



Inter Office

Personnel and Organization Staff

Mr. John Neilans
Manufacturing Engineering
Dearborn Glass Plant

February 9, 1977

Subject: Sodium Sulfate Replacement of Talc as Lubricating Compound at
Bending Lehr

The prototype installation for the application of sodium sulfate as the parting compound between glass sheets going through the bending Lehr was observed on February 3, 1977. The use of sodium sulfate will serve as a means to eliminate asbestos-form talc in the current application. This replacement will result in a significant improvement in employee exposure to hazardous materials.

The talc currently used contains asbestos which has been proven to cause debilitating lung fibrosis and cancer of the mesothelial membrane of the lungs. Contrast this with sodium sulfate which appears, from all current information, to be an inert non-toxic material and the benefits of the change are obvious.

The prototype operation as observed would move the application from the bending line to the glass cutting line along with automating the application. The automated spray as observed is completely exhaust ventilated allowing no escape of the sodium sulfate into the shop atmosphere. This method of control would be required during the production operation to ensure that elevated concentrations of sodium sulfate dust are not produced. Although sodium sulfate is not considered to be a highly hazardous material, any dust in high concentrations can be irritating and cause respiratory difficulty. After discussion with Dr. L. M. Roslinski, Toxicologist, and at his suggestion, it is suggested the ventilation control system be designed to maintain dust concentration of the respirable portion (less than 10 micron diameter) of the sodium sulfate dust to 1.0 mg/M³.

Discussions with S. Childs and yourself indicate that the production ventilation control system will differ little from the prototype system with the changes increasing control if they should occur. If the design of the ventilation system should change such that lower control is anticipated, this Section should be consulted. Also, it would be appreciated if the design specifications pertaining to ventilation control could be reviewed by this Section before final installation is made.

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