



Terry Tamminen  
Agency Secretary

# Air Resources Board

Alan C. Lloyd, Ph.D.  
Chairman

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Arnold Schwarzenegger  
Governor

June 2, 2004

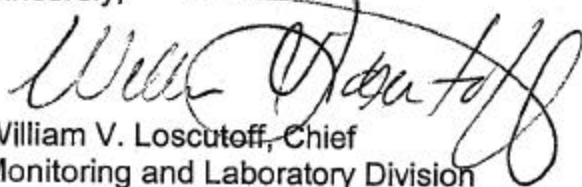
Mr. Roy E. Soffe  
Triangle Environmental, Incorporated  
2525 W. Burbank Boulevard  
Burbank, California 91505-2302

Dear Mr. Soffe:

In response to your letter dated February 16, 2004, we have completed our analysis of data from comparison testing of the Triangle's Phase II Vapor Recovery Air/Liquid (A/L) Tester also known as the TriTester Model 2.96. Based on the results described in the enclosed summary of EPA Method 301 statistical calculations, we approve the TriTester Model 2.96 instrument and procedure as equivalent to the 1996 version of ARB Test Procedure TP-201.5, when applied to any system for which the 1996 version of ARB TP-201.5 is specified or approved. This approval is applicable when testing is conducted as specified in the accompanying operating manual. Please note that equivalency of the TriTester Model 2.96 has not been determined with the 2001 version of TP-201.5.

Thank you for your patience and assistance in conducting the EPA 301 comparison testing of TriTester Model 2.96 to the 1996 version of ARB Test Procedure TP-201.5. If you have further question, please contact Joe Guerrero at (916) 324-9487 or via e-mail at [jguerrer@arb.ca.gov](mailto:jguerrer@arb.ca.gov).

Sincerely,



William V. Loscutoff, Chief  
Monitoring and Laboratory Division

Enclosure

cc: Lou Roberto  
South Coast AQMD

John Schroeder  
San Joaquin Valley APCD

*The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our Website: <http://www.arb.ca.gov>.*

California Environmental Protection Agency

**Summary of Statistical Analysis Comparing the  
1996 Version of TP-201.5 (Air to Liquid Ratio) to  
Triangle's TriTester Model 2.96  
June 2, 2004**

To determine if the Triangle TriTester Model 2.96 (Triangle's Phase II Vapor Recovery Air/Liquid (A/L) Tester) is equivalent to the 1996 version of TP-201.5, comparison testing was conducted on 11 different nozzles with a wide range of A/L values. These nozzles were tested repeatedly, alternating procedures, so any effects of A/L variation over time would be minimized in comparing runs. This resulted in 117 runs and the results were analyzed statistically in accordance with EPA Method 301. The calculated statistical results are summarized below. The TriTester Model 2.96 has not been evaluated for equivalency with the 2001 version of TP-201.5.

**Statistical Analysis**

<b>Statistical Measurement</b>	<b>Result</b>
Standard deviation of the 1996 version of TP-201.5 (taken as standard deviation of the difference in 1996 method runs from previous run on same nozzle with same method)	0.107 (SD <sub>v</sub> )
Average difference of Triangle's TriTester 2.96 from 1996 version of TP-201.5	0.003 (dm)
Standard deviation of Triangle's TriTester 2.96 from 1996 version of TP-201.5	0.104 (SD <sub>d</sub> )
Standard deviation of Triangle's TriTester 2.96 (calculated from SD <sub>d</sub> /1.414 since SD <sub>v</sub> > SD <sub>d</sub> )	0.074 (SD <sub>p</sub> )
F-statistic of Triangle's TriTester 2.96 relative to 1996 version of TP-201.	0.479 (F) <sup>1</sup>
t-statistics of Triangle's TriTester 2.96 relative to 1996 version of TP-201.5	0.306 (t)
Correction factor required if t-statistic is greater than 1.397	none required

<sup>1</sup> Passes F-test criterion of EPA Method 301 since F < 1.0.