**Overhaul**

Overhaul of fire scenes is essential for the protection of citizens and firefighters alike.

Overhaul should include: the search for and extinguishment of hidden or remaining fire, locating the point of origin, determining the cause of the fire, preserving evidence of arson, making the fire scene safe and to protect the public and firefighter alike from the possibility of a rekindle, further endangering both. In many instances, retrieval of personal and useable items for the occupant is included. Overhaul may be a simple process or it could require extended periods of work.

Many studies have shown that during this process toxic gases, which contain carcinogens, irritants and asphyxiates may be present with or without the presence of smoke. These particles may be inhaled or settle onto exposed skin and are absorbed into firefighter’s bodies. Technology does not currently exist to detect or quantify all significant respiratory/dermal hazards in the post fire environment. Carbon Monoxide, even at safe levels, does not correlate to the levels of other toxicants found at a fire scene. CO detectors cannot be relied upon to indicate when one might safely doff an SCBA.

The purpose of this policy is to guide safe and effective overhaul operations while keeping firefighters cancer free. **Overhaul in any potentially contaminated area** (with the exception of vegetation fires) **will require the use of SCBA and full structural PPE**. This includes vehicle, dumpster, other outside fires and mutual aid scenes where other departments have removed their SCBA.

**Overview**

It is the policy of Vincennes Township Fire Protection District that firefighter safety shall be the highest priority. The IC should consider the following guidelines:

Limit the amount of overhaul to fire extinguishment.This will help limit exposure to carcinogens. Fire extinguishment includes opening enclosed areas, drop ceilings, attics and voids in walls.

Show empathy to the homeowner and respect their property. Place their salvageable property in a separate area where rekindle could not further cause damage. Determine the appropriate time to stop overhaul operations and turn the scene over to the insurance, restoration company or private contractor.

SCBA and full structural PPE will be used during the entire overhaul process in areas that are potentially contaminated. This includes vehicle, dumpster and other outside fires.

Focus on the areas that have had direct fire involvement. Use the Thermal Imaging Cameras (TIC’s) to check for hot spots and areas of possible rekindle. Only remove debris that will assist in preventing further loss of property.

Use class A foam throughout the fire involved areas and designate a fire watch, if necessary or arrange for a periodic check of the fire scene until the structure is considered “cold”.

Rotate crews so that no one spends an excessive amount of time working in an SCBA.

**Procedures**

After the initial knockdown of the active fire, and at the discretion of the Incident Commander, companies engaged in suppression operations will withdraw from the building, and allow for a cool-down period of at least 20 minutes, before implementing overhaul operations.

The Incident Commander should establish an overhaul plan. The plan shall include an assessment of:

o Structural stability and other hazards

o Resource determination (crews and/or specialized equipment)

o Additional salvage needs

o Fire Watch

o Fire investigation needs

**Recommendations:**

Start overhaul from the top and work down, when possible.

Utilize TIC’s to find fire locations.

Open walls, ceilings, floors, shafts and other concealed spaces as necessary.

Class A-foam, or other wetting agents, should be considered when water application is required. Water weight and its impact on building stability will be considered.

If it is necessary to remove debris, remove it to an area outside, at a safe distance from the structure, completely extinguished, and sufficiently marked to reduce hazards to personnel or civilians.

**Cellulose Insulation Fires:**

When exposed to heat, sparks or flames cellulose insulation presents special problems for the fire service and building owners / occupants. Hot spots can get buried deep inside cellulose insulation where they can lie undetected for several hours before breaking into fire. While it is widely recognized that it is impossible to remove all cellulose insulation from a structure, fire crews should remove as much insulation as possible in the burned area. Consider the use of the insulation vacuum. Make sure that the insulation that has been removed from the structure is moved well away from the structure or other material in case of ignition.