Hot Work Training
Objectives

- Understand what Hot Work is
- Understand what Hot Work Permit is
- Understand risks and how to reduce risk potential
- Understand ventilation for Hot Work
- Understand PPE and What Not to Wear
- Understand Fire Watch
- Recognize what is wrong in examples given
What is Hot Work?

- Welding
- Flame Cutting
- Grinding
- Soldering with Torch
- Hot Riveting
- OSHA 1910.251 – 257
  (Standards for welding, cutting, and brazing)

ANY spark-producing operations
OSHA 1910.252: General requirements

For Hot Work Operations, OSHA requires:

- Fire hazards be removed
- Combustibles be at least 35 feet from Hot Work
- Fire extinguishers at Hot Work Location
- Fire watch in areas with a high risk for fire
- Proper authorization from authorized (UCM) employee to complete Hot Work
What is a Hot Work Permit?

Gives information on:

- Type of hot work
- Location of hot work job site
- Expiration of permit
- Required precautions checklist
- Emergency contact information
Why use a Hot Work Permit?

- Reminds worker of safety precautions
- Warns others of the work being done
- UCM requirement for all employees, students, and contractors doing hot work on UCM property
Before Hot Work

- FPO representative who issues the Hot Work Permit must call or stop by Public Safety (ext. 4123) prior to work being done to inform them of work
- Create list of emergency phone numbers
- Remove or cover combustibles within 35 feet of area
- Locate closest fire extinguisher (is it within 25 feet?)
- Provide fire extinguisher if needed
- Locate closest fire pull station
- Locate at least 2 routes of escape
Issuing Hot Work Permit

- Contact UCM Facilities (FPO) at ext. 4331. Inform them of Hot Work to be done. Provide specific information:
  - Work being completed
  - Location - be specific building, room #, etc.
  - Date and length of time
  - FPO - Life Safety may be able to cover the smoke detector or they may have to disabled they system in the specific area depending on work being completed and duration
Issuing Hot Work Permit (Cont’d)

- FPO representative who issues the Hot Work Permit must call Public Safety Dispatch (ext. 4123) prior to work being done to inform them of work.
- Public Safety Dispatch will immediately send an e-mail with details of Hot Work to be done to UCM EHS and Warrensburg Fire Department.
- When work is completed, FPO representative will complete Hot Work Permit and give copy to Public Safety Dispatch.
- Public Safety Dispatch will scan and electronically save completed Hot Work Permit.
What are combustibles?

- Cardboard
- Paper
- Chemicals
- Trash
- Building Material
Risks

- Burns
- Fire
- Explosions
- Metal Fever
How to Reduce Potential Risks

- Keep fire extinguishers within **25 feet** of hot work
- Remove combustibles within **35 feet** of hot work
- Cover non-removable combustibles with fire blanket **or** OSHA approved welding screen
- Wear proper PPE
- Have Fire Watch
Classifications of Fires

- **Class A**: Combustibles
- **Class B**: Flammable Liquids and Gas
- **Class C**: Electrical
- **Class D**: Combustible Metals
- **Class K**: Cooking Oils and Fats

Fire Triangle
Fire Extinguisher

- UCM uses “ABC” extinguishers and “K” extinguishers
- Effective on Class A, B, and C fires and Class K fires
Technique for Fire Extinguisher Use

- Pull
- Aim
- Squeeze
- Sweep (base of the fire at least 10 ft away)
In Case of Fire

- Keep escape route to your back
- Always have options for escape routes
- Call
  - UCM Public Safety
    - 911 (campus phone)
    - (660) 543 – 4123
Ventilation

- Beware of galvanized stainless steel
- If possible:
  - Keep the air moving
  - Open doors/windows
  - Use exhaust fan
- Use a respirator if ventilation is not possible
  - Why is this not an option the majority of the time?
Hot Work PPE

- Welding Helmet or Face Shield
- Hand Protection
- Body Protection
- Leather Boots
What NOT to Wear

- No cuffs on pants
- No polyester
- No poly-blend material
- No frayed jeans
What is a Hot Watch?

Person(s) that . . .

- Have clear view of operation
- Remains in communication with workers
- Stops work if necessary
- Never leaves area while work is being completed
- Pulls fire alarm if necessary
- Uses extinguisher if necessary
- Stays in place at least 30 minutes past the completions of work
What’s wrong with this picture?
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Summary

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