# South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4182 (909) 396-2000 • www.aqmd.gov

#### E-MAILED: NOVEMBER 25, 2009

November 25, 2009

Mr. Brad Johnson, Planning Manager Planning Division City of Pomona 505 S. Garey Avenue P.O. Box 660 Pomona, CA 91769

# <u>Draft Supplemental Environmental Impact Report (Draft SEIR) for the Proposed</u> <u>First Street Waste Transfer Station (SCH # 2006021046</u>

The South Coast Air Quality Management District (SCAQMD) appreciates the additional time to provide comments on the above-mentioned document. On March 30, 2007, the SCAQMD staff commented on the Draft EIR dated February 2007 (SCH No. 2006021046) and incorporates by reference its comments as applicable for this proposed project.

The SCAQMD staff supports the assumptions in the health risk assessment (HRA) analysis that alternative fueled waste collection trucks will be used at the facility at a rate of 90 percent within three years by 2013. Mitigation measures AQ-14 and AQ-15 should be revised to be consistent with the HRA analysis and the lead agency's commitment to use alternative fueled trucks by 2013. In addition, the SCAQMD staff recommends that the timing of the diesel particulate matter (DPM) retrofits mentioned in Mitigation Measures AQ-14 and AQ-15 be accelerated and applied to the on-site loaders, sweepers, and transfer trucks.

Pursuant to Public Resources Code Section 21092.5, please provide the AQMD with written responses to all comments contained herein prior to the adoption of the Final Supplemental Environmental Impact Report. The SCAQMD staff would be happy to work with the Lead Agency to address these issues and any other questions that may arise.

Please contact Gordon Mize, Air Quality Specialist – CEQA Section, at (909) 396-3302, if you have any questions regarding these comments.

Sincerely,

Susan Nakamura

Planning Manager

Planning, Rule Development & Area Sources

Lusan Napun

Attachment

SN:EE:JK:GM

LAC091023-01

Control Number

1

## **Operational Mitigation Measures**

1. In the Draft SEIR on pages 26, the lead agency has estimated as shown in Table 3.2S-1 DPM Cancer Risk/Chronic Hazard Index (Unmitigated), that due to the maximum concentrations of Diesel Particulate Matter (DPM), the associated cancer risk and the non-hazard index for the closest resident/worker/student receptors exceed the recommended SCAQMD threshold of ten in one million. In Table 3.2S-2 DPM Cancer Risk/Chronic Hazard Index (Mitigated), the maximum concentrations of DPM is shown to be less than significant with the application of the proposed operational mitigation measures described on page 27. In Table 3.2S-2, DPM cancer risks are modeled to be less than significant with mitigation but the Draft SIR does not state what year the application of the mitigation measures proposed on page 27 would result in cancer risk impacts being less than significant. From the time periods listed in Mitigation Measures AQ-14, AQ-15, AQ-16, and AQ-17 on page 27, the surrounding sensitive receptors could be exposed to significant DPM cancer risks from the proposed diesel fueled truck operations from 2010-2020, respectively, during the proposed conversion periods. This would mean that the residents, off site workers and students at both the elementary and high schools would be exposed to significant DPM cancer risks from the proposed site truck and equipment operations for up to 10 years. In the Final SEIR, the SCAQMD therefore recommends that the lead agency accelerate the retrofit of all diesel fueled trucks and equipment, solid waste collection trucks, on-site loaders, the on-site sweeper, etc. to 2010, or shortly thereafter, to minimize the amount of time these sensitive receptors will be exposed to these significant cancer risks. Retrofits should be completed with diesel emission control strategies capable of achieving the highest level of emissions reduction available for the application and engine model year in use.

#### **Health Risk Assessment**

- 2. A daily breathing rate of 271 liters per kilogram body weight per day was used for residential receptors. SCAQMD staff requires that the ARB recommended breathing rate of 302 liters per kilogram body weight per day be used for health risk assessments in the South Coast Air Basin. The ARB recommendation can be found at <a href="http://www.arb.ca.gov/toxics/harp/rmpolicyfaq.htm#11">http://www.arb.ca.gov/toxics/harp/rmpolicyfaq.htm#11</a>. The Final Supplemental EIR and HRA should include health risk for residential receptors developed using the ARB recommended breathing rate of 302 liters per kilogram body weight per day.
- 3. Worker receptor exposure was evaluated using an exposure duration of 30 years. This is inconsistent with SCAQMD and ARB recommendation of an exposure duration of 40 years. The Final Supplemental EIR and HRA should include health risk for worker receptors developed using the SCAQMD and ARB recommended 40 year exposure duration.
- 4. An exposure frequency of 240 was used for workers and students. The Final Supplemental EIR and HRA should include health risk for worker receptors with an exposure frequency of 245 days per year and 350 days per year for students.

- 5. A worker receptor averaging time period of 10,950 days was used to evaluate health risk. SCAQMD suggests an averaging time period of 25,550 days for all receptors. The Final Supplemental EIR and HRA should include health risk for worker receptors developed using an averaging time period of 25,550 days.
- 6. Student exposure was evaluated using an exposure duration of nine years. SCAQMD staff considers students sensitive receptors. All sensitive receptors are required to be evaluated with a 70 year exposure duration for health risk management (i.e., significance). Shorter exposure period can be used for risk communication, but significance for all sensitive receptors, which includes student receptors, should be based on a 70 year exposure duration. The Final Supplemental EIR and HRA should include health risk for student receptors developed using the SCAQMD recommended 70 year exposure duration.
- 7. A student receptor averaging time period of 3,285 days was used to evaluate health risk. SCAQMD suggests an averaging time period of 25,550 days for all receptors. The Final Supplemental EIR and HRA should include health risk for student receptors developed using an averaging time period of 25,550 days.
- 8. Idling time was assumed to be five minutes per trip. While state regulation limits idling to five minutes at a time, trucks often idle several times on-site (at guard stations, weigh stations, before loading and after unloading). SCAQMD staff recommends a default idling time of 15 minutes per trip unless there is an enforceable mitigation measure that would limit idling to a shorter time period. Enforceability would require the proposed facility staff to monitor idling activity, restrict idling to the idling time used in the HRA (e.g., in the case of the Draft Supplemental EIR five minutes total on-site) and penalties for truck drivers that idle more than the time used in the HRA (fines, loss of contract, etc.). The Final Supplemental EIR and HRA should include health risk based on a default idling time of 15 minutes per trip.
- 9. The initial ratio of diesel fueled trucks to natural gas fueled trucks is set at 70 percent to 30 percent from 2010 to 2019. At 2020 the ratio of diesel fueled trucks changes to 10 percent to 90 percent. Emission rates used in air dispersion modeling were developed from these ratios. Since the replacement of diesel fueled trucks to natural gas fueled trucks is expected to be gradual between 2020 and 2080, this methodology underestimates diesel combustion particulate emissions and, therefore, health risk by essentially converting the entire fleet from 70 percent diesel fueled/30 percent natural gas fueled to 10 percent diesel fueled/90 percent natural gas fueled starting in 2020.

Since the diesel fueled truck emission factors were developed by fleet year, a more precise and conservative approach would be to develop emission rates for air dispersion modeling by gradually changing the percentage from 70 percent diesel fueled/30 percent natural gas fueled to 10 percent diesel fueled/90 percent natural gas fueled in 2080. So, by subtracting 0.984 from the percentage of diesel fueled trucks each year and adding 0.984 to the percentage of natural gas fueled trucks each year

between 2020 and 2080, the ratio of diesel fueled trucks will decrease from 70 to 10 percent and the ratio of natural gas fueled trucks will increase from 30 percent to 90 percent. The percentage from each year should be multiplied by the EMFAC2007 fleet year diesel fueled truck emission factors (HHD and MHD) for the corresponding year. The emission factors can then be average to develop a weighted emission factor for the time period between 2020 and 2080. See the example for heavy duty diesel trucks in the following table:

Fleet Year	15 mph EMFAC2007 Fleet Year DPM Emission Factor Diesel- Fueled Heavy Duty Trucks, g/mile	Fraction of Diesel- Fueled Heavy Duty Trucks	Fleet Year DPM Emission Rate from Heavy Duty Trucks, g/mile
2020	0.279	0.6902	0.193
2021	0.267	0.6803	0.182
2022	0.259	0.670	0.174

- 10. Offroad equipment (sweeper and loader) emission factors, load factors and operation hours were developed from a previous Kleinfleder HRA which is not referenced, DOT emission factors for the sweeper, horsepower from a sweeper vendor. If site specific data is not available, then ARB Offroad2007 emission factors should be used. A summary of ARB Offroad2007 emission factors can be downloaded from the SCAQMD website at <a href="http://www.aqmd.gov/ceqa/handbook/offroad/offroad.html">http://www.aqmd.gov/ceqa/handbook/offroad/offroad.html</a>. These emission factors were compiled by ARB are presented by type of equipment, horsepower with load factors incorporated in the emission factors. The HRA in the Final Supplemental EIR should be developed using ARB emission factors unless the emission factors, load factors, and operation hours are specific to the proposed project.
- 11. Health risk appears to be reported only from discrete Cartesian receptors, for example, the maximum carcinogenic health risk from the proposed project to receptors is reported as the health risk reported at receptor W4 (433572.1, 3768833.1), which has an estimated PM10 concentration of 0.31273 micrograms per cubic meter. The ISCST3 output shows that the highest concentration at a worker receptor would occur at 433594.66,3768849, which at a gridded receptor. The maximum health risk value should be reported in the Final Supplemental EIR for each type of receptor (worker and residential/sensitive) whether the receptor is a discrete receptor or a gridded receptor.
- 12. In Volume II (Appendices) on pages 3-2 and 2-3 of Appendix S-3 Health Risk Assessment in the Draft SEIR, the lead agency categorized the 187 municipal solid waste commercial collection trucks that have an approximate weight capacity of 8 tons as medium-heavy trucks for HRA modeling purposes. Because these trucks weight over 33,000 pounds, they should be considered heavy-heavy-duty- trucks (HHDT) for air quality and risk assessment purposes. Although the lead agency has already determined that cancer risk for the proposed project exceeds the SCAQMD

recommended significance threshold of ten in one million (1.0 x 10<sup>-5</sup>) for the surrounding sensitive receptors and on-site workers, the HRA should be revised in the Final SEIR to reflect the correct EMFAC2007 emission factors and any subsequent revision to the risk to the sensitive receptors near the site, as well as project risks to on-site workers.

### **Localized Significance Thresholds Analysis**

13. In the Final EIR, the lead agency stated in its response to the SCAQMD's original comment in the SCAQMD letter dated March 30, 2007 for the Draft EIR, that a localized air quality analysis was not conducted because the pollutant emissions during construction were less than significant and because of the project size. Although the lead agency had determined in the Draft EIR that the proposed project construction air quality impacts were estimated to not exceed the SCAQMD recommended daily regional significance thresholds, the SCAQMD still recommends that the lead agency estimate the short-term localized impacts from the construction emissions to nearby sensitive receptors to disclose localized impacts to nearby sensitive receptors from project construction equipment and other short-term impacts such as fugitive dust.

Besides localized construction impacts, the SCAQMD also recommends that localized operational air quality impacts be evaluated since the proposed project would increase the number of on-site equipment operating at the site to include up to 17 additional diesel-fueled vehicles including 13 transfer trucks and two front loaders. This is in addition to the projected 241 commercial and transfer trucks that will deliver and haul away waste and operate at the site in support of the proposed increase to accept of up to 1,500 tons per day of non-hazardous solid waste. These vehicles will also impact local sensitive receptors and workers while loading, unloading, idling while queuing while operating at the facility. Given the amount of activity proposed during operations to support the proposed increased throughput, the SCAQMD reiterates its recommendation that a localized significance thresholds analysis be performed and included in the Final SEIR to ensure that nearby sensitive receptors, e.g., the residences and schools located less than a quarter of a mile from the project site, are not adversely impacted by construction or operational activities that would occur at the project site.

The SCAQMD's guidance for performing a localized air quality analysis is available at the following web address: <a href="http://www.aqmd.gov/ceqa/handbook/LST/LST.html">http://www.aqmd.gov/ceqa/handbook/LST/LST.html</a>. In the event that the lead agency's localized air quality analysis requested above demonstrates that any criteria pollutant exceeds SCAQMD's localized significance threshold, the SCAQMD staff recommends, that, if feasible, the lead agency consider the mitigation measures found at the following website:

<a href="http://www.aqmd.gov/ceqa/handbook/mitigation/MM">http://www.aqmd.gov/ceqa/handbook/mitigation/MM</a> intro.html .

# Diesel Particulate Matter Cancer Risk Mitigation Measures for Operations

5

14. Because the lead agency has determined that the proposed project would have significant Diesel Particulate cancer health risks without mitigation, the SCAQMD recommends the following changes to the mitigation measures listed on page 27 of the DSEIR, if feasible:

## AQ-13 (Idling)

The City of Pomona shall require all solid waste collection and transfer trucks to avoid idling on site to the fullest extent feasible. This is defined for the solid waste collection trucks as a maximum of 5 minutes within the designated unloading bays, and no idling allowed for either collection or transfer truck at any other locations on site. Signs shall be posted along the on-site truck routes informing drivers that idling while on site is prohibited, except at the unloading bays, where signs shall be posted informing drivers that idling there is limited to a maximum of 5 minutes while unloading. Enforceability would require the proposed facility staff to monitor idling activity, restrict idling to the idling time used in the HRA (e.g., in the case of the Draft Supplemental EIR five minutes total on-site) and penalties for truck drivers that idle more than the time used in the HRA (fines, loss of contract, etc.