GAS DETECTION ALARM RESPONSE PLAN

There are two types of gas detection alarm in Horizon building: 1) localized alarm and 2) building evacuation alarm. 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

1A) On the gas detection panel – yellow beacon light on top of the panel is lit, “Alarm” flashing on the view screen

1B) Inside the lab room where gas was detected – 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. If the alarm originated from your laboratory room, call (803) 777-9111 on your way out of the building to provide information about the incident.

3. If the alarm originated from your laboratory room, 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.