

## INCIDENT INFORMER

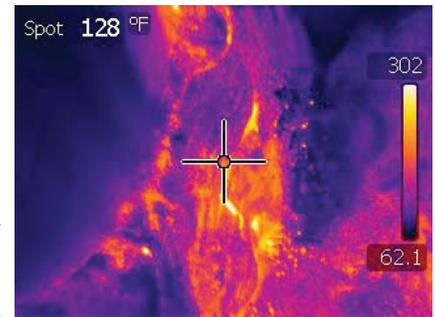
### PRB Coal Bunker Fire Northeast Ohio

Following the "Recommended Practice" of the PRB Coal Users' Group, an Ohio power plant was able to extinguish a potentially dangerous hot spot in their coal bunker by using a method perfected by Hazard Control Technologies (HCT). This technique reduces the possibility of explosions and results in less water being used that would create sludge, ruining the coal and blocking the flow of coal after extinguishment. The power plant had the foresight to sponsor *Coal Handling Hazards* training for the local fire department on the proper techniques to use on coal bunker fires. They avoided the temptation to stream water on the coal, stirring up dust and creating an explosive situation. Instead, they used the recommended F-500 Encapsulator Agent, HCT piercing rods and a thermal imaging camera, available through HCT. The local fire chief stated, "I highly recommend this training for any fire department responsible for a coal plant."

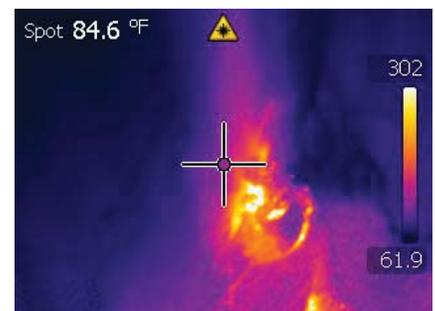
It's important that each facility creates a procedure for bunker and silo firefighting and strictly adheres to the details. The actions taken during the initial response period are critical to successfully extinguish the fire without incident. Utilizing thermal imaging cameras during the assessment will help provide responders with a complete understanding of the hot spot and allow for pinpoint suppression efforts.

Rapid response is important, but not as important as an organized plan of attack. Again, proper training in this procedure is critical. The thermal imaging camera locates the hot spot. To prevent blowback in case the coal ignites, the area above the coal must be washed down, prior to attacking the fire. This can be accomplished with 0.5 - 1% F-500 EA in a fixed suppression system or by a hand line and dispersed spray pattern. All personnel involved should be wearing total Personal Protective Equipment. Then, the area is ventilated to prepare for the smoke and steam that will be created. F-500 EA and a fog pattern from the piercing rod or fire nozzle should be used to spray down the inside of the silo. The same hand line can be used later to mitigate any smoke to increase visibility. Prepare at least five 5-gallon pails of F-500 Encapsulator Agent. A spotter using a thermal imaging camera and a two-way radio will coordinate the attack with a nozzleman inserting the piercing rods, five feet at a time. The F-500 EA and water is injected until the smoke and steam have stopped. This may require multiple piercing rod injections. The spotter will continue to scan with the thermal imaging camera every fifteen minutes for the next hour. Then, the bunker or silo should be emptied.

Complete training on handling PRB coal fires and a copy of the PRB Coal Users' Group *Recommended Practice - Coal Bunker, Hopper and Silo Fire Protection Guidelines* can be obtained by contacting Hazard Control Technologies.



Actual images from the power plant bunker fire with a thermal imaging camera identifying the coal hot spot.



Thermal image shows heat reduction during F-500 EA piercing rod treatment.



Thermal imaging cameras are now available through HCT.



Thermal imaging camera identifies and locates the burning coal in the silo.



HCT piercing rod injects F-500 Encapsulator Agent around the burning coal.



As the smoke subsides, the thermal imaging camera will confirm the fire is out.

HCT manufactures piercing rod kits and carts



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