

CASE STUDY

REAL-TIME AWARENESS BOOSTS HAZMAT TEAM RESPONSE

GAS DETECTION GIVES REMOTE VISIBILITY INTO AMMONIA LEAK INCIDENT

An urban fire department in the U.S. used Blackline Safety technology to respond to a dangerous ammonia leak with speed and precision.

THE CHALLENGE

Ammonia leak danger escalates

When hazmat personnel arrived on the scene of an ammonia leak at a cold storage facility one night, they were ready for anything. One responder wore a G7 personal multi-gas detector and the team also had a G7 EXO area monitor at the ready.

They immediately set up the G7 EXO downwind of the facility to determine the hazard level outside. At 21:08, the device detected high levels of ammonia (NH₃), alerting the team of a potentially volatile situation. A high-alarm notification was sent to the fire chief, who was off duty many miles away.

The danger escalated as high-gas alarms for both ammonia and hydrogen sulfide (H₂S) started coming in. The chief was able to monitor the situation remotely from his smartphone. With instant access to real-time data from the scene, he could follow and manage the response as it unfolded.

By 21:42, after 18 high-gas exposures were reported, the call was resolved and firefighters were off to their next emergency – a structure fire.

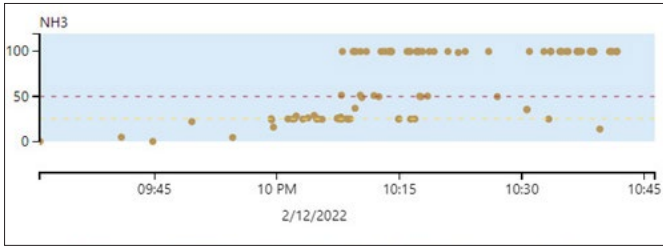
AT A GLANCE

- When they arrive at the scene of an ammonia leak, the Hazmat team quickly deploys the G7 EXO area monitor to determine gas levels. One responder puts on a wearable G7 personal multi-gas detector.
- The off-duty fire chief is miles away but is able to effectively monitor and coordinate the response remotely.
- A fast and efficient response to the ammonia leak freed up firefighters to immediately respond to another emergency using G7 connected safety technology.

18

HIGH ALARMS

46TOTAL ALERTS
DETECTED**1+1**PERSONAL SAFETY WEARABLE +
PORTABLE AREA GAS MONITOR



“With the connected gas detection tools supporting our hazmat team, I was confident we all had the critical information we needed to make decisions and target our response. I was able to monitor the entire situation as it happened remotely from my cell phone.”

Fire Chief

THE BLACKLINE SOLUTION

Hazmat team gets instant insight to aid response

On arrival, the firefighters’ first task was to assess the danger. Using G7 EXO, they quickly determined the ammonia levels were high and the situation was hazardous. Yet, they had G7 EXO deployed with the push of a button and up and running in minutes.

Both the G7 EXO and the G7c personal gas detector seamlessly connected to the local cellular network. This connectivity enabled responders to send real-time information to the command center and the chief who was monitoring the situation remotely, ensuring their response was rapid, precise and informed.

The data gave the team greater visibility, helping them make better decisions during the response and access more detailed reporting for the hotwash once the incident was over. As well, the GPS-enabled location technology allowed for precise mapping of the incident.

After resolving the ammonia leak, the firefighters responded to another call where it was used to monitor airborne toxins from the burning plastic and resins.

THE RESULTS

Real-time gas readings reduce risk and protect responders

Using the Blackline Safety gas detection and area monitoring technology they were trialing at the time, responders were able to monitor ammonia levels while they quickly responded to the leak. Despite not being overly familiar with the equipment, they quickly deployed the devices and information went directly to the fire chief. The chief was able to remotely monitor and coordinate the response with confidence knowing he had real-time information to accurately assess the situation.

During the incident, the G7 devices detected 18 high-gas exposures. These real-time gas readings gave responders full visibility into the escalating danger, so they were able to adjust their response with informed insight.

Firefighters never had access to this type of detailed information with their existing technology. Using the new tools, they saw firsthand how modern connected gas detection technology can help better protect themselves and others during a potentially dangerous situation.