South Coast Air Quality Management District

Applied Science and Technology Source Testing and Engineering

TECHNICAL GUIDANCE DOCUMENT R-003

Rules: 2011-Protocol for Monitoring, Reporting, and Recordkeeping for Oxides of Sulfur

 (SO_x) Emissions, Appendix A, Chapter 2.

2012-Protocol for Monitoring, Reporting, and Recordkeeping for Oxides of Nitrogen

(NO_x) Emissions, Appendix A, Chapter 2.

Date: August 26, 1997

Subject: CEMS Testing Requirements Resulting from Analyzer Span Range Modification

References: 40 CFR Part 60

40 CFR Part 75

1. Introduction

This technical guidance document clarifies the rule language in Rules 2011 and 2012, Appendix A, Chapter 2, Subdivision B, Paragraphs 17 (Rule 2011) and 16 (Rule 2012) for recertification of RECLAIM CEMS analyzers that have undergone a range modification. The rule states: "The District will reevaluate the monitoring systems at any affected piece of equipment where changes to the basic process equipment or air pollution control occur, to determine the proper full span range of the monitors. Any monitoring system requiring change to its full span range in order to meet the criteria in Chapter 2, Subdivision B, Paragraph 8 shall be recertified according to all the specifications in Chapter 2, Subdivision B, Paragraphs 10, 11, and 12, as applicable, including the relative accuracy tests, the calibration drift tests, and the calibration error tests."

2. Applicability

The CEMS recertification only applies if the analyzer range(s) has been modified to measure emissions resulting from modified basic equipment or air pollution control equipment. If the analyzer range is modified solely for the purpose of increasing the data gathering capability of the CEMS, without any changes to the basic equipment or the air pollution control equipment, a recertification test is not necessary. This applies to both pollutant and diluent gas analyzers.

3. Testing Procedure

If analyzer range(s) are modified solely for the purpose of increasing the data gathering capability of the CEMS, without any changes to the basic equipment or the air pollution control equipment, a three point linearity test of the analyzer, as required by 40 CFR Part 75,

Appendix A is adequate. The three point linearity test must be conducted at low-level concentration (20-30% of analyzer span range), mid-level concentration (50-60% of analyzer span range), and high-level concentration (80-100% of analyzer span range).

APPROVED	
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