PURPOSE

The purpose of this procedure is to establish standard guidelines for conducting on-site training fires in the flashover simulator. This policy establishes the safety guidelines when operating in the live fire training structure as a flashover simulator.

POLICY

Those individuals who have successfully completed a department approved, flashover instructor course shall be allowed to serve as instructors for the flashover simulator. A minimum of four (4) instructors are required for conducting flashover training within the flashover simulator. The four instructors may consist of one (1) Training Officer, one (1) Safety Officer, and two (2) flashover instructors. The flashover instructors are responsible for ensuring all students understand the rules pertaining to the flashover simulator.

When the training structure is being utilized with fire loads that will not produce a flashover, the training may be conducted with an instructor: student ratio not to exceed 1:5. However, a minimum of two (2) qualified instructors shall still be present and actively providing instruction/supervision. The minimum assignment of instructors during non-flashover evolutions shall include one (1) Training Officer and one (1) Safety Officer.

Any Fire Department member or outside agency wishing to use the flashover chamber must first obtain permission from the Deputy Chief of Special Operations and Training.

The time and date of the training drill must be scheduled with the training division. Training involving recruit and company training always have first priority as designated within the Annual Training Plan.
A training division officer must be on-site for any live fire drills involving the flashover simulator.

**A fee may be charged to outside services/agencies. For agencies requesting use, the following fees shall apply:**

- 200.00 per hour plus replacement of materials including particle board, propane, and pallets

The flashover chamber has been designed specifically for the purpose of repeated live fire training evolution's and include safeguards that only become unacceptably hazardous through misuse and neglect.

A safety officer shall be designated by the training division for all live fire training events involving the flashover simulator. The safety officer will monitor personnel and fire conditions, and work with Command to ensure all safety procedures are complied with, and that risk to personnel is minimized.

The safety officer shall have full authority to intervene and control or stop any aspect of the operations when in their judgment, a potential or real risk to personnel exists. The safety officer will not be assigned other duties that would distract from their safety responsibilities.

The safety officer shall ensure a protective clothing inspection is conducted for each member prior to entering the chamber.

Additional safety officers may be assigned to the training fire if the conditions dictate. Responsibilities of the safety officer(s) will include but not be limited to the prevention of unsafe acts and elimination of unsafe conditions.

Students must be in good physical condition. Health problems such as heart conditions, high blood pressure, emphysema, or diabetes may prohibit participation in the trainer. If someone has a preexisting medical condition, they should consult a medical physician before participating.

Students should be well hydrated before entering the trainer. Water or some sort of sports drink should be consumed immediately after exiting the trainer. In addition, if a student feels ill or in any way not healthy, they should not participate.

The number of personnel involved in training fires inside the flashover chamber shall be limited to ten (10) personnel. To reduce risk, and assist with scene management, training fire participants shall be formed into individual teams consisting of no more than eight (8) members and directly supervised by two (2) qualified flashover chamber instructors.

Exposing recruit fire fighters to live fire conditions presents special safety considerations. All fire fighters involved in flashover chamber training fires shall have received training to meet the performance objectives of:
Because communication is difficult while wearing an SCBA, talking should be kept to a minimum so that everyone will be able to hear. Should anyone need to leave, they must notify an instructor and maintain a low position while exiting. Standing is NOT permitted during flashover live fire training.

All safety clothing must be in good shape. Full PPE shall be worn during all live fire exercises unless instructed to do otherwise by the teacher. No bare skin should be showing when students are ready to start. Helmet shields should be removed because they discolor and have a tendency to melt. No polycarbonate helmets will be worn inside the container.

All members shall have a full SCBA bottle prior to entering the flashover chamber. ALS capabilities shall be maintained on-scene during training fires. Absolutely no horseplay will be tolerated. The instructor has authority in the trainer, regardless of rank.

**Required Fire Equipment**

Two separate sources of water supply shall be established. The water supply shall be test flowed to insure adequate water supply.

All fire suppression hoselines shall be supplied by one pumper. The backup hoselines shall be supplied by a separate water source. All hoselines will be flow tested to confirm a minimum of 95 gpm, prior to igniting the fire. During training, the nozzle and hose should always be kept clear. Be sure that no one is standing or blocking free movement of the nozzle and hose line. All lines must be charged and purged of air before starting the exercise. A backup line is mandatory.

**Flashover Simulator Checklist**

Prior to conducting flashover simulator training fires, the following items must be addressed.

- Dispatch Notified
- Training Division Approval
- Safety Officer Assigned
- Four (4) Qualified Instructors Present
  - minimum of two (2) when non-flashover training is being conducted
- Adequate fire apparatus on site
- Dedicated ALS capabilities on-scene
- Adequate water supply (Two Sources)
- Fire load; conservative; pallets are the only acceptable materials.
- Ignition location determined
- Protection line in place for FIRESTARTER; manned and charged
- Training Division on-scene
- Command established
- Command location identified and announced
- All radios checked for proper functioning/channel
- Groups/Divisions established as necessary
  - Interior Rescue (RIT)
  - Safety
  - Other
- Suppression line in place,
  - flow tested for a minimum of 95 gpm each
- RIT lines in place,
  - flow tested for a minimum of 95 gpm each
- RIT manned by minimum of two (2) fire fighters
- Suppression lines from one pumper,
  - RIT lines from a separate water source
- Flashover simulator participants and RIT units in full protective clothing, PASS and SCBA checked for proper functioning
- Flashover chamber instructors in charge of each observation team and RIT unit
- Operating plan established and understood by all
- Walk through briefing conducted for all crews
- PASSPORTS collected by safety officer
- Protective clothing and SCBA’s shall be decontaminated as necessary after use