



Safety Monitoring in Coal handling area

Monitoring involves scheduled (8 hr.) visual inspections and recordings of coal stockpiles with specific attention to the presence of haze, smoke emissions or spontaneous combustion odour. A thermocouple is inserted into the stockpile at specific positions to measure temperature in every 24 hours

Normally, wet coal will show signs of water sweating and slow rise in temperature in that area. Those areas to be watched regularly for any increase in steam

The following details to be recorded to monitor the stockpile:

- 1) Date of stacking
- 2) Type of coal
- 3) Stockpile temperature readings
- 4) Date of reclaiming

The record assist in the management of residency time and subsequent control measures for spontaneous combustion of stockpiled coal

A major preventive measure is regular scheduled stockpile observations. These observations assist in early identification of hot spots of spontaneous combustion.

Mitigation Measures:

- 1) The Bottom portion of the pile to be manually compacted with the help of shovels to prevent air from flowing into or out of the bottom of the pile when the coal pile is warmer than ambient conditions
- 2) In case of the coal being unable to reclaim due to some reasons and if smoke comes out, the smoldering portion to be taken out of the pile and water to be sprayed on the smoldering coal and allow it to cool and the area to be compacted to prevent further air contact
- 3) Fly ash slurry can be applied at the toe portion of the Pile to completely blanket the portion from Air contact
- 4) ile should be stacked such that there is sufficient gap between each piles