[**CALIBRATION OF PORTABLE & ONLINE CO MONITOR**](file:///D:\d%20drive\Paresh\BF1%20173%20m3%20After%20Relining\WI%20&%20HIRA\Temporary%20Internet%20Files\Content.IE5\M3%20%20MASTER%20LIST%20WORK%20INST%20Inst..doc) **AND CO HIGH ALARM TESTING**

**Objective**: To check the accuracy of CO Monitors

**Scope**: This procedure is applicable for all Portable & Online CO monitors

**Reference**

1. Standard CO gas cylinder.

2. Operation manual of Online CO Monitor & Portable CO monitor

**RISK/INST/17**

**Performance Criteria** : Accuracy of calibration of CO monitor (+/- 1ppm)

**Aspect for the Activity** : Waste generation, Gas leakage

**Identification of Hazards:**

**Chemical:** CO Gas poisoning

**Physical:** Pressure, Fire

**Hazard due to Human Behaviour/Human error:** Not adhering to WI/ PPE, Alcoholism, Use on non-certified tools/equipment

## Responsibility: Sr. Engineer Instrumentation/Associate / Inst Technician

**Procedure:**

All engineers and technicians shall follow this procedure whilst Calibrating CO monitor. Care should be taken to avoid excessive gas usage.

1. Make a calibration setup ready which include standard known value CO gas cylinder and regulator in clean air environment with proper vent line.
2. Switch on the instrument and wait for three minutes then check the zero of CO Monitor. Calibrate the zero in case the deviation exceeds acceptance limits (+/- 1ppm)
3. If zero is ok, apply standard CO Gas with flow of 40 LPM and compare reading with standard CO.
4. In case deviation exceeds acceptance limits (+/- 1ppm), calibrate the Span.
5. File the Calibration record.
6. After calibration, Install the Online Co Monitor and test the Co high Alarm in PLC as per the approved alarm Setpoint List.

**Amendement Record**

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| **Date** | **Manual Section Ref. & Para** | **Brief details of Revision** | **New Rev.** |
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| **Prepared By:**  Head Instrumentation PID1 | **Reviewed & Issued By:**  Management Representative | **Approved By:**  Head – Electrical & Instrumentation PID1 |
| **Signature:** | **Signature:** | **Signature:** |
| **Review Date:** 13.09.2023 | **Review Date:** 13.09.2023 | **Review Date:** 13.09.2023 |
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