FORM 1: Linearity and Interference Tests Recordkeeping Form For Portable Analyzers

DATE: TIME (start/stop): / **NAME:**

ANALYZER (Make/Model): **Analyzer S/N:**

OPERATOR:

Dates of Last Cell Replacements: **CO:** **NO:** **NO_2:** **O_2:**

Linearity Check

Date of Last Linearity Check:

Requirements:

* Linearity less than or equal to 3% of the mid span gas concentration
* Linearity check must be conducted within 12 months of the test date and when an electrochemical cell is replaced.

Interference Check

Date of Last Interference Check:

Requirements:

* Interference response less than or equal to 5% of span gas concentrations
* Interference check must be conducted within 12 months of the test date and when an electrochemical cell is replaced.

Date of Linearity Check:

Constituent	CO (ppm)	NO (ppm)	NO_2 (ppm)	O_2 (%)
Zero Gas				
Mid Span Gas				
High Span Gas				
Reading, Zero				
Reading, Mid				
Reading, High				
Linearity, E_{LIN}, %				
Slope =				
Calculated Mid				

Calculations for Linearity are described in Section 3.6 of the Periodic Monitoring Protocol

Date of CO Interference Check:

Constituent	CO (ppm)	NO (ppm)	NO_2 (ppm)
Interferent Span Gas Value, C_{NOG} & C_{NO2G}			
CO Response to NO, $R_{CO\text{-}NO}$			
CO Response to NO_2, $R_{CO\text{-}NO2}$			
CO Interference, I_{CO} %			

$I_{CO} = [(R_{CO\text{-}NO} / C_{NOG}) + (R_{CO\text{-}NO2} / C_{NO2G})] \times 100$

where: I_{CO} = CO interference response (percent)

$R_{CO\text{-}NO}$ = CO response to NO span gas (ppm CO)

C_{NOG} = concentration of NO span gas (ppm NO)

$R_{CO\text{-}NO2}$ = CO response to NO_2 span gas (ppm CO)

C_{NO2G} = concentration of NO_2 span gas (ppm NO_2)

CERTIFICATION: Based on the information and belief formed after reasonable inquiry, I certify that the statements and information contained in this report are true, accurate, and complete.

Test Conducted By

Signature

Title

Date