2. Nature of Surface [illegible] (cont'd)

The type of surface material [illegible] could eliminate certain insulating materials [illegible] because of corrosive effects of the insulation [illegible] magnesia must not be used over stainless steel or aluminum because of the corrosive effect of soluble chlorides in the magnesia.

3. Dusting of Insulation

The fines of some insulating materials may cause a dusting problem in certain operating areas; if objectional, a more stable insulation should be used. Some insulations can be crushed or crumbled when hit with a hard object. On occasion, vibration of pipe or equipment may cause the insulation to break down and become ineffective. An abuse resistant insulation such as sponge felt or a protective finish should be provided where dusting is a problem.

4. Initial Cost of Installation

Insulation costs vary just as other products which are manufactured in different grades. The most economical insulation, both from material cost and installation cost, which will adequately insulate the line or equipment should be used.

Premium grades of insulation, such as asbestos sponge felt, should not be used unless there is justification to do so. Dusting in process areas and where frequent removal and replacement is necessary will justify a premium grade insulation.

5. Expected Maintenance Cost

The initial installation cost of insulation is very important, but maintaining this insulation afterwards can more than make up for any initial savings in a short while if expected maintenance cost is not given proper consideration.

Good examples of insulation savings on this plant are the pump block cozies and C.P. spin block cozies. Original installation was Kaylo reinforced with expanded metal cozies. These cozies were very expensive to maintain. By changing to a more expensive insulation material (Calcilite) and eliminating the expanded metal, the future maintenance cost was reduced considerably.

Prefabricated cozies for lines, fittings and equipment which are removed and replaced frequently can reduce the maintenance insulating material cost because they can be reused.