January 5, 2026

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Sent via email

Dear Chris Heldreth:

Thank you for providing the California Air Resources Board (CARB) with the opportunity to comment on the Draft Environmental Impact Report (DEIR) for the City of Barstow General Plan (General Plan) and Barstow International Gateway Project (BIG Project or Project), State Clearinghouse No. 2024020501. The Project is located within City of Barstow (City), which is the lead agency for California Environmental Quality Act (CEQA) purposes. CARB appreciates the significant investment and opportunity that the BIG Project represents, and BNSF's commitment to reducing environmental impacts in coordination with CARB as part of the development of this DEIR. We offer the following comments in that spirit.

CARB submitted a comment letter, which is attached to this letter, on the Notice of Preparation (NOP) for the DEIR released in February 2024. CARB's letter dated May 7, 2024, highlighted the need to fully evaluate the BIG Project's air quality impacts in the DEIR, particularly for nearby disadvantaged communities. The proposed Project site is located adjacent to residential neighborhoods and Lenwood Elementary School, with some homes as close as 175 feet from the Project boundary. These communities are already burdened by multiple sources of air pollution, including emissions from the existing BNSF Barstow Railyard, Interstate 15, and State Route 58. Furthermore, CARB recommended including a mitigation measure that would ensure the BIG Project uses zero-emission switch and line-haul locomotives. It also urged the City and BNSF to implement existing and emerging zero-emission technologies to minimize exposure to diesel particulate matter (diesel PM) and oxides of nitrogen (NOx) emissions for all neighboring communities, and to minimize the greenhouse gases (GHG) that contribute to climate change.

While CARB acknowledges that the BIG Project's final design incorporates several key emission reduction measures, the City and BNSF should strive to make the Big Project as clean as possible to protect public health. The following sections set forth CARB's comments on specific aspects of the DEIR. In summary, CARB urges the City and BNSF to (1) include enforceable mitigation measures requiring the phased adoption of zero-emission locomotives and heavy-duty trucks, (2) require the use of zero-emission transport refrigeration units, (3) eliminate improperly deferred mitigation, and (4) provide substantial

evidence supporting the DEIR's assumptions regarding renewable diesel emission benefits, switcher idling emissions, fuel consumption rates, and locomotive fleet projections.

Project Description

The BIG Project is a proposed 4,300-acre integrated rail, logistics, and warehousing complex that would function as a major inland port for freight moved by BNSF Railway from seaports to a railyard consisting of a large intermodal facility and a block-swap yard, along with up to 9 million square feet of transload warehouse space and supporting roadway, utility, and energy infrastructure.[1,2] Train activity would be substantial, with approximately 84 line-haul locomotives and 12 switchers operating daily in 2028, and increasing to 119 line-haul locomotives and 16 switchers in 2048 transporting freight between the BIG Project and the Ports of Los Angeles and Long Beach (Ports).[3] Heavy-duty truck activity at the BIG Project would start at approximately 128,000 annual container truck trips in 2028 and increase to about 200,000 by 2048.[4]

The BIG Project incorporates design features intended to reduce air quality impacts. These include exclusive use of Tier 4 switch locomotives, retirement of older switchers at the existing Barstow yard, deployment of Tier 4 line-haul locomotives between the Ports and the BIG Project, and on-site use of zero-emission electric hostlers and electric rail-mounted gantry cranes. Onsite rubber-tired gantry cranes would be hybrid diesel electric. The Project also includes a 140-acre solar farm that is expected to generate about 21 megawatts (MW) of electrical power onsite.

The City's General Plan establishes a long-term policy framework to manage citywide growth through 2048. The plan accommodates more than 6,000 new households, roughly 18,500 new residents, and approximately 15 million square feet of new non-residential development.

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[1] City of Barstow. City of Barstow General Plan and Barstow International Gateway Project Draft Environmental Impact Report. November 2025. Table 3-8. Page 3-43. Accessible at: *https://www.barstowca.org/home/showpublisheddocument/10359/638987170966700000*.

[2] City of Barstow. City of Barstow General Plan and Barstow International Gateway Project Draft Environmental Impact Report. November 2025. Page 3-56. Accessible at: *https://www.barstowca.org/home/showpublisheddocument/10359/638987170966700000.*

[3] City of Barstow. City of Barstow General Plan and Barstow International Gateway Project Draft Environmental Impact Report. November 2025. Page 3-1. Accessible at: *https://www.barstowca.org/home/showpublisheddocument/10359/638987170966700000.*

[4] City of Barstow. City of Barstow General Plan and Barstow International Gateway Project Draft Environmental Impact Report. November 2025. Table 3-13. Page 3-53. Accessible at: *https://www.barstowca.org/home/showpublisheddocument/10359/638987170966700000*.

CARB Urges the City to Plan for the Use of Zero-Emission Technologies

CARB appreciates that BNSF has committed to deploying Tier 4 switch locomotives on-site and to utilizing Tier 4 line-haul locomotives to transport freight between the BIG Project site and the Ports, as well as electric infrastructure supporting electric heavy-duty trucks and equipment. These commitments represent meaningful improvements over baseline diesel locomotive operations and demonstrate a willingness by BNSF to reduce the BIG Project's air quality impacts. However, given the scale of the Project and its proximity to a disadvantaged community, the use of Tier 4 locomotives alone is not sufficient to minimize the Project's long-term air quality impacts. As presented in the Air Quality Section of the DEIR, the operation of the BIG Project would result in health risk impacts of 40 chances per million, well exceeding the Mojave Desert Air Quality Management District's (MDAQMD) 10 chances per million significance threshold.[5] As shown in the DEIR, this increase in health risk impacts is attributed to the operation of heavy-duty trucks, line-haul locomotives, and switchers operating at the BIG Project's proposed intermodal railyard. To reduce the BIG Project's impact on air quality, BNSF and the City must pursue strategies that transition the Project toward the use of zero-emission locomotives and trucks. The DEIR should therefore include a clear and enforceable project design feature or mitigation measure requiring the deployment of zero-emission line-haul locomotives, electric switchers, and zero-emission heavy-duty trucks as early as possible.

The DEIR concludes that zero-emission locomotive technologies are infeasible for the BIG Project due to current electrical constraints, charging loads, and the state of battery-electric and hydrogen locomotive development.[6] However, this determination relies almost entirely on present-day conditions and doesn't consider the Project's multi-decade lifespan. Zero-emission freight rail technology, utility infrastructure, and renewable energy generation will continue to advance, as evidenced by manufacturers, including, but not limited to, Innovative Rail Technologies, which is already producing and delivering battery-electric switch locomotives for operational use.[7] Rather than assessing the feasibility of building and expanding the necessary infrastructure over time, the DEIR assumes that today's limitations are permanent. It also treats battery-electric charging demands to

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[5] City of Barstow. City of Barstow General Plan and Barstow International Gateway Project Draft Environmental Impact Report. November 2025. Table 5.3-36. Page 5.3-142. Accessible at: *https://www.barstowca.org/home/showpublisheddocument/10133/638987214365300000*.

[6] City of Barstow. City of Barstow General Plan and Barstow International Gateway Project Draft Environmental Impact Report. November 2025. Page 5.3-110. Accessible at: *https://www.barstowca.org/home/showpublisheddocument/10133/638987214365300000*.

[7] Innovative Rail Technologies. IRT Delivers First Battery-Electric Switcher to Launch Customer. July 26, 2023. Accessible at: *https://innovativerailtech.com/reducing-rail-emissions-in-california/*. Please include all evidence cited in footnotes 7 – 19, 23 *herein* in the City's administrative record for this matter. (*Consol. Irrigation Dist. v. Superior Ct.* (2012) 205 Cal. App. 4th 697, 724-25.)

accommodate electric heavy-duty trucks and locomotives as fixed, without considering strategies such as expanded on-site solar, energy storage, staggered charging, or use of hybrid-electric locomotives. Because CEQA requires a forward-looking, good-faith assessment of feasible long-term mitigation measures and alternatives, and given the Project's multi-decade lifespan, the DEIR's reliance on static present-day constraints alone does not further CEQA's goal of mitigating all potentially significant long-term impacts.

The DEIR's assumption that the BIG Project has maximized the allocated power budget is unsupported. The DEIR treats the current 66-megawatt (MW) power budget allocated to the BIG Project by Southern California Edison (SCE) as fixed. To meet the BIG Project's future power needs, the City and BNSF should coordinate with SCE to expand substations and secure new transmission-level service to supply more power to the BIG Project site. The DEIR itself acknowledges that transmission-level service upgrades could be pursued over a 7 to 10 year timeline but frames this timeline as a constraint rather than a feasible infrastructure pathway. Because the BIG Project will operate for many decades, coordination with SCE on substation upgrades and long-term service expansion represents a reasonable, feasible, and critically important approach to enabling future electrification.

The BIG Project can also expand its electrical capacity beyond the 160-acre solar farm already proposed. The BIG Project area possesses land, rooftops, and paved areas that could support additional solar power generation. Expanded ground-mounted solar, rooftop PV systems on warehouses and maintenance buildings, and solar canopies over parking and container staging areas could increase daytime energy availability. When paired with energy storage systems, additional solar generation would allow the Project to flatten peak loads, support charging schedules, and increase the availability of renewable power for electric heavy-duty trucks, switchers, and ultimately line-haul locomotives.

The DEIR's assertion that electric switchers are infeasible is similarly unsupported by analysis or evidence. Battery-electric switch locomotives are already commercially available. Innovative Rail Technologies sells commercially available switchers currently operating at the U.S. Steel Plant in Pennsylvania.[8] Other rail operators such as Watco, OmniTRAX, and Cando Rail have developed their own battery-electric switchers in house which are currently in use today.[9,10,11] The DEIR states that charging time and power needs preclude their use, but this conclusion is based on assumptions that all units would charge simultaneously and that the site cannot add electrical capacity. However, switcher charging demand can be

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[8] Innovative Rail Technologies. IRT Locomotive Featured in US Steel TV AD. Accessible at: *IRT Locomotive Featured in US Steel TV Ad - Innovative Rail Technologies*.

[9]Railway Age. Watco Electric Switchers Receive High Marks. Accessible at: *https://www.railwayage.com/freight/short-lines-regionals/watco-electric-switchers-receive-high-marks/*.

[10]NSR AMPS Traction G90 BEL in Revenue Service. Accessible at: *https://www.railwayage.com/mechanical/locomotives/nsr-amps-traction-g9-bel-in-revenue-service/*.

[11]First Look: Cando Rail & Terminals' Battery-Electric Switcher. Accessible at: *https://www.railwayage.com/freight/switching-terminal/first-look-cando-rail-terminals-battery-electric-switcher/*.

managed through staggered charging schedules. For example, even assuming up to eight battery-electric switchers would charge concurrently, supporting their charging needs would require approximately 11 MW of additional power that can be met through expanded solar generation, energy storage integration, and coordinated SCE substation upgrades. The DEIR also does not consider that hydrogen-powered switchers and hybrid switchers, both of which eliminate or substantially reduce grid-based charging requirements, are now in active commercial deployment. For example, the Canadian National Railway Company (CN) is piloting medium-horsepower hybrid locomotive units that reduce emissions by up to 50% without any on-site charging infrastructure.[12] Canadian Pacific Kansas City Limited (CPKC) and CSX have also demonstrated multiple hydrogen fuel-cell switch locomotives capable of fast refueling and zero stack emissions.[13]

The DEIR's consideration of battery-electric line-haul locomotives also relies heavily on present-day limitations. While current battery-electric line-haul units have smaller energy capacities than diesel locomotives, this technology is advancing rapidly. There are multiple strategies capable of extending the range of electric line-haul locomotives and managing energy demand. Battery-tender cars, railcars specifically designed to carry additional battery capacity, can extend line-haul locomotive range to travel from the proposed intermodal railyard to the Ports. For example, a 14 MWh battery-tender has a range of 150 miles, within the range of the Ports. Discontinuous overhead catenary systems could also be used along the Ports-to-BIG Project corridor, which can provide electrification in strategic segments of the corridor, reducing battery size requirements and eliminating the need for full-route electrification. The Federal Railroad Administration has published a cost-benefit and risk framework supporting precisely these types of partial-electrification concepts.[14] Hybrid line-haul locomotives can also be used, in which combinations of battery-electric locomotives and diesel units can deliver significant emission reductions immediately. BNSF's own Wabtec demonstration achieved an 11% fuel reduction, with potential for reductions up to 30%.[15] Hybrid-electric locomotives combine diesel and battery power in one unit, enabling zero-emission operation while reducing overall diesel use and improving fuel efficiency. They require no additional infrastructure, making them a practical and cost-effective option for near-term deployment. This technology offers significant emissions reduction potential and increased locomotive power, making it suitable, not only for the BIG captive fleet, but also scalable across BNSF's national operations. As an interim solution, hybrid-electric locomotives can deliver immediate

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[12] CN. CN Launches New Medium Horsepower Hybrid Locomotive Pilot Project. Accessible at: *https://www.cn.ca/en/news/2025/01/cn-launches-new-medium-horsepower-hybrid-locomotive-pilot-projec/*.
[13] CPKC. CP 1200 Out On the Road. Accessible at: *CPKC's High-horsepower Hydrogen Locomotive begins testing*.
[14] Federal Railroad Administration. Cost and Benefit Risk Framework for Modern Railway Electrification Options. January 2025. Accessible at: *Cost and Benefit Risk Framework for Modern Railway Electrification Options*.
[15] Freightwaves. Wabtec: Battery-electric locomotive reduces fuel use by 11%. May 17, 2021. Accessible at: *https://www.freightwaves.com/news/wabtec-battery-electric-locomotive-reduces-fuel-use-by-11*.

environmental benefits while paving the way for future zero-emission line-haul technologies. Hydrogen fuel-cell line-haul locomotives, currently being tested in revenue service by CPKC, further demonstrate the viability of long-range zero-emission freight rail.[16]

Zero-emission heavy-duty trucks also represent a feasible pathway for the BIG Project to reduce emissions. Battery-electric Class 8 trucks are commercially available today and are already deployed in drayage service throughout Southern California. Comprehensive listings of eligible ZE truck models are publicly available through the Hybrid and Zero-Emission Truck and Bus Voucher Incentive Program (HVIP), which also provides significant purchase incentives.[17] Additional funding can be obtained through CARB's Carl Moyer Program and Voucher Incentive Program, both of which support early adoption of zero-emission heavy-duty trucks.[18,19] The DEIR does not consider these commercially available options or the funding sources that improve mitigation measure feasibility.

Given the potential for 1) expanded on-site renewable generation, 2) energy storage integration, 3) staggered charging strategies, 4) SCE substation upgrades, and 5) rapidly advancing locomotive and truck technologies, the DEIR's mitigation measure infeasibility conclusions are not supported by adequate analysis or supporting substantial evidence. To ensure that the BIG Project meaningfully reduces emissions and protects surrounding communities, the EIR should incorporate a Project design measure or mitigation measure that includes collaboration with SCE to ensure the fastest feasible expansion of power capacity at the site and lays out a clear timeline for the phased integration of zero-emission line-haul locomotives, switchers, and heavy-duty trucks.

CARB Urges the City to Use Zero-Emission Transport Refrigeration Units within the Proposed Transload Warehouse Center

Although not explicitly stated in the DEIR's project description, the air quality analysis for the BIG Project assumes that a portion of the proposed transload warehousing would be used for cold storage.[20] According to Appendix 5.3 (Air Quality Technical Report) of the DEIR, less than 5% of containers handled at the BIG Project would have transport refrigeration units

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[16] CPKC. CPKC's High-Horsepower Hydrogen Locomotive Begins Testing. Accessible at: *CPKC's High-horsepower Hydrogen Locomotive begins testing*.
[17] Zero-Emission Truck and Bus Voucher Incentive Project. Accessible at: *https://californiahvip.org/*.
[18] CARB. Carl Moyer Memorial Air Quality Standards Attainment Program. Accessible at: *https://ww2.arb.ca.gov/our-work/programs/carl-moyer-memorial-air-quality-standards-attainment-program*.
[19]CARB. On-Road Heavy-Duty Voucher Incentive Program. Accessible at: *https://ww2.arb.ca.gov/our-work/programs/road-heavy-duty-voucher-incentive-program*.
[20] City of Barstow. City of Barstow General Plan and Barstow International Gateway Project Draft Environmental Impact Report. November 2025. Page 5.3-121. Accessible at: *https://www.barstowca.org/home/showpublisheddocument/10133/638987214365300000*.

(TRU).[21] Furthermore, Mitigation Measure BIG AQ-14 (MM BIG AQ-14) requires electrical rooms at the proposed transload warehousing to hold additional panels that may be needed in the future to supply power to trailers with TRUs during the loading/unloading of refrigerated goods, suggesting that cold storage would occur.[22] If cold storage uses are allowed at the BIG Project site, trucks, trailers, and railcars visiting the Project site would likely be equipped with TRUs. Operation of TRUs on railcars, trucks and trailers can generate substantial diesel emissions while on-site.[23] Nearby residences and other sensitive receptors such as daycare centers, senior care facilities, and schools could therefore be exposed to diesel exhaust, resulting in a significant air quality impact that the DEIR fails to analyze.

CARB appreciates the inclusion of mitigation measure MM BIG AQ-14, however, CARB strongly recommends that all TRUs serving the Projects' proposed transload warehousing to be plug-in capable. This could be implemented through a Project design measure or mitigation measure that includes contractual language in tenant lease agreements, prohibiting the operation of diesel-powered TRUs within the proposed transload warehouse development.

The General Plan Air Quality Mitigation Measures Improperly Defer Mitigation

CARB is concerned that the DEIR improperly defers mitigation measures intended to reduce air quality impacts associated with the buildout of the proposed General Plan. Chapter 5.3 of the DEIR concludes that, by 2048, full buildout of the General Plan could generate 1,584 pounds per day of volatile organic compounds (VOC), 1,289 pounds per day of NOx, and 6,070 pounds per day of carbon monoxide (CO) from combined construction and operational activities, substantially exceeding MDAQMD significance thresholds, resulting in a significant air quality impact.[24] To address these significant adverse impacts, the DEIR proposes three mitigation measures (MM GP AQ-1 through AQ-3), each targeting different sources and phases of emissions.

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[21] City of Barstow. City of Barstow General Plan and Barstow International Gateway Project Draft Environmental Impact Report. November 2025. Appendix 5.3. Page 66. Accessible at: *https://www.barstowca.org/home/showpublisheddocument/10151/638982138812870000https://www.barstowca.org/home/showpublisheddocument/10133/638987214365300000*.

[22] City of Barstow. City of Barstow General Plan and Barstow International Gateway Project Draft Environmental Impact Report. November 2025. Page 5.3-108. Accessible at: *https://www.barstowca.org/home/showpublisheddocument/10133/638987214365300000*.

[23] CARB. Staff Report: Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets, and Facilities Where TRUs Operate Initial Statement of Reasons. July 27, 2021. Appendix I. Accessible at: *https://ww3.arb.ca.gov/board/rulemaking/tru2021/appi.pdf*.

[24] City of Barstow. City of Barstow General Plan and Barstow International Gateway Project Draft Environmental Impact Report. November 2025. Page 5.3-76. Table 5.3-17. Accessible at: *https://www.barstowca.org/home/showpublisheddocument/10133/638987214365300000*.

MM GP AQ-1 addresses construction-related impacts, requiring Project applicants to prepare project-specific air quality assessments at the time that specific projects are built within the General Plan area. If these project-specific air quality assessments find that emissions would exceed MDAQMD significance thresholds, applicants must implement measures such as the use of low-emission equipment, dust control, idling restrictions, and other site management practices.

MM GP AQ-2 focuses on operational-phase impacts, requiring technical assessments for future developments. If operational emissions are found to exceed significance thresholds, mitigation measures must be implemented, including electrical hookups for trailers with TRUs, energy-efficient appliances, electric vehicle charging, and other strategies to reduce long-term emissions from both stationary and mobile sources.

MM GP AQ-3 applies to new discretionary industrial or warehousing projects or commercial land uses that would generate substantial diesel truck travel. The project applicant prepares a health risk assessment (HRA), which is evaluated by the City and the Mojave Air District. If the HRA shows that the project's incremental cancer risk exceeds ten in one million, or that the noncancer hazard index exceeds 1.0, the "project applicant shall identify and demonstrate" that measures are capable of reducing potential cancer and noncancer risks to an "acceptable" level to the extent feasible, including appropriate enforcement mechanisms. Measures to reduce risk impacts may include but are not limited to measures such as dock electrification, newer low-emission equipment, and off-site truck routing. Even with these three measures, the DEIR concludes that the General Plan's air quality impacts would remain significant and unavoidable.

CEQA allows deferral of mitigation only under narrow circumstances and with strict safeguards. The CEQA Guidelines are clear: agencies may not defer formulation of mitigation measures until a future time, though specific details may be developed post-approval when (1) the agency commits to the mitigation, (2) the agency adopts specific performance standards, and (3) the agency identifies the types of actions that could feasibly achieve those standards. (Cal. Code Regs, tit.14, § 15126.4(a)(1)(B).)

MM GP AQ-3 is particularly problematic. Here the project applicant prepares the HRA and follows its recommendations. While the City and MDAQMD can evaluate the report, the government agencies are not permitted to modify or reject its analysis or proposed mitigations. "An agency goes too far when it simply requires a project applicant to obtain a ... report and then comply with any recommendations that may be made in the report." (*POET, LLC v. State Air Res. Bd*. (2013) 218 Cal. App. 4th 681, 736 *citing Endangered Habitats League, Inc. v. County of Orange* (2005) 131 Cal.App.4th 777, 793.) Further, MM GP AQ-3 does not require that significant impacts be lowered to a level of insignificance, only that measures are capable of reducing potential cancer and noncancer risks to an "acceptable" level.

MM GP AQ-1 through AQ-3 also rely heavily on subjective approval by a single staff member based on discretionary criteria such as "substantial evidence as determined by the

Planning Division" or actions taken "to the satisfaction" of staff. Such discretionary, post-hoc decision making circumvents CEQA's requirement that mitigation be vetted through public environmental review. (See *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296, 307.)

Moreover, MM GP AQ-3 does not commit the City to implementing feasible mitigation. Although the proposed measure lists examples of potential emission-reduction strategies, it does not require any specific actions, nor ensure that mitigation is enforceable through binding conditions such as tenant leases. MM GP AQ-3 requires only that measures identified in the project applicant's HRA are identified as mitigation measures in the environmental document and may or may not be incorporated into the site development plan as a component of the proposed project and are not required to be included in the conditions of approval. Without guaranteed incorporation of mitigation requirements into future approvals and lease agreements, these proposed mitigation measures lack enforceability as required by CEQA. (Cal. Code Regs, tit.14, § 15126.4(a)(1)(B), (a)(2).)

CARB Urges the Adoption of Additional Measures to Mitigate the General Plan's Significant Adverse Air Quality Impacts

As previously discussed in this letter and in CARB's letter submitted on the NOP, the future development within the proposed General Plan proposes the buildout of approximately 15 million square feet of non-residential development (e.g., industrial development), which will likely be constructed near existing residential neighborhoods already burdened by multiple sources of air pollution and Lenwood Elementary School. To reduce the General Plan's air quality impacts to these communities and schools, and to meaningfully reduce the General Plan's significant adverse project-specific and cumulative air quality impacts, CARB urges the City to adopt additional, mandatory mitigation measures.

At a minimum, CARB recommends adopting the following additional measures for all developments in the General Plan:

Construction Phase (mandatory measures):

- Prohibit unnecessary idling of diesel equipment;
- Require electrical hookups for battery/electric tools;
- Require Tier 4 (or equivalent retrofit) off-road diesel engines for all construction equipment where available;
- Require battery-electric or plug-in electric power where feasible for off-road equipment under 19 kW (e.g., compactors, pressure washers);
- Require model-year 2014 or newer heavy-duty trucks for construction access meeting CARB's lowest optional NOx standard;

- Include contract provisions requiring contractors to comply with all equipment and vehicle standards.

Operation Phase (mandatory measures):

- Require zero-emission heavy-duty trucks for industrial uses and include enforceable tenant-lease provisions;
- Require plug-in capability for all electric TRU-ready loading docks;
- Require all TRUs serving industrial areas to be plug-in capable and require that they use electric power while at loading docks;
- Limit onsite diesel idling (e.g., ≤2 minutes) through enforceable lease or contract terms;
- Ensure adequate onsite charging/fueling infrastructure (space, electrical capacity, metering) to support equipment and heavy-duty trucks.

The DEIR Fails to Formulate and Evaluate Mitigations to Address the General Plan's Significant Cumulative Air Quality Impacts

The DEIR acknowledges that Project cumulative impacts would be significant but fails to formulate and analyze mitigation measures to address these cumulative impacts. The DEIR states that several projects built over the life of the proposed General Plan would nonetheless contribute to higher levels of cancer risk in the MDAB and therefore result in a cumulatively considerable impact.[25] Likewise, the DEIR notes that cumulative impacts are conservatively assumed to be significant, given multiple projects could be constructed and operated in close proximity to each other.

The DEIR fails to formulate and analyze mitigation measures to address these significant cumulative impacts. The DEIR only notes that buildout of the proposed General Plan would be subject to MM GP AQ-1 (construction emissions analysis), MM GP AQ- 2 (operational emissions analysis), and MM GP AQ-3 (operational health risk assessment). There is no DEIR evaluation of mitigation measures to address acknowledge significant cumulative air quality impacts. "This obligation to describe mitigation measures is one of the procedural requirements of CEQA 'intended to assist public agencies in systematically identifying both the significant effects of proposed projects and the feasible alternatives or feasible mitigation measures which will avoid or substantially lessen such significant effects.'" (*POET, LLC v. State Air Res. Bd.* (2013) 218 Cal. App. 4th 681, 735, citing Pub. Res. Code § 21002.)

[25] City of Barstow. City of Barstow General Plan and Barstow International Gateway Project Draft Environmental Impact Report. November 2025. Page 6-17. Accessible at: *https://www.barstowca.org/home/showpublisheddocument/10399/638987217463730000*.

Further, these three air quality mitigation measures involve only individual project-level assessments and a perfunctory listing of possible measures. Moreover, even the individual project-level assessments are only triggered if a project has the potential to exceed the Mojave air districts significance thresholds. The incremental but cumulatively significant impact of projects that do not meet these thresholds will never be analyzed according to the DEIR.

CARB is concerned that because many future projects under the General Plan will be individually too small to exceed MDAQMD thresholds, the City's approach leaves the General Plan's cumulative air quality impacts unmitigated. CEQA requires mitigation of potentially significant cumulative air quality impacts resulting from reasonably foreseeable General Plan buildout. As currently drafted, this DEIR fails to do so.

The DEIR May Underestimate the BIG Project's Locomotive-Related Emissions

CARB is concerned that the DEIR may underestimate air pollutant emissions from the BIG Project because the DEIR relies on modeling assumptions that have not been adequately supported and need to be clarified in the FEIR. One key issue is the DEIR's use of a single, across-the-board percentage reduction to reflect renewable diesel (RD) use. According to Appendix 5.3 (Air Quality Technical Report) of the DEIR, BNSF plans to increase the RD blend at its Southern California fueling sites from 1% to 10% and to operate all Tier 4 line-haul and switch locomotives on a 10% RD blend.[26] The DEIR assumes the emissions benefit from RD as a simple linear interpolation of a 100% RD blend. For example, the DEIR assumes 10% blend achieves 10% of the benefit of full RD. The DEIR fails to include substantial evidence supporting the assumption of a linear emissions benefit from RD.

While renewable diesel can reduce air pollutant emissions, the size of the reduction depends heavily on the locomotive tier. Older Tier 0–2 locomotives tend to see the largest improvements because they lack advanced emission controls, whereas newer Tier 4 locomotives see only modest additional reductions. Although Tier 4 engines still have the lowest emissions overall, the effect of RD is not uniform across engine types. Because RD does not yield the same level of emission reductions across all locomotive tiers, BNSF should not apply a single blanket reduction factor.

The DEIR may also underestimate emissions from switch locomotives idling within the proposed railyard. Based on CARB's review of the air quality analysis presented in Appendix 5.3 (Air Quality Technical Report) of the DEIR, air pollutants emitted during the idling of switch locomotives within the proposed railyard were estimated using U.S. EPA

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[26] City of Barstow. City of Barstow General Plan and Barstow International Gateway Project Draft Environmental Impact Report. November 2025. Appendix 5.3. Page 9. Accessible at: *https://www.barstowca.org/home/showpublisheddocument/10151/638982138812870000https://www.barstowca.org/home/showpublisheddocument/10133/638987214365300000*.

emission factors for locomotives (EPA-420-F-09-025). Since the emission factors are averaged across representative engines within each tier and weighted by their typical operating modes and activity levels, the DEIR should not be using aggregated emission factors to estimate emissions from switchers idling within the proposed railyard. CARB urges the DEIR to use idling emission factors developed by the manufacturer of the switchers that will be operating at the BIG Project site.

The estimated fuel consumption of switch locomotives operating within the proposed railyard appears inconsistent with the values used in the BIG Project's air quality analysis. Table 3-10 of the DEIR (BIG Estimated Switcher Locomotive Fueling Events) indicates that switchers would be refueled at an average rate of 247 gallons per day. In contrast, the air quality analysis assumes much higher fueling rates: 3,333 gallons per day in 2028, 3,708 gallons per day in 2033, and 7,120 gallons per day in 2048. It remains unclear how much of this fuel would be consumed by switchers within the proposed railyard.

CARB is concerned that BNSF may shift air-pollutant emissions from other rail facilities to support the BIG Project. As described in Section 3.0 (Project Description), the BIG Project proposes operating 84 Tier 4 line-haul and 12 Tier 4 switch locomotives beginning in 2028, increasing to 119 line-haul and 16 switch locomotives by 2048.[27] Although the DEIR states that these locomotives would be new, it does not clarify whether they would be sourced from existing rail facilities in California or other states. Consequently, CARB is concerned that the locomotives identified for the BIG Project could be drawn from other rail facilities within California, which might then replace them with lower-tier locomotives. If the proposed Tier 4 line-haul and switch locomotives would in fact be displaced from other rail facilities, the DEIR project description must disclose this. Further the DEIR is required to evaluate the resulting indirect air-quality impacts associated with the continued or increased use of lower-tier locomotives at those other rail facilities. A project under CEQA is an activity that may either cause a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment. (Pub. Res. Code § 21065.) Indirect or secondary effects are caused by the project and farther removed in distance but are reasonably foreseeable. (Cal. Code Regs, tit. 14, § 15358, subd. (a)(2).)

Finally, the DEIR's assumptions regarding captive fleet locomotive population are unclear and appear inconsistent. The projected fleet decreases from 30 locomotives in 2028 to 25 in 2033, then rises to 38 in 2048. The rationale for this fluctuation is not explained in the DEIR.

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[27] City of Barstow. City of Barstow General Plan and Barstow International Gateway Project Draft Environmental Impact Report. November 2025. Table 3-11. Page 3-49. Accessible at: *https://www.barstowca.org/home/showpublisheddocument/10359/638987170966700000:*

Conclusion

The development of a new rail facility offers the City and BNSF a chance to generate employment for Californians and to establish a cutting-edge, zero-emission rail facility that could set a standard for future projects throughout California. To better protect nearby communities, including sensitive receptors such as schools and disadvantaged neighborhoods, the EIR should include enforceable mitigation measures, use accurate site-specific emission factors, and provide a clear plan for phasing in zero-emission locomotives, trucks, and transport refrigeration units. The EIR should also provide substantial evidence for air quality emission benefits of RD, switcher emission factors, and should explain or correct switcher fuel consumption rate inconsistencies.

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

CARB appreciates the opportunity to comment on the DEIR for the General Plan and BIG Project and can provide assistance with emission reduction strategies, as needed. Please include CARB on your list of selected State agencies that will receive the FEIR. If you have questions, please contact Stanley Armstrong, Air Pollution Specialist, via email at *stanley.armstrong@arb.ca.gov*

Sincerely,

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