



South Coast  
Air Quality Management District

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FAXED: July 21, 2009

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**Review of the Re-Circulated Draft Environmental Impact Report (Draft EIR)  
for the Proposed Mira Loma Commerce Center**

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 either a Revised Draft or Final Environmental Impact Report (Final EIR) as appropriate.

The SCAQMD staff has reviewed the re-circulated Draft EIR for the proposed Mira Loma Commerce Center and has identified several issues associated primarily with the health risk assessment. In particular it appears that the cancer risks from the proposed project may be underestimated. Therefore, SCAQMD staff recommends that the lead agency revise the health risk assessment to reflect actual operational activities at the project site. If the revised health risk assessment analysis results in substantially greater significant cancer risk impacts or non-cancer health risks are concluded to be significant then the lead agency should consider additional mitigation to reduce air quality impacts from the operational phase of the project.

The SCAQMD staff appreciates the fact that the lead agency allowed additional time in which to submit comments. Although, SCAQMD submitted comments after the extension date, staff requests that these comments be included, at a minimum in the administrative record.

Pursuant to Public Resources Code Section 21092.5, please provide the SCAQMD with written responses to all comments contained herein prior to the adoption of the Final EIR. Further, staff is available to work with the lead agency to address these issues and any

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other questions that may arise. Please contact Dan Garcia, Air Quality Specialist CEQA Section, at (909) 396-3304, if you have any questions regarding the enclosed comments.

Sincerely,

Steve Smith, Ph.D.  
Program Supervisor – CEQA Section  
Planning, Rule Development & Area Sources

Attachment

SS:DG

RVC090414-04  
Control Number

### **Regional Construction and Operational Air Quality Analysis**

1. In Section 4.3 (Air Quality) of the Draft EIR the lead agency assesses the regional air quality impacts from the proposed construction and operational activities. The lead agency summarizes the project's unmitigated operational emissions in Tables 4.3-F and Table 4.3-G. Based on staff's review of the URBEMIS output sheets in Appendix A of the Air Quality Impact Analysis, the lead agency used the commercial urban trip length of 8.9 miles and commercial rural trip length of 12.6 miles categorized as customer based trips in the URBEMIS 2007 Model.

Based on similar warehouse projects reviewed by the SCAQMD, the standard trip length that is applied to warehouse projects is 40 miles per one-way trip. The rationale for this trip length is that most vehicle trips to and from warehouse facilities are made by heavy-duty trucks hauling consumer goods, often from the Ports of Long Beach and Los Angeles to destinations outside of California. Thus, a commercial trip length of 12.6 miles or less would not be representative of haul truck activities at these types of facilities and, therefore could lead to an underestimation of on-road mobile source emissions. Therefore, SCAQMD staff recommends that the lead agency recalculate the mobile source emissions using actual fleet characteristics based on the project's anticipated warehouse operations. The mobile source emissions calculation should account for the project's applicable trip lengths (miles per one-way trip) and also reflect the actual percentage of the truck fleet creating mobile source emissions within the South Coast Air Basin and up to the California border.

Once the lead agency has recalculated the mobile source emissions to reflect a more appropriate trip length the SCAQMD staff requests that the lead agency revise Tables 4.3-F and 4.3-G of the Final EIR quantifying peak daily air quality impacts and summarizing all emissions from the planned operational activities including NO<sub>x</sub>, SO<sub>x</sub>, CO, PM<sub>10</sub>, PM 2.5 and VOC.

### **Localized Construction and Operational Air Quality Analysis**

#### **Health Risk Assessment (Toxic Pollutants)**

2. Idling emission sources for the warehouse areas were represented by applying the total amount of idling emissions over single lines sources at each building. This appears to be done correctly. However, idling emission sources at the business park areas were represented by a series of volume sources separated around several buildings. It does not appear that this was done correctly.

The equation used is as follows:

$$\text{Emission rate, g/sec} = (\text{truck ADT} * (\text{idling time, min}/60 \text{ min/hr}) * \text{Emission factor, g/hr}) / ((\text{Truck Bays}/\text{Truck Bay per Line}) * 24 \text{ hr/day} * 60 \text{ min/hr} * 60 \text{ sec/min})$$

**Table 1**

<b>Building</b>	<b>Floor Size (s.f.)</b>	<b>Project Truck ADT</b>	<b>Idling Time(g/s) (min)</b>	<b>Emission Factor(g/s) (g/hr)</b>	<b>Truck Bays</b>	<b>Truck Bays per Line</b>	<b>Total Line Emission Rate (g/s)</b>
18876	99,210	208	10	0.183	60	5	6.119E-06
18877 North	44,242	109	10	0.183	17	1	3.220E-06
18877 South	106,505	255	10	0.183	67	17	2.282E-05

Table 1 shows the emission rates estimated using the equation in the Draft EIR. Each building number listed in the preceding tables consists of a series of physical buildings. Building No. 18876 consists of six buildings. Building No. 18877 North consists of four buildings and Building No. 18877 south consists of four buildings

The purpose the ratio of truck bays to truck bays per line in the above equation is not clear. However, since the ratio reduces the total emission rate, it is not clear that this procedure is appropriate. Table 2 presents the total emission rates if the ratio of truck bays to truck bays per line is removed.

**Table 2**

<b>Building</b>	<b>Floor Size (s.f.)</b>	<b>Project Truck ADT</b>	<b>Idling Time (min)</b>	<b>Emission Factor (g/hr)</b>	<b>Total Emission Rate without Bay Ratio (g/s)</b>
18876	99,210	208	10	0.183	7.343E-05
18877 North	44,242	109	10	0.183	3.855E-05
18877 South	106,505	255	10	0.183	8.995E-05

Table 3 presents the difference in the amount of emissions that were modeled compared to the total amount of emissions. Column one identifies the building number. Column two contains the total line emissions rate estimated in the Draft EIR from Table 1 above, which includes the truck bays to truck bays per line in question. Column three contains the number of line sources that were actually modeled in the Draft EIR. Column four is the product of multiplying column two and three, since the emission rate in column one was used for each of the line sources modeled. The sum of the emission rates modeled in the Draft EIR is 1.60E-4 g/s. Column five is the total emissions without the truck bays to truck bays per line as presented in Table 2 above. Column six presents the difference between what was modeled in the Draft EIR and the total emission rate from Table 2 in grams per second. Column seven presents the difference between what was modeled in the Draft EIR and the total emission rate from Table 2 in pounds per day. Column eight presents the difference between what was modeled in the Draft EIR and the total emission rate from Table 2 in pounds per year. Based on this analysis it appears that emission rates from

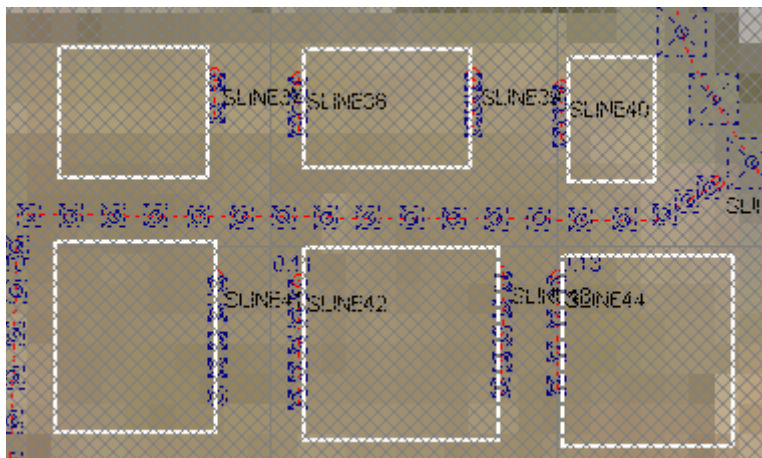
operational activities at the business park portion of the proposed project were underestimated.

**Table 3**

Building	Total Line Emission Rate from Draft EIR (g/s)	Number of Line Sources Actually Modeled in Draft EIR	Actual Emissions Modeled in Draft EIR (g/s)	Total Emission Rate without Draft EIR Bay Ratio (g/s)	Difference in Emission Rate (g/s)	Difference in Emission Rate (lb/day)	Difference in Emission Rate (lb/year)
18876	6.119E-06	8	4.90E-05	7.34E-05	2.45E-05	2.1	772
18877 North	3.220E-06	6	1.93E-05	3.86E-05	1.92E-05	1.7	606
18877 South	2.282E-05	4	9.13E-05	9.00E-05	-1.33E-06	-0.1	-42
Total			1.60E-04	2.02E-04	4.24E-05	3.7	1,336

The emissions for each building number were modeled as a series of line sources at each of the physical building structures related to the building number. For example, Building No. 18876 consists of six buildings. Two line sources were assigned to two of the buildings and one line source was assigned to four buildings for a total of eight line sources. The line sources are shown in Figure 1. The smaller line sources labeled SLINE 37 through SLINE 44 represent the idling line sources. Each line source was given the same emissions rate of 6.119E-06, even though the line sources differed in length (and therefore number of volume sources comprising each line source). This approach does not appear to be correct. The correct approach would be to ratio the magnitude of the total emissions from each building number by the length of the line source. So, if the line source used at one physical building is twice as long, the emissions rate from the long line source should be twice the rate as the shorter line source. Care must be taken so that the sum of the emission rates from each of the line sources comprising a building number is the same as the total emission rate estimate in Table 2.

**Figure 1**



Therefore, the HRA should be redone with the total emission rate from each building number applied to the correct location using line sources with the emissions rates assigned to line sources by length.

#### Localized Significance Threshold (Criteria Pollutants)

3. The operational NO<sub>x</sub> and CO LST analyses were developed using a different approach than the HRA. The PM<sub>10</sub> concentrations were taken directly from the HRA. Since the operational activities evaluated in the LST and HRA analysis are the same, it is not clear why separate emissions rate methodologies were used for NO<sub>x</sub> and CO concentrations. The LST approach used by the lead agency does not appear to be as accurate and is atypical. SCAQMD staff recommends that the operational NO<sub>x</sub> and CO LST analyses be revised using the source parameter methodology used in the HRA/PM<sub>10</sub> analysis in the Final EIR with corrections detailed in SCAQMD comments on the HRA.
4. Operational emissions from the proposed project were modeled using ISCST3. The SCAQMD's LST guidance states that off-site emissions should not be included in the emissions/concentrations compared to the LST thresholds. It appears that both off-site and on-site emissions were included in the LST analysis. This approach results in a more conservative analysis than is recommended by the SCAQMD.
5. To perform the LST analysis, NO<sub>x</sub> and CO operational emissions from URBEMIS were modeled using the ISCST3 model. Typically, on-site emissions from diesel trucks are split into idling and traveling emissions. Since URBEMIS emissions factors are generated from regional emissions (which include traveling and idling) from on-road sources using the BURDEN model, it is not clear that using these emission factors over sources representing the roadways on-site would generate concentrations that would represent operational activities from the proposed project. Because trucks may idle for longer periods of time on-site than on roadways, SCAQMD staff recommends that idling and traveling emissions be modeled as different sources using idling and traveling emission factors from EMFAC2007, which was done for PM<sub>10</sub> emissions values.
6. State regulations limit diesel truck idling to five minutes per event, but it does not limit the number of events at a given facility. Diesel trucks may idle several times at a given facility, while waiting for a dock to open, before and after loading or unloading at the dock, at scales, or at guard posts while checking in or out of a facility. SCAQMD staff recommends that a default of 15 minutes per truck trip be used to represent idling emissions. If less than 15 minutes idling time per truck trip is used, SCAQMD recommends that a mitigation measure be added to limit idling to the time period used in the HRA or LST analysis.

### **Localized Construction and Operational Mitigation Measures**

7. On page 4.3-43 (Short-Term Analysis) of the Draft EIR the lead agency assumes that the maximum area disturbed for each plot plan will be one to five acres. This assumption is reflected in the URBEMIS output sheets and was used to evaluate localized air quality impacts during the construction phase of the project. However, the lead agency does not include any provisions or requirements to limit the project's construction activities to only five acres per day. Therefore, SCAQMD staff requests that the lead agency require a mitigation measure that limits the project's construction activity to five acres or less per day.

8. In the event that the lead agency's revised regional and/or localized operational air quality impacts analyses requested in comment #1 and comments #3 through #6 demonstrates that any criteria pollutant emissions create new significant adverse impacts or make existing significant adverse impacts substantially greater, the SCAQMD recommends that the lead agency consider revising the following mitigation measures to further reduce air quality impacts from the operational phase of the project, if feasible:

**MM Air 4:** Project-generated trucks servicing the proposed project shall be ~~instructed to avoid~~ restricted from residential areas and schools ~~and, a specific truck route shall be delineated on the circulation/transportation plan, implemented with the use of signage, to direct project-related trucks away from sensitive receptors.~~

9. In the event that the lead agency's revised Health Risk Assessment requested in comment # 2 demonstrates that operation of the project would generate substantially greater cancer risk impacts or significant non-cancer health risks. The SCAQMD staff recommends that the lead agency consider revising the following mitigation measures to further reduce cancer risk impacts from the operation phase of the project, if feasible:

**MM Air 8:** In order to promote alternative fuels, and help support "clean" truck fleets, the developer/successor-in-interest shall provide building occupants and businesses with information related to SCAQMD's Carl Moyer Program, or other ~~such~~ state programs that ~~truck retrofits or~~ restrict the operation to "clean" trucks, such as a 2007 or newer model year or 2010 compliant vehicle.

**MM Air 11:** Each plot plan proponent shall be responsible for ~~providing information about~~ implementing park and ride programs for employees.

**MM Air 12:** The project proponents on each plot plan shall provide ~~information to~~ building occupants ~~on~~ incentives ~~and programs related to~~ for low-sulfur fuels and particulate traps, as well as other technologies available to business or truck fleets that reduce diesel particulate matter. ~~created by the SCAQMD.~~

10. Plot Plan 18877 and 18876 are directly adjacent to sensitive receptors identified on page 1.0-1 of the executive summary as the Mira Loma Village residential development area. The lead agency summarizes the net acreage and the total building area for each plot plan in Table 3.0-A (page 3.0-4) of the project description (section 3.0). Based on this table the lead agency indicates that Plot Plan 18877 will contain 247,660 sq.ft. of building space on 17.9 acres (779,724 sq.ft.); occupying less than 35 percent of the total land area and leaving a residual unoccupied land area of 532,064 sq.ft. SCAQMD staff recommends that the lead agency re-consider the design of each plot plan for the purposes of minimizing the elevated cancer risk impacts for sensitive receptors west and southwest (Mira Loma Village) of the project boundary during the project's operational activities.
  
11. On page 4.3-68 of the Draft EIR the lead agency proposed mitigation measure MM Air 2; "use clean street sweepers," however, the lead agency states that "individual developers are not parties to and do not control the administration of County contracts for street sweeping, therefore, this mitigation measure is not feasible." SCAQMD staff is aware that developers do not control the administration of the lead agency's contracts; however, the lead agency may specify conditions for approval (e.g. memorandum of understanding, developer agreement, etc.) to ensure MM Air 2 is implemented by the County on a cost recovery basis. Pursuant to Section 15126.4 (b) of the CEQA statutes and guidelines SCAQMD staff requests that the lead agency further consider all mitigation measures to reduce construction and operational air quality impacts.