



# **ENVIRONMENTAL AUDIT, INC.**®

1000-A Ortega Way, Placentia, CA 92870-7162  
714/632-8521 FAX: 714/632-6754

36<sup>th</sup> ANNIVERSARY  
[dstevens@envaudit.com](mailto:dstevens@envaudit.com)  
[mchoi@envaudit.com](mailto:mchoi@envaudit.com)

July 28, 2015  
Project No. 2955

Douglas P. Carstens  
Chatten-Brown & Carstens LLP  
2200 Pacific Coast Highway, Suite 318  
Hermosa Beach, CA 90254

**SUBJECT: Review of the Archer Forward: Campus Preservation and Improvement Plan EIR**

Dear Douglas Carstens:

We have reviewed the February 2014 Revised Draft Environmental Impact Report (DEIR) and the errata (Errata 1 and 2) included in the Final Environmental Impact Report (FEIR) for the “Archer Forward: Campus Preservation and Improvement Plan”. The analysis in the DEIR was based on a 4.5-6 year construction period, but the FEIR is based on a 3 year construction period. A compression in construction schedule of that magnitude should trigger, at a minimum, a re-evaluation of air quality and traffic associated with construction. However, the FEIR fails to adequately analyze several areas of concern associated with compacting a construction schedule. Further, the FEIR fails to provide adequate information to perform an independent analysis of the proposed changes. Outlined below are some deficiencies in the DEIR and FEIR due to the compressed construction schedule.

### **Air Quality**

- The numbers in the air quality appendices do not support the numbers presented in EIR. Table IV.B-13 (Mitigated Project Construction Emissions) show the peak value as 127 lb/day for NO<sub>x</sub> (actually it shows the peak at 111lb/day, but it’s a typo within the table). The table in Appendix F2 shows the peak as 94.9 lb/day NO<sub>x</sub>. Further, the CalEEMod outputs show 133.6 lb/day NO<sub>x</sub>. Neither of these values supports the value presented in the text of the DEIR.
- The lack of a 3 year construction schedule does not provide sufficient evidence that there is no change in peak day emissions. In fact, most of the data in the appendices would support a change in peak daily emissions due to overlap during Phase 1 and Phase 2 of the project.
- Based on the DEIR, the peak daily NO<sub>x</sub> emissions for construction occur during Months 14-16. Assuming no overlap in schedule will occur during the peak months, then Phase 1 and Phase 2 would have to overlap almost entirely to be completed in the remaining 2 years of the 3 year construction schedule presented in the FEIR. The chance of a new

peak day occurring during the first 6-7 months of the Phase 1/Phase 2 overlap is very high. If the first 6 months are staggered to avoid creating a new peak, there would be no realistic way to complete the project within the 3 year construction schedule without increasing the amount of construction occurring during day to day operations. Increasing day to day construction operations would merit further analysis to assure a new peak is not generated in later months.

- To determine the actual air quality impacts due to overlapping phases, the project would have to be remodeled in CalEEMod. However, new CalEEMod runs were not included in the FEIR.

### **Traffic**

As shown in Table IV.K-29, the peak traffic of 178 trips occurs during Phase 1b. Assuming no overlap during North Wing Renovation, Phase 1 Excavation, or the peak day, the remaining Phase 1 components have between 131 and 150 trips and would have to overlap with Phase 2. The original Phase 2, which builds the multipurpose and aquatic facilities separately, has 51 trips in the peak hour. Overlapping the original Phase 2 to any part of the remaining Phase 1 sections would change the minimum number of trips to 182, which is greater than the 178 trips described in the EIR. The results are the same in Table IV.K-29 which converts truck trips into passenger car equivalents. Using the information provided in the EIR, it appears that the peak traffic conditions would change for a 3 year construction schedule.

### **Health Risk**

- The DEIR is plagued with inconsistencies between the document and appendix. Using the appendix supporting documentation, the calculated the ground level concentration (GLC) should be 0.39 ug/m<sup>3</sup> instead of the 0.25 ug/m<sup>3</sup> found in the Appendix F.1-1(d).
- The DEIR claims 9.1 cancer cases per one million people. The tables in Appendix F.1-1(d) claims 8.2 cancer cases per million people. Using the corrected GLC, the 8.2 cancer cases per million people would scale up to 12.6 cancer cases per one million people for a 4.5 year construction schedule, which is above the CEQA threshold of 10 cancer cases per one million people. The 9.1 number used in the main text of the DEIR is unsupported by the appendix.
- In the tables in Appendix F.1-1(d), the diesel emission rate was based on approximately 10.8 hours per day of equipment operations. The AERMOD run, which models the dispersion of those diesel emissions, was based on 7 hours per day. Correcting this error in methodology would increase the GLC and, therefore, risk by 54% (as shown above).
- The diesel emission rates for the risk analysis were based on the 4.5 year construction schedule. Diesel emissions rates need to be readjusted for the 3 year schedule in order to correctly calculate health risk for construction. The actual effect on health risk cannot be determined without knowing if the hours per day or total PM would change due to a compressed schedule. Even if there were no change in total PM or daily construction hours, the diesel emission rate would still change (X pounds over 4.5 years will have a different emission rate than X pounds over 3 years), which requires the health risk to be re-evaluated.

- The health risk analysis in the EIR is based on the outdated 2003 OEHHA health risk assessment guidance. The new OEHHA guidance was adopted by the state on March 6, 2015, and adopted on June 5, 2015, by the AQMD, which governs regional air quality standards in the Los Angeles Basin. The new guidelines, as applied to this project, would increase the risk values substantially above those under prior guidelines. The cancer risk is expected to increase approximately 10 fold for short term events, such as construction, under the new guidelines because of the added sensitivity toward younger populations. The new guidance would push the already significant health risk under the old guidance well into the hundreds of cancer cases per million people.

These are obvious flaws in the analysis of the original construction schedule that merit further discussion/analysis in a revised and recirculated EIR to understand the impacts of a compressed 3 year construction schedule. At a minimum, a new construction schedule and equipment list would need to be provided for a proper analysis of the proposed changes to the project.

Please contact me if you have any further questions or comments.

Sincerely,

ENVIRONMENTAL AUDIT, INC.



Debbie Bright Stevens  
Vice President  
714-632-8521x241



Michael M. Choi  
Air Quality Specialist  
714-632-8521x227

DBS:mc