

## 7. Smoke Inhalation

### Catastrophe—No Fatality

Three employees of a manufacturing facility were admitted to the hospital after fighting a fire at the facility with portable fire extinguishers. The facility manufactures parts and accessories for the automobile industry. The fire occurred in the department where headliners for SUVs are made. A fire began in a headliner press used to mold the headliners from a sheet of polypropylene composites. A four-by-eight-foot sheet in the oven of the press caught fire. A quality assurance tech first observed black smoke rising from the top of the headliner press and activated the built-in carbon dioxide fire-suppression system. The supervisor in the area ran to the press and activated the general alarm. As the headliner department employees were evacuating the plant, maintenance workers began to arrive at the press area as required. Two maintenance workers fought the fire with portable fire extinguishers brought to them by the supervisor. After the two maintenance workers were successful in extinguishing the fire, they and the supervisor exited the plant. Once outside, they were observed by the company nurse to be coughing and she instructed them to go to the local hospital. The three employees admitted to the hospital and treated for smoke inhalation and kept overnight. They were released from the hospital the next day.

### TOSHA Citation(s) as Originally Issued

#### **Citation 1**

Item 1 T.C.A. 50-3-105(1)	The employer did not furnish employment and a place of employment which were free from recognized hazards that were causing or likely to cause death or serious physical harm to employees in that employees were exposed to toxic smoke while fighting a fire, due to the extinguishing system being inadequate to suppress the fire.
Item 2a 1910.147(c)(4)(i)	Procedures were not developed, documented, and utilized for the control of potentially hazardous energy in that maintenance workers were working without their individual lockout/tagout devices applied to the energy sources.
Item 2b 1910.147(f)(3)(i)	A procedure was not utilized to afford the employees a level of protection equivalent to that provided by the implementation of a personal lockout or tagout device when servicing and/or maintenance was performed by a crew, craft, department, or other group in that there was no group lockout procedure in place.
Item 2c 1910.147(f)(3)(ii)(D)	Group lockout or tagout devices were not used as required in that multiple maintenance employees did not apply their individual locks on a group lockout/tagout device.
Item 3 1910.147(c)(5)(ii)(D)	Lockout devices and tagout devices did not indicate the identity of the employee applying the devices.
Item 4 1910.147(c)(7)(i)	The employer did not provide adequate training to ensure that employees acquired the knowledge and skills required for the safe application, usage, and removal of energy control devices.

**See Photo on Next Page**



CO<sub>2</sub> extinguishing material