



South Coast  
Air Quality Management District

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July 5, 2011

**Review of the Draft Gateway Cities Council of Governments  
Air Quality Action Plan Health Risk Assessment Protocol**

The South Coast Air Quality Management District (AQMD) appreciates the opportunity to comment on the above-mentioned document. The following comments are meant as guidance for the lead agency and should be considered prior to finalizing the Air Quality Action Plan (AQAP) Health Risk Assessment (HRA) protocol.

It is our understanding that the AQAP HRA will be used to determine the potential health risks from air pollution to those living and working within the Gateway Cities jurisdiction. This HRA will take into account recent developments that occurred after the preparation of other air quality studies such as the MATES III study conducted by AQMD. Some of the major updates will be the inclusion of potential renovation of the I-710 freeway, revision of motor vehicle emission factors based on recent ARB rulemaking, and evaluation of air quality impacts at a finer resolution than previously studied at this geographic scale. The results of this HRA will be used to inform the Gateway Cities about potential future air quality impacts, and to provide a basis for considering future actions that can improve air quality. AQMD staff supports Gateway Cities COG's proactive approach to improving air quality, and looks forward to continuing to work collaboratively to achieve this goal.

The attached detailed comments are preliminary and based on the June 16, 2011 draft protocol. AQMD staff cannot provide final comments without the ability to review the draft I-710 EIR HRA in depth as it is unclear if all methods proposed to ensure consistency with the AQAP HRA are appropriate. AQMD staff is available to work with the Gateway Cities COG to address these issues. Should you have any questions, please contact Ian MacMillan, Program Supervisor CEQA IGR at (909) 396-3244.

Sincerely,

A handwritten signature in black ink that reads "Susan Nakamura".

Susan Nakamura  
Planning Manager

SN:IM

### **1) Construction Impacts Should be Included in the I-710 EIR HRA**

AQMD staff appreciates that a potential I-710 construction scenario was prepared for inclusion in the AQAP HRA. However, based on substantial concerns raised by the public and AQMD staff, the I-710 Corridor Project Committee voted to include construction impacts in the I-710 EIR HRA, consistent with the requirements of CEQA. However, it would appear from recent discussions for the AQAP HRA that these construction-related impacts might only be considered in the AQAP HRA and not in the I-710 EIR HRA. AQMD staff strongly encourages the Gateway Cities and Metro to include these construction related impacts in the I-710 EIR. These are impacts directly attributable to the proposed project, and need to be considered by the lead agency before a decision is made to proceed with the project.

### **2) Traffic during Freeway Construction**

Based on information provided in the AQAP HRA draft protocol, it is unclear to what extent traffic related impacts will be considered from I-710 construction activities. For example, several on-ramps and off-ramps are potentially scheduled for closure for more than one year at a time. The re-routing of traffic may have considerable air quality impacts due to increased congestion or altering of traffic patterns. These impacts should be evaluated in the I-710 EIR HRA and the AQAP HRA.

### **3) Cumulative Construction Impacts**

Based on information provided in the AQAP HRA draft protocol, only I-710 construction impacts will be considered. As many other construction projects are being considered for freeways in the Gateway Cities, the I-710 EIR HRA and the AQAP HRA should consider the potential cumulative impact of major construction on multiple freeways if there is a possibility of overlapping construction.

### **4) “On the Ground” Spot Checking of Emission Sources**

The AQAP HRA relies heavily on AQMD emissions estimated for a 2 km grid. This 2 km source grid was originally developed to evaluate impacts for an overlapping 2 km receptor grid. Because the AQAP HRA will evaluate receptor impacts at a much finer resolution (e.g., census block), care should be taken to ensure that the coarse source grid is applicable at this finer receptor scale. The AQAP HRA team should visit some areas and facilities to determine the validity of smoothing emissions across a 2 km grid. For example, there may be some areas with substantial off-road diesel equipment localized in a small industrialized area, however those emissions could be spread across a much larger geographic area in AQMD’s original dataset. Without considering these effects, the AQAP HRA may miss some crucial “hot spot” areas to focus future mitigation efforts.

### **5) PM Mortality**

AQMD staff concurs that the AQAP HRA should include an estimate of PM Mortality. The method specified by ARB and EPA should be appropriate based on the geographic scale proposed for the AQAP HRA.

## **6) Mitigation Process**

Although the proposed AQAP HRA draft protocol contains considerable detail regarding the assessment of potential air quality impacts, the process to be used to determine potential mitigation strategies is still vague. AQMD staff recommends that Gateway Cities provide a more detailed framework for conceiving and implementing mitigation measures before the AQAP HRA proceeds too much further. As the mitigation measures are the most important part of the AQAP, care should be taken to ensure that adequate resources are made available to evaluate their effectiveness and to ensure public and stakeholder input.

## **7) Hot Spot Analysis of “Average” Area**

The draft AQAP HRA protocol proposes to evaluate up to three hot spot areas at a more detailed level after completing the initial dispersion modeling. The hot spot modeling could be performed using a model such as CALINE 4 or potentially AERMOD. At this early stage it would seem that three locations in close proximity to a freeway may present the highest potential risk. If this is the case, the Gateway Cities may consider performing a hot spot analysis on the two highest freeway areas, and one “average” freeway area. In this way, the public could see a typical risk associated with proximity to freeways in comparison to background and hot spot levels. There is the possibility that areas that are not proximate to a freeway will have a potentially high risk. In addition the AQAP HRA should leave open the possibility of evaluating additional non-freeway hot spots (such as areas near concentrated sources of off-road diesel equipment, or facilities with substantial trucking, or significant point sources).

## **8) New OFFROAD Model**

The draft AQAP HRA protocol proposes to make adjustments to ARB OFFROAD 2007 model to evaluate potential emissions from off-road diesel equipment. As stated in ARB’s informal comment letter dated June 1, 2011, the new EMFAC 2010 model is set to be released later this summer. AQMD staff recommends that the AQAP HRA use either the OFFROAD 2007 model, or the EMFAC 2010 model to estimate off-road equipment impacts. Modifying the OFFROAD 2007 model for future years based on regulatory documentation should not be performed unless the specific method chosen is explicitly endorsed by ARB.