

From: Alan Leston  
Sent: Thursday, May 29, 2014 5:27 PM  
To: Hanlon, Edward  
Cc: Will Ollison  
Subject: AMMS comments

Mr. Hanlon,

It has come to my attention that a portion of my previous comments to the AMMS regarding a new FRM for O<sub>3</sub> may be in error.

Specifically, Mr. Dirk Felton noted:

There is an error in the set of public comments submitted by Mr. Alan Leston on 5/15/14 which are posted on the CASAC AMMS June 12, 2014 teleconference website. The collocated Ozone instruments in Suffolk County NY were not operated by the same person, same Agency nor under the same QA Program. The NY State monitor (Thermo) was in fact installed at that location in order to see why the Suffolk County values did not match other nearby NY State monitors.

My source of information on this topic was the "Clean Air Status and Trends Network (CASTNET) 2010 Annual Report Prepared by: AMEC Environment & Infrastructure, Inc. formerly known as MACTEC Engineering and Consulting, Inc."

That report stated in part;

The SLAMS network consists of approximately 4,000 monitoring stations across the United States whose measurement systems are largely determined by the needs of State and local air pollution control agencies to meet their respective SIP requirements. Several collocated SLAMS monitoring sites were operated from 1992 through 2009. Two of these collocated ozone monitoring sites were selected for analysis based on length of collocation and availability of recent data. These sites were collocated during the period 2006 through 2009. One Thermo Scientific 49i analyzer and one Dasibi 1008 analyzer were operated at site 36-103-0009, located in Suffolk County, NY, from 2006 through 2009. Two API 400 ozone analyzers were operated at site 29-189-0014, located in St. Louis County, MO, in 2008 and 2009.

The normal precision DQI is the MARPD of hourly O<sub>3</sub> data. For this analysis, the precision measure is the MARPD of DM8A concentrations from the two CASTNET and two SLAMS sites. Table 5a presents quarterly MARPD results calculated from the available data from the four sites. The site average MARPD values are also presented. The best precision was realized at the St. Louis County and Mackville collocated sites. Both sites operate identical analyzers at the respective sites and are serviced by the same operator. The Suffolk County site operates two different analyzers. The CASTNET monitors at ROM406/206 are run independently and serviced by two different operators. Precision of hourly ozone concentrations discussed elsewhere in this chapter shows a consistent bias between ROM406 and ROM206 hourly O<sub>3</sub> data with ROM406 sampling higher concentrations by about 4 ppb. Similarly, this analysis found a consistent 4 to 5 ppb bias between the collocated Suffolk County analyzers.

For all sites except the Suffolk site, the report states the nature of operational details. Because the Suffolk site followed the St. Louis and Mackville sites' descriptions of having the "same operator" - and the subsequent notation regarding the ROM sites specifically noted them as being operated by different operators- I concluded that the Suffolk site was operated by the "same operator".

Mr. Felton is clearly more expert than I in details of ambient air monitoring in New York State and I apologize for the incorrect assumption that the collocated monitors at the Suffolk County site were overseen/operated by a single person or entity.

However, this enhanced understanding of differences between collocated O3 monitors in NY only strengthens my stated belief that the routine operation of O3 instruments is NOT a trivial matter and that EPA should increase the number of continuous (i.e., hourly) collocated monitors.

Best regards,  
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