

## BEST PRACTICE

LOCATION: Asphalt/Coating plant      ARTICLE YEAR: 2013  
ACTIVITY: Maintenance & Housekeeping      COMPANY: Aggregate Industries  
SUB ACTIVITY: N/A      COMPANY LOCATION: Express Asphalt, Darwin  
BEST PRACTICE No: BP896      COMPANY TEL: 0780 226 0584  
COUNTRY OF ORIGIN: United Kingdom

### TITLE

**Bag house guardian**

### ARTICLE

#### DESCRIPTION

Express Asphalt was experiencing 2 to 3 safety lock-outs per week as the conventional temperature protection of asphalt bag house using thermocouples was not operating effectively. The "actual" gas temperatures were often running beyond the 170 degrees C set for the burner.

At high temperatures, the fabric of the filter bags experience high stress and degrade which can lead to the ignition of any residual flammable deposits on the outer surface of the bag. Following a bag house fire at another company, the protection systems were reviewed and a new control system was installed called the "Bag House Guardian". Instead of looking at actual temperatures it measures the 'rate' of temperature rise and, if it calculates that a thermal lock-out is 'likely' to occur, it automatically trims the burner back to prevent high gas temperatures being produced.

#### BENEFITS

- No temperature related lock-outs and reduced fire risk.
- Extended bag life, improved filtration and lower emission levels.
- Faster turnaround times for our customers with fewer stoppages
- Cooler plant building and improved energy efficiency.

### ARTICLE IMAGES

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