



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
RESEARCH TRIANGLE PARK, NC 27711

JUL 07 2011

OFFICE OF  
AIR QUALITY PLANNING  
AND STANDARDS

Mr. Ron McCulloch  
Golden Specialty, Inc.  
Corporate Headquarters  
Post Office Box 1898  
Deer Park, Texas 77536

Dear Mr. McCulloch:

This letter is in response to your correspondence of June 30, 2011, wherein you ask permission to use ASTM D5504-08 in place of ASTM D4084-07 to determine the hydrogen sulfide ( $H_2S$ ) concentration in fuel gas at boilers regulated under 40 CFR Part 63, Subpart DDDDD. The  $H_2S$  is determined by lead acetate tape monitoring in ASTM D4084-07, and by gas chromatography with pulsed flame photometric detection (GC/PFPD) in ASTM D5504-08. You noted that lead acetate tape monitoring is not commonly used for  $H_2S$  analysis in laboratory settings, and that GC/PFPD is proven, widely-used, and has a high degree of accuracy and precision.

We agree that GC/PFPD is an acceptable technique for measuring  $H_2S$  and have allowed its use in other applications. We believe ASTM D4084-07 and D5504-08 give comparable results. Therefore, we are approving your request. This approval may be applied to any facility that is covered by 40 CFR Part 63, Subpart DDDDD. We will post this broad approval on our web site (<http://www.epa.gov/ttn/emc/tmethods.html#CatB>) for use by other interested parties.

If you have questions or would like to discuss the matter further, please call Foston Curtis at (919) 541-1063, or you may e-mail him at [curtis.foston@epa.gov](mailto:curtis.foston@epa.gov).

Sincerely,

A handwritten signature in blue ink that reads "Connie Oldham".

Conniesue B. Oldham, Ph.D., Group Leader  
Measurements Technology Group

cc: Foston Curtis (E143-02)