# **Leading Causes of Industrial Fires**

Just as you learn about fire safety and escape procedures, OSHA also requires that you learn about the potential fire hazards in your work areas.

Some common causes of industrial fires workers should be aware of are:

#### **Electrical Fire Hazards**

Defective wiring is a major cause of industrial fires. Watch out for worn extension cords, exposed wiring, and broken power tools or equipment.

Avoid overloading circuits or outlets. Report all defective wiring or equipment to your supervisor and stop using it. Never try to fix it yourself!

Also, keep electric motors and machines free of dust and grease.

### Flammable Liquids

Solvents, paint and paint thinners, gasoline, and alcohol-containing substances all ignite easily at the slightest spark—or even by static electricity. They should be stored in OSHA-compliant and approved safety containers in well-ventilated areas not near any heat source.

Ground containers when transferring materials to safely discharge static electricity.

Spills should be cleaned up immediately. Spray painting should be confined to special fireproof booths.

# **Compressed Gases**

Compressed flammable gases have flash points below room temperature, so even small leaks of these materials can ignite. Don't expose cylinders to temperatures over 50 degrees C (122 degrees F). Don't extinguish a flame involving a flammable gas until the source has been turned off—it can easily re-ignite.

#### **Hot Work**

Welding and cutting operations generate heat, sparks, and slag. Make sure you wear fire-resistant protective clothing when welding or cutting. Follow the precautions listed on hot work permits.

Weld only in areas with fire-resistant floors or use protective shields. Catch slag in containers of water or sand. Protect open doorways or windows with a fireproof curtain.

Relocate combustibles, such as trash cans, to at least 35 feet away from the welding. Designate a fire watch to look out for stray sparks or lingering fires. Keep fire fighting equipment nearby.

## **Smoking**

Many companies have banned all smoking from the premises. If you are still allowed to smoke in designated areas, make sure that there are adequate ashtrays or butt cans and that smoking rules are posted and enforced.

### **Housekeeping Practices**

Sweep up dust, lint, sawdust, and scraps. Dispose of combustible waste—such as oily rags—in covered, airtight containers.

Keep work areas clean and uncluttered by trash and cartons, especially around machinery, stoves or heaters, and other appliances.

Use nonflammable cleaners. Keep incompatible substances away from each other.

Stack materials so they don't block sprinklers or exits.

#### Arson

Be aware of the possibilities of arson in your workplace. Arson has increased dramatically over the last decade, particularly at strike-bound plants or companies engaged in controversial activities.

Although arson may be directed at buildings or goods rather than people, it can still cause the deaths of workers or firefighters. The prime targets for starting set fires are shipping docks, outside areas where pallets or piles of cardboard are stored, or warehouses with costly goods.

Report anything that looks suspicious—after all, your job—and your life—may be at stake.