GAS DETECTION ALARM RESPONSE PLAN

There are two types of gas detection alarm in Horizon building: 1) <u>localized alarm</u> and 2) <u>building evacuation alarm</u>.
The proper steps you need to take for each type of alarm is described below.

1. Localized alarm

YOU WILL SEE either 1A only or both 1A and 1B

<u>1A) On the gas detection panel</u> – yellow beacon light on top of the panel is lit, "Alarm" flashing on the view screen

<u>1B) Inside the lab room where gas was detected</u> – flashing strobe light on the wall

> *Note: You will see the flashing strobe light on the wall inside your lab room ONLY if the gas release was detected by a sensor present in that room. An amber/yellow light alarm on the detection panel can also mean low battery power or a sensor failing. The detection panel view screen will indicate exactly what caused the alarm.*

WHAT YOU NEED TO DO

> *Note: Level 1 alarm for gas release is set at concentrations below the permissible exposure limit; which allows for researchers to investigate and correct the problem, without compromising safety.*

1.1 Proceed to the gas detection panel view screen to determine exact cause of alarm. Press "ALARMS" button for alarm details. If alarm indicates "low battery" or "check/replace sensor", report incident to Building Maintenance (803) 5874243 and EH&S (803) 5288191 or 3519874.

1.2 If alarm is due to a gas detected by a sensor, determine the specific gas and location of sensor. Report incident immediately to Group safety officer and Principal investigator of the lab where gas was detected. *Emergency contact information for each laboratory are found on the Hazard Information Notice posted on the entrance door.*

1.3 Report incident to Building Maintenance (803) 5874243 and EH&S (803) 5288191 or 3519874.

1.4 If you are the lab personnel in charge of the lab or in charge of the experiment where gas is detected:
    1.4.1) turn off gas cylinder source (except for centrally supplied hydrogen) ONLY if it can be done safely;
    1.4.2) shut down all other components of the experimental system involved;
    1.4.3) identify the source of leak, repair the leak and verify that leak has been repaired.

> *Note: Turning off the gas source, if it can be done safely, is very important in order to avoid gas concentration from reaching the level 2 set point. Use inert gas such as air or nitrogen to investigate, repair and recheck leaky tubing and/or connections.*

1.6 Authorized EH&S personnel verify that leak has been repaired and clears the incident.

1.7 Building Maintenance or EH&S personnel reset the gas detection panel.

2. Building evacuation alarm

YOU WILL SEE AND HEAR ALL OF THE FOLLOWING

- red beacon light flashing on top of the gas detection panel
- strobe lights flashing in all hallways and rooms in the building
- a voice announcement instructing ALL occupants to leave the building because a gas release has been detected
  > *NOTE: This alarm is triggered when a) gas sensor detects a gas concentration inside a laboratory room that is at or above the Level 2 set point or b) gas sensor detects a level 1 set point in the hallway or within building risers (not sure, verify!). Both are dangerous situations that make it necessary for everyone to evacuate the building.*

1. Leave the building immediately using the nearest stairway and proceed to designated assembly area.
2. <u>If the alarm originated from your laboratory room</u>, call (803) 777-9111 on your way out of the building to provide information about the incident.
3. <u>If the alarm originated from your laboratory room</u>, proceed to the Incident Command Center set up by the Columbia Police Department (*look for a red, marked SUV with green strobe light flashing*) and provide requested information (gas involved, injury, *etc.*) surrounding the incident to the Incident Commander.
4. Building Maintenance and EH&S assist Emergency responders by providing assistance as necessary.
5. Emergency Responders issue clearance to reoccupy the building.
6. Building Maintenance or EH&S personnel reset the gas detection panel; Fire Safety resets the fire panel.