

DOCKETED

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**Attachment: BAAQMD's Comments on the California Energy Commission's™
Draft Solicitation Concepts for Renewable Hydrogen Transportation Fuel Production
Facilities & Systems**

Signed comment letter on BAAQMD's Comments on the California Energy Commission's™ Draft Solicitation Concepts for Renewable Hydrogen Transportation Fuel Production Facilities & Systems is attached.

Additional submitted attachment is included below.



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AIR QUALITY
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DISTRICT

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EXECUTIVE OFFICER/APCO

August 15, 2017

Matthew Ong
California Energy Commission
1516 Ninth Street
Sacramento, CA 95814

RE: Comments on the California Energy Commission's Draft Solicitation
Concepts for Renewable Hydrogen Transportation Fuel Production
Facilities & Systems

Dear Mr. Ong:

On behalf of the Bay Area Air Quality Management District (Air District), I am writing to provide you with the Air District's comments on the California Energy Commission's (CEC) *Draft Solicitation Concepts for Renewable Hydrogen Transportation Fuel Production Facilities & Systems* ("Draft Solicitation Concepts"), which details the concepts for a competitive grant solicitation to be issued by the CEC's Alternative and Renewable Fuel and Vehicle Technology Program (ARFVTP).

Overall, we support the proposed draft concepts that among other provisions, calls for the installation and operation of renewable hydrogen transportation fuel production facilities in the San Francisco Bay Area (Bay Area), which is identified as one of the critical market regions for early market growth of fuel cell electric vehicles. The successful rollout of zero emission, hydrogen fuel cell vehicles and equipment is critical to the Air District's goals of improving the region's air quality and protecting the global climate, and the early lessons learned in the Bay Area can be applied to other parts of the State of California.

In addition, we offer the following comments on this Draft Solicitation Concepts document:

- We urge CEC to consider allowing renewable hydrogen fuel produced under this program to be used by medium- and heavy-duty vehicles, including trucks and buses, and off-road vehicles such as cargo handling equipment, and to be counted towards meeting the minimum production requirement, which is at least 1,000 kilograms per day. In this Draft Solicitation Concepts document, alternate uses of hydrogen for medium- and heavy-duty vehicles, off-road vehicles are not eligible for funding under this solicitation unless the hydrogen used for these purposes is produced outside the scope of the project and is beyond the minimum production requirement.

Considering the slow uptake of light-duty fuel cell electric vehicles, allowing hydrogen fuel use in alternate applications, such as heavy-duty vehicles and off-road equipment will offer more flexibility to the applicants to secure fuel off-take agreements, and help to ensure that they meet the Solicitation's production requirements.

Using hydrogen fuel in heavy-duty and off-road vehicles may also cost-effectively provide greater air quality and climate protection benefits than light-duty passenger vehicles in that the renewable hydrogen production facility may be co-located with the central fueling facility for a dedicated fleet that is operated on relatively fixed routes and schedules, the demand of fuel is more predictable and reliable, and the transport of fuel to fueling stations that are further away from the production facility is minimized. Expanding the eligibility to allow heavy-duty and off-road vehicles to be fueled would also benefit disadvantaged communities such as West Oakland, where heavy-duty drayage trucks and off-road equipment operating in and near the Port of Oakland are the largest contributor to poor air quality, and where the health risk from toxic air pollution (primarily diesel particulate matter) is three times higher than the average background levels in the Bay Area.

In addition, according to CEC, medium- and heavy-duty vehicles with a gross vehicle weight rating above 10,000 pounds represent 3% of registered vehicles, yet produce 23% of on-road greenhouse gas (GHG) emissions. Ultimately, use of renewable hydrogen fuel in these vehicles has the greatest potential to help the Bay Area and the State of California to achieve their GHG emissions reduction goals. Moreover, allowing hydrogen produced under this solicitation to be used by heavy-duty and off-road vehicles and equipment sends a positive message to the industry to encourage the accelerated advancement of fuel cell electric technology.

- We ask CEC to release more details for public comments before the solicitation is finalized on the methodology for calculating the points for each of the scoring criteria that will be used to rank the applications. While the Draft Solicitation Concepts document lists the scoring criteria and the factors that will be considered to determine the scores, details on the method to quantify the points are not discussed in the Draft. For example, minimizing the environmental impact associated with hydrogen delivery to refueling stations is one of the factors to be considered to determine sustainability of a project. However, it is not clear how the environmental impacts would be evaluated. Including information about the methodology that will be used to quantify these factors will help applicants to more effectively evaluate their projects prior to submitting an application, help CEC standardize the evaluation process, and ensure that the best projects are scored high and thus are funded accordingly.
- We also recommend CEC make a clarification in the final solicitation on the required operational period of a funded project, i.e., how long a funded project is required to operate to meet the project requirements. Preferably, the project period will last long enough to fully evaluate the technology (i.e., at least one year).

The Air District appreciates the opportunity to provide input on this Draft Solicitation Concepts document. Recognizing the climate and air quality benefits of installing and operating renewable hydrogen production facilities in the Bay Area, we look forward to continuing working with CEC and other stakeholders on the development and use of renewable hydrogen as transportation fuel in our region. If you have any questions regarding this letter please contact Damian Breen, Deputy Air Pollution Control Officer at (415) 749-5041.

Sincerely,



Damian Breen
Deputy Air Pollution Control Officer