



# South Coast Air Quality Management District

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**Mitigated Negative Declaration (MND) for the Proposed  
Lewis Street Reorganization Between the City of Garden Grove and the City of Orange (RO 17-01)  
and Residential 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 proposed project consists of the construction of a gated residential community with 70 single-family detached residential units on an approximately 9.01-acre site. The proposed project is expected to generate approximately 261 residents. The proposed residential units would have private outdoor areas and an open recreation area located near the entrance to the residential community. The proposed project is currently bounded by low-density residential and light/heavy commercial uses, medium-density residential and general commercial uses. The proposed project site, including the recreation area, is within 500 feet of the California State Route 22 (SR-22) Freeway.

**Mobile Source Health Risk Assessment**

When specific development is reasonably foreseeable as result of the goals, policies, and guidelines in the proposed 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 and information under Surrounding Land Uses in the MND, the SCAQMD staff found that the proposed project would facilitate the siting of future residents approximately 188 feet from the SR-22 Freeway (with the recreation area approximately 357 feet from SR-22), which has an average daily volume of 238,000 vehicles<sup>1</sup> including approximately 11,424 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. Diesel particulate matter emitted from diesel powered engines (such as trucks) has been classified by the state as a toxic air contaminant and a carcinogen.

Since future residences of the proposed project would be exposed to toxic emissions from the nearby sources of air pollution (e.g., diesel fueled highway vehicles), the SCAQMD staff recommends that the Lead Agency estimate potential health risks to these future residents from these sources. 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

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<sup>1</sup> Caltrans 2015 annual average daily traffic (Annual ADT) and truck volumes: <http://www.dot.ca.gov/trafficops/census/>.

conduct a health risk assessment (HRA)<sup>2</sup> to disclose the potential health risks to the residents from the freeway, railroad, and industrial sources.

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.

#### 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 available on SCAQMD's website at: <http://www.aqmd.gov/home/library/documents-support-material/planning-guidance/guidance-document>. Additional guidance on siting incompatible land uses (such as placing homes near freeways or other polluting sources) can be found in the California Air Resources Board's (CARB) *Air Quality and Land Use Handbook: A Community Perspective*, which can be found at: <http://www.arb.ca.gov/ch/handbook.pdf>.

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<sup>3</sup>. California freeway studies show about a 70% drop off in particulate pollution levels at 500 feet<sup>4</sup>. As a result of these studies, the CARB developed a Land Use Handbook<sup>5</sup> 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<sup>6</sup>.

#### Mitigation Measures and Limits to Enhanced Filtration Units

While the health science behind recommending against placing new homes in close proximity to freeways is clear, the SCAQMD staff recognizes that there are many factors Lead Agencies must consider when making local planning and land use decisions such as siting new housing. 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 MND is considered for adoption (CEQA Guideline Section 15074(b)). In an event that the Lead Agency determines that health impacts cannot be mitigated, a draft environmental impact report shall be prepared pursuant to the CEQA Guideline Sections 15073.5, 15086, and 15087.

<sup>2</sup> "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>.

<sup>3</sup> 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>.

<sup>4</sup> Ibid.

<sup>5</sup> Ibid.

<sup>6</sup> See Chapter 9 of the 2012 AQMP for further information. Accessed at: <http://www.aqmd.gov/aqmp/2012aqmp/Final-February2013/Ch9.pdf>.

Many mitigation measures have been proposed for other projects to reduce exposure, including, but are not limited to, building filtration systems, sound walls, vegetation barriers, etc. Because of the potential adverse health risks involved with siting housing near a freeway, it is essential that any proposed mitigation measure 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<sup>7</sup>, 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.

#### Compliance with SCAQMD Rule 1166

As stated in Section 4.8, Hazards and Hazardous Materials, on Page 4-53 in the MND, “Phase I identified the presence of a dry cleaner operation at the same property as the former service station.” Additionally, “[...] potential sources of volatile organic compounds (VOCs) from a former dry cleaning operation [is] located 100 ft east of the Project site [...], and underground fuel storage tanks [are] located 525 ft northwest of the Project site.” Although all VOC concentrations are below the EPA reporting limits (Page 4-54), in the event that petroleum hydrocarbons are expected to be encountered during excavation and any other soil disturbing activities, the Final MND should include a discussion to demonstrate compliance with the requirements of SCAQMD Rule 1166 – Volatile Organic Compound Emissions from Decontamination of Soil.

SCAQMD staff is available to work with the Lead Agency to address any other air quality and health risk questions that may arise. Please contact Gordon Mize, Air Quality Specialist, CEQA IGR, at (909) 396-3302, if you have any questions regarding these comments.

Sincerely,

*Lijin Sun*

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LS:GM

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Control Number

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<sup>7</sup> 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>.