AIR MONITORING EQUIPMENT

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A key element for keeping workers safe on the job is limiting exposure to harmful chemicals and hazardous materials. Proper air monitoring requires specific training, precise measurement, and specialized equipment to be fully accurate. Employees who use air monitoring equipment should be well-trained in properly using it. Using the right equipment improperly can lead to a false understanding of atmospheric conditions. Air monitors need to be properly set up before they are used to test the atmosphere.

RAE SYSTEMS MULTIRAE LITE CONTAINS 5 OR 6 SENSORS

- O2 - Oxygen
- LEL - Lower Explosive Limit
- H2S - Hydrogen Sulfide
- CO - Carbon Monoxide
- CI2 - Chlorine
- PID - Photoionization Device (measures organics)

FRESH AIR CALIBRATION

- Once the sensors in the monitor have warmed up, a fresh air calibration is necessary.
- This calibrates the sensors to the ambient environment.
- Press the button on the left to start the calibration.

Gas Calibrations must be done monthly!

BUMP TESTING

Bump testing must be performed before **each** use. If borrowing a monitor from NDFD, they will perform this testing prior to loaning the monitor.

It is essential that no contaminates are present when a fresh air calibration is completed.

CHECKING PUMP

- Upon start up, the pump can be heard.
- To ensure that the pump is working:
  - Look in the upper right corner of the screen.
  - Plug pump
    - Pump will shut off and alarm will sound.
    - Press button on left to clear the alarm.

TAKING A READING

- Allow monitor time to register any contaminants that may be present.
- Monitor will alarm if it detects the limits specified on the permit.

HOT WORK

Oxygen and the Lower Explosive Limit (LEL) must be tested prior to Hot Work in certain situations. Thresholds for Hot Work are:

- Oxygen: 19.5% - 22%
- Lower Explosive Limit (LEL): 10%

Contact Risk Management & Safety for Questions about this or other Safety Related topics @ 574.631.5037 or riskman@nd.edu