

June 3, 2010

via email: [fvergara@arb.ca.gov](mailto:fvergara@arb.ca.gov)

California Air Resources Board  
Attention: Floyd Vergara  
Manager, Industrial Section  
1001 I Street  
Sacramento, CA 95812

Dear Floyd:

RE: ARB CNG Specification Revisions

Thank you very much for including EMA in the May 19, 2010 meeting regarding future revisions to the California Air Resource Board's regulation of properties of compressed natural gas (CNG). As you are aware, EMA has been actively engaged in the previous discussions between ARB and industry regarding this subject, and we continue to have interest in this process.

EMA is pleased to provide the following information in response to ARB's request for input concerning revisions to the existing specification.

EMA fully supports the concept of replacing chemistry specific requirements currently included in the ARB CNG specification with performance parameters. This approach is consistent with EMA's position regarding both regulatory and industry consensus standards as it provides all interested parties with the flexibility to comply with the requirements without arbitrary or unnecessary burden on the regulated entities. Of course, a very important aspect of this change is to identify the appropriate performance parameters and related limit values. Of the various parameters that have been discussed for CNG fuels, Methane Number and energy content are the most significant performance parameters. Methane Number correlates well with a fuel's anti-knock capability, and energy content correlates well with the fuel's ability to provide the energy input required for an engine to meet expected performance characteristics. EMA recommends that legacy product requirements continue to influence ARB's fuel specifications until 2023 as to allow these products to be phased out of the market. Therefore EMA recommends that ARB's revised CNG specification include the following:

Methane Number: 80 minimum (through 2022) / 75 minimum (beginning 2023)  
Energy Content: 16,100 Btu/lb (37448 kj/kg) minimum -or-  
Higher Heating Value of 975 Btu/scf minimum  
Inert Content: 4.0% maximum (to prevent adulteration)

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In addition, it is important to remember that all CNG fuels must meet the California Public Utilities Commission gas quality requirements including, but not limited to: (i) moisture/water content; (ii) hydrogen sulfide limits; (iii) sulfur limits; (iv) hydrocarbon dew point; and (v) absence of foreign substances. Any revised ARB regulation should acknowledge such requirements.

EMA looks forward to working with ARB and other interested parties to develop and implement a revised CNG fuel specification for California.

Sincerely:

A handwritten signature in black ink, appearing to read "Roger T. Gault", with a long horizontal flourish extending to the right.

Roger T. Gault  
Technical Director

cc: Susan Feingold Carlson