

Hydrogen Sulfide (H₂S) Monitor Bump Test:

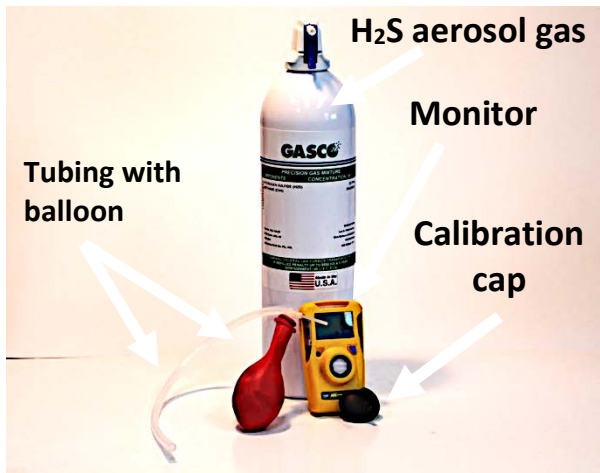
for BW Clip Real Time* with *aerosol gas spray*

Why Use A Monitor?

Hydrogen sulfide (H₂S) gas is released from manure when agitating, pumping manure, and when power washing inside a livestock building. Concentrations above *100 ppm are immediately dangerous to life and health*. An inexpensive monitor that alerts you before H₂S concentrations become lethal. It is important to test its response before you rely on it to save your life. To make sure your equipment will warn you of the danger of this gas, plan to *check your monitor 2 weeks* before manure pumping or other high-risk activity: This gives you time to get a replacement if you need one. Then, perform this check again **at the start of every day you use the monitor**, to be safe. If the monitor fails the bump test check to make sure all connections are tight, then complete the bump test again. If the monitor fails the bump test a second time, it will need to be replaced.

METHOD #1

1



You will need:

- H₂S aerosol gas: 25 ppm
- Monitor
- Tubing with a balloon
- Calibration cap

2



- Attach tubing to H₂S aerosol gas
- Attach other end of tubing to calibration cap
- Attach calibration cap to monitor
- Check to make sure there are no warnings on the screen

**BW Clip Real Time displays concentration; BW Clip does not (only displays months)*

This guidance was developed by the faculty and students from the University of Iowa Industrial Hygiene Program

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No H₂S gas: 0 ppm

- Pinch hose and pull trigger to fill up balloon to softball to cantaloupe size
- Release hose
- Confirm alarms **at 10 ppm:** audible, visual, and vibrating
- Confirm alarms **at 15 ppm:** Speed of each alarm will increase

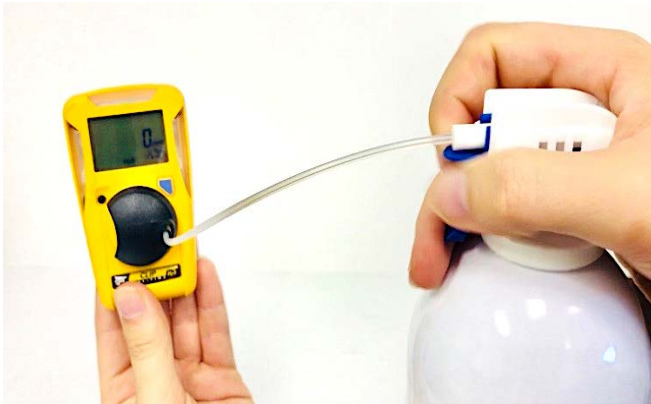
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Does not reach 25 ppm:
Get new monitor

- Aerosol bump test may not reach target concentration (25 ppm) using the aerosol spray method
- Do not use monitor if:**
- Alarms do not go off
 - It takes longer than 30 seconds to reach 10 and 15 ppm

-----METHOD #2-----

1



- Attach tube to calibration cap on the monitor
- Squeeze trigger for 6 seconds
- Confirm alarms **at 10 ppm:** audible, visual, and vibrating
- Confirm alarms **at 15 ppm:** Speed of each alarm will increase

2



- Aerosol bump test may not reach target concentration (25 ppm) using the aerosol spray method
- Do not use monitor if:**
- Alarms do not go off
 - Takes longer than 30 seconds to reach 10 and 15 ppm