Problem:
Hazard Control Technologies is aware of the challenges facing today’s industrial managers. Economic restrictions are resulting in reduced staffing. At the same time, more experienced employees are retiring or being phased out leaving companies with a loss of their “knowledge base.” Many employees are less inclined to remain with a company for as many years. These workplace dynamics present problems that management must overcome.

- Reduced staffing
- Loss of knowledge base
- More frequent turnover
- Less years in position

Managing change has become the norm. Hazard Control Technologies has a stable knowledge base and expertise in certain areas pertaining to a plant’s ability to be prepared for fire related emergencies and how to respond.

How would you answer the following questions?

1. Do you have an Emergency Response Plan in place?
2. Are your SOGs (Suggested Operating Guidelines) written, accurate and up-to-date?
3. Do your employees know what to do in the event of a fire or explosion?
4. Has your local fire department been trained to assist you?
5. Are you equipped to handle possible contingencies?

If the answer to any of these questions is “no,” Hazard Control Technologies may be able to prepare a program to help.

Solution: HCT’s Fire Emergency Preparedness and Response Management Program

Hazard Control Technologies is a recognized leader and sponsor of PRB Coal Users’ Group and has the capability to provide solutions to prepare for fire emergency events, not only in power plants, but other industrial situations involving combustible granular materials or potential fire and explosion hazards. HCT will visit your plant and provide a needs assessment to define your specific hazards and evaluate the assets available to deal with those hazards. This would include a site survey.

Next, HCT would prepare SOGs or review and update your SOGs for emergency response. An SOG procedures program should grow over the years from a broad-based emergency response guideline, to eventually, SOGs to address every predictable hazard on your site.

Finally, HCT has the experience to train all of your employees and local firefighters on hazard awareness in your plant. All employees would understand what their roles are in the case of an event. Coal handling employees would be trained in depth to recognize and report certain hazards and incipient responders would understand what is expected of them. Local firefighters would be involved to understand what industry hazards exist at a given plant and how to deal with them.

HCT became involved in combustible dust hazard mitigation when F-500 Encapsulator Agent became known as the most versatile fire suppression agent available for safe application on coal fires. Applying water to coal results in dangerous flare-ups, but adding just 1% F-500 EA to the water avoids flare-ups and rapidly penetrates into the coal, cooling and extinguishing fires. The superior performance of F-500 EA for combustible dusts led to multiple delivery systems, from fire extinguishers and other portable devices, to fixed suppression systems for coal handling areas, turbine and transformer protection. Another innovation is the piercing rod for extinguishing deep-seated silo, bunker or pile fires. HCT’s F-500 EA and the piercing rod are recommended by industry best practices and may be recommended for a given hazard at your plant.
HCT’s Fire Emergency Preparedness and Response Management Program

Potential SOGs

After creating general SOGs (Suggested Operating Guidelines), an ongoing program could include Hazard Preparedness and Emergency Response Management Plans for other areas of the plant. Some examples of possible SOG subjects are listed below:

### General
- Cable trays
- Electrical panels
- Hydrogen
- Heavy equipment
- Ignition control/Hot work

### Operations
- Boiler/Furnace
  - Fronts
  - Pipes
  - Start-up system
  - Drag chain
  - Activated carbon
- Fly ash
- Generator/Turbine
  - Bearings
  - Under turbine lube oil

### Transmission
- Step-up transformer
- Transformer yard

### Coal Handling
- Unloading - stacker
  - Rail
  - Barge
- Coal yard
  - Stacker
  - Reclaim
  - Conveyor
  - Tunnel
  - Elevated
- Crusher
- Transfer points
- Tripper room
- Silo/bunker
- Dust collectors
- Pulveriser
  - Coal feeder

Mobile Firefighting Systems from Hazard Control Technologies

The F-500 Fire Extinguisher can be rapidly deployed for small fires.

Multiple versions of Piercing Rod Systems provide the capability of extinguishing deep-seated combustible granular fires.

26 and 40-gallon Portable Carts are available carrying F-500 EA for incipient response on Class A, Class B fires and mitigating fuel spills.