RAMBOLL

ENVIRONMENT
& HEALTH

MEMORANDUM

To: NAIOP Inland Empire

From: Julia Lester, Ramboll US Consulting, Inc.
Varalakshmi Jayaram, Ramboll US Consulting, Inc.

Subject: **TECHNICAL COMMENTS IN RESPONSE TO THE DECEMBER 2022 REPORT TITLED *A REGION IN CRISIS: THE RATIONALE FOR A PUBLIC HEALTH STATE OF EMERGENCY IN THE INLAND EMPIRE***

INTRODUCTION

Ramboll US Consulting, Inc. (Ramboll) has prepared the following objective technical memorandum detailing comments on the December 2022 report titled *A Region in Crisis: The Rationale for a Public Health State of Emergency in the Inland Empire* ("Report"). This Report, prepared by the Center of Community Action and Environmental Justice, Robert Redford Conservancy for Southern California Sustainability, and Sierra Club San Gorgonio, states that the growth of warehouses in California's Inland Empire (IE) is an environmental justice issue that has resulted in a public health crisis in San Bernardino and Riverside counties. An updated version of this Report was submitted to Governor Gavin Newsom in January 2023.[1] Ramboll's air quality and public health experts have reviewed both versions of this Report and, as discussed in Detailed Comments below, determined that:

1. The Report omits previous and ongoing regulatory developments that have achieved substantial reductions in air pollutant emissions from warehouse sources and will continue to improve air quality and public health across the South Coast Air Basin. See **Table 1** (Report Claims that Ignore Regulatory Developments) for a summary.
2. The Report fails to acknowledge that siting distance issues have already been resolved by current and near-term regulatory programs. See **Table 3** (Report Claims that Ignore Advancements to Siting Distance Guidance) for a summary.
3. The health effect visualization figures in the Report do not take into account the emissions reductions that have been achieved from adopted regulatory programs. See **Table 4** (Report Claims that Ignore Developments to Health Data) for a summary.
4. The Report fails to mention that commercial cargo will continue to move on IE freeways and roads, even if warehouses are located elsewhere, and thus overestimates potential benefits for new

[1] Available at: https://calmatters.org/wp-content/uploads/2022/06/State-of-Emergency-Public-Health-Request.pdf. Accessed: February 2023.

warehouse development moratoria or delays. See **Table 5** (Report Claims that Fail to Analyze the Impact of a Warehouse Moratorium) for a summary.

Thus, the need for additional actions is overstated and many of the Report's Requests (pages 5 – 7) are not justified by the information in the Report. See **Table 6** and **Table 7** (Response to Suggested Actions Outlined in the December 2022 and January 2023 Reports respectively).

DETAILED COMMENTS

1. The Report omits previous and ongoing regulatory developments that have achieved substantial reductions in air pollutant emissions from warehouse sources and will continue to improve air quality and public health across the Inland Empire.

The Report does not account for existing or proposed regulations that have reduced and will continue decreasing air pollutant emissions from trucks, transportation refrigeration units, and yard equipment such as forklifts that service warehouses. Instead, the Report proposes solutions to address a problem that California Air Resources Board (CARB) and South Coast Air Quality Management District (South Coast AQMD) are already working to resolve and does not justify the need for these proposed solutions.

Key existing regulations that have and will continue to reduce emissions related to warehouse operations that were not accounted for in the Report include the following:

- United States Environmental Protection Agency's (USEPA's) Exhaust Emission Standards for Heavy-Duty Highway Compression Ignition Engines and Urban Buses:[2] The USEPA established exhaust emission standards for heavy-duty diesel engines in 1974 and tightened these on several occasions through the 1980s, 1990s, and early 2000s. The most recent amendments to this rule, in October 1997 and December 2000, established phase-in schedules for reducing oxides of nitrogen (NO_X) and particulate matter (PM) emission factors from heavy-duty engines manufactured between 2004 and 2010. Engines manufactured on or after 2010 are required to meet the 2010 NO_X and PM exhaust emission standards.
- CARB's Airborne Toxic Control Measure (ATCM) to Limit Diesel-Fueled Commercial Motor Vehicle Idling:[3] Adopted on July 22, 2004, this ATCM limits idling of diesel-fueled commercial motor vehicles with a gross vehicle weight rating greater than 10,000 pounds to less than five minutes at any location. Amendments to this rule require 2008 or newer model year heavy-duty diesel engines to be equipped with a non-programmable engine shutdown system that automatically shuts down the engine after five minutes of idling or optionally meet a stringent oxide of nitrogen (NO_X) idling emission standard.

[2] United States Environmental Protection Agency (USEPA). Heavy-Duty Highway Compression-Ignition Engines and Urban Buses: Exhaust Emission Standards. Available at: https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100O9ZZ.pdf. Accessed: February 2023.

[3] California Air Resources Board (CARB). Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling. Available at: https://ww2.arb.ca.gov/our-work/programs/atcm-to-limit-vehicle-idling/about. Accessed: February 2023.

- CARB's ATCM for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets, and Facilities Where TRUs Operate:[4,5] Adopted in 2004 and amended in 2010, 2011, and 2022, the ATCM for TRUs, TRU generator sets, and facilities that operate TRUs and TRU generator sets reduces diesel particulate matter (DPM) emissions at distribution centers, truck stops, and other facilities where large numbers of these units congregate. The 2022 amendments to this ATCM are designed to achieve additional public health, air quality, and climate benefits by requiring the transition of diesel-powered truck TRUs to 100% zero-emission (ZE) technology by 2029, implementing a more stringent PM emission standard of 0.02 grams per brake horsepower-hour or lower for model year 2023 and newer non-truck TRU engines, and requiring the use of refrigerants with lower global warming potentials (less than or equal to 2,200).
- CARB's Truck and Bus Regulation:[6] Adopted in 2008, this regulation reduces DPM, NO_X, and other criteria air pollutions from the statewide truck and bus fleet by requiring nearly all trucks and buses to have 2010 or newer model year engines by January 1, 2023. This is one of the most far-reaching and important tools that CARB has implemented to reduce smog-forming and toxic emissions and protect public health in disadvantaged communities.
- CARB's Heavy-Duty Inspection and Maintenance (HD I/M) Program:[7] Adopted in 2021, this regulation requires periodic vehicle emissions testing and reporting on nearly all heavy-duty vehicles operating in California. The regulation will combine this period vehicle testing with roadside emissions monitoring to screen for potential high-emitting vehicles and expanded enforcement strategies, to ensure that vehicles' emissions control systems are properly functioning when traveling on California roadways. The phased implementation of the HD I/M regulation began in January 2023. When fully implemented, the regulation is projected to cut statewide NO_X emissions by over 81 tons per day and PM emissions by 0.7 tons per day in 2037.
- CARB's Low NO_X Heavy-Duty Omnibus Regulation:[8] Adopted in 2021, this regulation will require 2024 and newer model year engines in trucks and buses to meet more stringent NO_X (up to 90% lower) and PM (up to 50% lower) standards as compared to the 2010 model year engines. The regulation also lengthens the useful life and emissions warranty of heavy-duty engines to help minimize occurrences of tampering and ensure emission controls are well-maintained and repaired when needed.
- CARB's Advanced Clean Truck (ACT) Regulation:[9,10] Adopted in 2021, this regulation is part of CARB's holistic approach to accelerate a large-scale transition to zero-emission (ZE) medium- and

[4] CARB. Transportation Refrigeration Unit. Available at: https://ww2.arb.ca.gov/our-work/programs/transport-refrigeration-unit/about. Accessed: February 2023.

[5] CARB. 2022 Amendments to the TRU ATCM. Available at: https://ww2.arb.ca.gov/sites/default/files/2022-09/advisory_22_30_0.pdf. Accessed: February 2023.

[6] CARB. 2008. Truck and Bus Regulation. Available at: https://ww2.arb.ca.gov/our-work/programs/truck-and-bus-regulation. Accessed: February 2023.

[7] CARB. 2022. Heavy-Duty Inspection and Maintenance Program. Available at: https://ww2.arb.ca.gov/our-work/programs/heavy-duty-inspection-and-maintenance-program and https://ww2.arb.ca.gov/our-work/programs/heavy-duty-inspection-and-maintenance-program/about. Accessed: February 2023.

[8] CARB. 2020. Heavy-Duty Omnibus Regulation. Available at: https://ww2.arb.ca.gov/our-work/programs/innovative-clean-transit/omnibus-regulation. Accessed: February 2023.

[9] CARB. 2021. Advanced Clean Trucks. Available at: https://ww2.arb.ca.gov/our-work/programs/advanced-clean-trucks. Accessed: February 2023.

[10] CARB. 2021. Advanced Clean Trucks Fact Sheet. Available at: https://ww2.arb.ca.gov/resources/fact-sheets/advanced-clean-trucks-fact-sheet. Accessed: February 2023.

heavy-duty vehicles by implementing a manufacturer sales requirement that requires an increasing percentage of ZE trucks sales from 2024 to 2035. By 2035, the rule requires ZE truck sales to be 55% of Class 2b-3 truck sales, 75% of Class 4-8 straight truck sales, and 40% of truck tractor sales.

- South Coast AQMD's Warehouse Indirect Source Rule (ISR):[11] The Warehouse ISR is designed to reduce emissions from day-to-day warehouse operations, including trucks transporting goods to and from warehouses. This rule applies to owners and operators of warehouses with at least 100,000 square feet of indoor floor space in a single building. Warehouse operators are required to earn a certain number of points for actions and investments in clean technologies annually (called WAIRE points) depending on the number of trucks visiting their facility. Examples of actions and investments that can generate WAIRE points under this rule include acquisition and use of near-zero-emission (NZE) and ZE trucks, acquisition and use of ZE yard tractors, acquisition and use of ZE fueling infrastructure for on-road vehicles, and acquisition and use of solar panels for on-site electricity generation. South Coast AQMD estimates that this rule will result in NO_X and DPM reductions of 0 to 5.1 tons per day (tpd) and 0 to 0.012 tpd, respectively, in 2023.[12] By 2031 the NO_X and DPM reductions are expected to increase to 0 to 20.3 tpd and 0 to 0.025 tpd, respectively.

Additionally, the following proposed regulations will continue to reduce emissions and risk associated with warehouse operations in the IE in the future.

- CARB's Proposed Advanced Clean Fleets (ACF) Regulation:[13] This regulation intends to transition the statewide medium- and heavy-duty truck fleet to zero-emission by 2045 by implementing ZE vehicle requirements for public and private fleets and a 100% ZE sales requirement for manufacturers. The implementation of the proposed ACF regulation is expected to begin in 2024.
- CARB's Proposed Amendments to the ATCM for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets, and Facilities Where TRUs Operate:[14] CARB staff are assessing zero-emission options for non-truck TRUs. After completion of this technology assessment, staff will propose an amendment to the TRU ATCM that would aim to achieve the 100% ZE goal for off-road equipment that was set forth in Executive Order N-79-20. This amendment is expected to be considered for adoption by the CARB Board in 2025.
- CARB's Proposed Zero-Emission Forklift Rulemaking:[15] This proposed rulemaking will accelerate the deployment of ZE technology in forklifts to reduce NO_X, PM, greenhouse gas (GHG), and other criteria air pollutant emissions from forklifts that operate in manufacturing and freight facilities such as warehouses, distribution centers, and ports. The updated draft regulatory language for this

[11] South Coast Air Quality management District (South Coast AQMD). 2021. Rule 2305: Warehouse Indirect Source Rule. Available at: https://www.aqmd.gov/docs/default-source/rule-book/reg-xxiii/r2305.pdf?sfvrsn=21. Accessed: February 2023.

[12] South Coast AQMD. Table 15 and Table 16 in the Final Staff Report—Proposed Rule 2305 and Proposed Rule 316 (May 7, 2021). Available as Appendix I to Agenda No. 27 in the SCAQMD's May 7th 2021 Board Meeting. Rule 2305: Warehouse Indirect Source Rule. Available at: http://www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2021/2021-May7-027.pdf?sfvrsn=10. Accessed: February 2023.

[13] CARB. 2022. Advanced Clean Fleets. Available at: https://ww2.arb.ca.gov/our-work/programs/advanced-clean-fleets. Accessed: February 2023.

[14] CARB. New Transportation Refrigeration Unit Regulation in Development. Available at: https://ww2.arb.ca.gov/our-work/programs/transport-refrigeration-unit/new-transport-refrigeration-unit-regulation. Accessed: February 2023.

[15] CARB. Zero-Emission Forklifts. Available at: https://ww2.arb.ca.gov/our-work/programs/zero-emission-forklifts/about. Accessed: February 2023.

rulemaking was released in July 2022 and will be considered for adoption by the CARB Board in September 2023.

As a result of the comprehensive regulatory actions detailed above, there have been significant reductions in NO_X, PM, and DPM emissions from trucks and TRUs within California and the IE, and additional reductions will continue to occur.

CARB's mobile source emissions model (EMFAC) provides historical and future projected estimates of emission factors in grams per mile, vehicle miles traveled, and regional emissions generated by on-road vehicles operating in California.[16] Ramboll used the most current version of this model EMFAC2021 v1.0.2 to develop **Figures 1** through **8** for trucks[17] operating in the IE.[18] **Figure 1** and **Figure 2** present DPM and NO_X emission factors (grams per mile) for trucks operating in the IE from calendar year 2000 to 2040. As noted in these figures, DPM and NO_X emission factors have reduced by 96% and 87% respectively from calendar year 2000 to 2023 primarily due to the implementation of USEPA's Exhaust Emission Standards for Heavy-Duty Highway Compression Ignition Engines and Urban Buses and CARB's Truck and Bus Regulation. These reductions in emission factors offset the 37% increase in vehicle miles traveled by trucks from 2000 to 2023 (**Figure 3**) to generate 94%, 94%, and 82% reductions in exhaust PM, DPM, and regional NO_X emissions from trucks operating in the IE (**Figure 5** and **Figure 7**).

Figure 9 presents the DPM emissions from TRUs operating in the IE from calendar year 2000 to 2040. This emission inventory was generated using the current version of CARB's off-road mobile source emissions inventory database that includes the 2022 amendments to the ATCM for TRUs.[19] DPM emissions from TRUs have reduced by 68% from calendar year 2000 to 2023 and are projected to decrease by an additional 81% from 2023 to 2040. CARB's proposed amendments to the TRU ATCM that aims to transition this equipment to 100% ZE technology will result in additional reductions that are not reflected in these projections.

[16] CARB. EMFAC. Available at: https://arb.ca.gov/emfac/. Accessed: February 2023.

[17] Vehicles with a gross vehicle weight rating that is greater than 8,500 pounds. These vehicles are represented by the Light-Heavy Duty Truck 1 (LHDT1), Light-Heavy Duty Truck 2 (LHDT2), Medium-Heavy Duty Truck (MHDT), and Heavy-Heavy Duty Truck (HHDT) vehicle classes in EMFAC2021 v1.0.2.

[18] Non-desert portions of San Bernadino and Riverside counties that fall under the jurisdiction of South Coast Air Quality Management District (SCAQMD). This region is represented by sub-areas San Bernardino (SC) and Riverside (SC) in EMFAC2021 v1.0.2.

[19] CARB. Emissions Inventory - Off-Road Model. Available at: https://arb.ca.gov/emfac/emissions-inventory/8fd25e6bb6ab32b20dd201f9be9d3d0c8cf350e4. Accessed: February 2023.

Figure 1. DPM Emission Factors for Trucks in the Inland Empire, 2000 – 2040

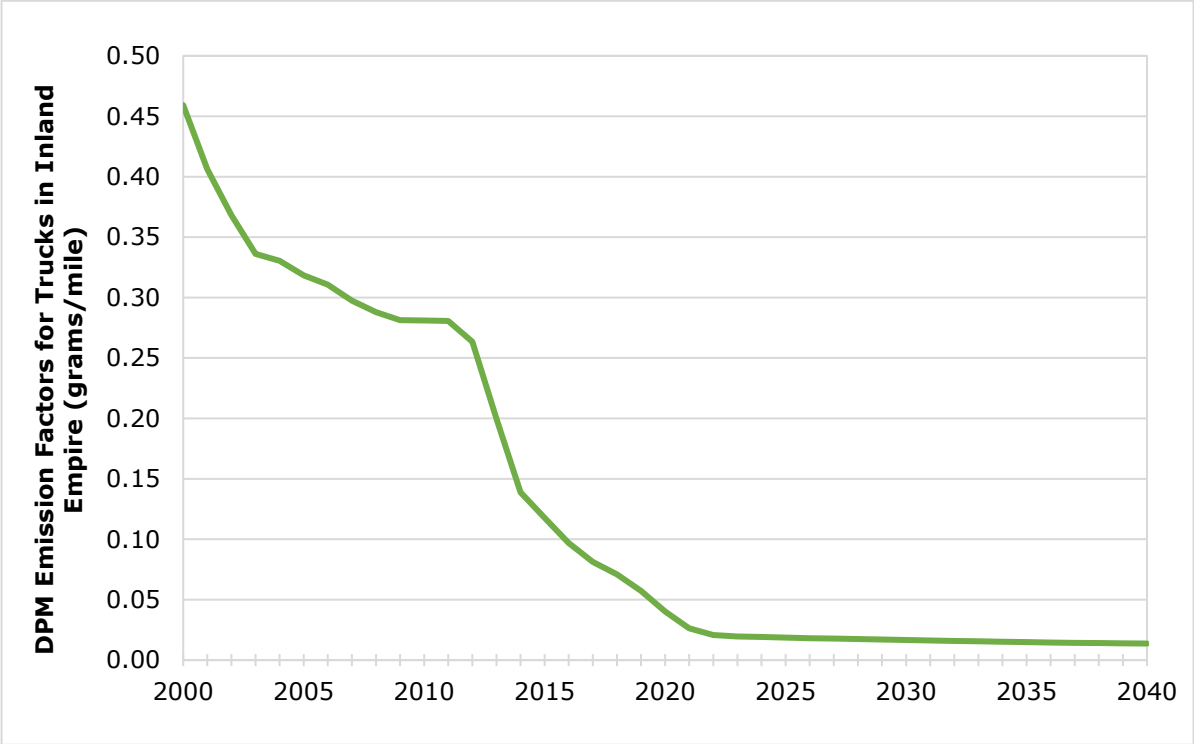


Figure 2. NO_X Emission Factors for Trucks in the Inland Empire, 2000 – 2040

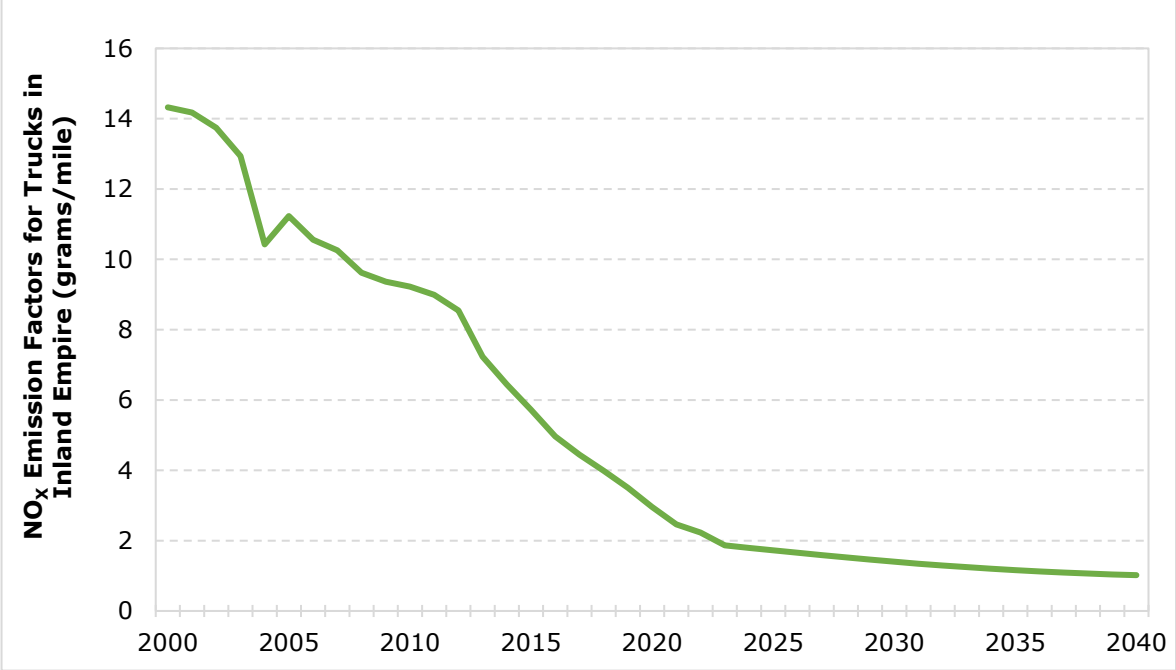


Figure 3. Vehicle Miles Traveled by Trucks in the Inland Empire, 2000 - 2040

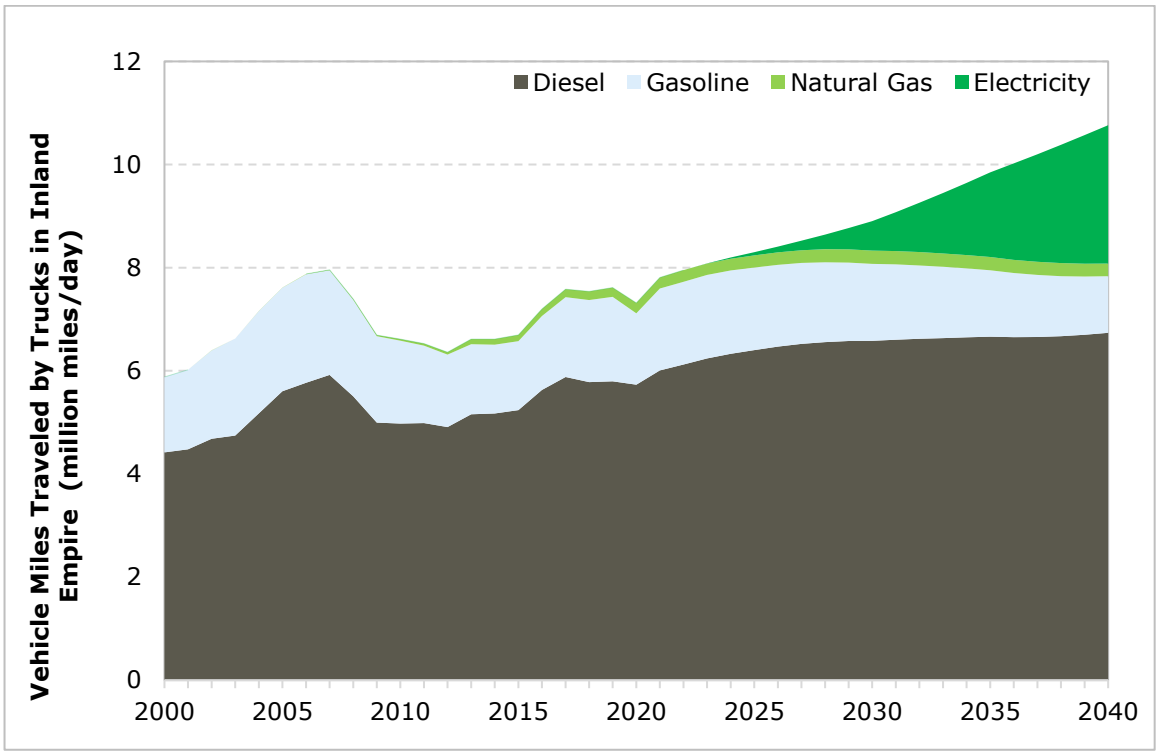


Figure 4. Vehicle Miles Traveled by Trucks in the Inland Empire, 2018 – 2040

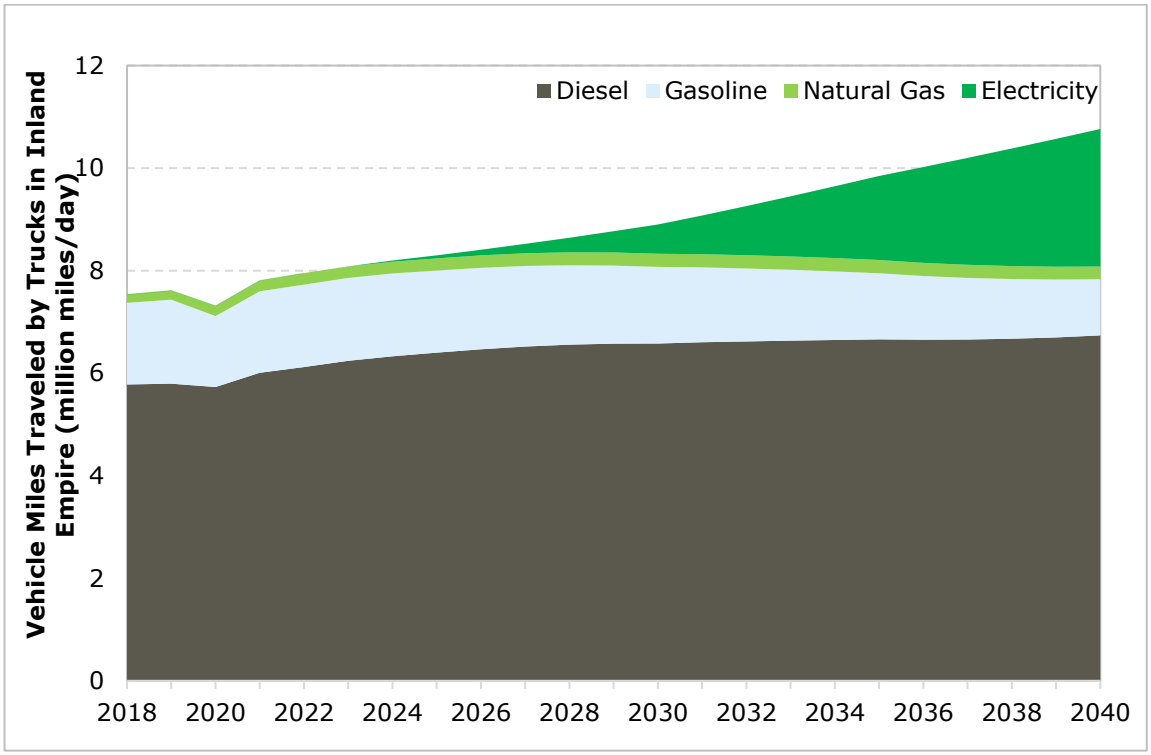


Figure 5. Exhaust PM Emissions from Trucks in the Inland Empire, 2000 – 2040

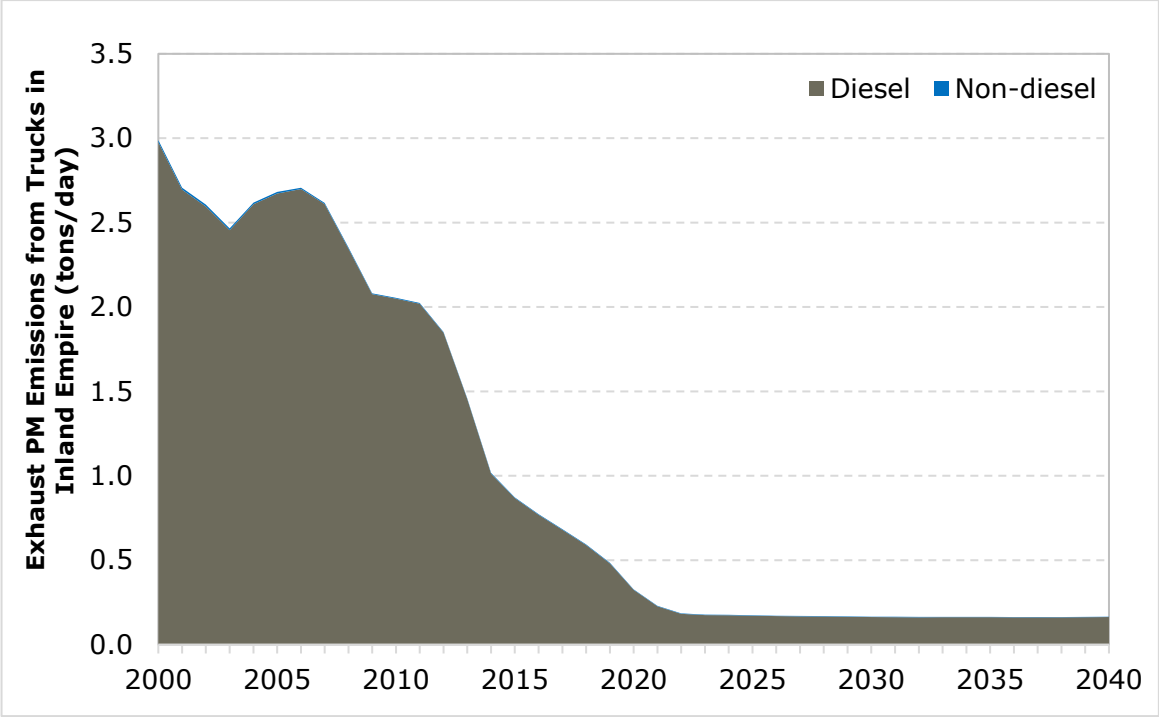


Figure 6. Exhaust PM Emissions from Trucks in the Inland Empire, 2018 – 2040

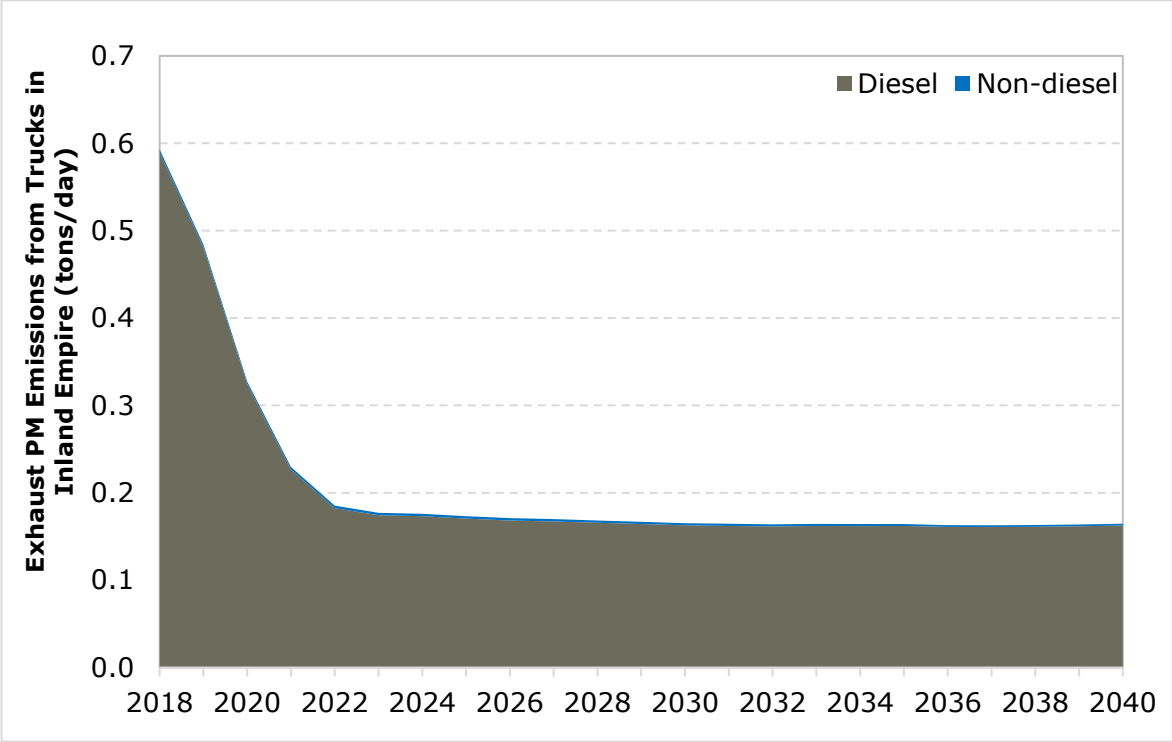


Figure 7. NOx Emissions from Trucks in the Inland Empire, 2000 – 2040

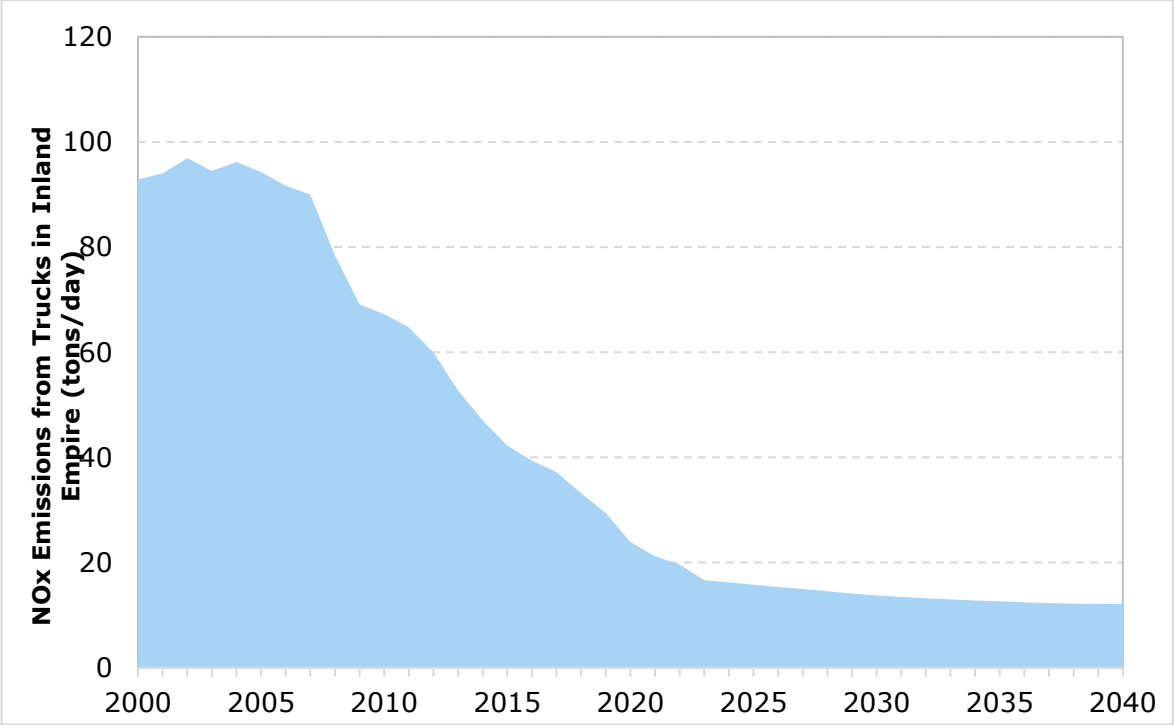


Figure 8. NOx Emissions from Trucks in the Inland Empire, 2018 – 2040

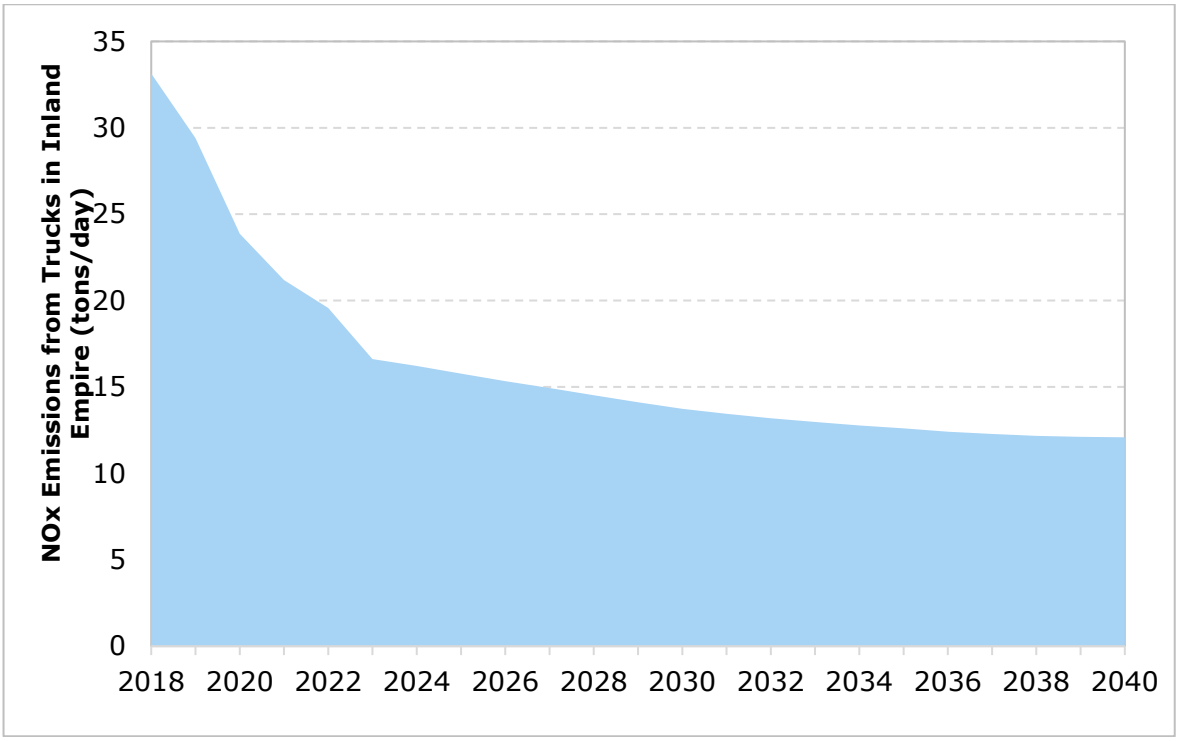
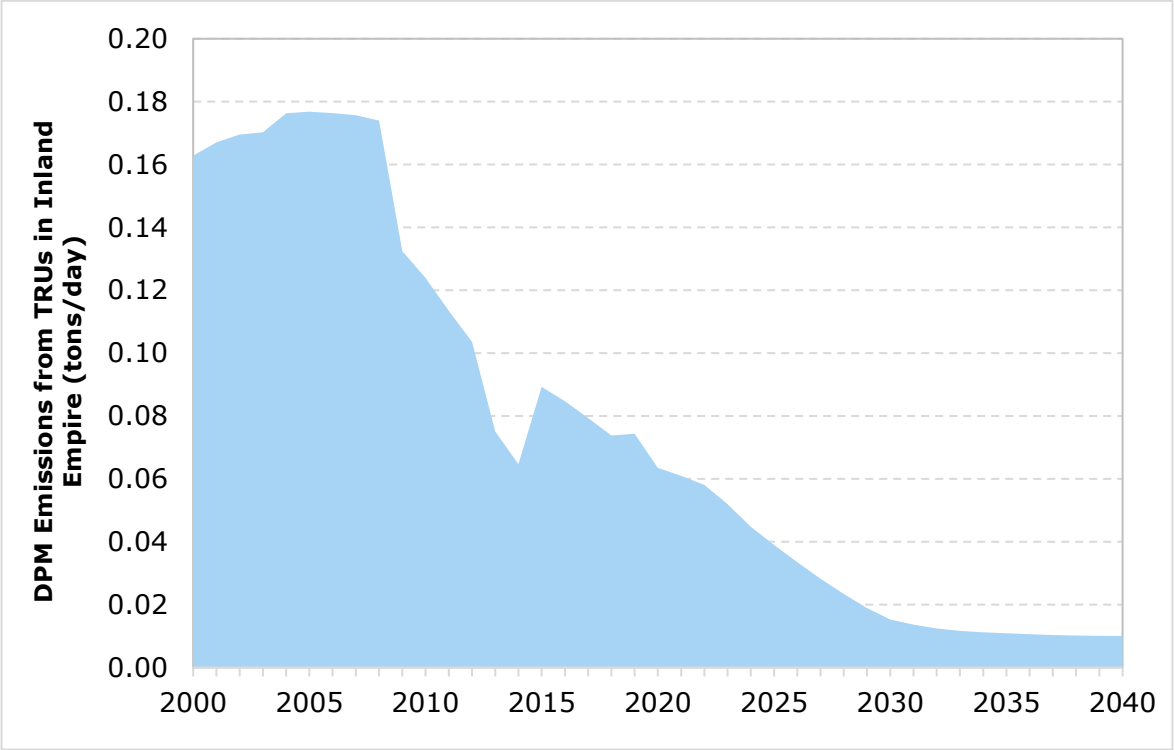


Figure 9. DPM Emissions from TRUs Operating in Inland Empire, 2000-2040



Besides the regulatory developments discussed above the reduce emissions from existing warehouse sources, the California Environmental Quality Act (CEQA) requires new development projects including warehouses in the IE to analyze and evaluate their air quality, health risk, and greenhouse gas impacts on a direct and cumulative basis. New warehouse projects in the IE typically use the methodologies and CEQA significance thresholds established by the South Coast AQMD for these evaluations, which take recently adopted regulations into account.[20] If any of the impacts for a proposed warehouse project are found to be significant, CEQA requires that the local lead agency impose enforceable mitigation measures to reduce those impacts to the extent feasible. Also, applicants proposing warehouse projects will often voluntarily re-evaluate their project designs and incorporate additional project design features to reduce air pollutant emissions.

The South Coast AQMD routinely monitors and comments on the air quality, health risk, and greenhouse gas technical analysis of new warehouse projects in Southern California including the IE region through

[20] CARB. Air Quality Analysis Handbook. Available at: http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook. Accessed: February 2023.

the CEQA process. In recent comment letters[21, 22, 23] on warehouse development projects, South Coast AQMD has provided guidance on these analyses methodologies and developed a robust suite of mitigation measures that address and reduce significant regional and localized air quality, greenhouse gas, and health impacts. Lead agencies and local jurisdictions may require these mitigation measures suggested by South Coast AQMD, if applicable and/or feasible for specific projects. A list of these mitigation measures is provided below:

- Requiring ZE or near-zero-emission (NZE) on-road haul trucks that meet CARB's adopted optional NO_X emissions standard of 0.02 grams per brake horsepower-hour (g/bhp-hr),
- Requiring phase-in schedule for ZE and NZE trucks to incentivize the use of these cleaner operating trucks and accelerate implementation of CARB's Advanced Clean Trucks Rule and Heavy-Duty Low NO_X Omnibus Regulation,
- Providing electric vehicle (EV) charging stations, or at a minimum, appropriately sized electrical infrastructure, panels, and hookups to facilitate future deployment of charging infrastructure,
- Maximizing use of solar energy by installing photovoltaic panels on the site to power the project and potentially feed energy back into the regional energy grid,
- Using light colored paving and roofing materials to reduce energy usage and associated emissions,
- Utilizing only Energy Star heating, cooling, lighting devices, and appliances,
- Using water-based or low volatile organic compound cleaning products that go beyond the requirements of South Coast AQMD Rule 1113,[24] and
- Implementing key design considerations to reduce air quality and health risk impacts, such as the following:
  - Clearly marking truck routes so that trucks will not travel next to or near sensitive land uses,
  - Designing the project such that truck entrances and exits do not face sensitive receptors, and trucks will not travel past sensitive land uses to enter or leave the site,
  - Designing the project such that any check-in point for trucks is at a sufficient distance inside the site boundary such that there are no trucks queuing outside the site,
  - Designing the project to ensure that truck traffic inside the site is as far away as feasible from sensitive receptors, and
  - Restricting overnight truck parking in sensitive land uses by providing for overnight truck parking areas inside the project site.

[21] South Coast AQMD. 2022. Comments on NOP of an EIR for the Majestic Freeway Business Center Phase II Project. Available at: http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2022/august/RVC220803-01.pdf?sfvrsn=8. Accessed: February 2023.

[22] South Coast AQMD. 2022. Comments on NOP of a DEIR for The Orchard Logistics Center Project. Available at: http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2022/august/RVC220726-06.pdf?sfvrsn=8. Accessed: February 2023.

[23] South Coast AQMD. 2022. Comments on NOP of a DEIR for OLC3 Ramona Expressway and Perris Boulevard Commercial Warehouse. Available at: http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2022/july/RVC220712-06.pdf?sfvrsn=8. Accessed: February 2023.

[24] South Coast AQMD. 2016. Rule 1113: Architectural Coatings. Available at: https://www.aqmd.gov/docs/default-source/rule-book/reg-xi/r1113.pdf?sfvrsn=24. Accessed: February 2023.

South Coast AQMD also reviews mobile source health risk assessment reports that are prepared as part of the CEQA compliance process for warehouse projects that generate diesel emissions or attract diesel-fueled vehicular trips, especially from heavy-duty diesel vehicles. Many of the same measures listed above that address air pollutants also address toxic air contaminants and the protection of public health.

Additionally, South Coast AQMD has been holding working group meetings to discuss how to address cumulative impacts from air toxics for CEQA projects.[25] Currently, CEQA requires analysis of a project's direct, indirect, and cumulative environmental effects.[26] In CEQA Guidelines Section 15355: "Cumulative impacts" refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. There are two methods for analyzing cumulative impacts. First, projects can contextualize their impacts within a list of past, present, and probable future projects in the area. Second, projects can demonstrate that the associated cumulative growth is aligned with an adopted local, regional, or statewide plan. Currently, South Coast AQMD guidance has been to apply the same significance thresholds for direct and cumulative air pollutant emission impacts. In other words, if a project is found to have a significant direct air quality impact, its cumulative impact is also considered significant and cumulatively considerable, regardless of the level of air quality that exists or is projected for the community.

In response to community and environmental group requests, the South Coast AQMD has reviewed other agencies' guidance documents on cumulative impacts. Among these guidance documents, USEPA released draft guidance on cumulative impacts in late 2022.[27] As of February 2023, the South Coast AQMD continues to work towards an updated approach that projects within the South Coast Air Basin can use to assess the potential for cumulative impacts from air toxics.

Recently approved environmental impact reports (EIRs)[28,29,30] within the IE have performed both a detailed health risk assessment (HRA) and cumulative analysis. Most recent projects have committed to mitigation measures that have reduced impacts from trucks and warehouse operations beyond those required by adopted regulations. These include, but are not limited to, the following:

---

[25] South Coast AQMD. CEQA Policy Development (NEW). Cumulative Impacts from Air Toxics for CEQA Projects. Available at: http://www.aqmd.gov/home/rules-compliance/ceqa/ceqa-policy-development-(new). Accessed: February 2023.

[26] California Code of Regulations. Article 9 Section 15130(b). Available at: https://casetext.com/regulation/california-code-of-regulations/title-14-natural-resources/division-6-resources-agency/chapter-3-guidelines-for-implementation-of-the-california-environmental-quality-act/article-9-contents-of-environmental-impact-reports/section-15130-discussion-of-cumulative-impacts#:~:text=(b)%20The%20discussion%20of%20cumulative,attributable%20to%20the%20project%20alone Accessed: February 2023.

[27] USEPA. 2022. Cumulative Impacts Research Recommendations for EPA's Office of Research and Development. Available at: https://www.epa.gov/system/files/documents/2022-09/Cumulative%20Impacts%20Research%20Final%20Report_FINAL-EPA%20600-R-22-014a.pdf. Accessed: February 2023.

[28] City of Fontana I-15 Logistics Draft Environmental Impact Report. 2019. Available at: https://files.ceqanet.opr.ca.gov/221268-2/attachment/5ACAxl-Ty-Qlfb-nCQYpjkV4FXBP85XKnPvzJ1cCkt0bbRndwYsN70cIJUdJqVEz2DdrhYdCDPBqtipj0. Accessed: February 2023.

[29] Environmental Impact Report for the K4 Warehouse and Cactus Channel Improvements Project. 2019. Available at: https://files.ceqanet.opr.ca.gov/125156-2/attachment/Ehqb2eUJImRQOIqiGAAWSHmDkaoZPmyRK24Uy0s3tld8G3lOWxuuhU_a7PpSB6ecz1qP5JqNptOuCa120. Accessed: February 2023.

[30] The World Logistics Center Final Programmatic Environmental Impact Report. 2015. Available at: https://moval.gov/cdd/pdfs/projects/wlc/FEIR.pdf. Accessed: February 2023.

- Installing signage that states the following:
  - Truck drivers shall turn off engines when not in use,
  - Truck drivers shall shut down engines within a set number of minutes,
  - Telephone number of the building facilities manager and CARB to report violations,
  - Parking in residential areas is prohibited, and
  - Directional information to clearly marked truck routes.
- The Project applicant shall make all Logistics Facility tenants aware of funding opportunities, such as the Carl Moyer Memorial Air Quality Standards Attainment program,[31] and provide literature on such funding opportunities as available from CARB.
- The Logistics Facility site plan design shall provide EV charging stations for employees and guests.
- For any warehouse use, the loading docks shall be designed to accommodate SmartWay[32] trucks.
- Prior to issuance of occupancy permits for each warehouse building, the developer shall demonstrate that vehicles can access the building using paved roads and parking lots.
- Tenants shall maintain records on fleet equipment and vehicle engine maintenance to ensure that equipment and vehicles are maintained pursuant to manufacturer's specifications.
- Tenant's staff in charge of keeping vehicle records shall attend CARB approved courses.
- Information regarding alternative fueling technologies and the availability of such fuels in the immediate area shall be posted in a prominent location available to truck drivers.
- All diesel trucks shall meet or exceed 2010 engine emission standards, or be powered by natural gas, electricity, or another diesel alternative.
- Prior to issuance of building permits for warehousing, a publicly accessible fueling station that offers alternative fuels shall be in operation within the area.
- Refrigerated warehouse space is prohibited unless it can be demonstrated that the environmental impacts resulting from the inclusion of refrigerated space do not exceed any environmental impact for the entire project.

Table 1, below, provides a list of claims made in the Report that fail to account for the regulatory developments described in the preceding section.

[31] CARB. Carl Moyer Memorial Air Quality Standards Attainment Program. Available at: https://ww2.arb.ca.gov/our-work/programs/carl-moyer-memorial-air-quality-standards-attainment-program. Accessed: February 2023.

[32] EPA SmartWay Program. Available at: https://www.epa.gov/smartway/learn-about-smartway. Accessed: February 2023.

Table 1. Report Claims that Ignore Regulatory Developments	
Report Claim	**Omitted Information**
Tie agreed-upon timeframes for diesel truck fleet electrification to project approval, such that no further warehouse construction is allowed in the AQMD basin until the fleet is 20% electrified, and no further warehouse construction is allowed in environmental justice communities until the fleet is 50% electrified. (Page 4 in the December 2022 Report) Tie warehouse project approval to real-time rather than projected fleet electrification. Consider tiered options such that no further warehouse construction is allowed in the SCAQMD basin until the fleet is 20% electrified, and no further warehouse construction is allowed in environmental justice communities until the fleet is 50% electrified. (Page 3 in the January 2023 Report)	Existing regulatory requirements have reduced PM and NO_X emissions from trucks in the IE by 94% and 82% respectively from 2000 to 2023 (**Figure 5** and **Figure 7**). Additional reductions of PM (7%) and NO_X (27%) emissions are expected to occur from 2023 to 2040 as a result of the recently adopted Low NO_X Heavy-Duty Omnibus and ACT regulations that are already transitioning the diesel vehicles to cleaner technologies including ZE trucks (**Figure 6** and **Figure 8**). These reduction estimates do not account for the additional improvements that will result from the increase in penetration of ZE vehicles that would occur with the implementation of the proposed ACF regulation. As such, substantial air quality improvements have occurred and will continue to occur based on existing regulatory requirements and the transition to ZE trucks as they become more commercially available will only further improve an already dramatically improved air quality environment. Further, as noted previously, local governments are required by CEQA to evaluate the air quality and health risk impacts of new development warehouse projects and mitigate impacts that are found to be significant. Hence, there is no justification for imposing warehouse construction delays.
Allow infrastructure improvement during the pause on warehouse development that would mandate that all existing and future warehouses be 100% self-powered through solar panels and bank 60% of their daily usage. (Page 6 in the December 2022 Report)	The consumption of electricity for warehouse operations does not create localized criteria air pollutant or toxic air contaminant emissions. Hence, installation of solar panels will not result in reductions of localized emissions or health benefits to the communities located in the vicinity of the warehouses.
GHG emissions associated with existing Ontario warehouses is more than 2.80 billion lb CO_2 per year, given an assumed diesel HDT VMT of 25 miles per day, 350 days per year. (Page 15 in the December 2022 Report and Page 14 in the January 2023 Report)	The Report fails to provide a basis for these emission estimates including but not limited to the data source for the GHG emission factors and daily truck trip activities. Regardless of the data likely being overstated, existing and currently pending regulatory actions will increase the penetration of cleaner trucks including ZE trucks that have zero tailpipe GHG emissions.

Table 1. Report Claims that Ignore Regulatory Developments	
Report Claim	**Omitted Information**
...AQMD's goals to reduce NO_X are currently reliant on black box solutions-in other words they are banking on future technologies (often denoted as TBD) that currently are not viable or do not exist. (Page 16 in the December 2022 Report and Page 14 in the January 2023 Report)	Only 18% (11 tons per day) of the NO_X emissions reductions from black box measures in the South Coast AQMD's 2022 Air Quality Management Plan[33] apply to mobile sources such as trucks that visit warehouses. Of this, 4 tons per day are expected from interstate heavy-duty trucks that are regulated by the USEPA and 7 tons per day are associated with an incentive funding program for mobile sources. These measures are not banking on future technologies as several clean truck engine technologies including low-NO_X natural gas trucks, battery electric trucks, and fuel cell electric trucks are ZE vehicles that are becoming commercially available. The remaining 82% (50 tons per day) of the NO_X emission reductions from black box measures in the 2022 Air Quality Management Plan (AQMP) are associated with ocean-going vessels, aircraft, stationary sources, and off-road equipment such as locomotives. Most of these emission sources are not associated with warehouse operations.
…the heavy-duty truck fleet will not fully transition to electric until 2045, allowing 23 years of vehicle pollution to continue to devastate the health of the IE communities. (Page 17 in the December 2022 Report and Page 16 in the January 2023 Report)	As noted previously, existing and pending regulatory actions are expected to reduce PM and NO_X emissions from trucks operating in the IE by 7% and 27% respectively from 2023 to 2040. These reduction estimates do not account for the additional air quality improvements that will result from the increased penetration of ZE vehicles that is expected from the implementation of the regulatory developments that are not yet fully in effect, such as the proposed ACF regulation. Further as noted in **Figure 9**, DPM emissions from TRUs operating in the IE are projected to decrease by at least 81% from 2023 to 2040 based on existing and pending regulatory requirements.

[33] South Coast AQMD. 2022. Policy Brief on Black Box Measures in the 2022 Air Quality Management Plan. Available at: http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2022-air-quality-management-plan/final-2022-aqmp/black-box_final.pdf?sfvrsn=4. Accessed: February 2023.

Table 1. Report Claims that Ignore Regulatory Developments	
Report Claim	**Omitted Information**
In the Inland Empire, we cannot think of a single warehouse EIR that has attempted to address cumulative impact. Instead, their focus is on individual sites that are considered either significant and unavoidable, or insignificant when viewed from an incremental perspective. (Page 18 in the December 2022 Report and Page 18 in the January 2023 Report)	Warehouse development projects in the IE that require an EIR typically follow the South Coast AQMD guidance for cumulative impact assessments. To date, South Coast AQMD guidance has been to apply the same significance thresholds for direct and cumulative air pollutant emission impacts. In other words, if a project is found to have a significant direct air quality impact, its cumulative impact is also considered significant and cumulatively considerable, regardless of the level of air quality that exists or is projected for the community. CEQA documents including EIRs have begun to more commonly include the California Office of Environmental Health Hazard Assessment's (OEHHA) CalEnviroScreen 4.0 data[34] and the South Coast AQMD's Multiple Air Toxics Exposure Study V (MATES V) data[35] for disclosure of reported pollution burdens in local communities (although the data is from 2016 and 2018, respectively and often represent worse air quality than present-day conditions). Cumulative analysis of air toxics has become more complex over time and as noted previously, the South Coast AQMD is working on updating the methodology for the cumulative impact assessment for CEQA projects.
…diesel VMT projected to grow by 55% by 2037, a rate which exceeds population growth by a factor of 5, and gasoline VMT by a factor of 20. (Page 22 in the December 2022 Report and Page 23 in the January 2023 Report)	The report provides no evidence to support this claim on the projected increase in diesel VMT. As shown in **Figure 4**, CARB projects a total increase of 26% in total truck VMT in the IE and a 7% increase in diesel truck VMT in the IE from 2023 to 2037. Over that same period, DPM exhaust emissions in the IE are expected to decrease by 8%, as shown in **Figure 6**.
...in the past 5 years, heavy-duty and medium-duty diesel VMT grew by almost 20%, almost completely offsetting the cleaner vehicles being introduced into the fleet through cleaner vehicle incentive programs and vehicle turnover... (Page 22 in the December 2022 Report and Page 23 in the January 2023 Report)	The report provides no evidence to support this claim. As noted in **Figure 4**, CARB estimated an increase of 7% in total truck VMT and 8% in diesel truck VMT in the IE in the last five years (from 2018 to 2023). This increase in truck VMT did not offset the emission reductions associated with the introduction of cleaner trucks. In fact, as shown in **Figure 6** and **Figure 8**, the DPM and NO_X emissions from trucks operating in IE reduced by 70% and 50% respectively in this time period (2018 to 2023).

[34] OEHHA. 2022. CalEnviroScreen 4.0. Available at: https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40. Accessed: February 2023.

[35] South Coast AQMD. MATES V Multiple Air Toxics Exposure Study. 2021. Available at: http://www.aqmd.gov/home/air-quality/air-quality-studies/health-studies/mates-v. Accessed: February 2023.

Table 1. Report Claims that Ignore Regulatory Developments	
Report Claim	**Omitted Information**
A common talking point for community leaders in the IE is that the air quality has dramatically improved within our region and throughout Southern California since the 1970s. This is true when it comes to visible pollution...$PM_{2.5}$ is so small that it is largely invisible...For now, $PM_{2.5}$ remains an invisible killer. (Page 34 in the December 2022 Report and Pages 34 and 35 in the January 2023 Report)	Existing regulatory requirements have reduced exhaust PM emissions (which is predominately $PM_{2.5}$) from trucks in the IE by 94% from 2000 to 2023. Additional reductions of 7% are expected to occur from 2023 to 2040 as a result of the recently adopted Low NO_X Heavy-Duty Omnibus and ACT regulations that are already transitioning the diesel vehicles to cleaner technologies, including ZE trucks. These reduction estimates do not account for the impact of an increase in penetration of ZE vehicles that would occur with implementation of the proposed ACF regulation.

2. The Report fails to acknowledge that siting distance issues have already been resolved by current and near-term regulatory programs.

The regulatory advances made to reduce the emissions and health risk associated with these emissions from heavy-duty truck and TRU operations at warehouses have rendered previous siting distance guidelines outdated.

In 2005, CARB published land use guidance[36] that recommends a minimum separation distance of 1,000 feet between new sensitive land uses and warehouses that accommodate more than 100 trucks per day or 300 hours per week of TRU operation. This siting distance guideline was chosen to reflect the distance at which cancer risk from DPM emissions would be less than 100 in a million. CARB's analysis for the developing of this guidance reflected DPM emissions from TRUs operating in calendar year 2000. A lot has changed in the 23 years since then. DPM emissions from trucks and TRUs have reduced significantly as described in the previous section (Detailed Comment 1). Further, the Office of Environmental Health Hazard Assessment (OEHHA) updated their guidance for estimating health risk in 2015 by incorporating age sensitive factors for children that increased risk associated with DPM by a factor of ~2.5.[37]

In order to evaluate how these changes affect CARB's recommended siting distance of 1,000 feet, Ramboll conducted a HRA of two warehouse scenarios in calendar years 2000 and 2023.[38] These include a Trucks with TRU Scenario which represents a warehouse that can accommodate 40 trucks per day and 300 hours of TRU operation per week and a Truck Only Scenario that represents a warehouse that accommodates 100 trucks per day. **Table 2** presents the modeling assumptions for these scenarios and **Figure 10** presents the DPM emission estimates for on-site activity for these scenarios in calendar years 2000 and 2023. As seen in **Figure 10**, there are significant decreases in on-site DPM emissions from 2000 to 2023 for both scenarios. This is a result of the implementation of several federal and state

[36] CARB. 2005. Air Quality and Land Use Handbook – A Community Health Perspective. Available at: https://ww3.arb.ca.gov/ch/handbook.pdf. Accessed: February 2023.

[37] California Office of Environmental Health Hazard Assessment (OEHHA). 2015. Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments. March 6. Available at: https://oehha.ca.gov/air/crnr/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk-0. Accessed: February 2023.

[38] Ramboll. 2021. Evaluating Siting Distances for New Sensitive Receptors Near Warehouses. Prepared for NAIOP IE.

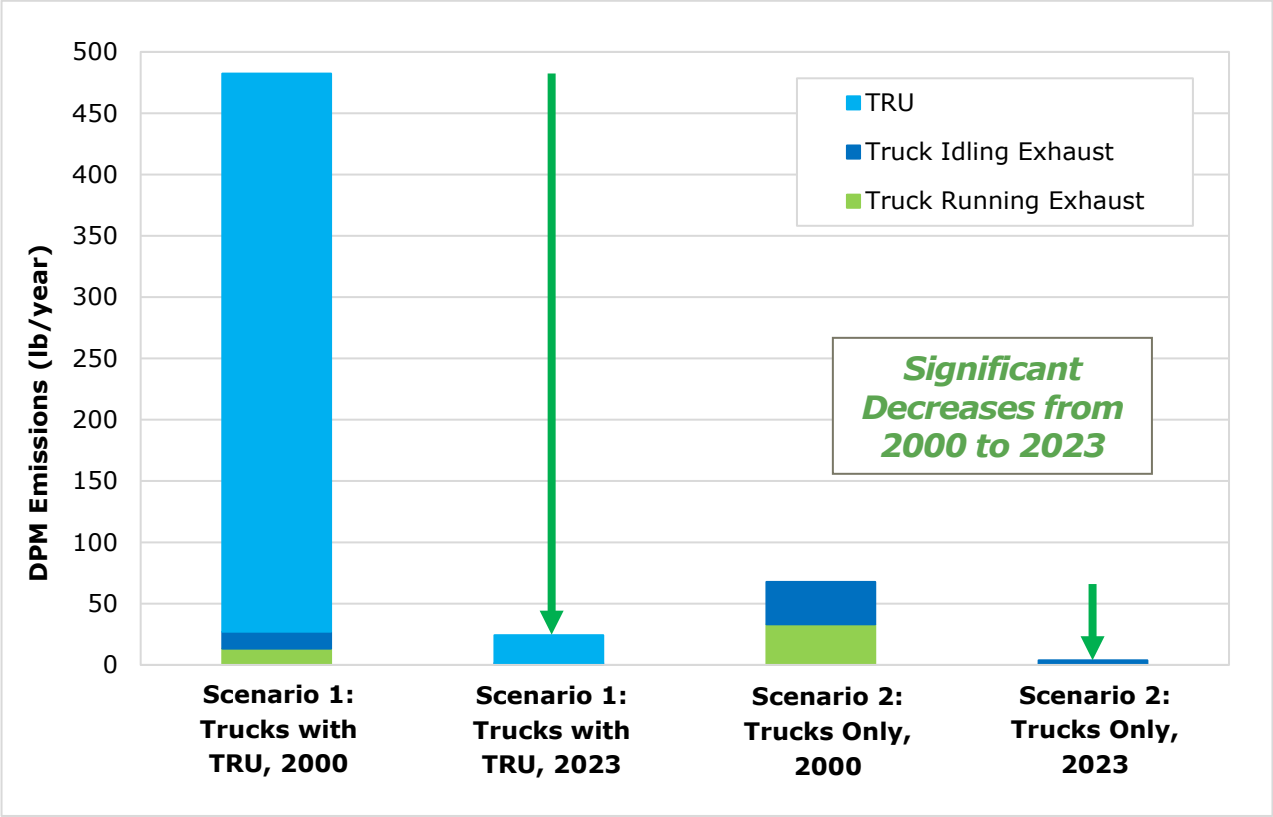
regulations on truck and TRUs, including CARB's Truck and Bus Regulation that required the statewide truck fleet to convert to 2010 or newer model year vehicles by January 1, 2023.

Table 2. Modeling Assumptions for Ramboll Scenarios

Modeling Assumptions	Scenario 1: Trucks with TRU	Scenario 2: Trucks only
Truck Activity	40 trucks per day 0.25-mile on-site travel distance per truck 15-minute idle time per truck per day	100 trucks per day 0.25-mile on-site travel distance per truck 15-minute idle time per truck per day
TRU Activity	300 hours of TRU operation per week which is equivalent to 1.1 hours per truck per day	No TRU activity
Warehouse Operating Schedule	24 hours a day, 7 days a week, 365 days per year	24 hours a day, 7 days a week, 365 days per year
Emission Inventory Model [1]	CARB's mobile source emissions inventory models EMFAC2017 and OFFROAD2017	CARB's mobile source emissions inventory models EMFAC2017 and OFFROAD2017
Dispersion Model	USEPA and South Coast AQMD recommended dispersion model - AERMOD	USEPA and South Coast AQMD recommended dispersion model - AERMOD
Meteorology	South Coast AQMD's Ontario Airport Meteorological dataset which has the most conservative dispersion factor for an area source in the South Coast Air Basin	South Coast AQMD's Ontario Airport Meteorological dataset which has the most conservative dispersion factor for an area source in the South Coast Air Basin
Health Risk Assessment Methodology	2003 OEHHA Guidance for calendar year 2000, which is consistent with CARB's analyses for developing the 1,000-foot siting guidance 2015 OEHHA Guidance for calendar year 2023, which is the current CARB and South Coast AQMD approved methodology	2003 OEHHA Guidance for calendar year 2000, which is consistent with CARB's analyses for developing the 1,000-foot siting guidance 2015 OEHHA Guidance for calendar year 2023, which is the current CARB and South Coast AQMD approved methodology

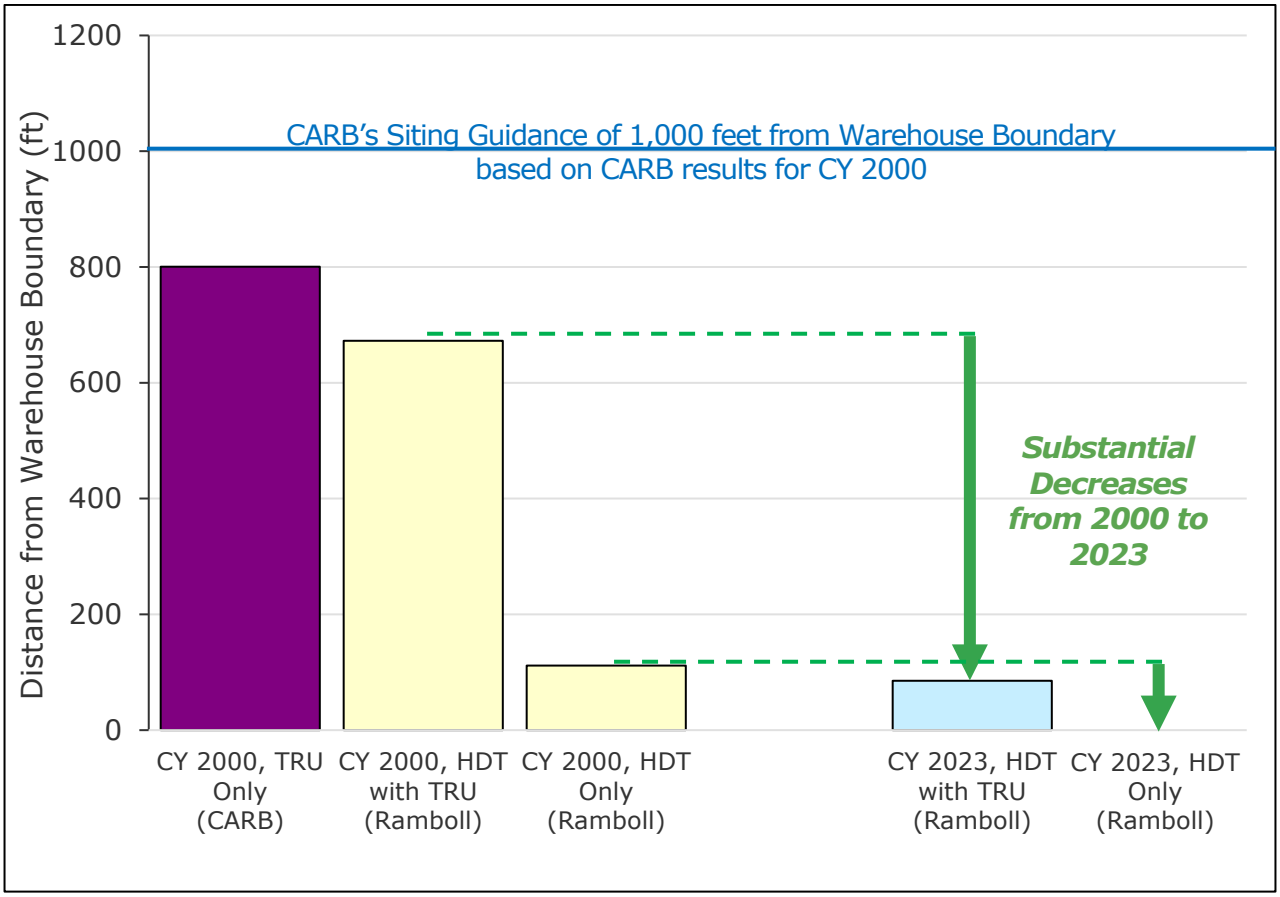
[1] Note, newer versions of the EMFAC and OFFROAD emissions inventory models were released after the completion of this analysis that increase the running exhaust DPM emissions for HDTs by 85% and DPM emissions from TRUs by 130% in the 2023 Scenarios. Because these 2023 emissions are already very low, the conclusions presented below are not expected to change, with emissions for Scenarios 1 and 2 still substantially lower in 2023 as compared to 2000.

Figure 10. Annual DPM Emissions for Ramboll Scenarios



The results of the health risk modeling shown in **Figure 11** compare Ramboll's results with the CARB analyses that was used to set the 1,000 feet siting guidance. The height of bars on this chart represents distances from the boundary of the modeled warehouse where the estimated residential cancer risk is greater than 100 in a million. The purple bar shows CARB's result for TRU operation that was used to set the recommended 1,000 feet siting distance (which is shown by the blue solid blue line at the top of this graph). The first light yellow bar beside the purple bar is Ramboll's result for the Trucks with TRU Scenario in calendar year 2000. These results are similar to CARB's results and give us confidence in Ramboll's analyses methodology. The two results on the right-hand side of the graph below the green arrows represent Ramboll's results for the trucks with TRUs and truck only scenarios in calendar year 2023. These show that cancer risk estimates are below 100-in-a-million at most distances away from the warehouse boundary. Therefore, CARB's minimum siting guidance of 1,000 ft for sensitive receptors located in the vicinity of warehouses is now overly conservative and should be substantially reduced or eliminated.

Figure 11. Estimated Distance from the Warehouse Boundary with Cancer Risk greater than or equal to 100 in a million[39,40]



Overall, this analysis demonstrates that federal and state regulations have led to significantly lower-emitting trucks and TRUs such that, even with the latest risk assessment methodology, CARB's 2005 Land Use Handbook recommendation of a minimum siting distance of 1,000 feet for sensitive receptors located in the vicinity of warehouses is now overly conservative. The analysis also demonstrates that there is no basis for proposals to increase the minimum siting distance and that CARB's recommended minimum siting distance of 1,000 feet could be substantially reduced or eliminated in the land use guidance.

Furthermore, as noted in the previous section (Detailed Comment 1), the CEQA process requires local government lead agencies to evaluate the air quality, health risk, and greenhouse gas impacts of new warehouse development projects and impose mitigation for any projects that exceed significance thresholds. Large warehouse projects that generate a large number of truck trips typically perform a HRA to evaluate localized impacts on sensitive receptors that may be located in the vicinity of the

[39] Ramboll. 2021. Evaluating Siting Distances for New Sensitive Receptors Near Warehouses. Prepared for NAIOP IE.

[40] Newer versions of EMFAC and OFFROAD had higher 2023 DPM emissions for HDTs and TRUs compared to those used in the Ramboll 2021 analysis in the previous footnote. Using these factors would not affect the CY 2023 HDT Only results, and the CY 2023 HDT with TRU distance at 100 in a million cancer risk may be closer to 200 feet in this modeling scenario. This is still a substantial decrease from the CY 2000 HDT with TRU distance.

project site. If any of these impacts are significant, the proposed project would have to incorporate design features and mitigation measure to reduce these impacts.

Table 3, below, provides a list of claims made in the Report that fail to account for new regulatory requirements and outdated siting distance guidance, as described in the preceding section.

Table 3. Report Claims that Ignore Advancements to Siting Distance Guidance

Report Claim	Omitted Information
Amend SB 352, which states that schools require further study if within 500 feet of an industrial facility or heavy traffic, to include the inverse: that no new industrial facilities that bring thousands of truck trips daily should require further study in order to be built within 500 feet of existing schools and sensitive receptors. (Page 5 in the December 2022 Report) Amend SB 352, which requires extra testing of air pollution sources within ¼ mile of any schools to determine whether a new school within 500 feet of a heavily trafficked road or industrial sites will pose a health hazard to students and teachers due to air pollution. Amend to include the inverse: that the same rules apply to warehouse siting in proximity to schools. Extend the distance to 500 meters, which was the distance based on the original USC air pollution/health study (Page 8 in the January 2023 Report)	CEQA already requires new development projects to perform an air quality and health risk assessments that evaluates the localized impacts on schools and other sensitive receptors in the vicinity of the project site. These assessments, which are also subject to lead agency requirements, already contain a robust amount of technical detail and rely on modeling software issued by the USEPA and CARB. If any impacts identified by these technical assessments are found to be significant, the project is required by the local lead agency to incorporate design features and mitigation measure to reduce these impacts, to the extent feasible.
In figures above, 1000 and 3000 buffer zones demonstrate how multiple schools, and a key part of the airshed, can be impacted by a single warehouse. (Page 27 in the December 2022 Report and Page 28 in the January 2023 Report)	The Report generally assumes that the air quality at schools located within 1,000 feet and 3,000 feet of a warehouse is significantly impacted by the warehouse operations, without providing any evidence. This claim fails to account for existing and pending regulatory developments that have resolved the siting distance concerns. As demonstrated by Ramboll's analysis, summarized in **Figure 11**, the distance separations that are needed to ensure health-protective warehouse operations are small and nowhere near 1,000 or 3,000 feet. Further, CEQA requires that local lead agencies evaluate new warehouse developments and mitigate any significant air quality and health risk impacts on sensitive receptors located in the vicinity of the project site.

Table 3. Report Claims that Ignore Advancements to Siting Distance Guidance	
Report Claim	**Omitted Information**
Unchecked growth has brought warehouse development projects closer to people's homes, in some cases right up against their backyards, despite warnings from state air quality regulators to keep homes more than 1,000 feet from distribution centers because of truck traffic. (Page 36 in the December 2022 Report and Page 36 in the January 2023 Report)	As described in Detailed Comment 2, the 1,000 foot buffer recommendation was made in 2005 using year 2000 truck and TRU data. In the 23 years since that time, federal and state regulations have led to trucks and TRUs with substantially lower criteria air pollutant and DPM (the predominant air toxic) emissions. Even with the latest and more sophisticated risk assessment methodology, CARB's 2005 Land Use Handbook recommendation of a minimum siting distance of 1,000 feet for sensitive receptors is now overly conservative and not necessary. As demonstrated by Ramboll's analysis summarized in **Figure 11**, the distance separations that are needed to ensure health-protective warehouse operations are much smaller than 1,000 feet. Further, CEQA requires that local lead agencies evaluate new warehouse developments and mitigate any significant air quality and health risk impacts on sensitive receptors located in the vicinity of the project site.

3. The health effect visualization figures in the Report do not reflect the emissions reductions that have been achieved from adopted regulatory programs.

The health impact data presented in the Report are based on South Coast AQMD's Multiple Air Toxics Exposure V (MATES V) Report,[41] which relies on 2018 data that is outdated now as significant reductions in DPM have occurred since 2018, and additional reductions are set to occur beyond 2023. These reductions are a direct result of adoption and implementation of several CARB regulations, particularly in the on-road sector, including the Truck and Bus Regulation, Low NOx Heavy-Duty Omnibus Regulation, and the ACT Regulation.

Ramboll conducted a high-level analysis to project the potential changes to basin-wide air toxics cancer risk in 2023 which could result from already adopted regulations for on-road mobile sources, using the following methodology:[42]

On-Road Risks:

- Ramboll used VMT presented in the 2016 South Coast AQMD AQMP[43] for calendar years 2018 and 2023 to scale the risk for each vehicle class. This is consistent with the methodology used for developing the emissions inventory in MATES V, which relied on VMT data from the 2016 South Coast AQMD AQMP. Note, using the updated VMT data for 2023 from South Coast AQMD's 2022 AQMP[44] that was prepared after the completion of this analysis does not change the conclusions of this analysis.

[41] South Coast AQMD. MATES V Multiple Air Toxics Exposure Study. 2021. Available at: http://www.aqmd.gov/home/air-quality/air-quality-studies/health-studies/mates-v. Accessed: February 2023.

[42] BizFed, the Los Angeles County Business Federation. 2021. Comment letter on the MATES V Draft Report. July 26.

[43] South Coast AQMD 2016 AQMP. Available at: https://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan/final-2016-aqmp. Accessed: February 2023.

[44] South Coast AQMD. Final 2022 AQMP. Available at: http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan#. Accessed: February 2023.

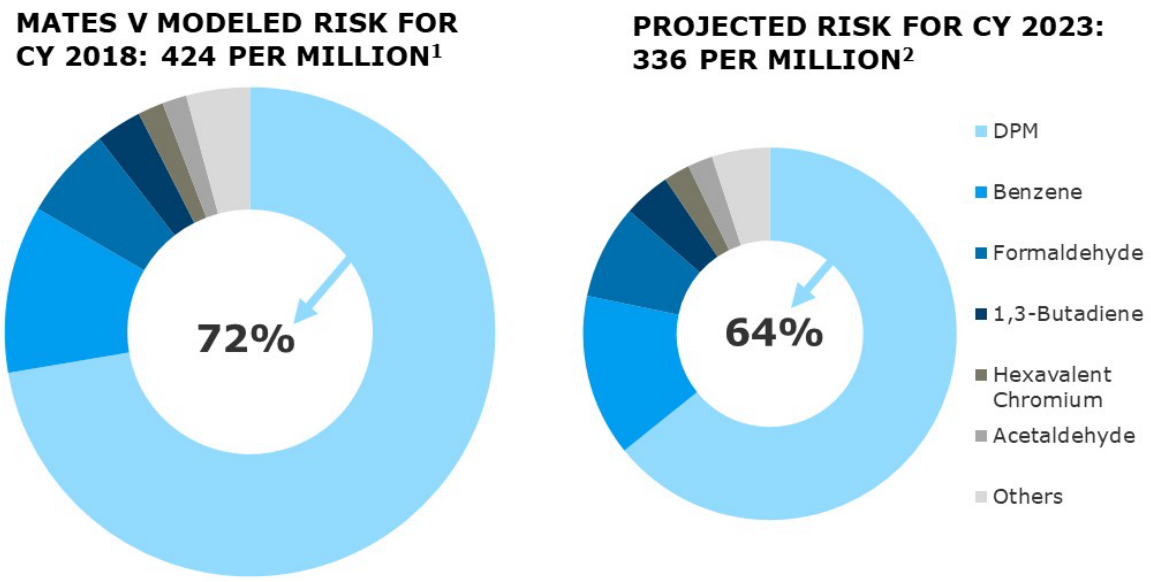
- Ramboll calculated the DPM emission factor for each vehicle class for 2018 (using EMFAC 2017 consistent with MATES V methodology) and 2023 (using EMFAC 2021 to represent CARB's current projection of 2023 DPM emission factors). Results of the emission factors were compared for each vehicle class to understand the percent increase or decrease in DPM between 2018 and 2023.
- Ramboll used the air toxics emission inventory data presented in the MATES V draft report to understand the associated air toxics risk on a vehicle category level. This air toxics risk was then scaled by the expected increase or decrease in both VMT and emission factor to understand projected risk in 2023.

Off-Road and Other Sources of Air Toxics Cancer Risks:

- Off-road and other sources of air toxics cancer risk were scaled up based on the projected population growth between 2018 and 2023. Population growth data was sourced from the Southern California Association of Governments Demographics and Growth Forecast Technical Report.[45]

The results of Ramboll's study showed an estimated basin-wide air toxics cancer risk of 336 in a million in 2023; a 20% reduction as compared to 2018 (**Figure 12**). This improvement is due to the expected decrease in on-road DPM emissions. The results of the Ramboll study highlight the importance of having current and accurate science to guide efforts to improve air quality.

Figure 12: Toxic Air Contaminant Contribution to Basin-Wide Cancer Risk



Additionally, the Report fails to provide the necessary context to understand how the basin average air toxics cancer risk of 424 in a million reported in the MATES V Study compares to the lifetime probability of developing cancer. Although the causes of cancer are not fully understood, numerous factors can increase the risk of developing cancer including by not limited to genetic mutations, lifestyle choices such as tobacco use, alcohol consumption, and physical inactivity, excessive exposure to sun, and

[45] Southern California Association of Governments Demographics and Growth Forecast Technical Report, September 3, 2020. Available at: https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal_demographics-and-growth-forecast.pdf?1606001579. Accessed: February 2023.

exposure to carcinogens such as air toxics. The 2023 study published by the American Cancer Society[46] estimates a lifetime probability of 39.1% to 40.9% for an American to develop invasive cancer. This would equate to a risk of 391,000 to 409,000 in a million. Even the highest MATES V air toxics risk reported in the IE (624 in a million) is less than 0.2% of the lifetime probability for an American to develop invasive cancer.

The Report also utilized CalEnviroScreen 4.0[47] to generate DPM exposure maps for schools located in within a 1,000 to 3,000 buffer around existing warehouses. CalEnviroScreen 4.0 relies on 2016 DPM data,[48] which is even more outdated than the MATES V Study that relies on 2018 data. As noted in **Figure 5**, the DPM emissions from trucks operating in the IE region has decreased by 77% from 2016 to 2023. Further, the DPM emissions from TRUs operating in the IE have also reduced by 39% since 2016 (**Figure 9**). Therefore, health effect visualization figures in the Report are not representative of present-day conditions that have lower background DPM concentrations.

The Report also argues that warehouse development is responsible for increased asthma incidence within the IE. Asthma is a long-term condition, characterized by inflamed and swollen airways to the lungs. It is an obstructive lung disease, meaning it is harder to fully exhale all of the air in the lungs, which makes it harder to breathe. Symptoms of asthma include coughing, wheezing, chest tightness and difficulty breathing when exposed to asthma triggers. Common asthma triggers include tobacco smoke, dust mites, outdoor air pollution, cockroach allergen, pets, mold, smoke from burning wood or grass, and influenza, colds, and respiratory syncytial virus. Other asthma triggers include sinus infections, acid reflux, physical exercise, weather such as thunderstorms or high humidity, breathing in cold, dry air, some foods, and fragrances.[49]

Overall, the asthma hospitalization rate for children ages 0-17 years in California decreased from 10.1% in 2015 to 8.3% in 2019. Asthma hospitalization rates varied by county. In 2015, the asthma hospitalization rate for children in San Bernardino County was 9.9% and decreased to 8.7% in 2019. In Riverside County, the asthma hospitalization rate was 7.3% in 2015 and 7.1% in 2019. In general, asthma hospital rates declined in California and these declines were seen in other counties, including counties with less warehouse development, and higher asthma hospitalization rates, than in the IE. For example, the asthma hospitalization rate for children in Fresno County was 18.3% in 2015 and decreased to 12.5% in 2019. Children in San Francisco County had an asthma hospitalization rate of 13.6% in 2015, which decreased to 11.3% in 2019, while children in Imperial County had an asthma hospitalization rate of 21.3% in 2015, which decreased to 15.7% in 2019. In other words, there was a downward trend in the asthma hospitalization rate from 2015 to 2019 (the most recent years for which data are available).[50]

---

[46] American Cancer Society. Cancer Facts and Figures 2023. Table 6. Probability of Developing Invasive Cancer During Selected Age Intervals by Sex, US, 2017-2019. Available at: https://www.cancer.org/content/dam/cancer-org/research/cancer-facts-and-statistics/annual-cancer-facts-and-figures/2023/2023-cancer-facts-and-figures.pdf. Accessed: February 2023.

[47] OEHHA. 2022. CalEnviroScreen 4.0. Available at: https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40. Accessed: February 2023.

[48] OEHHA. 2022. Summary of Changes in CalEnviroScreen Version 4.0. Available at: https://oehha.ca.gov/media/downloads/calenviroscreen/document/calenviroscreen40summaryofchangesf2021.pdf. Accessed: February 2023.

[49] Centers for Disease Control and Prevention. Common Asthma Triggers. Available at: https://www.cdc.gov/asthma/triggers.html. Accessed: February 2023.

[50] California Department of Public Health. Asthma Hospitalization Rates by County. Available at: https://data.chhs.ca.gov/dataset/asthma-hospitalization-rates-by-county. Accessed: February 2023.

Due to the myriad of triggering factors for asthma, it is clear that it is not exclusively warehouse development in the IE that is exacerbating asthma. As described above, other counties with less warehouse development (Fresno County, Imperial County, and California, as a whole) actually have higher rates of asthma hospitalization, showing that asthma exacerbations are not solely caused by warehouse operations, as this Report implies.

The Report states that air pollution has a direct impact and indirect impact on the reproductive system. It selectively references studies that reported associations between $PM_{2.5}$ exposure and preterm birth and adverse birth outcomes. There are also studies, however, that have reported no statistical associations between $PM_{2.5}$ and preterm birth or adverse health outcomes. In fact, the EPA (2019) Integrated Science Assessment (ISA) for Particulate Matter describes the evidence as "suggestive, but not sufficient to infer a causal relationship between $PM_{2.5}$ and pregnancy and birth outcomes." The ISA cites "limited and inconsistent epidemiological evidence", "uncertainty to support an independent effect of $PM_{2.5}$ in epidemiological evidence from copollutant models", "limited toxicological evidence that $PM_{2.5}$ exposure results in decreased birth weight of pups", variability in timing of exposure, as well as other factors when explaining the rationale for their conclusion.[51] Finally, the Report seems to infer that the cause of the decline in birth rates in California is air pollution without providing evidence. Although birth rates have declined in California since 2007, birth rates have also declined in the US as a whole. The reasons for the decline are a combination of factors, largely including increased educational and economic opportunities for women. These opportunities have allowed women to delay or forego marriage, and delay or forego having children. The Report cited a blog post from June 4, 2021, titled *California's New Baby Bust* that compared California birth rates in 2008 and 2019 (the time following the Great Recession). The authors of the blog state "*Women in their 20s account for the vast majority of recent declines, with almost no change for women in higher age groups. Changes in household structure play a strong role here. Women in their 20s are more likely to have children if they are married and living apart from their parents – both have become less common, and especially so in California where high housing costs make it harder to live on one's own*." Recently, the Pew Charitable Trusts summarized data from the Centers for Disease Control and reported that 43 states recorded their lowest fertility rates (annual births per 1000 women aged 15-44) in 2020 (over a 3-decade span).[52] Western states reported higher declines in 2020 when compared to their 2001-2010 annual averages than eastern states. Meanwhile, $PM_{2.5}$ concentrations and air quality indices were decreasing over the same time period in California[53,54] and across the United States.[55]

---

[51] USEPA. December 2019. Integrated Science Assessment for Particulate Matter. Available at: https://cfpub.epa.gov/ncea/isa/recordisplay.cfm?deid=354490. Accessed: February 2023.

[52] Pew Charitable Trust. The Long-Term Decline in Fertility—and What It Means for State Budgets. Issue Brief. December 5, 2022. Available at: https://www.pewtrusts.org/en/research-and-analysis/issue-briefs/2022/12/the-long-term-decline-in-fertility-and-what-it-means-for-state-budgets. Accessed: February 2023.

[53] South Coast Air Quality Management District. 2022 Air Quality Management Plan, Appendix II. Figure 2-19. December 2, 2022. Available at: http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2022-air-quality-management-plan/final-2022-aqmp/appendix-ii.pdf?sfvrsn=6. Accessed: February 2023.

[54] San Joaquin Valley Air Pollution Control District. 2018 PM2.5 Plan for the San Joaquin Valley, Appendix A. Figures A-3 and A-4. Available at: https://www.valleyair.org/pmplans/documents/2018/pm-plan-adopted/A.pdf. Accessed: February 2023.

[55] USEPA. 2022. Particulate Matter (PM2.5) Trends. Available at: https://www.epa.gov/air-trends/particulate-matter-pm25-trends. Accessed: February 2023.

Table 4, below, provides a list of claims made in the Report that fail to provide broader context to health data, which Ramboll has provided in the preceding section.

Table 4. Report Claims that Ignore Developments to Health Data

Report Claim	Omitted Information
California EnviroScreen 4.0 data placed many Inland communities at the 90th percentile and above for air and water pollution. (Page 8 in the December 2022 Report and Page 7 in the January 2023 Report)	CalEnviroScreen 4.0 relies on 2015-2017 $PM_{2.5}$ monitoring data and 2016 DPM data[56] which are outdated due to the continued progress made in improving regional air quality by existing and recently adopted regulatory actions.
Below are data and maps for Riverside and San Bernardino Counties…157 schools are within the 80th percentile or higher for Diesel Particulate Matter exposure due to proximity to warehouses and related truck traffic routes. (Page 23 in the December 2022 Report and Page 24 in the January 2023 Report)	The cited maps use data from CalEnviroScreen 4.0, which is now outdated as it uses 2016 DPM data. As noted in **Figure 5**, the DPM emissions from trucks operating in the IE region have decreased by 77% from 2016 to 2023. Further, the DPM emissions from TRUs operating in the IE have also decreased by 39% since 2016 (**Figure 9**).
Average cancer risk from ambient measurements in the South Coast basin was found to be 425 in a million. (Page 38 in the December 2022 Report and Page 38 in the January 2023 Report)	This value does not account for the reductions in on-road DPM emissions that have occurred since 2018, which are estimated to reduce this value to approximately 336 in a million (**Figure 12**) Additionally, the Report fails to provide the appropriate context for this data, i.e., this basin average air toxics cancer risk is less than 0.2% of the lifetime probability for an American to develop invasive cancer.
...MATES V data visualization tool, residential air toxics cancer risk in most of the IE is between the 80th and 90th percentiles. Next to the Ontario warehouse giga cluster, the air toxics cancer risk is 624 per million persons, which is higher than 95.0% of the AQMD population. (Page 39 in the December 2022 Report and Page 40 in the January 2023 Report)	MATES V depends on data from 2018 and is now outdated due to continued progress made by existing and recently adopted regulatory actions for on-road vehicles.

[56] OEHHA. 2022. Summary of Changes in CalEnviroScreen Version 4.0. Available at: https://oehha.ca.gov/media/downloads/calenviroscreen/document/calenviroscreen40summaryofchangesf2021.pdf. Accessed: February 2023.

Table 4. Report Claims that Ignore Developments to Health Data	
Report Claim	**Omitted Information**
Communities within 0.5 miles [*of warehousing facilities*] have an average asthma rate of 56 per 10,000 individuals (64th percentile) and experience heart attacks at a rate of 9.2 per 10,000 individuals (65th percentile). (Page 38 in the December 2022 Report and Page 39 in the January 2023 Report, citing a direct quote from a SCAQMD report[57])	This value does not provide context and does not describe adequately what was reported in the South Coast AQMD report. South Coast AQMD reported the average asthma rate for buffers of 1 or 2 miles around warehouses. The average asthma rates were not substantively different by buffer zone: 55.5, 55.0, and 52.3 (per 10,000 individuals) for buffers of 0.5, 1, or 2 miles around warehouses, respectively. Separately, ambient concentrations of $PM_{2.5}$ did not differ substantively by buffer zone: 11.9, 11.8, and 11.7 $\mu g/m^3$ for 0.5, 1, and 2 miles around warehouses, respectively. Ozone concentrations were 0.051, 0.050, and 0.051 ppm for 0.5, 1, and 2 miles around warehouses, respectively. DPM emissions (kg/day) varied little as well, from 25.5 kg/day for a 0.5-mile buffer to 23.8 kg/day for a 2-mile buffer. Meanwhile, there were larger differences in factors that are independently associated with risk of asthma (for example, Hispanic ethnicity decreased from 62% to 52% while the proportion of white increased from 18% to 25% from 0.5 to 2.0 miles around warehouses). A recent study found that Hispanic and black children have higher rates of asthma than white children, even after accounting for income.[58]
The fertility rate is also on the decline in California from 2010 - 2020…Air pollution has been associated with an increased risk of morbidity and mortality associated with multiple diseases including adverse pregnancy outcomes and including preterm birth. (Pages 44 and 45 in the December 2022 Report and Page 45 in the January 2023 Report)	There is no context provided for the declines in the fertility rate. The fertility rate has declined in the US as well as California. The decreases in fertility rates are commonly attributed to economic factors and improved opportunities for women that result in delaying or forgoing marriage and having children.

4. The Report fails to mention that commercial cargo will continue to move on Inland Empire freeways and roads, even if warehouses are located elsewhere.

A moratorium on IE warehouses would not halt cargo movement in the IE or in the broader Southern California region. Trucks will still travel throughout the IE to transport cargo even if no new warehouses are built in the area. Additionally, if new warehouses are instead farther away in response to such a moratorium, heavy-duty truck trips will likely be longer and VMT and related impacts will be greater.

[57] Southwest Coast Air Quality Management District. Second Draft Socioeconomic Impact Assessment for Proposed Rule 2305 – Warehouse Actions and Investments to Reduce Emissions (WAIRE) Program and Proposed Rule 316 – Fees for Rule 2305. April 2021. http://www.aqmd.gov/docs/default-source/planning/fbmsm-docs/pr-2305_sia_2nd-draft_4-7-21.pdf?sfvrsn=8. Accessed: February 2023.

[58] Zanobetti A, Ryan PH, Coull B, et al. 2022. Childhood Asthma Incidence, Early and Persistent Wheeze, and Neighborhood Socioeconomic Factors in the ECHO/CREW Consortium. JAMA Pediatrics, JAMA Pediatr. 176(8):759-767.

The warehouses in the IE often serve to transport cargo from the Ports of Los Angeles and Long Beach. Port cargo has been increasing over the years and remains on a continued upward trend. The Pacific Merchant Shipping Association estimated that over the course of the pandemic, cargo has increased 14.3% between 2018 and 2021.[59] Even if there are fewer warehouses in the IE, this cargo will still need to be transported through Southern California.

In 2022, the City of Perris, in the IE, proposed a temporary moratorium for new warehouse development. Before proceeding with the moratorium, they authorized a study[60] analyzing air quality, greenhouse gas, and environmental noise to evaluate warehouse impacts. The study concluded that the temporary moratorium was not necessary, as the air quality and health risk impacts due to recent logistics projects were not significant when compared to local South Coast AQMD thresholds. The report also performed an alternatives analysis and determined that a potential warehouse site could generate significantly less emissions than a comparably-sized shopping center or apartment complex.

The proposed Assembly Bill (AB) 2840[61] seeks to prohibit warehouse development in the IE unless the closest sensitive receptors are 1,000 feet away from the proposed development area. However, the IE is already quite urbanized. As described in the 2022 analysis performed by Urban Crossroads,[62] if these warehouses were to be sited as such, then they would have to be placed much farther North or East, farther away from the central cargo source, the Ports. This change, similar to the proposed moratorium, would just push warehouses farther from the source of cargo, increasing environmental impacts from VMT, and increasing costs to the consumer. Additionally, as mentioned previously, the 1,000 feet siting distance buffers are based on outdated guidance and should not be used to influence policy.

Table 5, below, provides a list of claims made in the Report that fail to provide broader context to the potential effects of a warehouse moratorium. This context is provided in the preceding section.

Table 5. Report Claims that Fail to Analyze the Impact of a Warehouse Moratorium

Report Claim	Omitted Information
A regional moratorium - or temporary halt in warehouse construction - is required to address gaps in current legislation and statutes that allow for continued building of warehouses... (Page 4 in the December 2022 Report and Page 6 in the January 2023 Report)	An IE moratorium could push warehouses farther from the source of cargo, increasing regional air quality emissions and environmental impacts from VMT, and increasing costs to the consumer.

[59] Jelenić, Thomas. PMSA. The Next Challenge. Available at: https://files.constantcontact.com/3190e792601/cafb683c-3120-48fe-8327-dd1dd5abddc8.pdf?rdr=true. Accessed: February 2023.

[60] Cadence Environmental Consultants. 2022. Air Quality, Greenhouse Gas Emissions, and Environmental Noise Conditions in the City of Perris. July.

[61] California Assembly Bill 2840: Qualifying Logistics Use Projects. 2022. Available at: https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220AB2840. Accessed: February 2023.

[62] Urban Crossroads. 2022. AB 2840 Qualifying Logistics Use Projects Vehicle Miles Traveled Evaluation. June.

Table 5. Report Claims that Fail to Analyze the Impact of a Warehouse Moratorium	
Report Claim	**Omitted Information**
"By 2015, the LA Times headlined that "people living near 60 Freeway in Ontario breathe the worst air in the Southland." (Page 8 in the December 2022 Report and Page 7 in the January 2023 Report)"	As described under Detailed Comment 1, existing and proposed regulatory developments have significantly reduced emissions from on-road sources from 2015 to 2023. Further, emissions from vehicles operating on the 60 freeway are not solely related to warehouse operations.
…the growth in diesel VMT for all of Southern California is fueled by the growth in warehouse construction in the IE. In other words, underlying the growth diesel VMT, locomotives, ocean-going vessels, and off-road equipment is the growth in warehouse land use. (Page 12 in the December 2022 Report and Page 10 in the January 2023 Report)	As described under Detailed Comment 4, the growth in VMT in the IE is not solely fueled by warehouse growth, instead its largely fueled by growth in cargo at the Southern California Ports. Additionally, as shown in **Figure 6** and **Figure 8**, DPM and NO_X emissions from trucks traveling in the IE are expected to decrease due to existing and proposed regulatory developments that would increase the penetration of cleaner trucks including ZE trucks into the IE fleet. **Figure 4** provides a breakdown of the estimated truck VMT by fuel type.
Warehouse growth spurs extra train, plane, truck, and shopping impacts as part of the goods movement industry. Most particularly, warehouses generate extra truck trips... we estimate that over 30,000 extra truck trips generated per year by the growth in warehouse space, almost all of which pass through the Inland counties and clogged freeways. (Page 13 in the December 2022 Report and Page 12 in the January 2023 Report)	As described under Detailed Comment 4, the growth in warehouses is fueled by growth in cargo at the Southern California Ports.
Warehouse land use is inducing the activity growth of the goods movement sector. Limiting warehouse land use growth to the rate of population growth would help to provide more equity among industries for emissions reductions and avoid disproportional environmental justice impacts. (Page 22 in the December 2022 Report and Page 23 in the January 2023 Report)	As described under Detailed Comment 4, the growth in warehouses and the good movement industry is fueled by growth in cargo at the Southern California Ports.

COMMENTS ON THE REPORT'S SUGGESTED ACTIONS

Overall, the Report fails to consider the significant and effective regulatory developments that have decreased heavy-duty truck emissions and associated health risk impacts from warehousing operations

throughout California and the IE. Over the past two decades, CARB and South Coast AQMD have been successful in passing regulations, requiring mitigation measures for logistics projects, and enhancing the CEQA process. For these reasons, the report's conclusions and recommendations are based on outdated information, and not justified. **Table 6** and **Table 7**, below, detail the key conclusions from the December 2022 and January 2023 Reports, and summarizes the main reasons each request is not reasonable using the context provided in Ramboll's analysis.

Table 6. Response to Suggested Air Quality Related Actions Outlined in the December 2022 Report

Executive Summary Requests	Lack of Justification
Develop a strong course of action to address warehouse cumulative impacts, including emissions and health risk analyses.	There are already existing mechanisms to address the cumulative impacts of both existing and future warehouse development projects. These include existing and proposed regulatory developments for warehouse sources and the CEQA process that requires a cumulative impact assessment for future warehouses as described in Detailed Comment 1.
Implement an oversight board that will oversee the AQMD 2305 warehouse truck monitors, truck routes, and safe routes for school children.	The Report fails to justify this, given that there are reports to the South Coast AQMD Governing Board and its committees on AQMD rule implementation, including Rule 2305. Other agencies oversee routes, including CalTrans, school districts, Cities/Counties, and local police departments, among others. This request is duplicative of these efforts.
Chart a legal pathway for a one-to two-year regional warehouse moratorium to establish baselines for sustainable industrial growth with Southern California Association of Governments (SCAG) and AQMD, to identify neighborhoods of high risk or existing warehouse oversaturation, to create a regional plan for sustainable logistics development, and to develop methods for maximizing community involvement in decision making in impacted neighborhoods with high warehouse saturation.	The Report does not establish the need for a moratorium, particularly when accounting for existing and ongoing regulatory developments that have and will continue to decrease impacts, as described in Detailed Comment 1. In particular, the moratorium fails to address that commercial cargo will continue to move on IE freeways and roads even if warehouses are located elsewhere, potentially increasing impacts.

Table 6. Response to Suggested Air Quality Related Actions Outlined in the December 2022 Report	
Executive Summary Requests	**Lack of Justification**
Tie agreed-upon timeframes for diesel truck fleet electrification to project approval, such that no further warehouse construction is allowed in the AQMD basin until the fleet is 20% electrified, and no further warehouse construction is allowed in environmental justice communities until the fleet is 50% electrified.	The Report does not establish the need for warehouse construction delays, particularly when accounting for existing and ongoing regulatory developments that have and will continue to decrease impacts. In addition, Report omits previous and ongoing regulatory developments that have and will continue to decrease impacts. PM and NO_X emissions from trucks in the IE reduced by 94% and 82% respectively from 2000 to 2023 (**Figure 5** and **Figure 7**). Additional reductions of PM (7%) and NO_X (27%) emissions are expected to occur from 2023 to 2040 as a result of the recently adopted Low NO_X Heavy-Duty Omnibus and ACT regulations that are already transitioning the diesel vehicles to cleaner technologies including ZE trucks (**Figure 6** and **Figure 8**). These reduction estimates do not account for the impact of the increase in penetration of ZE vehicles that would occur with the implementation of the proposed ACF regulation. Further, as noted previously, new developmental warehouse projects are required by CEQA to evaluate their air quality and health risk impacts and mitigate these if they are found to be significant. Hence, there is no justification for imposing warehouse construction delays.
Evaluate improved mitigations for the environmental justice communities that are already heavily impacted by pollution and other environmental detriments, mandate a higher level of community engagement at the beginning stages of any project that is independent of the developer.	The health effect data in the report do not reflect the emissions reductions that have been realized from adopted CARB regulations. There are already existing mechanisms in place to ensure improved mitigation measures for existing and new warehouses in the IE including but not limited to South Coast AQMD's Rule 2305 (see claimed emission reduction under Detailed Comment 1) and the CEQA process. As described in Detailed Comment 1, South Coast AQMD has provided guidance on developing a robust suite of mitigation measures that would reduce any significant regional or localized air quality, greenhouse gas, and health impact from new warehouse projects in recent comment letters. Additionally, CEQA includes a public process that ensures stakeholder and community engagement for the review of the environmental assessments that are necessary for project approval.

Table 6. Response to Suggested Air Quality Related Actions Outlined in the December 2022 Report	
Executive Summary Requests	**Lack of Justification**
Formalize prescriptive mitigation plans that include quantifiable reductions in pollutions and incorporate cumulative impacts.	There are already existing mechanisms in place to ensure improved mitigation measures for existing and new warehouses in the IE including but not limited to South Coast AQMD's Rule 2305 and the CEQA process. As described in Detailed Comment 1, South Coast AQMD has provided guidance on developing a robust suite of mitigation measures that would reduce any significant regional or localized air quality, greenhouse gas, and health impact from new warehouse projects in recent comment letters. While CEQA already required a cumulative impact assessment for new warehouse development, the South Coast AQMD is in the process of reviewing and updating its guidance to perform such analyses which would make the analyses more robust.
Amend Senate Bill 352, which states that schools require further study if within 500 feet of an industrial facility or heavy traffic, to include the inverse: that new industrial facilities that bring thousands of truck trips daily should require further study in order to be built within 500 feet of existing schools and other sensitive receptors.	CEQA already requires that local lead agencies perform an air quality and HRA that evaluates the localized impacts on schools and other sensitive receptors in the vicinity of new development projects including warehouses. If any of these impacts are found to be significant, the project is required to incorporate design features and mitigation measures to reduce these impacts.
Mandate that all schools track asthma-related absences and every school should have a pollution monitoring system that actively advises parents of the health impacts to their children.	As described in Detailed Comment 3, the connection between asthma and air pollution is more complicated than stated in the Report. Therefore, this program is potentially misleading. Additionally, the health effect data in the Report do not reflect the emissions reductions that have been realized from adopted CARB regulations.
Develop a Health Rights Act. Continued warehouse growth despite community harm and opposition is environmental racism in classic terms. We have a right to a life not impacted by asthma, heart disease, reproductive problems. We have a right to not be made sick by the air we breathe.	The health effect data in the Report do not reflect the emissions reductions that have been realized from adopted CARB regulations nor a linkage with warehouse pollution. The Report does not justify this request.

Table 6. Response to Suggested Air Quality Related Actions Outlined in the December 2022 Report	
Executive Summary Requests	**Lack of Justification**
Allow infrastructure improvement during the pause on warehouse development that would mandate that all existing and future warehouses be 100% self-powered through solar panels and bank 60% of their daily usage. Utilize the existing one billion square feet of warehouse to reinforce and increase energy reliability.	The consumption of electricity for warehouse operations does not create localized criteria air pollutant or toxic air contaminant emissions. Hence, installation of solar panels will not result in reductions of localized emissions or health benefits to the communities located in the vicinity of the warehouses.

Table 7. Response to Air Quality Related Suggested Actions Outlined in the January 2023 Report	
Executive Summary Requests	**Lack of Justification**
Request 1: Declare a regional warehouse moratorium of one to two years that allows time to implement policy changes.	The Report does not establish the need for a moratorium, particularly when accounting for existing and ongoing regulatory developments that have and will continue to decrease impacts, as described in Detailed Comment 1. In particular, the moratorium fails to address that commercial cargo will continue to move on IE freeways and roads even if warehouses are located elsewhere, potentially increasing impacts.
Request 2: Identify communities of high exposure from warehouse and/or industrial land uses; create higher standards supported by the state for project approval in high exposure, environmental justice, and disadvantaged communities.	The lack of justification for specific air quality related sub-requests made under Request 2 are presented below.

Table 7. Response to Air Quality Related Suggested Actions Outlined in the January 2023 Report	
Executive Summary Requests	**Lack of Justification**
Sub-Requests under Request 2 • Mandate a higher level of community engagement at the beginning stages of any project independent of the developer. • Mandate mitigation plans that include quantifiable reductions in GHGs and pollutants, including project reduction and demand-management strategies. • Mandate up-front mitigation of environmental harms, including but not limited to: ○ green infrastructure/just energy transition elements, ○ mitigation for health impacts: for example, a fair share fees health and trade system wherein industrial and warehouse projects pay into a healthcare and greenspace fund; can be used to expand healthcare, fund green infrastructure, fund studies and tracking, and retrofit schools adjacent to truck routes or warehouses, among other uses.	There are already existing mechanisms in place to ensure improved mitigation measures for existing and new warehouses in the IE including but not limited to South Coast AQMD's Rule 2305 (see claimed emission reduction and other benefits in the section above) and the CEQA process. As described in Detailed Comment 1, South Coast AQMD has provided guidance on developing a robust suite of mitigation measures that would reduce any significant regional or localized air quality, greenhouse gas, and health impact from new warehouse projects in recent comment letters. Additionally, CEQA includes a public process that ensures stakeholder and community engagement for the review of the environmental assessments that are necessary for project approval.
Sub-Request under Request 2 • Strengthen cumulative impact analysis to include all past, present, and future industrial projects within a tiered radius consistent with the scoping plan of the project, including travel routes.	There are already existing mechanisms in place to ensure improved mitigation measures for existing and new warehouses in the IE including but not limited to South Coast AQMD's Rule 2305 and the CEQA process. As described in Detailed Comment 1, South Coast AQMD has provided guidance on developing a robust suite of mitigation measures that would reduce any significant regional or localized air quality, greenhouse gas, and health impact from new warehouse projects in recent comment letters. While CEQA already required a cumulative impact assessment for new warehouse development, the South Coast AQMD is in the process of reviewing and updating its guidance to perform such analyses which would make the analyses more robust.

Table 7. Response to Air Quality Related Suggested Actions Outlined in the January 2023 Report	
Executive Summary Requests	**Lack of Justification**
Sub-Request under Request 2 • Tie warehouse project approval to real-time rather than projected fleet electrification. Consider tiered options such that no further warehouse construction is allowed in the SCAQMD basin until the fleet is 20% electrified, and no further warehouse construction is allowed in environmental justice communities until the fleet is 50% electrified.	The Report does not establish the need for warehouse construction delays, particularly when accounting for existing and ongoing regulatory developments that have and will continue to decrease impacts. In addition, Report omits previous and ongoing regulatory developments that have and will continue to decrease impacts. PM and NO_X emissions from trucks in the IE reduced by 94% and 82% respectively from 2000 to 2023 (**Figure 5** and **Figure 7**). Additional reductions of PM (7%) and NO_X (27%) emissions are expected to occur from 2023 to 2040 as a result of the recently adopted Low NO_X Heavy-Duty Omnibus and ACT regulations that are already transitioning the diesel vehicles to cleaner technologies including ZE trucks (**Figure 6** and **Figure 8**). These reduction estimates do not account for the impact of the increase in penetration of ZE vehicles that would occur with the implementation of the proposed ACF regulation. Further, as noted previously, new developmental warehouse projects are required by CEQA to evaluate their air quality and health risk impacts and mitigate these if they are found to be significant. Hence, there is no justification for imposing warehouse construction delays.
Request 3: Work collaboratively with the Office of Planning and Research, CARB, and impacted communities to codify best practices resulting from guidance documents and settlements that regulatory bodies, the Attorney General, or other litigants have established for warehouse projects. These should include but not be limited to project and fleet electrification, solar energy generation, siting truck, rail, and airplane routes away from sensitive receptors, mitigation, limiting of vehicle miles traveled, community benefits agreements, and setbacks from sensitive receptors. Authorize the Attorney General to enforce those provisions within the Inland Empire.	The lack of justification for specific air quality related sub-requests made under Request 3 are presented below.

Table 7. Response to Air Quality Related Suggested Actions Outlined in the January 2023 Report	
Executive Summary Requests	**Lack of Justification**
Sub-Request under Request 3 • Explore and support project alternatives that would contribute to community health and well-being, economy, and environmental benefit.	CEQA already requires new development projects to perform an air quality, health risk, and greenhouse gas assessments for proposed projects, conduct an alternative analysis, and identify the environmentally superior alternative.
Request 4: Expand or enforce existing regulations that are inconsistently enforced or unenforced at a local level.	The lack of justification for specific air quality related sub-requests made under Request 4 are presented below.
Sub-Request under Request 4 • Establish an oversight board for the SCAQMD 2305 indirect source rule to monitor compliance.	The Report fails to justify this, given that there are reports to the South Coast AQMD Governing Board and its committees on AQMD rule implementation, including Rule 2305.
Sub-Request under Request 4 • Amend SB 352, which requires extra testing of air pollution sources within ¼ mile of any schools to determine whether a new school within 500 feet of a heavily trafficked road or industrial sites will pose a health hazard to students and teachers due to air pollution. Amend to include the inverse: that the same rules apply to warehouse siting in proximity to schools. Extend the distance to 500 meters, which was the distance based on the original USC air pollution/health study.	CEQA already requires that local lead agencies perform an air quality and HRA that evaluates the localized impacts on schools and other sensitive receptors in the vicinity of new development projects, including warehouses. If any of these impacts are found to be significant, the project is required to incorporate design features and mitigation measures to reduce these impacts.