South Coast
Air Quality Management District
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SENT VIA E-MAIL AND USPS: May 19, 2017

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Mitigated Negative Declaration (MND) for the Proposed 999 Town & Country Mixed Use Project

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

Project Description

The Lead Agency proposes to construct a 262-unit residential apartment with an enclosed parking structure on six acres. The project is bounded by State Route (SR) 22 Freeway to the north, commercial uses to the south and east, and the on-ramp/off-ramp for the SR-22 Freeway to the west.

Air Quality Analysis and Mitigation Measures

In the air quality analysis, the Lead Agency found that regional and localized construction emissions would be significant. Based on a review of the CalEEMod modeling output in Appendix A, the SCAQMD staff found that Tier 4 for all construction equipment was used to calculate the mitigated construction emissions from NOx, PM10, and PM2.5 as substantial evidence to support the Lead Agency's finding that construction emissions would be less than significant. Although the MND included Mitigation Measure 3-1, which requires the use of Tier 4 for all off-road construction equipment greater than 50 horsepower (hp), the requirement is triggered only when Tier 4 is available. Additionally, the Lead Agency did not specify performance standards or criteria for how to determine availability in the MND. In general, "mitigation measures must be fully enforceable through permit conditions, agreements, or other legally binding instruments […]" (CEQA Guidelines Section 15126.4(a)(2)). To ensure that air quality impacts from NOx, PM10, and PM2.5 are adequately mitigated, and to be consistent with the air quality modeling assumption, the SCAQMD staff recommends that the Lead Agency commit itself to using Tier 4 for all off-road construction equipment greater than 50 hp and revise the Mitigation Measure 3-1 as follows:

> **Mitigation Measure 3-1:** All off-road construction equipment greater than 50 hp shall meet U.S. EPA Tier 4 emission standards, ~~where available,~~ to reduce NOx, PM10, and PM2.5 emissions at the Project site.

The MND also included Mitigation Measure 3-2, which requires the use of 2010 or newer diesel haul trucks if the Lead Agency can obtain them; otherwise, the 2007 model year will be used. Based on a review of the California Air Resources Board's diesel truck regulations[1], 2010 model year diesel haul trucks should have already been available and can be obtained in a successful manner for the project construction. Therefore, the SCAQMD staff believes that the Lead Agency should take this opportunity to require the use of 2010 model year or newer diesel haul trucks and revise Mitigation Measure 3-2 as follows:

> **Mitigation Measure 3-2:** 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 require trucks that meet U.S. EPA 2007 model year NOx emissions requirements.~~

Health Risk Assessment

When specific development is reasonably foreseeable as result of the goals, policies, and guidelines in the project, the Lead Agency should identify any potential adverse health risk impacts using its best efforts to find out and a good-faith effort at full disclosure in the CEQA document. Based on a review of aerial photographs, the SCAQMD staff found that the project would cause future residents to be approximately 10 feet from SR-22, which has an average daily volume of 146,700 vehicles[2] including approximately 6,602 diesel fueled trucks. Because of the close proximity to the existing freeway, residents would be exposed to diesel particulate matter (DPM), which is a toxic air contaminant and a carcinogen.

Notwithstanding the court rulings, the SCAQMD staff recognizes that the Lead Agencies that approve CEQA documents retain the authority to include any additional information they deem relevant to assessing and mitigating the environmental impacts of a project. Because of SCAQMD's concern about the potential public health impacts of siting sensitive populations within close proximity of freeways, the SCAQMD staff will continue to recommend that, prior to approving the project, Lead Agencies consider the impacts of air pollutants on people who will live in a new project and provide mitigation where necessary.

Since future residences of this project would be exposed to toxic emissions from the nearby SR-22, the SCAQMD staff recommends that the Lead Agency estimate potential health risks to these residents. Otherwise, the Lead Agency has not demonstrated, supported by substantial evidence, that public health will not be significantly impacted by this project. Therefore, the SCAQMD staff recommends that the Lead Agency conduct a health risk assessment (HRA)[3] to disclose the potential health risks to the people who will live at the project.

Guidance Regarding Residences Sited Near a High-Volume Freeway or Other Sources of Air Pollution

The SCAQMD staff recognizes that there are many factors Lead Agencies must consider when making local planning and land use decisions. To facilitate stronger collaboration between Lead Agencies and the SCAQMD to reduce community exposure to source-specific and cumulative air pollution impacts, the SCAQMD adopted the Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning in 2005. This Guidance Document provides suggested policies that local governments can use in their General Plans or through local planning to prevent or reduce potential air pollution impacts and protect public health. The SCAQMD staff recommends that the Lead Agency review this Guidance Document as a tool when making local planning and land use decisions. This Guidance Document is

[1] California Air Resources Board. March 2016. Available at: http://www.truckload.org/tca/files/ccLibraryFiles/Filename/000000003422/California-Clean-Truck-and-Trailer-Update.pdf

[2] Caltrans 2015 annual average daily traffic (Annual ADT) and truck volumes: http://www.dot.ca.gov/trafficops/census/.

[3] "Health Risk Assessment Guidance for Analyzing Cancer Risk from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis" accessed at: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/mobile-source-toxics-analysis.

available on SCAQMD's website at: http://www.aqmd.gov/home/library/documents-support-material/planning-guidance/guidance-document.

Numerous health studies have demonstrated potential adverse health effects associated with living near highly travelled roadways. In traffic-related studies, the additional non-cancer health risk attributable to proximity is seen within 1,000 feet and is strongest within 300 feet[4]. California freeway studies show about a 70% drop off in particulate pollution levels at 500 feet[5]. As a result of these studies, the California Air Resources Board (CARB) developed the Air Quality and Land Use Handbook[6] that recommends avoiding new sensitive land uses (such as housing) within 500 feet of a freeway. Additional research has shown that the near roadway environment also contains elevated levels of many pollutants that adversely affect human health, including some pollutants that are unregulated (e.g., ultrafine particles) and whose potential health effects are still emerging[7]. Guidance[8] on strategies to reduce air pollution exposure near high-volume roadways can be found at: https://www.arb.ca.gov/ch/rd_technical_advisory_final.PDF.

Limits to Enhanced Filtration Units

In the event that the Lead Agency, after performing an HRA, finds that maximum cancer risk from the proposed project would exceed the SCAQMD significance threshold of 10 in one million, the identification and evaluation of mitigation measures are required to reduce health impacts below the significance level before the ND is considered for adoption (CEQA Guideline Section 15074(b)).

Many mitigation measures have been proposed for other projects to reduce exposure, including building filtration systems, sounds walls, vegetation barriers, etc.[9] However, because of the potential adverse health risks involved with siting housing near a freeway, it is essential that any proposed mitigation must be carefully evaluated in order to determine if those health risks would be brought below recognized significance thresholds.

In the event that enhanced filtration units on housing residents are proposed as a mitigation measure, the Lead Agency should consider the limitations of the enhanced filtration. For example, in a study that SCAQMD conducted to investigate filters[10], 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 the HVAC system is running, there may be increased energy costs to the resident. It is typically assumed that the filters operate 100 percent of the time while residents are indoors, and it does not account for the times when the residents have their windows or doors open or are in common space areas of the project. These filters also have no ability to filter out any toxic gases from vehicle exhaust. The presumed effectiveness and feasibility of any filtration units, if proposed as a mitigation measure, should therefore be evaluated in more detail prior to assuming that they will sufficiently alleviate near roadway exposures.

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[4] California Air Resources Board. April 2005. "Air Quality and Land Use Handbook: A Community Health Perspective." Accessed at: http://www.arb.ca.gov/ch/landuse.htm.

[5] Ibid.

[6] Ibid.

[7] See Chapter 9 of the 2012 AQMP for further information. Accessed at: http://www.aqmd.gov/aqmp/2012aqmp/Final-February2013/Ch9.pdf.

[8] In April 2017, ARB published a technical advisory, *Strategies to Reduce Air Pollution Exposure Near High-Volume Roadways*: *Technical Advisory*, to supplement ARB's Air Quality and Land Use Handbook: A Community Health Perspective. This Technical Advisory is intended to provide information on strategies to reduce exposures to traffic emissions near high-volume roadways to assist land use planning and decision-making in order to protect public health and promote equity and environmental justice. Available at: https://www.arb.ca.gov/ch/landuse.htm.

[9] Ibid.

[10] This study evaluated filters rated MERV 13+ while the proposed mitigation calls for less effective MERV 12 or better filters. Accessed at: http://www.aqmd.gov/docs/default-source/ceqa/handbook/aqmdpilotstudyfinalreport.pdf.

Pursuant to the CEQA Guidelines Section 15074, prior to approving the project, the Lead Agency shall consider the MND for adoption together with any comments received during the public review process. The SCAQMD staff is available to work with the Lead Agency to address the comments raised in this letter and any other air quality questions that may arise. Please contact Jack Cheng, Air Quality Specialist, CEQA IGR Section, at (909) 396-2448, if you have any questions regarding these comments.

Sincerely,

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ORC170509-04
Control Number