

FireAde[®] 2000

Global Leader

Fire Service Plus is committed to saving lives and protecting the environment by manufacturing the most universally advanced agent. Our product, FireAde 2000, redefines the newest standards for industrial fire prevention and extinguishment. Fire Service Plus has incorporated 30 years of ground breaking research and development with rigorous worldwide testing.



Safety

Fire Service Plus has been servicing the coal industry for many years. Common concerns are widely recognized with unexpected shutdowns, dust build-up, and stockpile spontaneous combustion throughout the coal industry. Fire Service Plus provides a solution that is safe, effective and affordable to alleviate these concerns.

Protecting Our Environment

Today, there is increased awareness and concerns regarding the environmental footprint chemicals leave behind. Many products use harmful chemicals, acids, and other ingredients that contaminate the environment. Fire Service Plus uses water based and food grade ingredients to protect the integrity of living organisms, waterways, and human life.

FireAde 2000 is non-toxic, non-hazardous, non-corrosive, and fully biodegradable. Material safety data sheets (MSDS) and additional environmental information is available.



Purpose & Scope

To provide information to coal facilities on how to manage stockpiles prone to spontaneous combustion and stockpiles in advanced stages of spontaneous combustion.

Coal - particularly when it is unwashed or contains high sulphur content, can be prone to spontaneous combustion. High, loosely compacted faces on stockpiles allow moisture and oxygen penetration, which may result in spontaneous combustion. While the addition of water only will suppress any visible flames, it will accelerate the chemical processes causing the coal to heat up and flame.

This is a general procedure for most conditions but unusual or different circumstances may require a different approach. In every situation a formal risk assessment needs to be conducted involving all safety personnel.



WETTING AGENT
IN ACCORDANCE WITH ANSI/NFPA 18 FOR
PHYSICAL PROPERTIES AND FIRE EXTINGUISHMENT



AIR FOAM/LIQUID
CONCENTRATES
(Mechanical
Foam)



FOAM
LIQUID
CONCENTRATE
14CY

General Applications

Safe and Effective Extinguishment of Coal Fires

Any outbreak of fire in coal must be dealt with as early and effectively as possible with minimum risks to persons involved.

- Dozers should not be operated above burning coal on a stockpile.
- All personnel should remain upwind of the smoke or fire.
- Fire fighting and hot coal handling should always be carried out in pairs, with one (1) person acting as spotter.
- Areas downwind of the hot coal or fire should be assessed for health concerns, environmental, and community impacts. If necessary adequate controls should be implemented including evacuations if necessary.
- The different stages are typically listed as follows:
 - o Stage 1 – coal gives off steam
 - o Stage 2 – coal gives off white smoke
 - o Stage 3 – coal burns with yellow sulfur smoke
 - o Stage 4 – coal burns with visible flame



The following steps are recommended for safe extinguishment of stockpile coal fires:

1. Stockpiles or affected areas must be continuously monitored. The temperature equipment should be a probe type, thermal imaging, or infrared device. A gas detector should be used by any personnel involved with the management of the fires to detect harmful levels of carbon monoxide and oxygen levels.
2. Respirators are recommended for all involved.
3. Handling equipment will depend on situation and extent of fire. Common practice includes track dozer, large end loader and water truck (fire truck) fitted with high capacity output of water.
4. Rubber tired equipment must NOT be driven over any burning areas of stockpile.
5. Tracked equipment may be used with extreme caution.
6. Areas downwind should be controlled and monitored at all times.
7. Prior to handling the coal, a mixture of FireAde 2000 and water should be heavily applied, particular to any open flame and thick white or yellow smoke. Burning coal retains a great deal of BTU's and a heavy soaking will be required to cool. The addition of FireAde 2000 breaks the chemical reaction of spontaneous combustion and prevents reigniting when stockpiles are opened. Re-application may be needed to insure extinguishment.
8. The coal may be moved once there is no visible flame or smoke. Steam will continue coming off coal for a long period of time, but it is less dense in color. Once coal is at this stage, it may used or removed. If coal cannot be used or removed immediately, continue to re-apply FireAde 2000 as needed to insure continued extinguishment and no spontaneous combustion.
9. Finally, FireAde 2000 will not accumulate, harden, or reduce BTU's when applied at any percentage.

