WHAT DID YOUR VISITOR (FISHER) HAVE TO SAY ABOUT ASBESTOS? JLM

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~~KAI~~
→ JLM

J. J. Nelson OP-8

PLAINTIFF'S EXHIBIT

AL-1950

PITTSBURGH PURCHASING

INDUSTRIAL - 19

MR. G. J. MYERS

MARRICK OPERATIONS

HWC ~~HHS-OP-7~~
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AJS
JZN OP-8

August 7, 1972

RE: ELIMINATION OF ASBESTOS FROM INSULATION PRODUCTS

This will summarize the results of our efforts to eliminate materials containg asbestos from our various unit operations associated with smelting, melting and casting of aluminum.

The most efficient high temperature insulation boards available for back-up insulation applications contain approximately 8 per cent asbestos; the more popular brands for this type insulation are, Johns-Manville's Superex; Carey's Hi-Temp; International Vermiculite's IV-18 and IV-20. We are working with the board manufacturers to eliminate asbestos from these products and as early as January, 1973 an asbestos-free insulation board for back-up insulation may be available for our use. Although the asbestos-free board may not have the insulation, strength and low shrinkage characteristics as the board presently used, its use should be acceptable for back-up insulation and shows promise in meeting the rigid standards set by OSHA.

NOTHING AVAILABLE NOW

COPY

In transfer operations, e.g. trough linings, the most commonly used materials are asbestos-lumnite and Molten Metal Marinite (MMM). In our search for new materials to upgrade the service life of trough liners along with meeting OSHA requirements, some of our plants are switching to asbestos-free materials such as Glasrock, Alumina-Silica fiber materials (Fiberfrax Vari-Form or Knowool or Cerafelt) and Silfrax. In addition, we have an active program in progress to develop Alcoa's 340 material (asbestos-free) for trough lining.

WHICH PLANTS TO WHAT?

RESULTS WHEN?

The most difficult and frustrating phase of our objective to rid ourselves of materials of construction which contain asbestos has been associated with the MMM headers used in ingot casting. For the past 12 years we have been actively engaged with all manufacturers of board products, and in particular Johns-Manville, to upgrade and/or develop a satisfactory substitute for MMM for the critical header applications in HDC and FDC ingot casting operations. Todate, the refractory suppliers and Alcoa have been unable to develop a new formulation for an insulating type board having good resistance to metal attack along with acceptable machining and shrinkage characteristics. All of the major board manufacturers except Johns-Manville have abandoned their efforts along this line, and today, we are left with only one supplier and one acceptable board, namely MMM. Many attempts have been made to eliminate asbestos from Marinite but in all cases, the result was a totally unacceptable board with respect to strength, machineability, and resistance to metal attack. MMM is not the ideal material for header

NOTHING COMING

ALCOA

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applications, but it is the only material that has performed satisfactorily. Without MMM the HDC Process would come to a screeching halt. We have doubled our efforts in the search for other materials to replace MMM and, todate, the only faint ray of hope lies with Alcoa's 340 material.

We are faced with the task of meeting both OSHA requirements and the rigid physical and chemical properties demanded for critical refractory applications. Presently, both standards appear unrealistic; however, we take courage in knowing that other "impossible challenges" have been met by Alcoa, and it is only a matter of time before our present dilemma will be resolved.

M. J. CAPPIO

MJC:pat

cc: Mr. J. D. Eagan - Warrick Operations
Mr. R. P. Carter - Pgh. 7
Mr. J. E. Nelson - Pgh. 8 OP

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