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Inter-Office Communication

MINERALS, PIGMENTS AND METALS DIV'N
PFIZER INC.
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TO: Mark Hoffman - Easton

July 28, 1971

FROM: Harry E. Rourke - Toledo

RE: Kilnoise Acoustic Plaster - Problems and Improvements

At the present time, there are two problems with Kilnoise as we manufacture it today.

1. Inadequate acoustical absorption (.50 NRC minimal requirement).
2. Potential environmental problem because of the asbestos ingredient.

Mark, the most important problem to solve is the need for an acoustical improvement on solid backing. Our literature, copy of which is enclosed, indicates that Kilnoise has a noise reduction coefficiency of .50 under the Rourke Method, and .60 under the standard method (dry basecoat application), but this schedule of absorption is based on a suspended metal lath mounting which is typical in normal school, church, etcetera, construction.

However, the job that I am principally concerned with requires a solid mounting, which means that Kilnoise is being applied direct to concrete. This job is the new subway system in Toronto, Canada, which can amount to 100,000 bags of Kilnoise or more. Kilnoise was accepted and is being applied on the tunnel job, predicated on its performance of at least .50 NRC on a solid backing. It then became necessary for us to build mock up samples and test them at Geiger Hamme Acoustical Laboratories at Ann Arbor, Michigan, to meet the required minimum spec of .50 NRC. To date we have run X panels at a variety of thicknesses on solid backing with the following results:

5/8" Perforated (Test run May 3, 1971)

125	250	500	1,000	2,000	4,000	NRC	Actual
.10	.20	.35	.48	.59	.62	.40	.40 (.162)

5/8" Perforated Brush Stippled (Test run February 26, 1971)

125	250	500	1,000	2,000	4,000	NRC	Actual
.11	.25	.42	.54	.65	.67	.45	46.5

EXHIBIT
Rourke 47
5/24/94 SR

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" Perforated (Test run February 26, 1971)

125	250	500	1,000	2,000	4,000	NRC
.15	.31	.37	.42	.38	.31	.35

" Perforated (Test run February 26, 1971)

125	250	500	1,000	2,000	4,000	NRC
.8	.38	.45	.43	.35	.26	.40

" (Strong) Brush Textured and Perforated (Test run July, 1971)

125	250	500	1,000	2,000	4,000	NRC
.16	.22	.30	.31	.33	.33	.30

you can see, we are not meeting at .50 NRC. In order for us to maintain our ition with regard to the tunnel application, it is imperative that we do meet .50 NRC even though we have to modify the product.

ıddition to the Toronto subway system, we are working on another subway tem in Washington, D. C., that will encompass 72 miles of tunnels. At the sent time, we are laying the groundwork for Kilnoise to be specified and used, if we fail to meet performance in Toronto, there will be no opportunity to get Washington, D. C. job. A competitive material that to my understanding has n used is Cafco Sound Shield 85, as manufactured by U. S. Mineral Products. n making arrangements to pick up samples off Cafco for your determination as whether there is something in that product that would complement the NRC value Kilnoise when applied to a solid backing. These samples should be in Easton week of August 5. Cafco claims that their material contains lime, therefore, ists rusting and staining. We are presently shipping U. S. Mineral Products roximately 100 tons of Type "N" Lime a year, which we assume they are puttin o a Sound Shield 85. In my opinion, they should be using Type "S" which would ıance the application, but I would rather not call that to their attention at this time.

ıink a meeting would be in order between you, Bill Stephenson, Bob Plantz and self, and Roger Linnett and Don Ingram, if they can be available, to review the tory of the development of Kilnoise with regard to its changing in content and liscussion on application versus performance from an acoustical standpoint. doing this, we can develop a course to pursue with the improvement of the prod-. I am hopeful that in finding ways to increase the acoustical value, we might o solve the potential hazard of asbestos and possibly eliminate the need for any nd tool work, such as brush texturing or nail perforating. In other words, if we ve a material that we can spray on and walk away from, with good acoustical val-, we may solve many problems and open new markets. Would you please review foregoing and advise Bob Plantz and myself as to when it would be convenient you to review this matter with us.

Harry

:R:jj
cl.

SAMPLE 15822

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