



U.S. Department  
of Transportation  
**Federal Transit  
Administration**

1200 New Jersey Avenue SE  
Washington, D.C. 20590

February 3, 2012

Ben Cupp, Jr.  
Director of Engineering  
ARBOC Specialty Vehicles  
51165 Greenfield Parkway  
Middlebury, IN 46540

Dear Mr. Cupp:

This letter responds to your January 20, 2012 email in which you requested assistance from the Federal Transit Administration (FTA) concerning the applicability of the Bus Testing Regulation (49 CFR Part 665) to versions of the ARBOC Specialty Vehicles Spirit of Mobility bus model. Your email specifically states that:

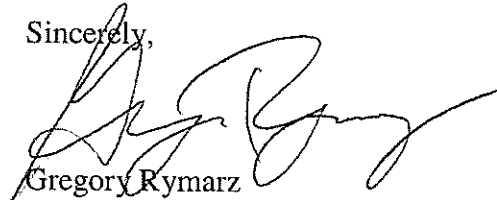
- “Arboc Specialty Vehicles submitted our model SOM23G built on the GM gasoline powered chassis in July 2008 for a seven year 200K mile durability test. That testing was completed on January 9, 2009. We as a manufacturer have also submitted for partial testing our 2009 model SOM23 Gas Hybrid powered vehicle along with 2010 SOM236 CNG Hybrid powered vehicle on July 9, 2010 and completed on December 14, 2010.”
- “Each example of the previously mentioned vehicles shares a common vehicle passenger compartment design, component parts, and manufacturing technique. The GM4500 Diesel powered chassis has been tested by various other manufactures for identical service life conditions. Testing being referenced was performed May 2010 on a 4500 chassis, 6.6L Diesel, Allison 2000 series transmission - 7 year STURRA test.”
- “We as a manufacturer are requesting your ruling which would allow us as a manufacturer to produce and sell our vehicle body, which has previously been tested in three configurations on the diesel powered 4500 GM 6.6L diesel powered chassis with the Allison 2000 series transmission, without the need for further testing. We respectfully submit this question based on the knowledge that the 4500 GM 6.6L diesel powered chassis is a mass produced vehicle with extended service life in the field, to have proven its durability and performance in the field application to which our vehicle would be subjected.”

FTA has reviewed your request and the additional spring documentation and has determined that **No Testing** will be required for the Spirit of Mobility bus model based on the GM 4500 diesel chassis. This determination is based on the following facts:

- A 23-foot version of ARBOC Mobility's Spirit of Mobility Model on a 159" wheelbase non-hybrid gasoline-powered GM 3500 chassis and on a GM 4500 CNG chassis completed testing, including durability, at Altoona (Bus Testing Report No. PTI-BT-R0812 & PTI-BT-R1009) in the 7 year category.
- A full 7 year test of the GM 4500 diesel chassis based bus was performed in 2010 (Bus Testing Report No. PTI-BT-R1001). This chassis is fully representative of the current GM 4500 diesel chassis. The Spirit of Mobility would be expected to perform in a similar manner. A copy of this report should be included along with a copy of report PTI-BT-1009 to faithfully represent to FTA grantees the bus testing results for a GM 4500 diesel Spirit of Mobility.

This determination is based on the changes detailed in your submissions or mentioned above. Should you make any other changes to the vehicle, additional testing may be required. If you require any further assistance with this or other matters concerning bus testing, I encourage you to consult the resources provided at [www.fta.dot.gov/bustesting](http://www.fta.dot.gov/bustesting). If you still have questions after checking this website, please feel free to contact me at the address above, or by e-mail ([gregory.rymarz@dot.gov](mailto:gregory.rymarz@dot.gov)), fax (202-366-3765), or telephone (202-366-6410).

Sincerely,



Gregory Rymarz  
Bus Testing Program Manager  
Office of Mobility Innovation, TRI-12