
The use of Method 7E may be required by specific New Source Performance Standards, Clean Air Marketing rules, State Implementation Plans, and permits where measurement of NO_X

3.2 Calibration Curve means the relationship between an analyzer's response to the injection of a series of calibration gases and the actual concentrations of thos-0.4 (n) gas-0.4 (n) s.

3.3 Calibration Gas means the gas mixtur-0.4 (n) (t) -0.2ontaining NO

3.7 Data Recorder means the equipment that permanently records the concentrations reported by the analyzer.

3.8 Direct Calibration Mode means introducing the calibration gases directly into the analyzer

3.15 Run means a series of gas samples taken successively from the stack or duct. A test normally consists of a specific number of runs.

3.16 System Bias means the difference between a calibration gas measured in direct calibration mode and in system calibration mode. System bias is determined before and after each run at the low- and mid- or high- concentration levels. For dilution-type systems, pre- and post-run system-0.2 (s) calibration error-0.2 (s) is measured, rather-0.2 (s) than system-0.

exposure may cause only slight pain or pass unnoticed, but the resulting edema sever0.2 (s) l d(

6.2.6 Calibration Gas Manifold.

Prepare a system to allow the introduction of calibration gases either directly to the gas analyzer in direct calibration mode or into the measurement system, at the probe, in system calibration mode, or both, depending upon the type of system used. In system calibration mode, the system should be able to flood the sampling probe and vent excess gas.

cases, when two ranges are used, you must quality- assure both ranges using the proper sets of calibr(e) -0.4tion g(e) -0.4ses. You must (e) -0.4lso meet the interference, c(e) -0.4libr(e) -0.4 drift checks. However, we c(e) -0.4ution that when you use two segments of (e) -0.4 large me(e) sc(e) -0.4le for dual r(e) -0.4nge purposes, it m(e) -0.4y be difficult to meet the perform(e) -0.4

This concentration sets the calibration span and results in measurements being 20 to 100 percent of the calibration span.

7.1.2 Mid-Level Gas.

40 to 60 percent of the calibration span.

7.1.3 Low-Level Gas.

Less than 20 percent of the calibration span.

7.1.4 Converter Efficiency Gas.

What reagents do I need for the converter efficiency test?

The converter efficiency gas is a manufacturer-certified gas with a concentration sufficient to show NO_2

8.1 What sampling site and sampling points do I select?

8.1.1 Unless otherwise specified in an applicable regulation or by the Administrator, when this method is used to determine compliance with an-0.2 (c) emission standard, conduct-0.2 (c) a-0 test as-0.2 (c) described-0.2 (c) in Section 8.1.2 to-0.2 (c) determine-0.2 (c) the-0.2 (c) samplin

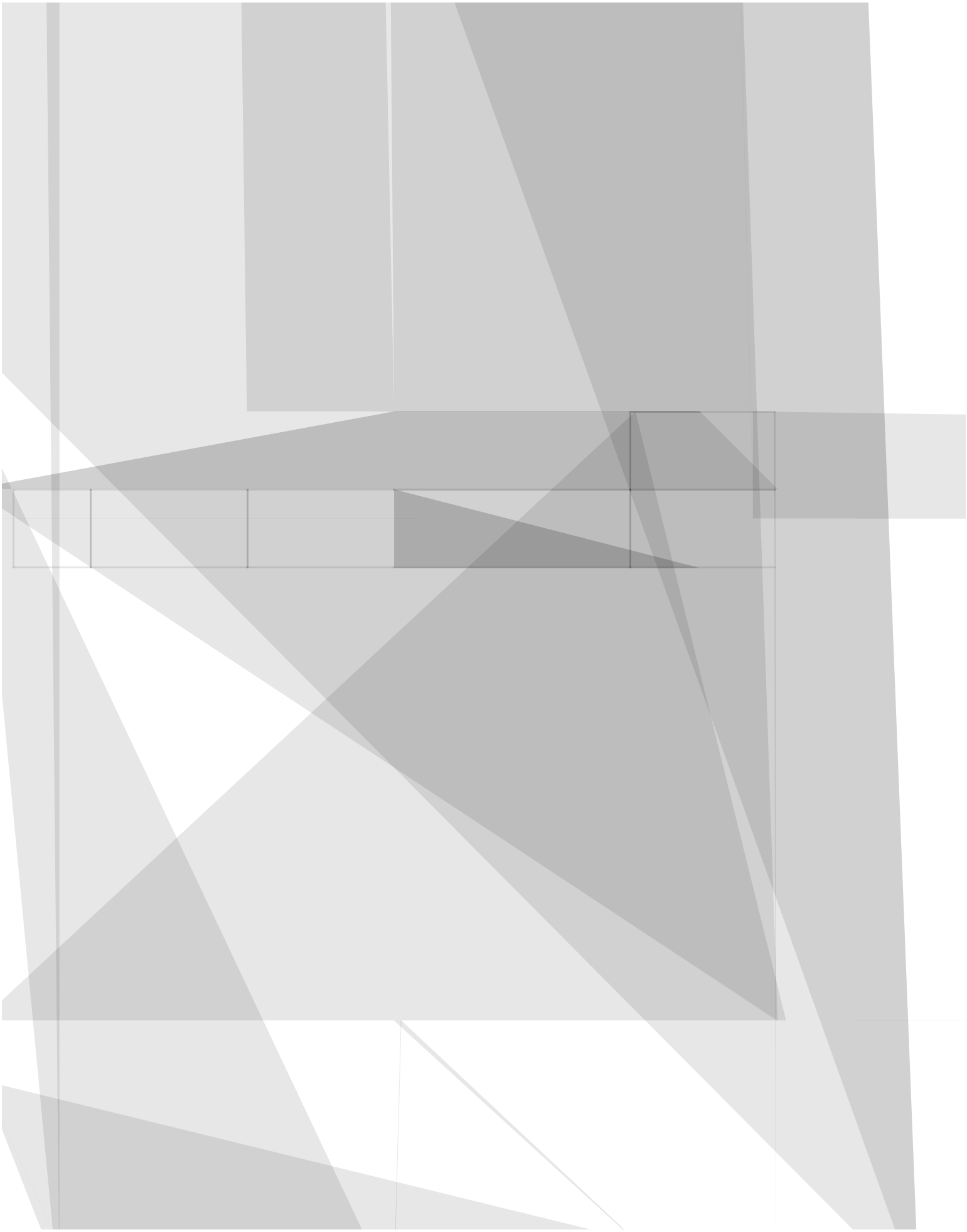
measurement line exhibiting the highest average concentration during the stratification test, at 0.4, 1.0 and 2.0 meters from the stack or duct wall. If the gas stream is found to be stratified because the 10.0 percent or 1.0 ppm criterion for a 3-point test is not met, locate twelve traverse points for the tes.2 (o)0.2 (f) he stetTf [(t) -0.1 (r) h-0.4 ((T 0.1( ) -0.2 (w -0.2

8.2.4.1. Introduce NO_2 converter efficiency gas to the analyzer in direct calibration mode and record the NO_X

analyzer to these gases in p(s)-0.1ymv. Record the resyonses and determine the interference usi

(3) You may satisfy the multipoint traverse requirement by sampling sequentially using a single-hole probe or a multi- hole probe desig (t) -0.ed to sample at the prescribed points with a flow within 10 perce (t) -0.t of mea (t) -0. flow rate. Notwithstanding, for applicatio (t) -0.s u (t) this chapter, the use of multi-hole probes is subject to the approval of the Administrator.

8.6 Alternativeairn6rnrnac3(l) 0.2 (rn) 01 (A) -03 (t) -01 (a) 0.d1 (6) 0.1 (A



Calibration Standards, September 1997, as amended August 25, 1999. When Method 205 is

C_{MA} = Actual concentration of the upscale calibration gas, ppmv.

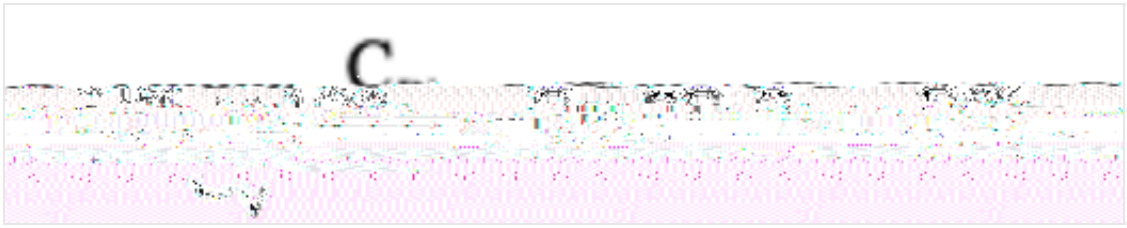
C_{Native} = NO_X concentration in the stack gas as calculated in Section 12.6, ppmv.

C_O

Q_{Spike}

NO 2 NO Conversion Efficiency.

If the NO_X converter efficiency test described in Section 8.2.4.1 is performed, calculate the efficiency using Equation 7E7.



Eq. 7E-7

12.8 NO 2 NO Conversion Efficiency Correction.

If desired, calculate the total NO_X concentration with a correction (a) 0.1 or converter e (a) 0.1 tioiot (t) -03onveh 1y. -N -0.2 (v)T Q Q q 18 40 576 673 re W n4 q 72/TT372 (0.4 Per. -N al ri /C

12.10 Moisture Correction.

high) the calibration error must either be within 2.0 percent of the calibration span. Alternatively, the re1 (p) -0.ult1 (p) -0. are acceptable if |C
dif
2
cv

Recoveries of both pre-test spikes and post-test spikes must be within 100 10 percent. If the