1. Can you please explain how to calculate the ACA error discussed in Section 12.0 (2) of Procedure 2? Also, please explain what is meant by the term "+10% percent of the average audit value" found in section 10.4(3) of Procedure 2?

According to Section 12.0 of Procedure 2, Equations 2-1a or 2-1b must be used to calculate ACA error.

To calculate the ACA error in terms of the average audit value, Equation 2-1a takes the absolute value of the PM CEMS response value minus the reference standard (typically a filter is used as the reference standard). The resulting absolute value is then divided by the reference standard and multiplied by 100. The resulting value is your ACA Accuracy, or ACA error, and must not exceed 10 percent as specified by Section 10.4 (3).

To calculate the ACA error in terms of the applicable standard, Equation 2-1b takes the absolute value of the PM CEMS response value minus the reference standard (typically a filter is used as the reference standard). The resulting absolute value is then divided by the applicable emission limit and multiplied by 100. The resulting value is your ACA Accuracy, or ACA error, and must not exceed 7.5 percent as specified by Section 10.4 (3).

Analyzer Range	0-25 mg/acm		
Emission Limit	22 mg/acm		
	Audit Point 1	**Audit Point 2**	**Audit Point 3**
Reference Standard	0.0	12.0	20.0
CEMS Response 1	0.5	13.0	20.5
CEMS Response 2	0.4	12.0	21.0
CEMS Response 3	0.6	13.0	19.5
Avg CEMS Response	0.5	12.7	20.3
ACA Accuracy/Error (%)	2.3 Using Eq. 2-1b	5.8 Using Eq. 2-1a	1.5 Using Eq. 2-1a

2. Can you please explain how to apply the criteria for excessive ACA error discussed in Section 10.4 (3) of Procedure 2? Specifically what is meant by the term "whichever is greater"?

40 CFR 60, Appendix F, Procedure 2, Section 10.4 (3) states:
"*What are the criteria for excessive ACA error? Your PM CEMS is out of control if the results of any ACA exceed ±10 percent of the average audit value, as calculated using Equation 2-1a, or 7.5 percent of the applicable standard, as calculated using Equation 2-1b, whichever is greater.*"

We recognize that the above wording is confusing. We intended this to state that the PM CEMS is considered out of control when the ACA error is calculated using Equations 2-1a and 2-1b and both equations exceed the specified allowable error. In other words, if the results of either equation meet the specified requirement then the PM CEMS is not considered

out of control based on the ACA error. However, please note that as specified by Procedure 2, Section 12.0 (2), Equation 2-1a may not be used to determine ACA error if the reference standard value is zero.

3. PS-11 §8.6(4)(iii) states that you attempt to obtain three different levels of PM mass concentration during the testing to develop the PS-11 correlation curve. PS-11 identifies the levels as:

- **Level 1: From no PM (zero concentration) emissions to 50 percent of the maximum PM concentration;**
- **Level 2: 25 to 75 percent of the maximum PM concentration; and**
- **Level 3: 50 to 100 percent of the maximum PM concentration.**

However, "the maximum PM concentration" is not defined. How should "the maximum PM concentration" be interpreted?

In § 8.6(4) the term "maximum PM concentration" corresponds to the maximum reference method test run result achieved during the testing.