



# South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178  
(909) 396-2000 • www.aqmd.gov

E-Mailed: April 9, 2013  
markg@moval.org

April 9, 2013

Mr. Mark Gross  
Community and Economic Development Department  
14177 Frederick Street  
Moreno Valley, CA 92553

## **Review of the Draft Environmental Impact Report (Draft EIR) for the Proposed World Logistics Center Project**

The South Coast Air Quality Management District (SCAQMD) staff appreciates the opportunity to comment on the World Logistics Center (WLC) Draft Environmental Impact Report (EIR), the lead agency's willingness to accept this letter one day late, and for the lead agency and applicant reaching out to us early on to discuss how to prepare the air quality analysis. The following comments are meant as guidance for the lead agency and should be incorporated into the Final EIR as appropriate.

The Draft EIR determines that the proposed project would have significant long term air quality impacts. Specifically, the air quality analysis demonstrates that the project's operational NOx emissions could exceed 3,000 pounds per day, compared to a CEQA significance threshold of 55 pounds per day. Further, the project's cancer risks exceed 100 per one million for onsite residents (i.e., residents within the plan area), and cancer risks exceed 10 per one million for residents close to the project site and in freeway adjacent communities reaching all the way to the SR-60 and I-15 interchange approximately 20 miles west of the project site.

These impacts will be added to a community that already experiences some of the worst air quality in the nation, with the local air quality monitor recording the sixth most exceedances of the 8-hour ozone standard nationwide (a total of 54 days in 2011). Other areas of the basin that have seen substantial increases in warehouse development also experience PM2.5 levels that exceed federal standards. Considering this existing air quality setting, and the proposed project's high level of emissions well above significance thresholds, additional mitigation must be implemented.

SCAQMD staff appreciates that the project includes some design features and mitigation measures to reduce the air quality impacts from this regionally significant project. These include measures like the prohibition of trucks that do not meet 2010 emission standards, requiring all onsite equipment (like hostlers) to use alternative fuels, and providing onsite alternative fueling infrastructure. However, even with the incorporation of these

measures the Draft EIR reveals that air quality and cancer risk impacts are still significant, both during operations, and the ten year long construction period. Therefore, it is imperative that the lead agency specify how these measures will be made enforceable to ensure that the project's regional air quality impacts and health risk impacts are minimized and provide additional feasible mitigation.

Because diesel truck emissions contribute over 95% of total air quality impacts from this project, additional measures must be taken to increase the number of alternative-fueled trucks serving this project and to reduce impacts on the community. These measures include: implementing a mandatory phase-in schedule for non-diesel trucks to serve the project, requiring additional onsite electric charging for trucks, requiring natural gas fueling infrastructure to be built before the first warehouse is completed, and providing additional buffers to separate diesel truck activity from the community. Details regarding these comments and others are provided in the attachment.

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 other air quality questions that may arise. If you have any questions regarding the enclosed comments, please contact me at (909) 396-3244.

Sincerely,



Ian MacMillan  
Program Supervisor, CEQA-IGR  
Planning, Rule Development, and Area Sources

SN:IM:DG

SBC130206-07  
Control Number

1. Alternative Fueled Truck Phase-In Schedule

Given that the proposed project will generate significant health risk impacts to a large number of surrounding and on-site residents (with risks up to 100 in a million) and will generate 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 EIR, 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.

2. Electric Vehicle (EV) Charging Stations

Trucks that can operate at least partially on electricity have the ability to substantially reduce the significant health risks and 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 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 each warehouse 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<sup>1</sup>. Further, electrical hookups should be provided at the onsite truck stop for truckers to plug in Transportation Refrigeration Units and any other onboard auxiliary equipment.

3. CNG Fueling Station and Convenience Site (*Advanced Installation Date*)

As described in the Draft EIR, the proposed project is projected to generate health risks offsite greater than 10 in one million to both local residents and residents along the 60 Freeway. Further, the proposed project has the potential to generate these significant air quality impacts for the region beginning in the first year of construction and operation, hence it is crucial that the lead agency implement measures that could reduce emissions sooner rather than later. Natural gas trucks have the ability to substantially reduce health risk impacts as they do not emit any diesel particulate matter, the primary driver of health risk impacts. The SCAQMD staff therefore recommends that the lead agency revise mitigation measure 4.3.6.3C to require the installation of an alternative fueling facility (e.g., natural gas) to serve the project site prior to operation of any logistics warehousing within the plan area.

---

<sup>1</sup> [http://ladbs.org/LADBSWeb/LADBS\\_Forms/Publications/LAGreenBuildingCodeOrdinance.pdf](http://ladbs.org/LADBSWeb/LADBS_Forms/Publications/LAGreenBuildingCodeOrdinance.pdf)

4. Operational Emissions Analysis and Mitigation Requirements

The local and regional air quality analysis for the proposed project is based on two scenarios identified in the Draft EIR as Scenario 1 and Scenario 2. Scenario 1 represents full build-out of the proposed project within one calendar year by 2012 whereas Scenario 2 represents a construction and operational phase-in schedule with full build-out of the project by 2022 (These Scenarios differ from HRA Scenarios 1 and 2 on a no project and with project analysis). In Scenario 1 of the regional emission analysis, the project would emit over 7.4 tons of NO<sub>x</sub> emissions per day at project build out, while in Scenario 2 the project could emit over 1.5 tons per day of NO<sub>x</sub>. A majority of these emissions (approximately 98%) are generated by the 14,600 daily heavy duty diesel truck trips estimated to serve the proposed project. Although Scenario 2 may be more representative of both construction and operation of the proposed project the lead agency based the project's significance determination for air quality impacts on Scenario 1 (worst case scenario). As a result, the Draft EIR allows for significant levels of NO<sub>x</sub> emissions (over 7.4 tons per day) from the proposed project. For reference, 7.4 tons represents approximately one-fifth of the entire 2022 NO<sub>x</sub> emissions budget from heavy-heavy duty trucks (HHDT) in the four county SCAB region. In comparison Scenario 2 build-out emissions comprise only about 4% of the baseline HHDT NO<sub>x</sub> emissions in 2022. While it is exceedingly rare for a single project to account for ~4% of basin-wide emissions, the 20% estimate from Scenario 1 is unprecedented and does not present a credible value to determine significance based on project conditions described in the Draft EIR. The cause of this overestimate is likely due to the use of EMFAC 2007 instead of EMFAC 2011, and assuming that trucks not meeting 2010 emissions standards will be used.

SCAQMD typically encourages a conservative analysis for CEQA purposes; however, the scale of overestimation here does not seem appropriate. For example, it could let the lead agency at a later date allow much higher emissions than the Scenario 2 emissions estimate (for example through future variances from the 2010 truck requirement) without requiring additional mitigation pursuant to CEQA. SCAQMD encourages the lead agency to use the Scenario 2 estimate (adjusting it as necessary to make it appropriately conservative) to determine project significance and to provide contingency measures in case future conditions indicate that emissions might exceed this value.

5. Project Impacts Higher due to Proximity of Project to Existing Sensitive Receptors

The proposed project requires that all heavy duty trucks access the site via Theodore Street to avoid travelling within the adjacent residential community. Further, mitigation measure 4.3.6.4A(k) requires at least a 250-foot setback between residentially zoned property and warehouse buildings. It appears that the dispersion modeling takes this buffer zone and truck restriction into account. However, as seen in Figure 4.3.11 and 4.3.12 of the Draft EIR, cancer risk impacts still exceed SCAQMD's significance thresholds of 10 in one million for a substantial distance into the community, including an east-west band extending over one mile from SR-60. Pursuant to CEQA Guidelines 15126.4, all feasible mitigation must be implemented to reduce these impacts, even if the mitigated impact remains

significant. At a minimum, the project should require the 1,000 foot buffer as recommended in the state Air Resources Board's Land Use Handbook. This buffer should also apply to any undeveloped sensitive receptors that may be sited in the future next to the WLC Specific Plan area.

6. 2010 Diesel Haul Trucks, Service Yard Trucks and Other On-Site Equipment

Given that Scenario 2 of the Draft EIR allows for a significant levels of daily emissions (~1.5 tons/day of NO<sub>x</sub>) from the proposed project it is imperative that the lead agency enforce the project operational restriction/design feature that requires all medium-heavy duty and heavy-heavy duty trucks entering logistics sites to meet or exceed 2010 engine emission standards. Additionally, the project requires that all service yard trucks and other onsite equipment be powered by electricity, natural gas, propane and/or 100% biodiesel fuel (see page 3-33 of the Project Description in the Draft EIR for discussion of this requirement, also, see comment #13 regarding bio-diesel fuel). However, it is uncertain to SCAQMD how these provisions will be enforced long-term. Therefore, the SCAQMD staff recommends that lead agency include a description in the Final EIR that specifies how the above-mentioned 2010 engine emissions standards and on-site equipment specifications will be enforced. In the event that the lead agency determines that it is not feasible to enforce these conditions that capture these requirements/design features the lead agency should revise the health risk assessment (HRA) to ensure that the analysis does not take credit for cleaner trucks and equipment thereby potentially underestimating the project's health risk impacts.

7. Solar Roof Panels

Previously, SCAQMD staff has heard lead agency staff state that all new warehouses must offset all office electrical use using solar generation either onsite or offsite. It is therefore surprising that while the proposed project consists of over 41 million square feet of roof space on buildings greater than 500,000 ft<sup>2</sup>, that the lead agency does not provide any commitment in the Draft EIR to the installation of solar panels. Given the availability of roof space associated with this project the lead agency should maximize the opportunity to produce solar energy by including mitigation beyond MM 4.16.4.6.1A. Specifically, the lead agency should require that buildings maximize the possible number of solar energy arrays.

8. Onsite Residential Receptors

On page 4.3-73 (Table 4.3.AA) of the Draft EIR the lead agency identified the potential incremental cancer risk for onsite residential receptors as 100.7 in a million; however, the lead agency does not provide any discussion about mitigation for on-site receptors in the Draft EIR. The WLC Specific Plan provides a "Right-to-Farm" provision in section 11.5 that indicates that residential uses may stay on the project site for a considerable time, overlapping with warehouse operations. Therefore, the SCAQMD staff recommends that the lead agency provide discussion about the proximity of on-site residents to potential future warehousing within the plan area and any applicable project conditions or mitigation measures that will minimize the significant health risk impacts to these residents.

9. Cactus Avenue Truck Access

As described in the Draft EIR, while heavy duty trucks must access the site via Theodore Street, by 2022 more than 1,500 light-heavy and medium-heavy duty diesel trucks per day are projected to access the site via Cactus Avenue and then Iris Avenue to the southwest according to the Draft EIR. It is not clear what destination these trucks are serving as there do not appear to be any non-residential or school land uses within about 5 miles of this access point. The lead agency should clarify if this path is meant to be a truck route linking the warehouses on the west side of the city with those proposed in the project. If alternate routes are available that will not impact as many sensitive receptors, then those should be made a requirement of the plan.

10. Preclusion of Refrigerated Warehouse Space

Based on a review of the project's emissions calculations it appears that the lead agency determined the project's air quality impacts using emission factors for unrefrigerated warehouses/truck activity. However, the discussion provided in the first paragraph of page 3-33 (project description) of the Draft EIR allows for refrigerated warehouse uses whereas Section 11.1 of the WLC Specific Plan prohibits refrigerated warehouses. Therefore, the SCAQMD staff recommends that the lead agency either revise the air quality analysis to account for emissions from refrigerated warehouse uses or include a mitigation measure that precludes the use of refrigerated warehousing at the project site.

11. Fleet Mix/Trip Rate

The proposed project primarily supports goods movement in the region that relies on HHDTs, however, based on Table 17 of the Air Quality Appendix the proposed project assumes that only 12.5% of the proposed project's total trips are generated by HHDTs (from a total of 20% trucks). CalEEMod guidance and the NAIOP study referenced in the Draft EIR both indicate that a higher truck percentage may be more appropriate for the proposed land use. Further, regional goods movement operational activities fluctuate based on seasonality. For example, goods movement activity often increases at the end of the year with back-to-school and holiday seasons. Given that SCAQMD significance thresholds are based on peak daily emissions, the Final EIR should include a discussion about whether the trip rates are annual average rates or peak daily rates that include adjustments for seasonality. Also, given that the project could significantly elevate health risk impacts to residents surrounding the project site and regional goods movement corridors, the SCAQMD staff recommends that the lead agency incorporate mitigation and monitoring that ensures any additional air quality impacts from extra diesel haul truck trips beyond those identified by the Draft EIR are publicly disclosed and mitigated where feasible.

12. Health Risk Impacts

The HRA contained in the Draft EIR appropriately compares the project's cancer risk levels to SCAQMD's Maximum Incremental Cancer Risk (MICR) threshold of 10 in one million. However, it does not appear that the lead agency conducted a cancer burden analysis using the SCAQMD's significance threshold of 0.5. A cancer burden calculation provides a more useful measure of the extent of cancer risk across a

populated area. Given the large area already encompassed within the 10 in one million risk contour in Figure 4.3.11, the one in one million contours will likely affect a much larger population. The Final EIR should include maps showing the one in one million contours as well as the calculated cancer burden.

13. On-Site Equipment

Based on a review of the air quality analysis it does not appear that the lead agency included potential emissions from on-site equipment (e.g., service yard trucks, emergency generators and auxiliary equipment) used for logistics operations in the air quality impacts significance determination. Therefore, the SCAQMD staff recommends that the lead agency revise the air quality analysis and HRA to include all on-site emissions sources and ensure that they are accounted for in the Final EIR. Also, given that on-site equipment emissions will contribute to the project's overall significant air quality and health risk impacts the SCAQMD staff recommends that the lead agency prohibit the use of on-site diesel powered equipment including bio-diesel to minimize the project's operational emissions and require the use of electric equipment. If diesel fueled emergency generators are required for the proposed project they should be equipped with diesel particulate filters. Installing diesel particulate filters on emergency standby engines is feasible and would ensure compliance with BACT, and SCAQMD Rules 1470 and 1472.

14. Onsite Mobile Equipment not Included in Localized or Regional Analysis

Neither the regional emissions nor dispersion modeling analyses include emissions from onsite mobile equipment such as hostlers and forklifts. While section 11.3 of the Specific Plan requires that all onsite mobile equipment utilize alternative fuels to reduce diesel emissions, this equipment will still emit criteria pollutants such as NO<sub>x</sub> and PM if it relies on fuels like natural gas. Emission factors for hostlers and forklifts can be obtained either from ARB's OFFROAD2007 or from engine manufacturers if specific equipment types are known. These emissions should be included in the regional emissions estimate and the localized criteria pollutant analyses in the Final EIR.

15. Localized NO<sub>2</sub> Dispersion Modeling Analysis Methodology

The NO<sub>2</sub> modeling analysis for combined construction and operation of the project does not compare against the federal one hour standard. Because the construction duration will last more than the three year averaging period of the standard, and because construction will overlap with operations, NO<sub>2</sub> concentrations should also be compared against the federal standard for this period.

Further, the annual average emission rate was used for the 1-hour analysis. Because this 1-hour standard is designed to evaluate peak impacts, a peak one hour emission rate should be input into all hours that it could reasonably occur in the model. Although peak 1-hour emissions are calculated within the emission calculation spreadsheets provided to SCAQMD, it is not clear if these are appropriate for this exercise. The peak 1-hour rates in the calculation sheets take an entire day's

emissions and puts them all into one hour. As this intensity of activity is unlikely to occur, a peak hour should be calculated based on anticipated operations.

#### 16. Construction Mitigation Measures

Given that the construction air quality analysis in the Draft EIR demonstrates significant regional air quality impacts from NO<sub>x</sub>, VOC, CO, PM<sub>10</sub> and PM<sub>2.5</sub>, and significant local air quality impacts from NO<sub>2</sub>, PM<sub>10</sub> and PM<sub>2.5</sub>, the SCAQMD staff recommends that the lead agency provide additional mitigation pursuant to CEQA Guidelines Section 15126.4. Specifically, SCAQMD staff recommends that the lead agency minimize or eliminate significant adverse air quality impacts by adding the mitigation measures provided below. Also, the lead agency should note that the following measures have been determined to be feasible and applicable to past projects within other jurisdictions<sup>2</sup>.

- Require the use of electricity from power poles rather than temporary diesel or gasoline power generators, and
- 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 NO<sub>x</sub> and PM emissions requirements.

Further, SCAQMD staff recommends that the lead agency replace MM 4.3.6.2A (a) and (b) with the following:

- ✓ Project Start to December 31, 2014: All off-road diesel-powered construction equipment greater than 50 hp shall meet Tier 3 off-road emissions standards. 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.
- ✓ 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.
- ✓ 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.

---

<sup>2</sup> For example see the Metro Green Construction Policy at:  
[http://www.metro.net/projects\\_studies/sustainability/images/Green\\_Construction\\_Policy.pdf](http://www.metro.net/projects_studies/sustainability/images/Green_Construction_Policy.pdf)

- ✓ 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/tao/Implementation/SOONProgram.htm>

For additional measures to reduce off-road construction equipment, refer to the mitigation measure tables located at the following website:  
[www.aqmd.gov/ceqa/handbook/mitigation/MM\\_intro.html](http://www.aqmd.gov/ceqa/handbook/mitigation/MM_intro.html).

Also, the SCAQMD staff recommends that the lead agency replace mitigation measures 4.3.6.2C (a) as follows:

- a) Non-VOC containing paints, sealants, adhesives, solvents, asphalt primer, and architectural coatings (where used), or pre-fabricated architectural panels shall be used in the construction of the Project to reduce VOC emissions to the maximum extent practicable.

#### 17. Cleaner Operating Truck Incentive Programs

The project should require that all tenants provide information and promote incentive programs and available alternative fueling truck technologies. This information should be updated as needed to ensure that the most recent information is available. Further, the lead agency should require that all future tenants apply for incentive funding (such as VIP, Carl Moyer, etc.) to upgrade their fleet. If they are awarded funding, they must also be required to use it within a reasonable period of time.