



South Coast Air Quality Management District

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

FAXED: April 5, 2006

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Mr. Jimmy C. Liao
City Planner/Project Coordinator/EIR Unit
Los Angeles Department of City Planning
200 North Spring Street, Room 750
Los Angeles, CA 90012

**Bradley Landfill and Recycling Center Transition Master Plan Draft
Environmental Impact Report (Draft EIR) No. ENV-2001-3267-EIR**

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 the Final Environmental Impact Report.

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 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,

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

Attachment

SS:GM

LAC060110-03
Control Number

Construction Emissions

1. Tables 4.4-6 and 4.4-8 do not accurately reflect peak daily Phase I construction emissions shown in the first table on page 3 of Appendix F2. These tables substantially underestimate actual Phase I construction emissions for some pollutants calculated for the proposed project and should be revised in the Final EIR to reflect actual Phase I construction emissions
2. The reference for the off-road equipment exhaust emission factors in Appendix F of the EIR states that composite emission factors were based on the CARB OFFROAD Model. The reference does not state whether the emission factors are fleet averages or individual engine year composite emission factors. Unless equipment years are specified as part of either the proposed project description or as a mitigation measure, off-road equipment emission factors should represent the fleet average of each equipment type.
3. Consistent with the SCAQMD's environmental justice program and policies, the SCAQMD recommends that the lead agency also evaluate localized air quality impacts during construction and operation. SCAQMD staff recommends that for this project and for future projects, the lead agency undertake the localized analysis to ensure that all feasible measures are implemented should the analysis demonstrate that construction NOx and CO emissions are significant. The methodology for conducting the localized significance thresholds analysis can be found on the SCAQMD website at: www.aqmd.gov/ceqa/handbook/LST/LST.html.

Mitigation Measures - Construction

4. Mitigation measures 4.4-1 and 4.4-8 improperly defer identifying a construction emission management plan and a fugitive dust control plan, respectively, until some indeterminate time in the future. As a result, the public is denied the ability to review and comment on the effectiveness of the measures to be included in the plans during the public review period for the Draft EIR. The SCAQMD recommends that these plans be developed and circulated for public review prior to certification of the Final EIR.
5. On page 4.4-24 of the Draft EIR the lead agency proposes mitigation measure 4.4-7 – use of CARB-verified particulate filter traps. The SCAQMD is aware of at least one diesel emission control technology that has been verified by CARB for off-road construction equipment; however the verification may not cover the specific engines installed on the construction equipment used for the proposed project. In order to determine the feasibility of the proposed mitigation measure, the SCAQMD recommends that lead agency compare the off-road engine information including the engine model year, the engine manufacturer, and the engine family number with the CARB website located at: <http://www.arb.ca.gov/diesel/verdev/verdev.htm/>. Even

though there may not be CARB-verified particulate traps for specific categories of construction equipment, installation of particulate filters should still be required as they will still provide a PM10 emission reduction benefit. Since diesel PM is also classified as carcinogenic, this will reduce potential PM exposures impacts. Therefore, it is recommended that mitigation measure 4.4-11 be modified to allow the lead agency more flexibility with regard to retrofitting construction equipment with particulate filters, similar to mitigation measure 4.4-10.

6. In a footnote in Volume II Appendix F on page 14, emission estimates for off-road diesel construction equipment for Phase 1b – TS/MRF Soil Import and Pad Construction, the lead agency states that “mitigation assumes use of PuriNOx fuel for off-road diesel construction equipment” and lists control efficiencies of 14 to 63 percent to reduce NOx and PM10 emissions. Use of PuriNOx or other emulsified diesel fuels is not included as a mitigation measure. To receive emission reduction credit for emulsified diesel fuels, they must be listed as a mitigation measure or implemented in an enforceable manner through permit conditions, contracts, or other binding agreements. In addition, the lead agency should investigate the use of PuriNOx with the Lubrizol brand of diesel oxidation catalyst to also reduce NOx emissions.
7. Because the short-term (construction) air quality impacts from the proposed project are estimated to exceed established daily significance thresholds for NO_x (Phases I and II) and particulate matter (PM10) (Phase I), the SCAQMD recommends that the lead agency consider modifying the following mitigation measures and adding additional mitigation measures to further reduce construction air quality impacts from the project, if applicable and feasible:

NO_x – Recommended Additions:

- Prohibit material delivery heavy-duty truck idling in excess of five minutes.
- Configure construction parking to minimize traffic interference.
- Provide temporary traffic controls such as a flag person, during all phases of construction to maintain smooth traffic flow.
- Schedule construction activities that affect traffic flow on the arterial system to off-peak hour to the extent practicable.
- Reroute construction trucks away from congested streets or sensitive receptor areas.
- Provide dedicated turn lanes for movement of construction trucks and equipment on- and off-site.
- Give preferential consideration to contractors who use clean fuel construction equipment; emulsified diesel fuels; construction equipment that uses low sulfur diesel and is equipped with oxidation catalysts, or other retrofit technologies, etc.

PM10 – Recommended Additions:

- Replace ground cover in disturbed areas inactive for ten days or more.
- Apply non-toxic soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for ten days or more).
- Install wheel washers where vehicles enter and exit the construction site onto paved roads or wash off trucks and any equipment leaving the site each trip.
- All streets shall be swept at least once a day using SCAQMD Rule 1186 certified street sweepers or roadway washing trucks or whenever visible soil materials are carried to adjacent streets (recommend water sweepers with reclaimed water).
- Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 mph.
- All trucks hauling dirt, sand, soil, or other loose materials are to be covered in accordance with requirements of CVC Section 23114.
- Appoint a construction relations officer to act as a community liaison concerning on-site construction activity including resolution of issues related to PM10 generation.

Health Risk Assessment (HRA)

8. Truck emissions in the emission inventory for comparison with the regional significance thresholds were developed using speed-rated EMFAC2002 emission factors. Truck emission rates for the health risk assessment (HRA) were prepared using a pre-1990 EPA diesel particulate emission factor. It is not clear why EMFAC2002 emission factors were used for the emissions inventory and pre-1990 EPA diesel particulate emission factors were used for the risk assessment. EMFAC2002 is the federal- and state-approved source for emission factors in California. A specific reference was not provided for the pre-1990 EPA diesel particulate emission factors, so SCAQMD staff could not verify the validity of the emission factor or whether it is appropriate for use in this specific application. In addition, the speed, temperature, humidity and load parameters were not provided for the pre-1990 EPA diesel particulate emission factors. The emissions for the trucks were developed from estimates for time idled, distance traveled, load on the engine, horsepower, fuel economy, etc. It is not clear that the estimates for type of engine, horsepower, fuel economy and load on the engine used in the emission rate estimates reflect the truck vehicle fleet proposed by the project.

The SCAQMD recommends that the Final EIR include an HRA based upon EMFAC2002 emission factors. The EMFAC2002 emission factors for both travel and idling should be used. If EMFAC2002 emission factors are not used documentation should be provided explaining why the alternative emission factors are more appropriate than EMFAC2002 emission factors, the on-road mobile source emission factors approved by EPA and CARB for use in California. The documentation of the alternative emission factors should show whether they are more or less conservative than the EMFAC2002 emission factors.

9. It is not clear that the source configuration matches the proposed project description. Based on the discussion on page 4.4-34, 4,000 tons of material per day would be delivered to the transfer facility, 1,000 tons of material would be delivered to the MRF and 1,260 tons of material would be delivered to the green waste processing area. Based on this information 80 percent of the material delivered to the site would be delivered to the TS/MRF and 20 percent to the green waste facility. Using the spatial allocation of the roads from the ISCST3 input file the round trip distance to the green waste processing area is approximately 2,000 meters (2 one-way trips x 1,000 meters) and the round trip distance to the TS/MRF would be 600 meters (2 one-way trips x 300 meters).

Page 4.4-34 states that there would be an increase of 867 truck trips. It would be more appropriate to distribute 175 trucks trips (122 SWCV truck trips and 54 transfer truck trips) and associated emissions along the 1,000-meter road to the green waste processing area and 701 trucks (486 SWCV truck trips and 214 transfer truck trips) and associated emissions along the 300-meter road to the TS/MRF. In addition, since the landfill would be closed no travel would occur over the landfill. Therefore, it is unclear why volume sources are placed over the landfill (FACE sources).

The Final EIR should describe the volume sources in detail (i.e., what the FACE sources represent) and why vehicles are traveling on the landfill after it is closed. The source configuration in the dispersion model used to estimate diesel exhaust concentrations in the Final EIR should more clearly and accurately represent the distribution of truck trips and emission source locations for the proposed project.

10. There is a discrepancy in the number of trucks evaluated in the HRA. The lead agency states on page 4.4-34 that there would be an increase of 867 truck trips, while the HRA estimates emissions from 851 truck trips. Operational emissions were estimated based on 404 routes (see page 12 of the Air Quality Technical Appendix Bradley Landfill Operational Emissions in Appendix F of the Draft EIR). However, using the same methodology used to estimate total trips in Table 3-13 from Tables 3-4, 3-7, and 3-11, it appears that there would be an increase of 1,448 truck trips.

Description	Total Trips	Truck Trips	Source
Existing	2,130	1,798	Table 3-4
Proposed Green Waste Expansion	1,125	1,032	Table 3-7
Proposed TS/MRF	2,834	2,214	Table 3-11
Additional	1,829*	1,448	*Table 3-13

* Additional truck trips estimated by subtracting the proposed truck trips in Tables 3-7 and 3-11 from the truck trips in Table 3-4.

The number of truck trips used to evaluate air toxic health impacts in the HRA should be consistent with the number of truck trips used to calculate impacts in other areas of the Final EIR.

11. Idling emissions were allocated to the volume source at the gate, but it does not appear the idling emissions were allocated to the volume sources at the TS/MRF or green waste processing area where it is reasonable to assume that refuse, transfer, and green waste trucks would idle. Table 4.4-13 states that TS/MRF trucks would idle for four minutes to unload, but it is not clear that the idling emissions were allocated to the TS/MRF building. It is also not clear why the lead agency assumes that trucks would continually idle less than the five minutes allowed by §2485, Chapter 10 - Mobile Source Operational Controls, Article 1 - Motor Vehicles, Division 3. Air Resources Board, Title 13, California Code of Regulations at the front gate, the TS/MRF and green waste processing area. Further, given the potential for trucks queuing until they can drop off or pick up materials, a more realistic assumption would be that trucks idle for three or four five-minute periods. The Final EIR should include references for the four-minute idling assumption or consider a more realistic idling time period and then remodel sources in the HRA to reflect the more realistic idling assumptions. For example, CARB's BURDEN model assumes each vehicle trip includes idling of up to 20 minutes per trip. Although this includes idling at intersections, this estimate could form the basis for a more realistic idling assumption.
12. Roadway sources are typically modeled as line sources. Line sources are volume sources that are placed according to Figure 4-8 in EPA User's Guide for the Industrial Source Complex (ISC3) Dispersion Model, Volume II - Description of Model Algorithms, EPA-454/B-95-003b (ISC3 User's Guide). Figure 1-8 of EPA's ISC3 User's Guide illustrates that line sources can be represented either by volume sources placed adjacent to each other or volume sources placed such that the centers of the volume sources are equivalent to two times the length of the volume width. The volume sources representing roadway traffic in the dispersion model were separated by distances that are greater than those prescribed by EPA's ICSC3 User's Guide. The HRA in the Final EIR should be based on a dispersion model with roadways modeled according to the EPA ISC3 User's Guide.
13. The HRA does not appear to include diesel emissions from off-road equipment presented in Tables 3-7 and 3-11 for the increased green waste and proposed TS/MRF. The Final EIR should evaluate emissions from off-road, as well as, on-road equipment. Emissions for off-road equipment should be estimated using CARB OFFROAD emission factors or manufacturer emission factors for the actual pieces of equipment proposed.
14. The landfill is currently 1,010 feet above sea level and the proposed project would increase the landfill height to 1,053 feet above sea level. Based on Figure 3-8, relative to San Fernando Road the landfill is approximately 140 feet high and that the proposed project would increase height to 183 feet high. Figure 3-5 appears to indicate that the landfill is approximately 3,000 feet at its longest width.

Based on the differences in elevation between the landfill, TS/MRF and San Fernando Road, it is not clear that conditions modeled using the flat terrain option represents anticipated terrain features of the proposed project. It is also not clear that the volume source release parameters representing the trucks as they travel below

grade was modeled correctly. The Final EIR should include a HRA with concentrations that have been modeled with the appropriate terrain elevations and truck exhaust release parameters.

15. On page 3-25 it is stated that the 55-foot high TS/MRF building elevation would be built below the adjacent grade of San Fernando Road, such that only the top of the TS/MRF building would be seen from San Fernando Road. The elevation of the green waste processing area could not be located in the Draft EIR. The elevations of terrain and emission sources should be clearly presented in the Final EIR because, as noted in the preceding paragraph, this could affect the results of the HRA.
16. On page 4.4-35 of the Draft EIR the lead agency states that the HRA assumes that 80 percent of the engines of the SWCV trucks delivering refuse and recyclables would be controlled to 85 percent in compliance with CARB's Solid Waste Collection Vehicle Diesel Retrofit Program. Further, it is stated that none of the transfer trucks would be retrofitted to comply with CARB's Diesel Retrofit Program. Because the Diesel Retrofit Program requires phasing in retrofits based on the engines' Tier category, it is unclear how the lead agency derived the 80 percent retrofit assumption. This needs to be explained in the Final EIR.

There is also no indication regarding how the lead agency expects to achieve the 85 percent control efficiency on which this assumption is based. The control technology used to achieve the 85 percent control efficiency needs to be identified in the Final EIR.

In the HRA analysis in Appendix F5 one of assumptions used for the analysis is that 80 percent of the transfer trucks will be controlled to 85 percent. First, this assumption is inconsistent with the statement on page 4.4-35 that it is assumed that none of the transfer trucks would be retrofitted to comply with CARB's Diesel Retrofit Program. As a result, it appears that the HRA underestimates emissions from transfer trucks. It is unclear from the analysis if this discrepancy also occurs in the analysis of operational emissions analysis. This apparent discrepancy needs to be corrected or explained in the Final EIR.

Operational Emission Estimates

17. In Volume 3 in Appendix F in the Air Quality Data section, the lead agency uses a 15-mile round trip mileage figure to estimate operational emissions during Phases I and II for trash and transfer truck activities. For trash truck activities, the 15-mile round trip figure appears to be underestimated because the Draft EIR states that Municipal Solid Waste (MSW) is generated for disposal from communities including the community areas that are farther from the Bradley Landfill than the 7.5 one-way mileage assumption made in the Draft EIR, e.g. the West San Fernando Valley (Simi Valley is 22.78 one-way miles from the Bradley Landfill); San Gabriel Valley (Covina 34.8 one-way miles), Long Beach (40.44 one-way miles), as well as communities throughout the City of Los Angeles and the eastern San Fernando Valley. In addition, the Draft EIR indicates that 60 percent of the Phase I (Volume III

Appendix F Section 3 page 4) will be trash trucks. During Phase II, the Draft EIR also estimates that 60 percent of the trash truck trips will come from non-Waste Management trash trucks (page 8). In the Final EIR, the lead should revise the round-trip mileage in its on-road emission estimates and revise its operational emission estimate tables in the Final EIR. Otherwise, the emissions estimated from the trash-truck could be substantially underestimated.

18. The 15-mile round trip used to estimate on-road vehicle emissions from transfer truck activities also appears to be underestimated considering that the Draft EIR states in Volume I, page 4.3-47 that 95 percent of the transfer trucks would transport waste to outlying landfills in the Antelope Valley and five percent of the transport trucks would transport waste to an outlying landfill in Riverside County (see also Volume II Appendix E page ii). The approximate one-way distances from the Bradley Landfill to those sites are 47 miles to Palmdale; 62 miles to Lancaster and 72 miles to Corona, respectively. Therefore, using the 15-miles as an assumption for estimating on-road vehicle emissions from the transfer trucks during Phase I and Phase II would substantially underestimate operational emissions for the proposed project. In the Final EIR more realistic mileage figures or a composite distance figure should be used that more accurately reflects the distances to the outlying landfills identified in the Draft EIR.

Mitigation Measures - Operation

19. Because the lead agency proposes to site the TS/MRF less than one-quarter mile from two residential sensitive receptors and long-term (operational) air quality impacts from the proposed project are estimated to exceed established daily significance thresholds for volatile organic compounds (VOC), nitrogen oxide (NO_x), and particulate matter (PM10), the SCAQMD recommends that the lead agency consider adding the following mitigation measures to further reduce operational air quality impacts from the project, if applicable and feasible:

NO_x – Recommended Additions:

- Provide minimum buffer zone of 300 meters between truck traffic and sensitive receptors;
- Re-route truck traffic by adding direct off-ramps for the truck traffic or by restricting truck traffic on certain sensitive routes;
- Improve traffic flow by signal synchronization;
- Enforce truck parking restrictions;
- Restrict truck idling; Restrict operation to “clean” trucks;
- Electrify service equipment facility;
- Use “clean” street sweepers for dust created by truck track out;
- Pave road and road shoulders;
- Require or provide incentives to use particulate traps;
- Conduct air quality monitoring at sensitive receptors; and

- Accelerate the conversion of Waste Management fleets to alternative clean fueled vehicles;
- Replace off-road mobile source equipment with alternative clean fueled equipment.

Odor Control

20. In Table 2-1 Sensitive Receptors and Their Respective Distances, the lead agency does not include the green and wood waste operation. In the Final EIR, the lead agency should include the distance from the green and wood waste operation to the sensitive receptor locations and also include the distances from the various operations of the proposed project to other businesses in the area as odors frequently generate complaints from workers at those locations as well.
21. In the Draft EIR, the lead agency proposes to expand the existing green and wood waste operation from 1,260 tons per day to 2,500 tons per day, essentially doubling the amount of green and wood waste processed. In addition, the lead agency proposes to operate a transfer station, processing 4,000 tons per day, and a materials recycling facility, processing 1,000 tons per day. The TS/MRF is proposed to be enclosed in a building with negative pressure and odor neutralizer mist to be sprayed at the exhaust fan exit points. No such building enclosure is identified for the green and wood waste operation. The SCAQMD records show that more than 350 complaints have been received since January 2003, alleging odors from Bradley Landfill. Most complaints were related to green and wood waste odors. Therefore, in addition to enclosing the new TS/MRF, the SCAQMD believes that additional control of odors is warranted for the proposed project and, therefore, also recommends enclosing the green and wood waste operation and that both enclosures should be vented to a biological, thermal, chemical or physical process odor control device as approved by the SCAQMD permitting process.
22. The SCAQMD disagrees with the lead agency's qualitative discussion that cumulative air quality impacts are less than significant. First, the SCAQMD recommends that if project-specific air quality impacts are concluded to be significant then cumulative impacts should also be considered significant. Second, the lead agency identifies 29 related projects in Table 2-4, but no effort is made to identify or quantify construction or operational air quality impacts from these related projects. Therefore, when considering construction and operational air quality impacts from the proposed project and the related projects, it is likely that significant adverse cumulative air quality impacts would result for those project-specific criteria pollutants that do not exceed applicable significance thresholds. The Final EIR needs to include a quantitative analysis demonstrating that cumulative construction and operational air quality impacts are not significant or change the conclusion to indicate that cumulative construction and operational air quality impacts are significant.