

Mr. Patrick Alford  
Planning Manager, City of Newport Beach  
3300 Newport Blvd  
Newport Beach, CA 92663



Dear Mr. Alford:

The Banning Ranch DEIR states on page 21 of the Air Quality section under Mass Emission Thresholds that Mitigation Measures 4.10-1 through 4.10-4 will be used to reduce NOx emissions from construction. MM4.0-1 deals with Tier 3 and 4 certified diesel equipment and says that Tier 3 is mandatory, but Tier 4 is required only where available.

What does “only where available” mean and do the Project Applicants intend to use Tier 4 equipment to reduce NOx emissions, given that it is available now and the need for Tier 4 equipment isn’t anticipated until 2014, according to this document? On May 11, 2004, the EPA introduced Tier 4 emissions standards that are to be phased in from 2008 to 2015. These standards reduce emissions of diesel particulate matter (PM) and nitrogen oxide (NOx) by about 90% and if adhered to by the use of Tier 4 equipment could reduce the impacts of NOx from significant and unavoidable to less than significant. It could also greatly reduce the emissions of other criteria pollutants like PM10 and PM2.5, which are highly toxic.

A study in 2006, by the Union of Concerned Scientists on the health risks of construction pollution in California stated that in 1998, the California Air Resources Board (CARB) estimated that diesel exhaust is responsible for 70 % of the state’s risk of cancer from airborne toxins:

**“The Health Risks of Construction Pollution in California**

Using established U.S. Environmental Protection Agency (EPA) and California Air Resources Board (CARB) methods to quantify the impact of air pollution, the Union of Concerned Scientists (UCS) estimates that construction equipment emissions statewide are responsible for:

- more than 1,100 premature deaths per year
- more than 1,000 hospital admissions for cardiovascular and respiratory illness
- 2,500 cases of acute bronchitis
- tens of thousands of asthma attacks and other lower respiratory symptoms

This pollution is hurting the state’s economy as well. Construction equipment is critical to the building industry (a sector of the economy worth \$60 billion per year) and instrumental in maintaining and building our roads and highways (on which California spent eight billion dollars last year). But the pollution from this equipment results in more than nine billion

dollars in annual public health costs, including hundreds of thousands of lost work days and school absences.

The impact of several pollutants that comprise diesel exhaust must be taken into account:

- Particulate matter (PM). Also known as soot, these small particles (25 times smaller than the width of a human hair) are released directly from the tailpipe or formed indirectly from emissions of NO<sub>x</sub> and sulfur oxides (SO<sub>x</sub>). PM can penetrate deeply into the lungs, causing or aggravating a variety of respiratory and cardiovascular illnesses and even leading in some cases to premature death (Pope 2002, Krewski 2000, Samet 2000).
- Smog-forming pollutants. NO<sub>x</sub> and hydrocarbons react in the presence of sunlight to form ozone (smog), which can damage the respiratory tract, reduce lung function, exacerbate asthma, aggravate chronic lung diseases, and also cause premature death (White 1994, Koren 1995, Thurston 2001, Bell 2005). As much as 10 to 20 percent of all summertime hospital visits and admissions for respiratory illness are associated with ozone, and more than 90 percent of Californians live in areas that do not comply with federal ozone standards (Thurston 1992, 1994).
- Air toxics. The state of California has classified diesel exhaust and more than 40 compounds in diesel exhaust as toxic air contaminants.<sup>7</sup> Exposure to these chemicals can cause cancer, damage to fetuses, and other serious health and reproductive problems. CARB has estimated that diesel exhaust is responsible for 70 percent of the state's risk of cancer from airborne toxics (CARB 1998)."

[http://www.ucsus.org/assets/documents/clean\\_vehicles/digging-up-trouble.pdf](http://www.ucsus.org/assets/documents/clean_vehicles/digging-up-trouble.pdf)

The Mass Emission Thresholds section also says that emission reductions achieved with MMs 4.10-2 through 4.10-4 are not quantifiable in the CalEEMod model, which is being used to estimate emission reductions, but would potentially reduce pollutant emissions below those shown in Table 4.10-8.

Please clarify what "not quantifiable" means with regard to the CalEEMod model. If MMs 4.10-2 through 4 are not quantifiable in the CalEEMod model, are they quantifiable in some other model? And if not, how is it known to what levels they'll reduce pollutant emissions? How can it be said with certainty that the levels will be below significance for any of the toxins listed in the table, NO<sub>x</sub> in particular?

When labels like "sensitive receptors" are used in documents like a DEIR it's easy to forget that actual living and breathing human beings, including pregnant women, children, the aged and the infirm, are being exposed to unsafe levels of pollutants. In this case, the only way to protect them from the health risks of emissions like NO<sub>x</sub> is to use Tier 4 equipment as

recommended in MM 4.10-1 and/or to avoid the concurrent remediation and grading that would cause the exceedances of NOx and other air toxins.

Further, as shown in Table 4.10-8 on page 21, the use of approximately 50 percent Tier 3 and 50 percent Tier 4 diesel engine equipment would reduce NOx emissions below the SCAQMD CEQA threshold value and the following is stated: “It is noted that the use of all Tier 3 equipment and no Tier 4 equipment would not reduce NOx emissions below the SCAQMD thresholds for all construction years. Although the data in Table 4.10-8 shows that emissions of all pollutants would be less than the SCAQMD CEQA thresholds with approximately 50 percent Tier 3 and 50 percent Tier 4 diesel engine equipment, the availability of sufficient numbers of Tier 4 equipment in 2014 and the following years cannot be assured. Therefore, the Project construction emissions would be a potentially significant and unavoidable impact.”

And what recourse will local residents, including the pregnant women, children, the aged and those with respiratory conditions, have if their health is adversely affected by these “potentially significant and unavoidable impacts”? Has the city given any thought to the potentially significant and unavoidable long-term costs that might occur if SCAQMD CEQA thresholds are not observed and the public is exposed to unsafe levels of air toxins and pollutants over the 9-13 years of construction and beyond, due to population growth and traffic congestion?

Why are the impacts unavoidable? If the Project Applicant cannot guarantee the use of Tier 4 equipment, then they can avoid concurrent remediation and grading, which would reduce the use of the heavy equipment causing these impacts. Why isn't that suggested in the DEIR as a possible mitigation in order to avoid significant impacts?


In Section 1-11 of the Executive Summary, the Newport Banning Ranch DEIR refers to the City of Newport Beach General Plan Final EIR, but the Banning Ranch DEIR doesn't cross-reference the General Plan FEIR, which should be done for clarity. Apparently in approving the General Plan project, the City approved a Statement of Overriding Considerations, which notes that there are “economic, social, and other public benefits that outweigh the significant and unavoidable impacts associated with the General Plan project (Threshold 4.2-3).”

Will this Statement of Overriding Considerations also apply to the Banning Ranch Project and this DEIR? If so, what significant and avoidable impacts are they referring to? Benzene, NOx, particulate matter and the other DEIR criteria pollutants have known health risks that include cancer, respiratory disease and increased morbidity (death), which is why they're regulated by state and federal agencies. Will these risks to Newport Beach residents be impacts that would be considered negotiable in favor of economic, social and other public benefits?

Also, how are the regulating agencies made aware that exceedances will occur when remediation and grading are concurrent and Tier 4 equipment is not used? Will the public be alerted that air toxins may exceed safe levels during at least five of the ten construction years, according to this report?

Thank you for taking the time to read my letter. I'm sure you consider these questions as important as I do, and I await your response.

Yours truly,

  
10 Arises Ct  
Newport Beach CA 92663