

INCIDENT— FIRE, REMSEN HALL (JUNE 2013)

A researcher was flame-sealing a glass tube using an oxy-gas torch. The tube had been dipped in liquid nitrogen to condense its contents before the sealing operation, so the researcher was using a lab wipe to handle the cold glass. The wipe ignited and fell into the laboratory waste box, which also ignited. The researcher extinguished the resulting fire using a dry-chemical extinguisher mounted in the hallway outside the lab. Neither the fire department nor Security was called, nor was the building fire alarm sounded.

LESSONS LEARNED

- The work should not have been done near the lab waste box (or using a lab wipe to hold the tube). **Flame-sealing or any other “hot work” involving open flames, sparks, or hot surfaces should never be performed near combustible materials.** The National Fire Protection Association has specific good practice recommendations for hot work—contact Health, Safety & Environment for assistance with making your hot work area fire-safe.
- The researcher was not trained to extinguish fires, and he should not have used the hallway fire extinguisher. **JHU requires that untrained personnel never attempt to extinguish fires.** Amateur firefighters endanger themselves and others, and while a building can be replaced, your life or that of your colleagues cannot. **Evacuate, sound the fire alarm, and call Security at x6-7777 instead.**
- The torch used was lacking many important required safety features, such as pressure-rated hoses to prevent leaks, non-return valves to prevent backflow of oxygen into the building gas system, and flame arrestors to prevent flashback into the hoses. If you do not know if your torch has these items, contact Health, Safety & Environment to have it inspected.

DISCUSSION QUESTIONS

1. How do we use open flames in our lab?
2. What fire risks are there from our lab procedures?
3. Where are the fire loads—large combustible objects or conglomerations—in our lab?