PLAINTIFF'S EXHIBIT

BIR-210

3906A

MEMORANDUM

In Reply to _____ *Date* 1/11/74 *From* BBH *To* MK- Mr. Powers

Subject ACCELERATED WEATHERING OF COATING ASPHALTS

BB- Mr. Heim
BBR- Mr. Frazier
BBQ- Mr. Homan
MB- Mr. Hixon
MS- Mr. Colvin
MJ- Mr. Miller
MP- Mr. Page
PB- Mr. Koval
PK- Mr. Zinkowski
PS- Mr. Marsh
PJ- Mr. Dickinson
PBL- Mr. Clark
PKL- Mr. Price
PSL- Mr. Potter
PJL- Mr. Sutton

Pacific Division:

Mr. Wood
Mr. Jochums
Mr. McClung
Mr. Hyde
Mr. Koopmann
Mr. Costa

Accelerated weather testing of unfilled and filled asphalts, representing the coatings being used by the various mills at mid-year 1973, have been completed. The tests were run on 25 to 30 mil coatings applied to aluminum panels. Weathering took place in a Model DMC-R Weather-Ometer according to ASTM D 529-62, Cycle A.

Cycles to failure were as follows:

Unfilled Coating		53% Filled Coating	
FO	49	FK	106
FK	46	FB (a)	96
FJ	43	FB (b)	83
FB	41	FJ	80
FS	39	FS	73
FW	19	FO	60
FM	19	FW	55
		FB (c)	51
		FM	19

(a) Limestone
(b) Lynn S&S Rock Dust
(c) FBW Dust

1. FK coating asphalt, stabilized with FKW dust was a top performer as usual.

2. FB coating, with limestone filler also had excellent durability. Filled with FBW dust, this particular sampling, survived for less than two-thirds the number of cycles that we usually experience with this combination of coating and filler.

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3. The Portland coating (catalysed Arabian flux from Chevron) plus limestone filler was somewhat disappointing in comparison with its unfilled version which was best of the group.

4. The overall poor performance of the Martinez coating was not unexpected since it was based on a Persian Gulf crude.

5. The asphalt coatings were generally satisfactory in stain resistance. The Martinez, Persian Gulf coating was poorest of the group.

P.S. Hoye

PSHoye/rp
Attach.

ASPHALT COATING DURABILITY - CYCLES TO FAILURE IN AWT

SI Texas Stain		S.P. °F.	Pen 0.1 mm	Unfilled Sample	Unfilled Cycles	53% Filled Sample	53% Filled Cycles
4.0	Perth Amboy	227	17.5	542	43	543-1	80
	Trumbull					-2	80
	Average						80
	Filler					GAF B65 Filler	
3.0	Charleston	220	14	544	46	545-1	106
	Exxon-Venezuela					-2	106
	Average						106
	Filler					FKW Dust	
4.5	Martinez	220	18	546	19	547-1	19
	Shell-Persian Gulf					-2	19
	Average						19
	Filler					Kaiser Dolomite	
3.5	Portland	214	22	548	49	549-1	60
	Chevron-Cat. Arabian					-2	60
	Average						60
	Filler					Limestone	
3.0	Shreveport	224	13	550	39	551-1	83
	Lion-American Petrofina					-2	63
	Average						73
	Filler					Glenwood Filler	
3.5	Wilmington	214	16	552	19	553-1	54
	Union-California					-2	56
	Average						55
	Filler					3M Filler	
3.8	Norwood	229	14.5	554	41	555-1	51
	Exxon/Shell Venezuela					-2	51
	Average						51
	Filler					FBW Dust	
	Norwood	229	14.5			556-1	96
	Exxon/Shell Venezuela					-2	96
	Average						96
	Filler					Limestone	
	Norwood	229	14.5			557-1	83
	Exxon/Shell Venezuela					-2	83
	Average						83
	Filler					Lynn S&S Rock Dust	

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