

CALIBRATION FREQUENCY

Critical Environment Technologies Canada Inc.



Gas detectors are health and safety devices; their purpose is to protect lives and property. Therefore, making sure the sensor responds properly to the target gas is very important. This is done through a regular maintenance routine that includes inspection, bump testing and calibration.

Most malfunctions are discovered at the time of bump testing or calibration, meaning at some point *between* calibrations the gas monitor manifested a problem.

Gas sensors have an electronic output that decreases over time. Calibration readjusts the output to compensate for the decreasing lifespan of the sensor element. If calibration is not done on a regular basis, the sensor can "drift", meaning it could provide erroneous readings.

A bump test verifies that the gas sensor will respond to an acceptable range of the target gas and the configurations (alarms/relays) are activating properly.

Places that are required to monitor the environment to measure to WCB allowed exposure levels should be bump testing the sensors once per month.

A bump test is also recommended if there is any concern about whether or not a gas sensor is responding properly to the target gas.

IMPORTANT - if a bump test fails, a full calibration should be done right away.

In applications that have more dangerous gases and frequent or lengthy interactions with people, the gas detectors should be bump tested every month and need to be calibrated every 6 months. Such sensors and places include but are not limited to:

- Ammonia sensors in ice rinks and cold storage facilities
- Chlorine and Ozone sensors in swimming pools
- Places where people work 4 to 8+ hour shifts
- Schools, Hospitals

Almost all applications will require the gas detectors to be calibrated every 6 months.

Gas detectors in underground parking facilities should be calibrated every 12 months.

As a manufacturer of gas detection equipment we make recommendations, however, ultimately it is the user's responsibility to know and comply with local, regional, national, etc. standards and regulations set out by the Regulatory Authorities.

Critical Environment Technologies can provide annual, bi-annual field service calibrations and/or monthly bump testing services, locally, in the Lower Mainland and Fraser Valley Region. If you are outside our Service area we may be able to recommend a gas detection service company in your area.