

# South Coast Air Quality Management District

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# <u>Review of the Recirculated Draft Subsequent Environmental Impact Report (SEIR)</u> <u>for the Auto Club Speedway Project</u>

South Coast Air Quality Management District (AQMD) staff appreciates the opportunity to comment on the above-mentioned document, and that the lead agency will accept comments after the close of the comment period (March 26, 2010 to May 25, 2010). Neither the Initial Study, nor the Recirculated Draft SEIR were provided to the AQMD until April 27, 2010. Pursuant to Public Resources Code (PRC) 15082 and 15086, please ensure that the AQMD receives a copy of all future CEQA documents from your agency. The following comments are intended to provide guidance to the lead agency and should be incorporated into the Final SEIR.

AQMD staff is concerned that the proposed operation of the drag strip on the north side of the project site will bring a potentially significant source of emissions in close proximity to residences. AQMD staff recognizes the difficulty in quantifying emissions from a unique source like a drag strip, however staff is concerned that the lead agency prematurely concluded that air quality impacts are less than significant without fully analyzing the proposed project. The air quality analysis in the Recirculated Draft SEIR is incomplete. In addition, the limited analysis underestimates air quality impacts by including incorrect calculation methodologies, omitting any criteria pollutant analysis, excluding some emission sources, and potentially underreporting emission rates.

AQMD staff is especially concerned about the proposed project and its potential impacts given the history of air quality complaints about this facility over the past several years. AQMD staff strongly recommends that the lead agency consider each of the detailed comments in the attachment, and provide a revised and comprehensive analysis to the public with sufficient time to review and provide comments.

Pursuant to Public Resources Code Section 21092.5, please provide the AQMD staff with written responses to all comments contained herein prior to the adoption of the Final SEIR. Further, staff is available to work with the lead agency to address these issues and

any other questions that may arise. Please contact Ian MacMillan, Program Supervisor, CEQA Section, at (909) 396-3244, if you have any questions regarding the enclosed comments.

Sincerely,

In V. M. Mill

Ian MacMillan Program Supervisor, CEQA Inter-Governmental Review Planning, Rule Development & Area Sources

Attachment

SN:IM

SBC100422-01 Control Number

## June 3, 2010

# **GENERAL COMMENTS**

## Availability of CEQA Documents for Project

 As indicated in Appendix C of the Recirculated Draft SEIR, the AQMD was not included in the distribution list for the Initial Study, and also did not receive a copy of the Recirculated Draft SEIR until it requested one from the lead agency on April 27, 2010. AQMD staff is concerned that it was not informed about this project by the lead agency, especially considering the air quality complaints regarding operations at the project site received both by the AQMD and the lead agency. Pursuant to Public Resources Code (PRC) § 15082 and 15086, please ensure that AQMD receives a copy of all future CEQA documents from your agency.

#### Adequacy of Air Quality Analysis in Initial Study and Recirculated Draft SEIR

- 2. As indicated in Comment #1 above, the AQMD staff was unaware of this project during the comment period for the Initial Study. The Recirculated Draft SEIR relies on the analysis in the Initial Study and on a limited Air Quality Modeling Technical Study to determine that air quality impacts are less than significant for this project. However, the analyses in the Initial Study and in the Recirculated Draft SEIR do not follow standard AQMD guidance and appear to underestimate potential air quality impacts. Prior to certifying the Final SEIR, AQMD staff strongly recommends that the lead agency present a revised air quality analysis following standard guidance available on our website<sup>1</sup>.
- 3. Part of the rationale for not completing a comprehensive air quality analysis in the Recirculated Draft SEIR is explained on pages 7-8 of the Initial Study. It states that the project will not expose sensitive receptors (e.g., residences) to substantial pollutant concentrations because "The project involves modifying noise standards, and does not include any physical or programmatic changes that might alter sensitive receptor exposure to air pollutants. No impact will result." However, this statement appears to be contradicted in the Recirculated Draft SEIR on page 3-7, where the lead agency states that "Modifying the noise standard . . . could permit the operation of additional classes of drag cars ....". Further, the northerly drag strip location is approximately 600 feet from the closest residence, whereas the previous southerly drag strip location was nearly 3200 feet from the closest residence. These two physical changes in the environment have the effect of potentially increasing emissions and moving emission sources substantially closer to sensitive receptors. Therefore, AQMD staff strongly recommends that the lead agency provide further analysis of these impacts prior to certification of the Final SEIR pursuant to Public Resources Code §15126.2 and 15162.
- 4. On page 0.1-2 and page 3-7 of the Recirculated Draft SEIR, the lead agency states that Revision 11 would remove any restriction on racing within the facility and would allow for racing at any location at the Speedway Facility as long as it meets the proposed noise standard. Pursuant to Public Resources Code §15064 the lead agency must consider all potential environmental effects of a project. The analysis presented in the current Recirculated Draft SEIR is limited to the relocated drag strip. Any future relocation or substantial modification of racing activities may have environmental impacts other than noise (e.g., air quality, greenhouse gases, etc.). If

<sup>&</sup>lt;sup>1</sup> <u>http://www.aqmd.gov/ceqa/hdbk.html</u>

the lead agency wishes to provide unlimited racing activity at the project site, an analysis of the potential environmental effects of this action should be presented to the public prior to modifying operations.

5. The potential for air quality impacts from accidents and subsequent racing vehicle fires at the drag strip was not discussed in the Recirculated Draft SEIR or in the Initial Study. While the toxic emissions from these unique events may be difficult to quantify, a discussion of the frequency and scale of these foreseeable accidental releases and the potential types of emissions from them is warranted as the source of this hazard will be substantially closer to sensitive receptors with the proposed new drag strip operations.

# **EMISSIONS CALCULATIONS**

#### Fuel Usage

6. The Air Quality Modeling Technical Study determined emission rates for operations at the northern drag strip using emission factors from US EPA in a document titled "The Master List of Compounds Emitted by Mobile Sources" (EPA List). However, as noted in the companion report to this document<sup>2</sup>, the EPA List primarily studies onroad "street legal" vehicles and does not include emission factors for typical racing vehicles that would use the drag strip. The nonroad vehicles included in the EPA List are also not typical of vehicles that will operate at the project site (e.g., trains, construction equipment, lawn mowers, marine vessels, etc.). As indicated in Table 3-2 of the Recirculated Draft EIR, a substantial proportion of vehicles racing on the new drag strip will not be "street legal" and many may also use non-standard fuels such as nitromethane, leaded gasoline, methanol, nitrous oxide, diesel (for support vehicles), etc.

In order to account for the alternate engines and fuels, a scaling factor of 4.0 is assumed during vehicle acceleration in the Air Quality Modeling Technical Study. It is unclear if this ad-hoc assumption about increased emissions reasonably captures the correct volume of contaminants. For example, the emission factors from the EPA List are derived from vehicle miles travelled (VMT) from on-road vehicles that presumably achieve approximately 0.05 gallons per mile (20 mpg) fuel efficiency. On a fuel consumption basis, the factor of 4.0 increase used in the Recirculated Draft SEIR reduces the fuel efficiency to approximately 0.2 gallons per mile. However, drag racing vehicles may consume more than 10 gallons for start-up, staging, and a single <sup>1</sup>/<sub>4</sub> mile run<sup>3</sup>. This equates to a potential 200-fold underestimation of emissions.

AQMD staff recognizes the complexity in analyzing potential emissions from a unique source such as a drag strip. Applicable emission factors may not be readily available from either EPA or CARB. AQMD staff therefore recommends that the lead agency present a qualitative discussion comparing emissions from drag strip vehicles and vehicles used in the EPA List. In addition, when revising the quantitative analysis the lead agency should use the emission factors based on horsepower rather than mileage from the EPA List. These emission factors should then be corrected for total fuel consumption for typical events at the project site.

<sup>&</sup>lt;sup>2</sup> Expanding and Updating the Master List of Compounds Emitted by Mobile Sources – Phase III. Available at: <u>http://www.epa.gov/oms/regs/toxics/420r06005.pdf</u>

<sup>&</sup>lt;sup>3</sup> <u>http://nhra.org/streetlegal/funfacts.html</u>

#### Speciated Emissions

7. The speciation of contaminants emitted during racing is based on the EPA List, however this list was compiled using unleaded gasoline available for onroad vehicles. Fuels used in drag racing are exempt from California Air Resources Board standards for reformulated gasoline<sup>4</sup>, and may include mixtures such as methanol, leaded gasoline, nitromethane, and nitrous oxide. The only modification to the speciated emissions in the Air Quality Modeling Technical Study included an assumed 8-fold increase in fuel usage for nitromethane fueled vehicles, and a 10-fold increase in ammonia and formaldehyde emissions. References for these assumptions were not provided. AQMD staff recommends that further analysis be provided for emissions from these alternate fuels prior to certifying the Final SEIR. This should also include a description of the typical composition of alternate fuels utilized at the track.

## Proportion of Alternate Fueled Vehicles

8. The Air Quality Modeling Technical Study stated that only 1% of all races would include vehicles that use nitromethane. The proportion of other alternate fuels used in races is unclear, however the project description states that the vehicle fleet mix may change if the project is approved. The Final SEIR should include a breakdown of the approximate number of races for each specific fuel type that are expected during project operations.

#### Additional Pollutants not Included in Recirculated Draft SEIR

9. The Recirculated Draft SEIR did not determine if Ambient Air Quality Standards or (AAQS) or AQMD thresholds would be exceeded from project operations. Pollutants not analyzed include criteria pollutants such as NO2, PM10, PM2.5, CO, and Lead. Adverse health effects are associated with short term exposure to each of these pollutants, and the potentially substantial emissions of these contaminants should be analyzed prior to certifying the Final SEIR. This analysis should include an evaluation of regional and localized impacts consistent with standard AQMD guidance.<sup>5</sup>

#### Additional Sources of Emission not Included in Recirculated Draft SEIR

10. Several sources of emissions have not been assessed in the Recirculated Draft SEIR. These include racing emissions from tires during "burn-outs"; brake wear; and tuning, maintenance, and idling of racing and support vehicles. Information regarding the potential emissions from these sources is available from US EPA AP-42 section 2.5 (for burning tires) and EMFAC2007 (for brake wear). Emissions from tuning/idling should be based on fuel consumption for racing vehicles, and EMFAC2007 or OFFROAD2007 for support vehicles.

## **AVERAGING OF EMISSIONS**

Number of Vehicles Operating at Track

11. The Air Quality Modeling Technical Study states that there will be approximately 200 drag races per day at the project site with a total of 13,200 races per year. The air

<sup>&</sup>lt;sup>4</sup> <u>http://www.arb.ca.gov/enf/advs/advs397.pdf</u>

<sup>&</sup>lt;sup>5</sup> www.aqmd.gov/ceqa/hdbk.html

quality analysis then incorrectly assumes that there will only be emissions from 200 vehicles per day. As two vehicles typically participate in each race, the emissions appear to be underestimated by 50%.

#### Emissions Averaged on Annual Basis

12. Based on the emissions calculation sheets provided directly to AQMD staff that were not included in the Recirculated Draft SEIR, the vehicle emissions are calculated by multiplying the grams/mile emission factor from the EPA List by the total number of vehicle miles travelled per year. This calculation methodology substantially underestimates hourly and annual ground level concentrations (GLC's).

According to the Air Quality Modeling Technical Study, racing is only predicted to occur for a few hours a day for just 66 days per year. The majority of hours in a year will have no emissions from the project. By including hours with zero emissions into the average, the actual high hourly emissions are reduced to a much lower level. In order to describe to the public the potential short term health effects of this project, the lead agency should provide maximum hourly emissions estimates and model these emissions during all expected operating hours of the project. This maximum rate should be calculated for the worst case engine and fuel fleet mix.

Further, for estimating annual GLCs, the model files include the assumption that emissions may occur 24 hours per day. In order to account for meteorological conditions only during project operations, the hourly scalar factor should be used in the model analysis to match the expected operating hours of the project. The long term average emission rates should then be modified accordingly.

#### VHT Emissions Calculations

13. In May 2009, the Auto Club Speedway facility received a Notice of Compliance from the AQMD regarding its application of VOC-containing materials (specifically methanol) to the drag strip during racing activities. Subsequently, facility representatives have indicated to AQMD staff that these coatings are no longer in use, and have been replaced with very low VOC (<1%) coatings. In order to reduce the potential for future emissions of VOCs from coating the drag strip, a mitigation measure should be added to the Final SEIR that prohibits the application of coatings with VOC content greater than 1% at all future drag strip events. In addition, the Final SEIR should revisit the ingredient list for coatings applied to the drag strip and present an updated emissions estimate.

# HEALTH RISK ASSESSMENT

## 8 hour RELs

14. In February 2009, the Office of Environmental Health Hazard Assessment (OEHHA) released updated risk assessment health values, including a new 8-hour REL for six compounds (acetaldehyde, acrolein, arsenic, formaldehyde, manganese, and mercury).<sup>6</sup> The health risk assessment should be revised to reflect these more recent health standards.

<sup>6</sup> 

<sup>&</sup>lt;sup>6</sup> <u>http://www.arb.ca.gov/toxics/healthval/healthval.htm</u>

#### Location of Receptors

15. The air quality ISC model run uses a 2 km grid with 100 m spacing between receptors. However this grid spacing extends less than one quarter mile to the east of project operations, and only 500 feet into the nearest neighborhood. No health risk values are presented for residences to the east of the project site. In addition, none of the nearby schools mentioned in the Recirculated Draft SEIR is explicitly evaluated in the model. The receptor grid should be extended prior to certifying the Final SEIR, and discrete health risk values should be reported at the closest residential receptor to the east and at each school identified in the Recirculated Draft SEIR.

#### Odors Odors

16. As indicated on page 8-1 of the Recirculated Draft SEIR, AQMD has received several complaints regarding odor impacts from the facility in the past few years. Specifically, from June 2006 through May 2010, the AQMD has received 51 complaints from local residents alleging the Auto Club Speedway as the source of odors or other emissions. The lead agency concludes that impacts are less than significant because the temporary monitoring by AQMD staff that occurred in the spring of 2009 did not result in any Notices of Violation. This analysis by the lead agency does not evaluate the physical changes to the environment (closer drag strip, different operating hours, and a different racing fleet mix) that may occur due to project activities, or the variable nature of odorous emissions. Prior to certifying the Final SEIR, the lead agency should present a more robust analysis of potential odor impacts from the project.

## **MITIGATION MEASURES**

- 17. If air quality impacts are found to be significant after re-evaluation based on the preceding comments, the lead agency may want to consider the following mitigation measures.
  - Limit the number of vehicles that can race in a single day, and the number of vehicles that can race in a year.
  - Limit the number of vehicles that can race in one hour.
  - Limit the types of cars that can race in a single day or year based on fuel type or expected emissions from a specific vehicle class.
  - The project proponent should establish a monitoring program to evaluate emissions from project operations.
  - The project proponent should provide a contact person who can receive concerns from the community, especially with regards to air quality and odors.
  - Limit the types of fuels used on the drag strip.
  - Prohibit drag strip coatings with a VOC content greater than 1%.