

ONE SPACE PARK, REDONDO BEACH, CALIFORNIA 90278 • Telephone: (213) 679-9249 • TWX: 910-325 5611 • TELEX: 674 47

HYSTL DEVELOPMENT COMPANY

February 28, 1972

Mr. Robert Egan, President
Michigan Silo Co., Inc.
P. O. Box 514
Cherry Road, N.W.
Massillon, Ohio 44646

Dear Mr. Egan:

I am sorry for the delay in answering your letter of February 4th, but it took me a while to dig back through some closets and find a copy of my thesis and to determine if I had any other related information. I did find an original copy of the thesis, but no other information; so my reply to you will be based completely on memory after a thirty-year period has passed.

First of all I believe that the cumar formula which you sent with your letter was developed during the summer of 1941, after I had completed my thesis. During that summer I worked for Mr. Brassert and the Concrete Silo Company in Bloomfield. As I recall, I developed this formula as a variation on the general systems which I had found to be best during my thesis work at Indiana University. At that time we used the Cumarone-Indene resins because they were inexpensive and had generally good chemical resistance. In the formula you sent the R-16-A and the Paradene No. 2 Flake are both resins of this type which I presume still are offered by the Neville Chemical Company, Pittsburgh, Penn. 15225 (412-331-4200). Similarly, at that time the Aroclors were used because of their inexpensive price, good ability to plasticize, and excellent chemical resistance.

In those days the question of Food and Drug Department requirements was not as significant as today. The cumar coating was never tested by another laboratory in connection with any Food and Drug Department question. We operated on the principle that the coating material resisted the acid of the silage and therefore would be satisfactory for such use. In my present work I have no occasion to closely follow developments concerning the toxicity of materials; however,

DSW 325631

STLCOPCB4075673

Mr. Robert Egan, President

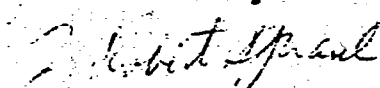
-2-

February 28, 1972

I am aware that chlorinated diphenols of which Aroclor is one have been suspect as far as Food and Drug questions are concerned. I do not have any alternative to suggest to you as a substitute for the Aroclors. The only thing I can suggest is direct contact with Neville Chemical Company, who may be able to suggest an alternate plasticizer for the cumar resins in such a coating application. The Monsanto Chemical Company makes a number of plasticizers, and they too may be able to offer an alternative. I would imagine that Monsanto has an office in Cleveland, or if not, you can contact them at 800 North Lindbergh Blvd., St. Louis, Mo. 63166 (314-694-1000).

I am sorry that I do not have any more detailed or helpful information to offer you; however, I think either the Neville or Monsanto companies would be the best source of information and suggestions to permit this general type of coating system to meet Food and Drug requirements.

Very truly yours,


J. Robert Spraul
General Manager

JRS/vgk

DSW 325632

STLCOPCB4075674