Copy for Dr. [illegible]

June 17, 1980

R. Corley:

Below, I have tried to summarize for you (not PPG's employees, in general) the PCB picture as it relates to Lake Charles.

Polychlorobiphenyls (PCB) are a class of commerical chlorinated aromatics which possess very little volatility and great chemical/thermal stability. This stability and some electrical properties have permitted widespread use of PCBs in electrical transmission systems (transformer oils, for example) for a good many years.

Unfortunately, the high stability of PCBs also prevent biodegradability when these materials escape to water (leaks, disposal). Taken up the food chain (water, plants, fish, foul, humans), PCBs were found in the 1960-70 period to allow weak egg shells in some game birds (young not born) which could lead to extinction.

It has never been established whether PCBs are carcinogenic or what level of ingestion is medically significant; PCBs are listed in EPA publications as "probable carcinogens".

PCBs were probably the first industrial chemical fingered to be a bad actor in the environment, and people have never forgotten this. Politically, in the media, and socially, "PCB" probably ranks with "hazardous chemical" and "nuclear waste" as an immediate emotion-causing word even without any further facts. For these same reasons (and in spite of the fact that regulations governing the use and storage of PCBs are extensive), the EPA has consistently delayed for years in making any decisions regarding incineration or methods of disposal for waste PCBs.

Within the last few months, a federal court decision (involving Dow Chemical) ruled that even a single chlorine atom on a biphenyl qualified the structure as a PCB. This decision puts the entire chemical industry in the position of handling and "manufacturing" PCBs since Dopp Kettle bottoms, Dowtherm + a Cl_2 leak, and the like are all sources of low level PCB contaminants. To throw a concentration framework around this, EPA regulations state:

Non-PCB materials, 0 - 50 ppm
PCB-contaminated materials, 50 - 500 ppm
PCB materials, > 500 ppm

As a consequence of the legal ruling, EPA letters were sent out to the chemical industry requesting PCB analyses of all streams, wastes, and products. Natrium found that it was dealing with 15,000 ppm PCBs in one system; Lake Charles so far has found only a few marginal systems (vinyl tar buggies have 50 - 135 ppm of various types of PCBs).

The G.O. has applied for a one-year EPA variance to "manufacture" PCBs at Natrium; tomorrow, the same request will go to Washington on behalf of Lake Charles.

Shortly, Lake Charles will request from the regional EPA office (Dallas) approval to burn our low level PCB wastes in our incinerators (as has always been done).

Lake Charles personnel should know of these EPA requests, that the PCBs are not of the "commercial type", that very low levels are involved (50 - 100 ppm), that almost all of our organic wastes have a zero level of PCBs, and that our incinerators should (and always have) effectively dealt with the problem of any PCB emissions.

There should be no cause for employee alarm in this whole matter; in fact, Lake Charles is not positive right now that we even have a PCB problem. The EPA requests are being made to escape penalties associated with a late petitioning of the EPA. If no problem is eventually found to exist (or operational alternatives can be made to eliminate the low level PCB formation), the petition will be withdrawn.

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