ABRASIVE BLASTING WITH BLACK BEAUTY

1 PURPOSE:

To provide guidance in the use of Abrasive Blasting agents. Original Black Beauty has been selected, as of 2/1/94, as the preferred blasting agent. It is a very stable, non-flammable, non-toxic material derived from coal that has been burned in boilers as fuel.

2 SCOPE:

This applies to all blasting operations in the Lake Charles Complex whether performed by PPG Personnel or Contractors.

3 APPLICATIONS:

Any other abrasive blasting media must be pre-approved by the Safety Department before being used. There are specific applications where sand might be used. Sand must be pre-approved before being used and will only be approved for the specific application. Use of sand by either PPG or Contractors requires a safety deviation issued from the Safety Department and JSI to assure protection of workers doing blasting and other personnel in the area where the blasting is performed.

4 The Material Safety Data Sheet for Original Black Beauty lists 10mg/m$^3$ as the threshold limit value for exposure. Respiratory protection is required if dust exposures exceed the TLV for the task.

5 Other safety concerns are the protection of the eyes, facial area, and all exposed skin from rebound of the blasting material. Therefore, respiratory protection coupled with a hood, long sleeve garment, and gloves is the minimal level of protection required.

Respiratory protection can be achieved using NIOSH approved respirators as follows:

5.1 Air supplied blasting hood (Protection Factor 25)
5.2 Full face air purifying respirator with HEPA filters (Protection Factor 50)
5.3 Positive pressure air supplied mask (Protection Factor 2000)

When selecting options two and three a desert hood or CPF III hood must be used to protect the head and neck areas. Gloves should cover all exposed areas of the hands and wrists not covered by clothing.

Should blasting generate hazardous or toxic materials those materials must also be taken into consideration when selecting respiratory protection and when disposing of the used blasting media.