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Draft Environmental Impact Report (DEIR) for the Proposed Meredith International Centre General Plan Amendment

The South Coast Air Quality Management District (SCAQMD) appreciates the opportunity to comment on the above-mentioned document. The following comments are meant as guidance for the Lead Agency and should be incorporated into the Final CEQA document.

The proposed Project is an amendment to the Meredith International Centre Specific Plan. The Specific Plan Amendment would allow for the development of approximately 3 million square feet of industrial uses, 1.1 million square feet of commercial uses, and up to 800 residential units on approximately 257 acres. The Lead Agency has projected 42,057 total daily vehicle trips by project buildout in 2020. Of the approximate 3 million square feet of industrial use, 2.39 million square feet will be developed as high-cube warehouses. The Lead Agency has projected 5,228 total daily vehicle trips including 1,652 daily truck trips operating at the high-cube warehouse.

In the Air Quality Section, the Lead Agency quantified the project's construction and operation air quality impacts and has compared those impacts with the SCAQMD's recommended regional and localized daily significance thresholds. Based on its analyses, the Lead Agency has determined that construction and operational air quality impacts will exceed the recommended regional daily significance threshold for VOC, NOx, CO, PM10 and PM2.5.

The Lead Agency has determined that estimated operation emissions and cancer risks substantially exceed the SCAQMD recommended thresholds of significance during operations (VOC, NOx, CO, PM10 and PM2.5, mostly from vehicle operations) and for Toxic Air Contaminants (potential cancer risk from sensitive receptors being sited near diesel particulate emissions (DPM) from vehicles operating on the freeway). The unmitigated cancer risk totaled 20 in one million from the DPM emissions from the freeway vehicles, which is above the SCAQMD's recommended CEQA significance threshold for Maximum Incremental Cancer Risk (MICR): 10 in one million or greater

lifetime probability of contracting cancer. Although the project proposes mitigation, SCAQMD staff has concerns about the effectiveness of the mitigation measures.

Pursuant to Public Resources Code Section 21092.5, SCAQMD staff requests that the Lead Agency provide the SCAQMD with written responses to all comments contained herein prior to the adoption of the Final EIR. The SCAQMD staff is available to work with the Lead Agency to address these issues and any other air quality questions that may arise. Please contact Jack Cheng, Air Quality Specialist CEQA Section, at (909) 396-2448, if you have any questions regarding the enclosed comments.

Sincerely,

Jillian Wong

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Planning, Rule Development & Area Sources

Attachment

JW:JC
SBC150130-01
Control Number

Health Risk Assessment (HRA) and Localized Significance Threshold (LST) Analysis

1. The American Meteorological Society/Environmental Protection Agency Regulatory Model Improvement Committee (AERMIC) was formed to introduce state-of-the-art modeling concepts into the EPA's air quality models. Through AERMIC, a modeling system, AERMOD, was introduced that incorporated air dispersion based on planetary boundary layer turbulence structure and scaling concepts, including treatment of both surface and elevated sources, and both simple and complex terrain. As of December 9, 2006, AERMOD is fully promulgated as a replacement to ISC3, in accordance with Appendix W (http://www.epa.gov/ttn/scram/dispersion_prefrec.htm). AERMOD is a steady-state plume model that incorporates air dispersion based on planetary boundary layer turbulence structure and scaling concepts, including treatment of both surface and elevated sources, and both simple and complex terrain. The Lead Agency used AERMOD (version 14134) to prepare the dispersion modeling for the HRA but used SCREEN3, which is the screening level version of ISC to perform the LST dispersion modeling analysis. AERSCREEN is now the preferred model to be used for screening level analysis, replacing SCREEN3. Therefore, SCAQMD staff recommends that the Lead Agency revise the LST analysis using the latest version of AERMOD (version 14134). SCAQMD's modeling guidance for AERMOD can be found at http://www.aqmd.gov/home/library/air-quality-data-studies/meteorological-data/modeling-guidance. Please note that when using AERMOD, the regulatory default option should be used (i.e. without the use of the "FASTALL" or "FLAT" options). If the Lead Agency wishes to use the FASTALL option or any other regulatory non-default options, SCAQMD staff should be consulted prior to the start of modeling.

2. The Lead Agency used meteorological data from the SCAQMD's Pomona station, which is located approximately 8 miles away from the Project site, while the SCAQMD's Upland meteorological station is located approximately 2 miles from the project site. Furthermore, the meteorological data used was for 2005-2009, which is outdated. SCAQMD staff recommends that the Lead Agency revise the air quality modeling performed for the HRA and LST analysis using the most recent available meteorological data from the SCAQMD's Upland station (for years 2008-1012), which were available at the time of analysis. AERMOD-ready meteorological data for various meteorological stations within the South Coast Air Basin (SCAB) are available for download free of charge at http://www.aqmd.gov/home/library/air-quality-data-studies/meteorological-data/data-for-aermod. By using outdated meteorological data, the air quality impacts from the project might have been under-estimated.

3. The HRA analysis involved the use of separate discrete receptors placed randomly. SCAQMD staff recommends that the Lead Agency revise the HRA using a receptor grid of no more than 100-meter spacing over the existing residences and areas zoned or planned for residential development, in order to ensure that the maximum impacts to a residential receptor are properly analyzed. Likewise, a similar receptor grid should be used for the worker and school receptors, as appropriate.

4. In the HRA, when estimating cancer risks from the freeway to the future residents, the Lead Agency appeared to use an exposure duration of 30-years to calculate the cancer risks. Current SCAQMD methodology for cancer risk to residents requires the use of a 70-year exposure duration. The Lead Agency should revise the HRA using the 70-year exposure duration.

5. In the DEIR, the Lead Agency analyzed health risk impacts for residential exposure separately from TAC emissions coming from vehicles operating on the I-10Freeways. Since residents will be exposed to adverse health impacts from both the freeways (diesel-fueled vehicles operating on the freeways) and project warehouse distribution uses (diesel-fueled trucks operating at the sites), the combined risk from both sources should be totaled and disclosed in the Final EIR, in addition to the separate Maximum Incremental Cancer Risk (MICR) estimates for both sources already included in the DEIR. Otherwise, the potential combined risk is underestimated.

Air Quality Analysis - Operations

Use of an Un-Refrigerated Warehouse Land Use CalEEMod Model Input

6. Based on a review of the project's emissions calculations in Appendix D: Air Quality Technical Appendix [1] (CalEEMod Output Sheets), the Lead Agency determined the proposed Project's air quality impacts using emission factors for unrefrigerated warehouses/truck activity. In Section 4.5 Noise, the Lead Agency utilized noise studies from similar logistics warehouse buildings since the future tenants of the proposed Project are unknown. The noise levels were estimated base on reference levels measurements of similar logistics warehouse building that include refrigerated containers. Since the future tenant is unknown, SCAQMD staff recommends that the Lead Agency include a mitigation measure that precludes the use of refrigerated warehousing at the Project site or revise the air quality analysis to account for emissions from refrigerated warehouse uses.

Mitigation Measures for Construction Air Quality Impacts

7. Based on a review of the DEIR the Lead Agency determined that the proposed project will result in significant air quality impacts during construction. Specifically, the air quality analysis demonstrated that the proposed project will exceed the SCAQMD's CEQA regional construction significance thresholds for NOx. Therefore, the SCAQMD staff recommends the following changes and additional measures be incorporated into the proposed project and FEIR to reduce significant project impacts in addition to the measures included in the Draft EIR.

Recommended Change:

~~4.3.3 During grading activity, all rubber-tired dozers and scrapers (≥150 horsepower) shall be CARB Tier 3 Certified or better. Additionally, during grading activity, total~~

[1] Appendix D: Air Quality Impact Appendix.

~~horsepower-hours per day for all equipment shall not exceed 149,840; and the maximum (actively graded) disturbance area shall not exceed 26 acres per day.~~

Consistent with measures that other lead agencies in the region (including Port of Los Angeles, Port of Long Beach, Metro and City of Los Angeles)[2] have enacted, require all on-site construction equipment to meet EPA Tier 3 or higher emissions standards according to the following:

- Post-January 1, 2015: All off-road diesel-powered construction equipment greater than 50 hp shall meet the Tier 4 emission standards, where available. In addition, all construction equipment shall be outfitted with BACT devices certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations.

Recommended Additions

- Require the use of 2010 and newer diesel haul trucks (e.g., material delivery trucks and soil import/export) and if the lead agency determines that 2010 model year or newer diesel trucks cannot be obtained the lead agency shall use trucks that meet EPA 2007 model year NOx emissions requirements.

- A copy of each unit's certified tier specification, BACT documentation, and CARB or SCAQMD operating permit shall be provided at the time of mobilization of each applicable unit of equipment.

- Encourage construction contractors to apply for SCAQMD "SOON" funds. Incentives could be provided for those construction contractors who apply for SCAQMD "SOON" funds. The "SOON" program provides funds to accelerate clean up of off-road diesel vehicles, such as heavy duty construction equipment. More information on this program can be found at the following website: http://www.aqmd.gov/home/programs/business/business-detail?title=vehicle-engine-upgrades

For additional measures to reduce off-road construction equipment, refer to the mitigation measure tables located at the following website: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/mitigation-measures-and-control-efficiencies .

[2] For example see the Metro Green Construction Policy at: http://www.metro.net/projects_studies/sustainability/images/Green_Construction_Policy.pdf

Mitigation During Operations (MERV Filters and HVAC Systems)

Limits to Enhanced Filtration Units

8. The Lead Agency should consider the limitations of the proposed enhanced filtration mitigation (Measure 4.3.6) for this project on the housing residents. For example, in a study that SCAQMD conducted to investigate filters[3] similar to those proposed for this project, costs were expected to range from $120 to $240 per year to replace each filter. In addition, because the filters would not have any effectiveness unless there is a HVAC system that draws enough air to support the filter system and that the HVAC system is fully operable throughout the life of the project. In addition, there may be increased energy costs to the resident. The proposed mitigation also assumes that the filters operate 100 percent of the time while residents are indoors to reduce significant TAC impacts up to 7.14 in one million compared with the SCAQMD threshold of 10 in one million. It should be noted that these filters have no ability to filter out any toxic gasses from vehicle exhaust and would not reduce exposure when residents are outside of their homes, e.g. children playing outdoors, being around a pool area, residents relaxing or walking outside, working outside on a balcony, cleaning a vehicle, etc. In the Final EIR, the presumed effectiveness and feasibility of this mitigation should therefore be evaluated in more detail prior to assuming that it will sufficiently alleviate near truck exhaust exposures. Otherwise, impacts to residents from exposure to TACs will remain substantially significant and unavoidable.

Mitigation Measures for Operational Air Quality Impacts (Mobile Sources)

9. During project operations, the Lead Agency has determined that project operation emissions are significant for Volatile Organic Compounds (VOC) and Oxides of Nitrogen (NOx), Carbon Monoxide (CO), Particulate Matter (PM10) and PM2.5, primarily from on-road mobile sources including truck activity emissions. The SCAQMD staff therefore recommends the following change and additional measures that should be incorporated into the Final EIR to reduce exposure to sensitive receptors and reduce project air quality impacts:

Additional Mitigation Measures:

- Require the use of 2010 compliant diesel trucks, or alternatively fueled, delivery trucks (e.g., food, retail and vendor supply delivery trucks) at

[3] http://www.aqmd.gov/docs/default-source/ceqa/handbook/aqmdpilotstudyfinalreport.pdf?sfvrsn=0 . This study evaluated filters rated MERV 13+ while the proposed mitigation calls for less effective MERV 12 or better filters. See also CARB link for the "Status of Research on Potential Mitigation Concepts to Reduce Exposure to Nearby Traffic Pollution" (August 23, 2012): http://www.arb.ca.gov/db/search/search_result.htm?q=Potentiaal+Mitigation+Concepts+to+Reduce+Exposure+to+Nearby+Traffic+Polltion&which=arb_google&cx=006180681887686055858%3Abew1c4wl8hc&srch_words=&cof=FORID%3A11 .

commercial/retail sites upon project build-out. If this isn't feasible, consider other measures such as incentives, phase-in schedules for clean trucks, etc.

- Provide minimum buffer zone of 300 meters (approximately 1,000 feet) between truck traffic and sensitive receptors based on guidance from the California Air Resource Board (CARB) guidance.[4]
- Limit the daily number of trucks allowed at each facility to levels analyzed in the Final EIR. If higher daily truck volumes are anticipated to visit the site, the Lead Agency should commit to re-evaluating the project through CEQA prior to allowing this higher activity level.
- Design the site such that any check-in point for trucks is well inside the facility to ensure that there are no trucks queuing outside of the facility.
- On-site equipment should be alternative fueled.
- Provide food options, fueling, truck repair and or convenience stores on-site to minimize the need for trucks to traverse through residential neighborhoods.
- Improve traffic flow by signal synchronization.
- Have truck routes clearly marked with trailblazer signs, so that trucks will not enter residential areas.
- Because the proposed Project generates significant regional emissions, the Lead Agency should require mitigation that requires accelerated phase-in for non-diesel powered trucks. For example, natural gas trucks, including Class 8 HHD trucks, are commercially available today. Natural gas trucks can provide a substantial reduction in health risks, and may be more financially feasible today due to reduced fuel costs compared to diesel. In the Final CEQA document, the Lead Agency should require a phase-in schedule for these cleaner operating trucks to reduce project impacts. SCAQMD staff is available to discuss the availability of current and upcoming truck technologies and incentive programs with the Lead Agency and project applicant.

  At a minimum, require upon occupancy that do not already operate 2007 and newer trucks to apply in good faith for funding to replace/retrofit their trucks, such as Carl Moyer, VIP, Prop 1B, or other similar funds. Should funds be awarded, the occupant should also be required to accept and use them.

Electric Vehicle (EV) Charging Stations

10. Trucks that can operate at least partially on electricity have the ability to substantially reduce the significant NOx impacts from this project. Further, trucks that run at least partially on electricity are projected to become available during the life of the project as discussed in the 2012 Regional Transportation Plan. It is important to make this

[4] CARB: Air Quality and Land Use Handbook: A Community Health Perspective, April 2005, Page4 for Distribution Centers.

electrical infrastructure available when the project is built so that it is ready when this technology becomes commercially available. The cost of installing electrical charging equipment onsite is significantly cheaper if completed when the project is built compared to retrofitting an existing building. Therefore, the SCAQMD staff recommends the Lead Agency require the proposed facility and other plan areas that allow truck parking to be constructed with the appropriate infrastructure to facilitate sufficient electric charging for trucks to plug-in. Similar to the City of Los Angeles requirements for all new projects, the SCAQMD staff recommends that the Lead Agency require at least 5% of all vehicle parking spaces (including for trucks) include EV charging stations.[5] Further, electrical hookups should be provided at the onsite truck stop for truckers to plug in any onboard auxiliary equipment. At a minimum, electrical panels should appropriately sized to allow for future expanded use.

CNG Fueling Station and Convenience Site

11. Since the proposed project generates significant regional NOx operational impacts, the SCAQMD staff recommends that the project pro-actively take measures that could reduce emissions sooner rather than later. The SCAQMD staff therefore recommends that the Lead Agency ensure the availability of alternative fueling facility (e.g., natural gas) to serve the project site prior to operation of any large truck operation uses within the project area.

Mitigation Measures for Operational Air Quality Impacts (Other)

12. In addition to the mobile source mitigation measures identified above, the SCAQMD staff recommends the following on-site area source mitigation measures below to reduce the project's regional air quality impacts from VOC, CO, NOx, PM10 and PM2.5 emissions during operation. These mitigation measure should be incorporated pursuant to CEQA Guidelines §15126.4, §15369.5.

    - Maximize use of solar energy including solar panels; installing the maximum possible number of solar energy arrays on the building roofs and/or on the Project site to generate solar energy for the facility.
    - Use light colored paving and roofing materials.
    - Utilize only Energy Star heating, cooling, and lighting devices, and appliances.
    - Install light colored "cool" roofs and cool pavements.
    - Limit the use of outdoor lighting to only that needed for safety and security purposes.
    - Require use of electric or alternatively fueled sweepers with HEPA filters.
    - Use of water-based or low VOC cleaning products.

[5] http://ladbs.org/LADBSWeb/LADBS_Forms/Publications/LAGreenBuildingCodeOrdinance.pdf

Transportation

- Make a commitment to install electric car charging stations (not just wiring infrastructure) for both non-residential and residential uses at the project site.
- Create local "light vehicle" networks, such as neighborhood electric vehicle (NEV) systems.

Other

- Provide outlets for electric and propane barbecues in residential areas.