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Final Mitigated Negative Declaration (MND) for the Proposed Cedar Avenue Truck Terminal Project (Proposed Project)

South Coast Air Quality Management District (South Coast AQMD) staff appreciates the opportunity to comment on the above-mentioned document. The Proposed Project consists of construction and operation of a truck terminal that would include parking for 260 trucks and 14 vehicles on 8.95 acres. The County of San Bernardino (County) was the Lead Agency under the California Environmental Quality Act (CEQA) for the Proposed Project and prepared a MND, which was circulated for a 30-day public review and comment period from January 13, 2021 to February 11, 2021. South Coast AQMD staff became aware of the MND five months later on July 21, 2021. Because the MND was not sent to the South Coast AQMD before the close of public comment period, South Coast AQMD staff provided comments to the Lead Agency to request future CEQA documents and air quality technical appendices for review after they are completed and released for public review[1]. At the July 22, 2021 meeting, the County's Planning Commission considered the Proposed Project and recommended an approval of the Proposed Project to the County Board of Supervisors. At this time, the County Board of Supervisors has not set a date to consider the Planning Commission's recommendation related to the Proposed Project.

On July 26, 2021, South Coast AQMD staff became aware that new information was added to the MND after the close of public comment period. New information, which consists of updated criteria pollutants emission calculations (e.g., updated CalEEMod outputs) and a new mobile source health risk assessment (HRA)[2], is included in the Proposed Project's Final MND. On July 27, 2021, South Coast AQMD staff submitted a request to the Lead Agency to obtain the updated technical air quality emission calculations and air dispersion modeling files performed for the mobile source HRA. The Lead Agency provided the requested files on July 29, 2021.

Based on a review of the Final MND and technical modeling files, South Coast AQMD staff has four comments. A summary of these comments is provided as follows with additional details provided in the attachment.

1. Emission Rates from Heavy-Duty Trucks: The Final MND calculated truck running and idling emissions based on an assumption that all trucks accessing the Proposed Project would be

[1] South Coast AQMD staff. July 22, 2021. Comment Letter on the Mitigated Negative Declaration (MND) for the Cedar Avenue Truck Terminal (Project). Accessed at: http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2021/july/SBC210721-02.pdf.

[2] San Bernardino County, Land Use Services Department. Planning Commission Staff Report for Agenda Item #3 Accessed at: http://www.sbcounty.gov/uploads/lus/pc/PROJ-2020-00035%20Staff%20Report-final.pdf.

heavy-heavy-duty trucks. Unless the Lead Agency includes a project condition or a mitigation measure to limit truck access by only heavy-heavy-duty trucks, it is reasonably foreseeable that the Proposed Project would attract light- and medium- heavy-duty trucks during operation. Since light- and medium heavy-duty trucks have higher running and idling emission rates than heavy-heavy-duty trucks, the Final MND has likely underestimated the Proposed Project's operational mobile source emissions and should be revised.

2. Air Dispersion Modeling Parameters: In the air dispersion modeling that was performed for the Proposed Project's mobile source HRA and included in the Final MND, the Lead Agency represented all heavy-duty trucks idling as nine discrete point sources with uniform stack parameters for each point source. Since the Proposed Project would include 260 truck parking spaces, and to account for on-site idling emissions, the Lead Agency should use a series of volume sources or provide more information to justify the use of nine point sources with the uniform point source input parameters for modeling emissions from truck idling.

3. Recommended Air Quality Mitigation Measures: The Final MND did not include air quality mitigation measures. Due to the Proposed Project's close proximity to existing receptors, mitigation measures and design features should be included to reduce air quality and health risk impacts from mobile sources (e.g., trucks) and area sources to nearby sensitive receptors.

4. South Coast AQMD Permits and Responsible Agency: The Proposed Project will include operation of a maintenance facility on-site, with four maintenance bays. If operations include on-site fueling, a permit from South Coast AQMD would be required, and South Coast AQMD should be identified as a Responsible Agency for the Proposed Project.

The Final MND includes a mobile source HRA, which is new information added to the MND after public notice was given of the availability of the MND for public review and comments from January 13, 2021 to February 11, 2021 but before the consideration by the County's Planning Commission at the July 22, 2021 meeting. It appears that the mobile source HRA was not publicly noticed and circulated for public review in the same manner as the MND. The public is likely deprived of a meaningful opportunity to review the new information, and decisionmakers are also likely deprived of meaningful public participation and an informed decision making related to the Proposed Project's long-term health risk impacts on sensitive receptors.

South Coast AQMD staff is available to work with the Lead Agency to address any air quality questions that may arise from this comment letter. Please contact Alina Mullins, Air Quality Specialist, at amullins@aqmd.gov or (909) 396-2402, should you have any questions.

Sincerely,

Lijin Sun

Lijin Sun
Program Supervisor, CEQA-IGR
Planning, Rule Development & Area Sources

Attachment
LS:AM
Control Number: SBC210721-02

ATTACHMENT

South Coast AQMD Staff's Summary of Project Description in the Final MND

The Proposed Project consists of construction and operation of a truck terminal facility that would include parking for 260 trucks and 14 vehicles, a 2,400-square-foot office building, a 4,800-square-foot maintenance shop with four repair bays, and a 250-square-foot guard shack on an 8.95 acre-site in the unincorporated community of Bloomington within the County of San Bernardino. The Proposed Project will be operational 24 hours a day, seven days a week and will generate 572 daily truck trips from heavy-heavy-duty 4-axle trucks visiting the site[3]. During operations, the Proposed Project will provide storage for truck trailers in-between deliveries or during off seasons[4]. The Proposed Project is adjacent to single-family residences to the north and commercial land uses to the south, and within 130 feet of a mobile home park to the east[5].

South Coast AQMD Staff's Summary of the CEQA Air Quality Analysis and HRA in the Final MND

In the air quality analysis, the Lead Agency quantified the Proposed Project's construction and operational emissions and compared those emissions to the South Coast AQMD's recommended regional and localized CEQA air quality significance thresholds. Based on the analysis, the Lead Agency found that the Proposed Project's construction and operational air quality impacts would be less than significant[6]. Although the Proposed Project would generate 572 daily truck trips during operation, the Lead Agency did not perform a mobile source HRA in the MND. After the close of the 30-day public review and comment period for the MND, which was not sent to the South Coast AQMD, the Lead Agency included a mobile source HRA, dated June 14, 2021, in the Final MND and found that the Proposed Project would result in a cancer risk of 5.06 in one million[7] for a 30-year exposure duration, which would not exceed South Coast AQMD's CEQA significance threshold of 10 in one million for cancer risk[8].

South Coast AQMD staff's detailed comments on the Final MND's air quality analysis and the air dispersion modeling performed for the mobile source HRA are provided as follows.

1. Emission Rates from Heavy-Duty Trucks

South Coast AQMD staff found that the Lead Agency assumed that all trucks visiting the Proposed Project would be heavy-heavy-duty 4-axle trucks. This assumption was based on a traffic memorandum prepared for a previous truck trailer yard project located near the Proposed Project site[9]. Emission rates from heavy-heavy-duty trucks (HHDT) were then folded into the air dispersion modeling and mobile source HRA. South Coast AQMD staff is concerned with this assumption because there is no project condition or mitigation measure that would prevent light-heavy-duty trucks (LHDT) or medium-heavy-duty trucks (MHDT) from accessing the site. LHDT and MHDT

[3] MND. Bloomington Truck Storage Project Health Risk Assessment Analysis. Page 165.
[4] MND. Page 1.
[5] MND. Page 2.
[6] MND. Pages 15 through 21.
[7] MND. Bloomington Truck Storage Project Health Risk Assessment Analysis. Page 168.
[8] South Coast AQMD has developed the CEQA significance threshold of 10 in one million for cancer risk. When South Coast AQMD acts as the Lead Agency, South Coast AQMD staff conducts a HRA, compares the maximum cancer risk to the threshold of 10 in one million to determine the level of significance for health risk impacts, and identifies mitigation measures if the risk is found to be significant.
[9] MND. Traffic Analysis *Table 4-1 Project Trip Generation Rates*. Page 44.

trucks can have higher running or idling emission rates than those of HHDT. Table 1, *Examples of LHDT, MHDT, and HHDT Emission Rates*, illustrates the differences between emission rates from the different heavy-duty truck categories. As demonstrated in Table 1, MHDT can have higher running emissions than HHDT, and MHDT and LHDT can have higher idling emissions than HHDT. Without a project condition or a mitigation measure to restrict LHDT and MHDT from accessing the site, these types of heavy-duty trucks have the potential to access the Proposed Project and generate emissions from running and idling. As such, the Final MND has likely underestimated the Proposed Project's regional emissions and local concentrations of air pollutants, such as diesel particulate matter (DPM), which is a known carcinogen, from LHDT and MHDT accessing the site. South Coast AQMD staff recommends that the Lead Agency use appropriate assumptions to develop a reasonable profile or composition of heavy-duty trucks that will visit the Proposed Project and revise the air quality analysis and mobile source HRA in the Final MND to account for emission rates from LHDT, MHDT, and HHDT. Alternatively, the Lead Agency should incorporate a project condition or a mitigation measure that will limit truck access to only HHDT, which is the only heavy-duty truck type that has been analyzed in the Final MND.

Table 1: Examples of LHDT, MHDT, and HHDT Emission Rates*

Heavy-Duty Truck Types	Running EMFAC (grams/ mile)	Running Emission Rate (g/s) for AERMOD[1]
HHDT	0.0784	2.08E-04
MHDT	0.17489	4.63E-04
LHDT2	0.05383	1.43E-04
	Idling EMFAC (grams/hour)	**Idling Emission Rate (g/s) for AERMOD[2]**
HHDT	0.02224	3.68E-05
MHDT	0.24358	4.03E-04
LHDT2	0.78639	1.30E-03

*Source: South Coast AQMD staff. July 2021.

1. To calculate running emissions, South Coast AQMD staff used the operational characteristics provided by the Lead Agency. Operational characteristic assumptions included: 24 hours of operation, 572 daily truck trips and 0.4 miles of on-site truck travel.
2. To calculate idling emissions, South Coast AQMD staff used the operational characteristics provided by the Lead Agency. Operational characteristics assumptions included: 572 daily truck trips and 15 minutes of idling per hour.

2. Air Dispersion Modeling Parameters

Based on a review of the air dispersion modeling performed using AERMOD, South Coast AQMD staff found that the Lead Agency modeled truck idling as nine discrete point sources in various locations within the Proposed Project site[10]. The Proposed Project will have 260 parking spaces dedicated to truck trailers. Due to the nature of operations as a truck terminal, it is reasonably foreseeable that truck idling may occur across the entire Proposed Project site at any of the 260 parking spaces or during ingress or egress from the site, and not limited to nine discrete locations modeled in AERMOD. Additionally, modeling point sources in AERMOD requires specific information about a source's stack, such as the temperature, velocity, and flow rate of the gas existing the stack and the stack's diameter. The Lead Agency used the same point source stack parameters for all nine point sources[11]. It is also reasonably foreseeable that the Proposed Project will service a diverse truck fleet with different engines and exhaust systems, and that not every

[10] MND. Bloomington Truck Storage Project Health Risk Assessment Analysis. Page 180.
[11] *Ibid*. Page 171.

truck will have stack parameters similar to the one used in the modeling. Therefore, South Coast AQMD staff recommends that the Lead Agency use a series of volume sources to account for on-site truck idling. Alternatively, the Lead Agency can provide additional information to justify that modeling truck idling as nine discrete point sources with the uniform point source input parameters across the Proposed Project site is appropriate. When modeling idling emissions from a truck with cargo container as a point sources, it is important to note that the cargo container has a downwash effect that wind flowing over or around the container has on plumes released from nearby stacks. It creates a cavity of recirculating winds in the area near the container, and the cavity causes increased vertical dispersion of plumes emitted from stacks on or near the container. Therefore, the building downwash parameters should be used in AERMOD.

3. Recommended Air Quality Mitigation Measures

Due to the Proposed Project's close proximity to existing sensitive receptors (within 130 feet), the Lead Agency should include air quality mitigation measures to reduce air quality and health risk impacts to nearby receptors during operation. The following mitigation measures are provided as resources to the Lead Agency.

Mitigation Measures to Reduce Air Quality and Health Risk Impacts from Mobile Sources during Operation

- Limit the daily number of trucks allowed at the Proposed Project to levels analyzed in the Final MND. If higher daily truck volumes are anticipated to visit the site, the Lead Agency should commit to re-evaluating the Proposed Project through CEQA prior to allowing higher activity levels.
- To assist in the turnover to cleaner truck fleets within the South Coast Air Basin as electric trucks become more widely available and in use, and to attract zero-emission trucks to the Proposed Project instead of just diesel trucks, the Lead Agency should provide electric vehicle (EV) charging stations or at a minimum, provide the electrical infrastructure and electrical panels for future EV charging stations. Panels should be appropriately sized. Electrical hookups should be provided for truckers to plug in any onboard auxiliary equipment.

Mitigation Measures to Reduce Air Quality and Health Risk Impacts from Area Sources during Operation

- Maximize use of solar energy by installing solar energy arrays.
- Use light colored paving and roofing materials.
- Utilize only Energy Star heating, cooling, and lighting devices, and appliances.
- Use of water-based or low VOC cleaning products that go beyond the requirements of South Coast AQMD Rule 1113.

Design Considerations to Further Reduce Air Quality and Health Risk Impacts during Operation

- Clearly mark truck routes with trailblazer signs, so that trucks will not travel next to or near sensitive land uses (e.g., residences, schools, day care centers, etc.).

- Design the Proposed Project such that truck entrances and exits are not facing sensitive receptors and trucks will not travel past sensitive land uses to enter or leave the Proposed Project site.
- Design the Proposed Project such that any check-in point for trucks is inside the Proposed Project site to ensure that there are no trucks queuing or idling outside.
- Design the Proposed Project to ensure that truck traffic inside the Proposed Project site is as far away as feasible from sensitive receptors

4. South Coast AQMD Permits and Responsible Agency

The Proposed Project includes operation of a maintenance facility with four maintenance bays. If on-site fueling will occur at the maintenance facility, a permit to construct and a permit to operate from South Coast AQMD will be required. South Coast AQMD should be identified as a Responsible Agency for the Proposed Project in the Final MND. The assumptions used in the air quality analysis and HRA in the Final MND will be used as the basis for evaluating the permits under CEQA and imposing permit conditions and limits. The 2015 revised Office of Environmental Health Hazard Assessment (OEHHA) methodology[12] is being used by South Coast AQMD for determining operational health impacts for permitting applications and also for all CEQA projects where South Coast AQMD is the Lead Agency. Should there be any questions on permits, please contact South Coast AQMD's Engineering and Permitting staff at (909) 396-3385. For more general information on permits, please visit South Coast AQMD's webpage[13].

[12] Office of Environmental Health Hazard Assessment. "Notice of Adoption of Air Toxics Hot Spots Program Guidance Manual for the Preparation of Health Risk Assessments 2015". Accessed at: https://oehha.ca.gov/air/crnr/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk-0.

[13] South Coast AQMD. Accessed at: http://www.aqmd.gov/home/permits.