

Near Miss

By Captain John Shumaker

Incident # 157111

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At 2106 hours E61 was dispatched to the McDonalds Restaurant at 3323 North 24th Street for a fall injury. E61 found the patient, who was a McDonald's employee, at the top of a stairwell that leads to the basement storage area. E61 began the regular line of questioning and treatment for what seemed to be a standard medical call. The patient was a 24 YOF who was pregnant. The patient stated that she was going into the basement to check on something and became lightheaded and fell. One of the other employees heard the fall and went to the stairwell to help the patient. Both employees exited the stairwell and called 911 to report the "fall injury". As the Captain from E61 was questioning the patient and one FF was checking vitals, the other FF and the Engineer went into the basement to see if the patient had tripped or slipped on something. Shortly after entering the basement both members of E61 became lightheaded and exited the basement. Upon exiting the basement, the Engineer fell and both members reported dizziness and a bitter taste in their mouths. E61's Captain immediately called for a Hazardous Assignment and evacuated everyone out of the building.

At 2117 hours the Haz Assignment was dispatched. One thing to note was that the PTI on the MCT still only had the info from the initial fall injury. I'm not sure how this could have been fixed, but updated PTI would have been helpful enroute. BC2 assumed command and assigned E4 to Haz Sector. E4 and Squad 8 made entry into the building in turnouts and SCBAs. The goal of the entry was to meter the basement for what was suspected to be a Co2 leak. The manager of the restaurant told the crews that they had just had the Co2 tank filled a couple of hours prior to the call. The crews made entry with 2 CGI meters and 2 Gas Ranger meters. As the crews descended the basement stairwell they started to get decreased O2 readings and slightly increased VoC readings on the CGI meters. As the crews continued into the basement the O2 readings continued to decrease (the lowest reading was 17.5%). One of the many interesting things about this call was the readings the crews were getting on the Gas Rangers. The Rangers were reading 100% LEL. When switched to % gas the readings were 25%. The readings were obtained at ground level and at ceiling level. These reading prompted Haz Sector to exit the building and start to mitigate the potential hazards. They shut off the gas at the meter and attempted to shut down the power from the exterior.

It was determined that another entry was necessary to shut off the power to the building, and investigate the Co2 tank. Haz Sector made a second entry into the building and secured the power to the building while monitoring the air to assure there was no risk of a spark causing ignition. Haz Sector then re-entered the basement to investigate the Co2 tank. They found a broken line on the tank and were able to shut down the tank to mitigate the hazard. After exiting the building, Haz Sector made a plan to ventilate the building. A confined space fan and flexible ducting were used off of SQ8. This method of ventilation was chosen due to the heavier than air gas in a below grade location. The ventilation was complete after about 30 minutes. Haz Sector did a final entry and obtained Zero readings on all the meters.

A few things to note about this call:

- The 2 members off of E61 were transported to the hospital for further evaluation. This can truly be deemed a “near miss”
- Statistics say that the majority of fatalities in these situations are would be rescuers
- Jeff Zientek will contact the manufacturer of our Gas Rangers to inquire about the Co2 readings on what is supposed to be a natural gas specific meter
- Jeff will also check to see if we can use our Manning meters with the sensors we have, and do a conversion for Co2
- The on-site Co2 monitors at the restaurant didn't function
- Some McDonalds locations have basements
- The gas hot water heater was located in the basement so the potential for a gas leak and source of ignition existed
- The ventilation profile was difficult because of a heavier than air gas in a basement
- SWG initial responder had to be told more than once to exit the hot zone (hot zone mgmt. is challenging on such a large scale scene)
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The total FD response to the incident included:

E61, BC2, SQ8, E4, L4, HM4, L9, E9, R9, E5, E11, R11 C957N&S, SDC, NDC, PI3, C959, C99, R17, and U29.

E61 did a **great job** of identifying the hazard, evacuating the building, and calling for the appropriate response. Crews did a great job of investigating and mitigating the hazard.

****Always suspect a potentially toxic environment when responding to any restaurant, convenience store, or any structure that has these systems in place...especially in basement areas.****

