PLAINTIFF'S EXHIBIT

BIR-1005

Bird

March 10, 1983

Mr. Robert M. Naley
Manager - New Business
Development - Polymers
Stauffer Chemical Company
Westport, Connecticut 06881

Dear Bob:

Per our telephone conversation last week, I am sending you all the Bird weathering data that we have from our Norwood and Shreveport test decks in regards to Stauffer material that we have tested.

The oldest material we have on our test decks is from E8143 and E8144 siding compound made by Stauffer and extruded at East Walpole in the pilot plant in May 1981, that was followed by a siding run in the pilot plant in June 1981, using compound formulated with a mixture of SCC 1015 resin plus B. F. Goodrich 103 EPF 76 PVC resin. This formulation was made on our Littleford compounder at the pilot plant. An injection molding compound produced by Stauffer using SCC 1015 resin was run at Bardstown on our injection molder in September 1981. Gutter collector boxes from this run were exposed on both the Norwood and Shreveport test decks. We have 6, 12, and 18 months data on the siding runs and 6 and 12 months data on the injection molder run. Further samples will be coming off the test decks this Spring.

Enclosed are the computer sheets showing the results of the color change and the impact tension. I have marked the Norwood test decks in blue and the Shreveport test decks in red, impact retensions are circled and change in delta E are marked with crosses.

In general, all of the samples look good. After 12 and 18 months the best looking sample is the siding made with Stauffer E8143, but the others are certainly acceptable. In looking at the retains it is most apparent that the samples go through a slight darkening period before they start to turn slightly lighter. It appears as though the maximum delta E will be able to stand on this color will be somewhere around 5 or 6. I say this because the injection molded sample after 12 months would be of questionable acceptability for a siding product due to the fact that it is fading on our Shreveport test decks after 12 months while it is still quite dark on the Norwood test decks. I believe that for a gutter system this amount of color change

might not be objectionable. I hope that this information is of some help to you.

Regarding the work we did with SCC 1001 and SC 1004 resins, I am enclosing several lab notebook pages that show limited results. The exposures were made on our Norwood test decks and the color readings were taken in LAB stars. The only work done on these resins of course was on a lab mix basis. The SCC 1001 series gave poor color retension. The work done on SCC 1004 is incomplete in that we can only show you six month data on color retention. The balance of the test deck samples on this series was lost after the investigator left our employment. The six months data is interesting. The white, regardless of TiO_2 loading yellowed badly while the yellow, green and gray were not too bad after six months.

Byrdie and I enjoyed seeing you and Carol at the California meeting and we look forward to seeing you this summer at the Cape. If I can be of any further help, please contact me.

Sincerely,

James W. Jackson
Product Development Manager, Roofing

JWJ/cm
Encl.

cc: Mr. John Arnold