VI. ENVIRONMENTAL IMPACT ANALYSIS
B. AIR QUALITY

INTRODUCTION

For purposes of this Addendum, the air quality analysis was updated to reflect the changes to the Proposed Project as such changes would effect the prior environmental findings as presented in the 2003 certified EIR. In calculating the air quality emissions, the 2003 EIR analysis was based upon the computer screening model URBEMIS2002 for Windows (Version 7.4.2). In April 2005, the South Coast Air Quality Management District (SCAQMD) published an updated version of this model entitled URBEMIS2002 for Windows (Version 8.7). Accordingly, this analysis uses the most recent version (Version 8.7) in accordance with SCAQMD recommendations. Due to several enhancements, URBEMIS2002 for Windows (Version 8.7) uses a different file structure than previous versions of URBEMIS and project files generated by previous versions of URBEMIS are not readable by URBEMIS2002 (Version 8.7). Consequently, the modeling analysis for the Revised Project was re-created to simulate the prior input assumptions, with the following adjustments account for changes in the Proposed Project:

- The buildout year was adjusted from 2007 to 2010;
- The duration of construction period was changed from 18-24 months to 30-36 months;
    - The duration of the demolition phase was changed from 2 months to 5 months
    - The duration of the excavation phase was changed from 2 months to 5 months.
    - The duration of the building phase was adjusted from 12 months to 21 months;
- The extent of grading was increased from 250,000 cy of excavation and export to 600,000 cy of excavation and export.

For purposes of this comparative analysis, provided below are summary tables that identify the SCAQMD's thresholds of significance for construction and operation impacts. It should be noted that SCAQMD thresholds are reported in pounds per day (lbs/day), as reported in maximum concentrations per day for five criteria air pollutants, including: carbon monoxide (CO), ozone (O_3), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), and respirable particulate matter (PM_{10}). Consequently, adjustments to the construction schedule are effective in reducing or counteracting the increased volume of excavation/debris. The SCAQMD thresholds of significance are summarized in Table VI.B-1, below:

Table VI.B-1
SCAQMD Emissions Significance Thresholds (lbs/day)

Pollutant	Construction	Operation
ROG	75	55
NOx	100	55
CO	550	550
SOx	150	150
PM_{10}	150	150

Source: SCAQMD CEQA Air Quality Handbook, November, 1993 Rev.

2003 EIR Environmental Findings

Construction

The 2003 EIR found that for construction, the Original Proposed Project would exceed the SCAQMD's significance threshold criteria for fugitive dust, NOx, CO, and PM_{10}. The significance thresholds would not be exceeded for either ROG or SOx pollutants. Construction emissions estimations for the 2003 analysis were conducted assuming an approximately 18- to 22- month construction schedule. Construction-related air emissions would be generated through activities including demolition, grading, construction worker travel, delivery and hauling of materials, fuel combustion from on-site vehicles, and the application of architectural coatings. The total amount of earthwork and grading was based on an estimate of 250,000 cubic yards (cy) of cut and soil export from the Project Site. Demolition debris was estimated at 18,750 cubic feet of volume. Because the above-identified pollutants would exceed SCAQMD thresholds, construction air quality impacts were determined to be significant and unavoidable. For comparative purposes, the summary table of the 2003 EIR construction–related air quality analysis is presented in Table VI.B-2, below. As can be seen in Table VI.B-2, the construction emissions would not exceed SCAQMD thresholds for ROG or SO_x criteria pollutants. SCAQMD thresholds would be exceeded for NO_x CO, and $PM_{10.}$

Table VI.B-2
Maximum Daily Construction Emissions
as Reported in the 2003 Certified EIR[a]

Source	ROG	NO_x	CO	SO_2	PM_{10}
Phase 1 Demolition Activities					
Fugitive Dust	--	--	--	--	0.94[b]
Off-Road Diesel	26.67	196.71	203.09	--	8.71
On-Road Diesel	0.28	6.37	1.06	0.09	0.15
Worker Trips	0.37	0.70	7.46	0.00	0.03
Maximum lbs/day	27.32	203.788	211.61	0.09	9.83
Phase 2 Site Grading Emissions					
Fugitive Dust	--	--	--	--	191.00
Off-Road Diesel	37.27	286.80	274.72	--	12.96
On-Road Diesel	19.30	351.45	72.15	5.88	10.23
Worker Trips	0.14	0.06	1.67	0.00	0.02
Maximum lbs/day	56.71	638.31	348.54	5.88	214.21
Phase 3 – Building Construction					
Bldg. Const. - Off-Road Diesel	19.55	145.59	146.86	--	6.29
Bldg. Const. - Worker Trips	0.00	0.00	0.00	0.00	0.00
Architectural Coatings - Off-Gas	0.00	--	--	--	--
Architectural Coatings - Worker Trips	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	19.55	145.59	146.86	0.00	6.29
Total Construction Emissions	**56.71**	**638.31**	**348.54**	**5.88**	**214.21**
SCAQMD Thresholds	**550**	**75**	**100**	**150**	**150**
Significant Impact? (Yes/No)	**NO**	**YES**	**YES**	**NO**	**YES**

[a] *Emissions calculated by the California Air Resource Board's URBEMIS2002 for Windows (Version 7.4.2) Model.*
[b] *All emissions are projected without the implementation of mitigation measures.*

Source: Christopher A. Joseph & Associates, 2003.

Operation

The 2003 EIR operational air quality estimations were based on a maximum seating capacity of approximately 78,000 seats. Mobile source emissions during the hour before and after a Coliseum event would exceed SCAQMD thresholds for ROG, NOx, CO, and PM_{10} emissions. The threshold for SOx emissions would not be exceeded. The 2003 EIR also stated that even though emissions would sometimes exceed the SCAQMD thresholds, since the Original Proposed Project would contain fewer seats than the existing stadium, the operational air emissions on event days would be reduced as compared to sold-out events at the existing Coliseum. In addition, the time during which air quality standards would be exceeded would represent less than 1 percent of the time each year. Nevertheless, the Original Proposed Project would result in significant and unavoidable operational air quality impacts.

A Statement of Overriding Considerations was adopted for the Original Project's contribution to construction and operational air quality impacts.

For comparative purposes, the summary table of the 2003 EIR operational air quality analysis is presented in Table VI.B-3, below. As can be seen in Table VI.B-3, mobile source emissions would exceed SCAQMD thresholds for ROG, NO_x, CO and PM_{10} emissions on days when major events are held. It is important to note, however, that mobile air quality emissions would only be generated on days when major events are scheduled.

Table VI.B-3
Future Coliseum Mobile Emissions by Event
as Reported in the 2003 Certified EIR

Event Type	Maximum Attendance	Pollutant Emissions [a] (lbs/day)				
		ROG	NO_x	CO	SO_2	PM_{10}
Sold Out Event (78,000 seats)	78,000	1,705.04	257.64	2,811.06	2.19	201.13
SCAQMD THRESHOLDS		55	55	550	150	150
SIGNIFICANT IMPACT?(Yes/No)		**Yes**	**Yes**	**Yes**	**No**	**Yes**

[a] *Emissions calculated by the California Air Resource Board's URBEMIS2002 for Windows (Version 7.4.2) Model assumed 35 mile round trip for Coliseum patrons. Trip generation assumed to be 0.296 trips per person.*

Source: Christopher A. Joseph & Associates, 2003.

Mitigation Measures

The 2003 EIR adopted several mitigation measures designed to reduce the Project's impact on air quality. These mitigation measures are reproduced below:

Construction Phase Mitigation:

1. Haul trucks shall be staged on-site in the vacant parking areas within Exposition Park. Haul truck staging plan shall be subject to review by the City of Los Angeles Department of Building and Safety and the Department of Transportation. Trucks shall be called to the site by radio dispatch.

2. Diesel-powered equipment shall be located as far away as possible from sensitive land uses and areas. Specifically, diesel compressors, pumps and other stationary machinery shall be located to the extent feasible on the south side of the Coliseum or within the interior of the Coliseum to avoid air pollution impacts on passive recreational spaces in Exposition Park (such as the area north of the Coliseum and south of the museum complex).

3. Grading activities shall be restricted on exceedingly windy days (winds in excess of 25 mph) when fugitive dust emissions are likely to be carried off-site. All truck loads of export debris shall be covered or shall provide at least 2 feet of freeboard.

4. Ground wetting shall be required in accordance with SCAQMD Rule 403 for dust control during grading and construction.

5. Contractors shall cover any stockpiles of soil, sand and similar materials.

6. Equipment engines shall be maintained in proper tune.

7. Construction equipment shall be shut off to reduce idling when not in direct use for extended periods of time.

8. Contractors shall discontinue construction activities during second-stage smog alerts.

Operational Phase Mitigation:

1. To reduce the traffic-related air quality impact on the affected intersections, the Proposed Project shall implement the required traffic management measures described in Section IV.C.6 of the EIR (Traffic, Parking, and Access)..
2. The Proposed Project applicant shall comply with all requirements of the South Coast Air Quality Management District's Regulation 15, which attempts to reduce employee vehicle trips through the implementation of various transportation management strategies.

Environmental Impacts of the Revised Project

Construction

Construction air quality effects from the Revised Project would be substantially the same as those anticipated in the 2003 EIR. The construction activities used to estimate construction emissions for the Original Proposed Project, including demolition, grading, worker travel, hauling and delivery, fuel combustion from on-site equipment, and the application of architectural coatings would still occur under the Revised Project. However, under the Revised Project a greater amount of earthwork and grading would be required to construct stadium support facilities under the north sideline. Under the prior design, field level locker rooms, storage areas and maintenance facilities were proposed to remain in their current location on the south side of the stadium. Under the new design these areas will be expanded to the north side of the stadium, thus increasing the extent of grading and excavation by approximately 350,000 cy of soil. The construction period for the Revised Project would be expected to occur over approximately 30-36 months. Using the recently updated URBEMIS2002 for Windows (Version 8.7), construction-related emissions were re-calculated to take the above changes into consideration. As summarized in Table V.B.1, below, consistent with the findings of the certified EIR, construction-related emissions for NO_x, CO and PM_{10} would be significant prior to mitigation. ROG and SO_2 emissions would be below the SCAQMD's significance criteria and thus less than significant. After employing the same mitigation

measures that were defined in the prior EIR, the construction-related emissions after mitigation would remain significant and unavoidable for NO_x and CO emissions, would remain less than significant for ROG and SO_2 emissions, and would be reduced to less than significant levels for PM_{10} emissions (see Table VI.B-5). As these findings are substantially similar to the findings presented in the certified EIR, it can be concluded that the proposed revisions would not result in a substantial increase in the severity of environmental impacts with respect to construction- related air quality emissions.

Table V.B-4
Revised Project Maximum Daily Construction Emissions[a]

Source	ROG	NO_x	CO	SO_2	PM_{10}
Phase 1 Demolition Activities					
Fugitive Dust	--	--	--	--	5.14
Off-Road Diesel	24.60	166.96	195.61	--	6.54
On-Road Diesel	0.81	14.41	3.0	0.03	0.41
Worker Trips	0.31	0.37	7.41	0.00	0.03
Maximum lbs/day	25.72	181.74	206.02	0.03	12.12
Phase 2 Site Grading Emissions					
Fugitive Dust	--	--	--	--	805.07
Off-Road Diesel	37.27	262.85	297.00	--	10.90
On-Road Diesel	9.70	214.15	33.36	0.38	4.98
Worker Trips	0.13	0.07	1.47	0.00	0.02
Maximum lbs/day	47.10	477.07	331.83	0.38	820.97
Phase 3 – Building Construction					
Bldg. Const. - Off-Road Diesel	17.47	115.55	143.22	--	4.28
Bldg. Const. - Worker Trips	0.09	0.05	1.04	0.00	0.00
Architectural Coatings - Off-Gas	11.21	--	--	--	--
Architectural Coatings - Worker Trips	0.00	0.00	1.04	0.00	0.00
Maximum lbs/day	28.77	115.61	144.26	0.00	4.28
Max Lbs/day All Phases	**47.10**	**477.07**	**331.83**	**0.38**	**820.97**
SCAQMD Thresholds	**550**	**75**	**100**	**150**	**150**
Significant Impact? (Yes/No)	**NO**	**YES**	**YES**	**NO**	**YES**

[a] *Emissions calculated by the California Air Resource Board's URBEMIS2002 for Windows (Version 8.7.0).*
[b] *All emissions are projected without the implementation of mitigation measures.*

Source: Christopher A. Joseph & Associates, 2006.

Table V.B-5
Revised Project Daily Construction Emissions
Without and With Mitigation[a]

Source	ROG	NO_x	CO	SO_2	PM_{10}
Total Construction Emissions (Without Mitigation)	47.10	477.07	331.83	0.38	820.97
Total Construction Emissions (With Mitigation)	47.10	477.07	331.21	0.38	106.94
SCAQMD Thresholds	**550**	**75**	**100**	**150**	**150**
Significant Impact? (Yes/No)	**NO**	**YES**	**YES**	**NO**	**NO**

[a] *Emissions calculated by the California Air Resource Board's URBEMIS2002 for Windows (Version 8.7.0).*

Source: Christopher A. Joseph & Associates, 2006.

Operation

The Revised Project would not be expected to substantially increase the amount of air quality emissions as analyzed in the 2003 EIR. Like the Original Proposed Project, the Revised Project would include a maximum seating capacity of approximately 78,000 and would assume the NFL and USC football teams to be the primary tenants of the Coliseum in addition to its use as a concert, rally, and other sporting events venue. Since operational air quality emissions estimations in the 2003 EIR were based on the same assumptions as have been made for the Revised Project, operational air quality emissions would be expected to be approximately equal to the emissions estimated in the 2003 EIR. Nevertheless, to account for an increase in the project buildout year (from 2007 to 2010), the operational impacts of the Revised Project were re-calculated. The revised operational emissions are summarized below in Table VI.B-6. As summarized in Table VI.B-6, similar to the 2003 EIR findings, operational emissions would exceed the SQAQMD's significance criteria for ROG, NO_x, CO, and PM_{10}. Also similar to the EIR findings, emissions for SO_2 would be less than significant. It should be noted that in all cases the revised emission estimates are found to be lower than those concluded in the certified EIR. This estimated reduction in emissions can be attributable to several factors, including: (1) the revised URBEMIS model incorporates more accurate and up to date fleet vehicle emission standards, and (2) the future buildout year (from 2007 to 2010), which allows for greater vehicle emission reduction standards to be met. Nevertheless, the SCAQMD's significance criteria for ROG, NO_x, CO, and PM_{10} emissions would remain significant and unavoidable.

With regard to the criteria set forth in CEQA Section 15162 (a), the changes proposed by the 2006 Revised Project would not result in any new significant air quality impacts or result in a substantial increase in the severity of those effects previously identified. Therefore, the preparation of a subsequent environmental analysis is not warranted.

Table V.B-6
Future Coliseum Mobile Emissions by Event

Event Type	Maximum Attendance	Pollutant Emissions [a] (lbs/day)				
		ROG	NO_x	CO	SO_2	PM_{10}
Sold Out Event (78,000 seats)	78,000	1,230.45	158.55	1,642.93	1.26	193.84
SCAQMD THRESHOLDS		55	55	550	150	150
SIGNIFICANT IMPACT?(Yes/No)		**Yes**	**Yes**	**Yes**	**No**	**Yes**

[a] *Emissions calculated by the California Air Resource Board's Urbemis 2002 Model assumed 35 mile round trip for Coliseum patrons. Trip generation assumed to be 0.296 trips per person.*

Source: Christopher A. Joseph & Associates, 2006.

Mitigation Measures

The 2003 EIR adopted several mitigation measures designed to reduce the Project's impact on air quality. As no new significant impacts were identified, the Revised Project would implement the same mitigation measures (identified above and in Section VII, Mitigation Monitoring and Reporting Program).