Personal gas monitor use requirements

Personal (wearable) gas monitors, either single gas or multi gas detectors, are considered part of the basic operating Personal Protective

Equipment (PPE) for all Chevron personnel and contractors entering classified (i.e. process) areas. These instruments protect workers from unseen workplace gas hazards and their proper maintenance and calibration ensures their accuracy in detecting worker exposure to harmful gases.

Chevron requires contractors to have a process in place and follow the instruments manufacturers recommendations in respects to bump testing and calibration. For further details, please see and follow the OSHA's Safety and Health Information Bulletin guidance below on calibrating and testing direct-reading portable gas monitors. Calibrating and Testing Direct-Reading Portable Gas Monitors | Occupational Safety and Health Administration (osha.gov)

Personal Gas Monitor Four Steps of Operation:

Prior to use, ensure that personal gas monitors are functioning, properly calibrated and tested, and are worn in the breathing zone, on the outer most garment, as close as practical to the nose and mouth.



- 1) Bump test instrument on docking station.
- 2) Turn on the instrument and check the battery.
- 3) Zero the instrument in fresh air.
- 4) Clear the peak readings.

Responding to Alarm Events

If gas testing results indicate a hazardous condition (e.g., exceed the acceptable criteria for measurable environmental permissible limits), then the following is required:

- Alarm During Active Gas Testing
 - 1. Stop work (Exercise SWA).
 - 2. Evacuate personnel in the work area to a safe area.
 - 3. Review work conditions and the reason for alarm.
 - 4. Implement mitigation solutions.
 - 5. Re-test atmospheric conditions.
 - 6. Re-validate permits.
- Alarm from Personal Four Gas Monitor or Odor Detected

1. Review current work conditions and implement appropriate mitigations (e.g. reposition upwind or don respiratory protection) prior to continuing task.

2. If monitors continuously alarm, ensure area/task is left in safe state and exit the area immediately.

- 3. Move crosswind or upwind to a safe location.
- 4. Notify your supervisor and Operations immediately.

In addition, use gas testing results to identify appropriate safeguards/controls (e.g. engineering, administrative or PPE) to minimize potential exposures. Work shall not commence until gas testing results are within acceptable criteria defined above.

Resources

- This video describes the hazards associated with manual gauging and fluid sampling on oil and gas
 production tanks and describes steps that employers and workers can take to do this work safely. <u>Tank
 Gauging Hazard Alert National STEPS Network</u>
- Multi gas monitor hazard alert: Limitations of Monitors110117 (squarespace.com)