 2 or more elements concurrently on or after January 1, 2018. SB 1000 requires environmental justice elements to identify objectives and policies to reduce 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

---

<sup>2</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>3</sup> "CalEnviroScreen 3.0." Oehha.ca.gov, California Office of Environmental Health Hazard Assessment, June 2018, <https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30>.

<sup>4</sup> Senate Bill 1000, Leyva, S., Chapter 587, Statutes of 2016, amended the California Health and Safety Code, § 65302.

into the planning process to prioritize improvements and programs that address the needs of disadvantaged communities.

### **c. 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).<sup>5</sup> 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. The Wilmington, Carson, West Long Beach Community is 1 of 13 statewide communities chosen for inclusion in the Community Air Protection Program.

The Wilmington, Carson, West Long Beach Community 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.

Health-harming emissions, including particulate matter (PM), toxic air contaminants, and diesel PM generated during the construction and operation of the Project may negatively impact the community, which is already disproportionately impacted by air pollution from the existing port and other freight operations as well as stationary sources of air pollution. Part of the AB 617 process requires CARB and the South Coast Air Quality Management District (SCAQMD) to create a highly-resolved inventory of air pollution sources within this community. CARB would be more than happy to share this community emissions inventory with the City and applicant to aid in the DEIR's cumulative impact analysis.

## **II. It is Unclear Whether the Proposed Warehouse/Industrial Buildings Would be Used for Cold Storage**

The Project's description in the IS/MND does not explicitly state that the proposed 292,400 square-foot industrial/warehouse buildings would include cold storage space. Warehouses and distribution centers containing cold storage require trucks with transport refrigeration units (TRU) to transport frozen goods to and from the facility.<sup>6</sup> Based on CARB's research, TRUs on trucks and trailers can emit large quantities of diesel exhaust while operating within a facility. Residences and other sensitive

---

<sup>5</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>6</sup> TRUs are refrigeration systems powered by integral diesel engines that protect perishable goods during transport in an insulated truck and trailer vans, rail cars, and domestic shipping containers.

receptors (e.g., daycare facilities, senior care facilities, and schools) located near where these TRUs could be operating would be exposed to diesel exhaust emissions that would result in significant cancer risk.

CARB urges the City and applicant to clarify in the IS/MND whether the Project would be used for cold storage, so the public can fully understand the potential environmental effects of the Project on their communities.<sup>7</sup> If the Project will not be used for cold storage, CARB urges the City to include one of the following measures in the Project's final design:

- A Project design measure requiring contractual language in tenant lease agreements that prohibits tenants from operating TRUs within the Project site; or
- A condition requiring a restrictive covenant over the parcel that prohibits the applicant's use of TRUs on the property, unless the applicant seeks and receives an amendment to its conditional use permit allowing such use.

If the City does allow TRUs within the Project site, CARB urges the City to model air pollutant emissions from on-site TRUs, as well as include potential cancer risks from on and off-site TRUs in the Project's health risk assessment (HRA). The revised HRA should account for all potential health risks from Project-related diesel PM emission sources such as backup generators, TRUs, heavy-duty truck traffic, and include all the air pollutant reduction measures listed in Attachment A of this letter.

### **III. The IS/MND Does Not Adequately Analyze the Project's Potential Cancer Risk Impacts**

In the Air Quality Section of the IS/MND, the City and applicant concluded that the Project would expose sensitive receptors to substantial pollutant concentrations that would result in a less than significant impact. This impact conclusion was reached by comparing the Project's stationary construction and operation emissions of nitrogen oxide (NO<sub>x</sub>), carbon monoxide (CO), particulate matter 10 micrometers in diameter (PM<sub>10</sub>) and particulate matter 2.5 micrometers in diameter (PM<sub>2.5</sub>) to SCAQMD's localized significance thresholds and conducting a qualitative CO hotspot analysis. Although the Project's air pollutant emissions are below SCAQMD's localized significance thresholds and would not result in any CO hotspots, at a minimum, the

---

<sup>7</sup> Project descriptions "must include (a) the precise location and boundaries of the proposed project, (b) a statement of the objectives sought by the proposed project, (c) a general description of the project's technical, economic and environmental characteristics, and (d) a statement briefly describing the intended use of the EIR." (*stopthemillenniumhollywood.com v. City of Los Angeles* (2019) 39 Cal.App.5th 1, 16.) "This description of the project is an indispensable element of both a valid draft EIR and final EIR." (*Ibid.*) Without explicit acknowledgment in the project description that the proposed project will not include cold storage facilities, the current project description fails to meet the bare minimum of describing the project's technical and environmental characteristics.

IS/MND must include some quantitative analysis in determining the severity of the Project's impact on public health.<sup>8</sup>

Since the Project is located near residences already disproportionately burdened by multiple sources of air pollution, CARB recommends that the City prepare an HRA for the Project. The 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).<sup>9</sup>

#### **IV. The Air Quality Analysis Presented in the IS/MND is Inconsistent with the Project's Traffic Impact Report**

The traffic impact analysis presented in the Transportation Section of the IS/MND indicates that the Project under warehousing and/or manufacturing, and warehousing land-use options would result in 166 and 104 daily trips of light, medium, and heavy-duty trucks, respectively. However, according to the Project's California Emissions Estimator Model (CalEEMod) outputs, referenced in Appendix A of the IS/MND, the Project fleet mix includes 3 percent light-duty trucks, 2 percent medium-duty trucks, and 3 percent heavy-duty trucks. Based on these truck fleet mix estimates, the Project would result in approximately 57 combined daily truck trips under the warehousing and manufacturing land-use option, and 37 combined daily truck trips under the warehousing land-use option. Since the daily truck trips reported in the Project's CalEEMod outputs are well below what is presented in the Project's traffic impact analysis, CARB is concerned that the air pollutant emissions reported in the IS/MND are underestimated. CARB urges the applicant and City to remodel the Project's mobile air pollutant emissions using the vehicle trips presented in Project's traffic impact analysis.

#### **V. The IS/MND Did Not Account for Air Pollutant Emissions from Heavy-Duty Trucks During On-site Grading**

The IS/MND did not account for air pollutant emissions from heavy-duty trucks during the Project's grading construction phase. According to the Project's description, approximately 27,400 cubic yards of imported soil would be required to grade the Project site. According to the CalEEMod User's Guide, the default values for hauling trips are based on the assumption that a truck can haul 20 tons (or 16 cubic yards) of

---

<sup>8</sup> 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.)

<sup>9</sup> 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>.

material per load.<sup>10</sup> Assuming a truck capacity of 16 cubic yards, about 3,425 one-way heavy-duty truck trips would be necessary to import 27,400 cubic yards of soil to the Project site. Based on CARB's review of the CalEEMod outputs presented in Appendix A of the IS/MND, the City and applicant assumed that no heavy-duty truck trips would be required to import or export soil during the Project's grading construction phase.

CARB urges the City and applicant to remodel the Project's construction air pollutant emissions using accurate heavy-duty truck trip estimates. Residences and other sensitive receptors (e.g., daycare facilities, senior care facilities, and schools) located near construction haul routes could be exposed to diesel exhaust emissions that were not evaluated in the IS/MND. The IS/MND should clearly state the total number of heavy-duty truck trips expected during Project construction so the public can fully understand the potential environmental effects of the Project on their communities.

## **VI. Conclusion**

Lead agencies may only adopt mitigated negative declarations if the "initial study shows that there is no substantial evidence, in light of the whole record before the agency that the project, as revised, may have a significant effect on the environment" (14 CCR section 15070(b)(2)). Based on the comments provided above, CARB is concerned that the City's current IS/MND does not meet this legal threshold.

CARB recommends that the City and applicant clearly define whether the proposed warehouse/industrial buildings will be used for cold storage, prepare an HRA for the Project, and account for all air pollutant emission sources. If the proposed warehouse/industrial buildings will be used for cold storage, the City and applicant should model air pollutant emissions and associated cancer risks from on and off-site TRUs in a recirculated IS/MND. The recirculated IS/MND should also include all statutory considerations that address the disproportionate impacts of air pollution on disadvantaged communities found in Section I of this letter.

Should the updated and recirculated IS/MND find that there is substantial evidence in the record to support a fair argument that the Project may have a significant effect on the environment, the City and applicant must prepare and circulate a Draft

---

<sup>10</sup> CAPCOA, 2017. California Emissions Estimator Model User's Guide Version 2016.3.2. November 2017. Accessible at: <http://www.caleemod.com/>

Environmental Impact Report (DEIR) for public review, as required under CEQA.<sup>11, 12</sup> In addition to the concerns listed above, CARB encourages the applicant and City to implement the measures listed in Attachment A of this comment letter in order to reduce the Project's construction and operational air pollution emissions.

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 appreciates the opportunity to comment on the IS/MND for the Project and can provide assistance on zero-emission technologies and emission reduction strategies, as needed. 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,



Richard Boyd, Chief  
Risk Reduction Branch  
Transportation and Toxics Division

Attachment

cc: See next page.

---

<sup>11</sup> "Substantial evidence" is defined, in part, as "enough relevant information and reasonable information that a fair argument can be made to support a conclusion, even though other conclusions might also be reached. Substantial evidence shall include facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts."

<sup>12</sup> The adequacy of an IS/MND is judicially reviewed under the "fair argument" standard should a party challenge the lead agencies CEQA determination. Under this standard, a negative declaration is invalid if there is substantial evidence in the record supporting a fair argument that a project may have a significant effect on the environment. (*Gentry v. City of Murrieta* (1995) 36 Cal.App.4<sup>th</sup> 1359, 1399.) This is the case "even though [the lead agency] may also be presented with other substantial evidence that the project will not have a significant effect." (CEQA Guidelines, Title 14 CCR section 15064(f)(1).)

The California Environmental Quality Act (CEQA) places the burden of environmental investigation on the public agency rather than on the public. If a lead agency does not fully evaluate a project's environmental consequences, it cannot support a decision to adopt a negative declaration by asserting that the record contains no substantial evidence of a significant adverse environmental impact. (*Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296, 311.) If a lead agency does not study a potential environmental impact, a reviewing court may find the existence of a fair argument of a significant impact based on limited facts in the record that might otherwise not be sufficient to support a fair argument of a significant impact. (*Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296, 311.)

Max Castillo  
July 23, 2020  
Page 8

cc: State Clearinghouse  
[state.clearinghouse@opr.ca.gov](mailto:state.clearinghouse@opr.ca.gov)

Carlo De La Cruz  
Senior Campaign Representative  
Sierra Club  
[carlo.delacruz@sierraclub.org](mailto:carlo.delacruz@sierraclub.org)

Lijin Sun  
Program Supervisor  
CEQA Intergovernmental Review  
South Coast Air Quality Management District  
[lsun@aqmd.gov](mailto:lsun@aqmd.gov)

Morgan Capilla  
NEPA Reviewer  
U.S. Environmental Protection Agency  
Air Division, Region 9  
[capilla.morgan@epa.gov](mailto:capilla.morgan@epa.gov)

Taylor Thomas  
Research and Policy Analyst  
East Yard Communities for Environmental Justice  
[tbthomas@eycej.org](mailto:tbthomas@eycej.org)

Andrea Vidaurre  
Policy Analyst  
Center for Community Action and Environmental Justice  
[andrea.v@ccaej.org](mailto:andrea.v@ccaej.org)

Stanley Armstrong  
Air Pollution Specialist  
Risk Analysis Section  
Transportation and Toxics Division  
[stanley.armstrong@arb.ca.gov](mailto:stanley.armstrong@arb.ca.gov)



## ATTACHMENT A

### Recommended Air Pollution Emission Reduction Measures for Warehouses and Distribution Centers

The California Air Resources Board (CARB) 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 recommended by CARB, specific to warehouse and distribution center 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.
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 on site. Necessary infrastructure may include the physical (e.g., needed footprint), energy, and fueling infrastructure for construction equipment, on-site vehicles and equipment, and medium-heavy and heavy-heavy duty trucks.
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 phases be model year 2014 or later. All heavy-duty haul trucks should also meet CARB's lowest optional low-oxides of nitrogen (NO<sub>x</sub>) standard starting in the year 2022.<sup>1</sup>

---

<sup>1</sup> In 2013, CARB adopted optional low-NO<sub>x</sub> emission standards for on-road heavy-duty engines. CARB encourages engine manufacturers to introduce new technologies to reduce NO<sub>x</sub> emissions below the current mandatory on-road heavy-duty diesel engine emission standards for model year 2010 and later. CARB's optional low-NO<sub>x</sub> emission standard is available at: <https://www.arb.ca.gov/msprog/onroad/optionnox/optionnox.htm>.

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

## **Recommended Operation Measures**

1. 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.
2. Include contractual language in tenant lease agreements that requires all loading/unloading docks and trailer spaces be equipped with electrical hookups for trucks with transport refrigeration units (TRU) or auxiliary power units. This requirement will substantially decrease the amount of time that a TRU powered by a fossil-fueled internal combustion engine can operate at the project site. Use of zero-emission all-electric plug-in TRUs, hydrogen fuel cell transport refrigeration, and cryogenic transport refrigeration are encouraged and can also be included in lease agreements.<sup>2</sup>
3. Include contractual language in tenant lease agreements that requires all TRUs entering the project site be plug-in 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 requiring all TRUs, trucks, and cars entering the Project site be zero-emission.
6. 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.
7. 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.

---

<sup>2</sup>. CARB's Technology Assessment for Transport Refrigerators provides information on the current and projected development of TRUs, including current and anticipated costs. The assessment is available at: [https://www.arb.ca.gov/msprog/tech/techreport/tru\\_07292015.pdf](https://www.arb.ca.gov/msprog/tech/techreport/tru_07292015.pdf).

8. 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,<sup>3</sup> Periodic Smoke Inspection Program (PSIP),<sup>4</sup> and the Statewide Truck and Bus Regulation.<sup>5</sup>
9. Include contractual language in tenant lease agreements restricting trucks and support equipment from idling longer than 5 minutes while on site.
10. Include contractual language in tenant lease agreements that limits on-site TRU diesel engine runtime to no longer than 15 minutes. If no cold storage operations are planned, include contractual language and permit conditions that prohibit cold storage operations unless a health risk assessment is conducted, and the health impacts fully mitigated.
11. Include rooftop solar panels for each proposed warehouse to the extent feasible, with a capacity that matches the maximum allowed for distributed solar connections to the grid.
12. Including language in tenant lease agreements requiring the installation of vegetative walls<sup>6</sup> or other effective barriers that separate loading docks and people living or working nearby.

---

<sup>3</sup>. 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>.

<sup>4</sup>. 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>.

<sup>5</sup>. The regulation requires that newer heavier trucks and buses must meet particulate matter filter requirements beginning January 1, 2012. Lighter and older heavier trucks must be 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>.

<sup>6</sup>. Effectiveness of Sound Wall-Vegetation Combination Barriers as Near-Roadway Pollutant Mitigation Strategies (2017) is available at: <https://ww2.arb.ca.gov/sites/default/files/classic/research/apr/past/13-306.pdf>.