FROM J. M. MCCOLLUM
MECHANICAL ENGINEERING DIVISION
PITTSBURGH OFFICE - 3 WPH

TO R. W. FLANAGAN
HEALTH & SAFETY DEPARTMENT
PITTSBURGH OFFICE - 6 AB

1981-04-03

RE: ASBESTOS SUBSTITUTES FOR POTROOMS

The following is an updated report on present uses of asbestos substitutes for potroom applications.

Cradle to Potshell Insulation	-	We are presently specifying an asbestos bearing item, J-M millboard #106 because this is used in an area where exposure to this item is very minimal. A phenolic plastic or fabric substitute would probably be suitable for use in this area.
Superstructure Foot Insulation	-	We are presently specifying ebony asbestos for this item. Tests on other materials have not been successful.
Pot Cover Insulation	-	We have eliminated use of asbestos by wrapping AMATEX THERMOGLASS #G-36P752 around an aluminum bar. In other installations fiberglass fabrics have been used as the insulating material.
Walkway Grating Insulation	-	We have eliminated use of transite by substituting either GRC Cem-fil sheet or wood treated by Koppers with their NCX chemical for fire retardation.
Bus Insulation	-	We have eliminated use of transite by substituting an aluminum bar with a 1/16" layer of glass fabric epoxy, NEMA grade G-11, taped to each side of the bar.
Exhaust Duct Gaskets	-	We are using the same asbestos impregnated sheet material as previously reported, however, Garlock's Gylon material would probably work for this application.
Siphon Gaskets	-	We are presently using Pyrotek's T-1 felt material for this application. This item contains no asbestos.
Ladle and Ladle Lid Seal	-	We are presently using Pyrotek's Z-5 material which contains no asbestos. Several layers of this material are used for one seal.
Pot Exhaust Duct	-	We have conducted extensive tests on a Hetron 197 material at both Wenatchee and Warrick. This material is quite expensive and it may not be as durable as the transite now in use. Therefore, we are continuing to use transite for this application.

Bob, regarding the pot exhaust duct,we need some input from your department. We need to know if we can, from a health standpoint, continue to use the transite material for the pot exhaust duct. You mentioned that your department could run some tests to determine the amount of asbestos present in the air where these ducts are used. I definitely feel this should be done because we will continue to use transite ducts, if they pose no health hazard, for as long as they are available. We operate approximately 4,500 pots at our domestic smelters alone, and it would cost about $200 per pot to remove the present ducts and replace them with non-asbestos ducts, which have not yet proven to give the same length of service as the transite ducts we are now using. Please let us know if you intend to run these tests, and if you do, where and when they will be run.

J. M. MCCOLLUM

JMM/smk

cc: J. L. McKinstry - 3 WPH