For John Hussey - Washington -- Please share with K. W. Easley

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MONSANTO TO SHUT DOWN PCB UNIT, EXIT BUSINE BY OCT. 31, 1977

ST. LOUIS, Oct. 5 -- Monsanto Company today announced that it will shut down its polychlorinated biphenyl (PCB) manufacturing unit, complete distribution of all inventories and withdraw completely from the market as the principal supplier of PCB dielectric insulating fluids to the electrical power supply industry by no later than Oct. 31, 1977.

The firm withdrawal date was announced by Earle H. Harbison, Jr., General Manager of Monsanto's Specialty Chemicals Division. Mr. Harbison said the company would have targeted an even earlier shutdown date had transformer and capacitor manufacturers' conversion timetables permitted. Monsanto's PCB products are produced solely for use as dielectric insulating fluids at the company's William G. Krummrich plant, located just south of East St. Louis, Ill.

According to Mr. Harbison, PCBs are a group of synthetic chlorinated organic compounds, commercially produced for the first time in 1929 in response to the electrical industry's need for improved dielectric insulating fluids which would also provide increased fire resistance benefits in transformer and capacitor applications.

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"Fire resistant, PCB-filled transformers are used in certain indoor installations such as high rise buildings, hospitals, and schools, and in electrically-powered urban commuter trains. Their function is to either increase or reduce voltage or change the current in the system. PCB-containing capacitors are used to control voltage and reduce power losses in fluorescent and mercury lights, AC motors, air conditioning compressors and television receivers," he said. To illustrate the widespread use of PCBs in electrical apparatus, Mr. Harbison alluded to the World Trade Center in New York City where some 250,000 fluorescent light fixtures, each containing a PCB-filled capacitor, are currently in service.

In describing the magnitude of the problems associated with reaching a firm exit date, Mr. Harbison explained that the unique fire resistant and dielectric characteristics of PCBs have for the past 45 years made them not only the standard but, in many cases, the only fluids approved for these dielectric applications. He pointed out that fire, insurance, building and electrical codes and regulations in many parts of the country have traditionally required their use in high density population applications where violent failure of a device containing a flammable fluid could result in a fire or explosion of catastrophic proportions. Mr. Harbison emphasized that fire resistant PCB-filled capacitors not only fail infrequently but also fail safely.

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"Unfortunately, the very properties that have made PCBs ideal and even mandatory for these essential uses, were also found in the early 1970's, more than 40 years after they were first introduced, to be the properties causing them to persist and accumulate in the environment. Because of this tendency to resist biodegradation, Monsanto announced last January its decision to voluntarily cease production as soon as the electrical industry could find viable alternate fluids and convert its equipment and components to their use," he added.

Citing previous actions undertaken by the company to restrict the entry of PCBs into the environment, Mr. Harbison said that prior to 1970 PCBs were also used in many non-electrical products as well. He explained that in dielectric applications they are contained in "closed" or sealed systems but in many of the other applications, this was not the case.

"So, when scientific investigations first confirmed their presence in the U.S. environment in the early 1970's, and long before the potential impact of these findings was determined, Monsanto began to implement its voluntary program of terminating sales of PCBs to all non-electrical applications and simultaneously warned its customers of the potential environmental problems and the need to prevent the entry of PCBs into the environment. Monsanto's voluntary program was reviewed, supported and endorsed by a Federal Task Force, formed in 1972 to study the problem.

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"This restricted sales policy reduced Monsanto's annual PCB production by over 50 per cent and further eliminated the likely sources of losses to the environment. Principal applications affected by the company's unilateral withdrawal in the early 1970's were in carbonless copy paper, fire resistant hydraulic fluids, heat transfer fluids and plasticizers," he said.

The Monsanto official said the company also took a number of significant steps in its own manufacturing area to prevent loss of PCBs to the environment. He described the control achieved as unique in the industrial chemicals industry. He added that the products are shipped in Monsanto-owned tank cars, used exclusively for that purpose, and in customer-owned tank trucks. Drum shipments are made in special reinforced drums which Monsanto believes to be the best available.

Mr. Harbison said that multi-lingual warning labels are affixed to each container setting forth a brief description of the nature of the material and appropriate actions to be taken in the event of a spill or leak. Similar labels are also supplied for use on return shipments for incineration.

The company also built and operates an incinerator at its Sauget, Ill., plant for the specific purpose of safely destroying PCB waste liquids, both from its own operations and from its customers.

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"In addition, Monsanto worked with representatives of the transformer and capacitor industries, utility companies and appropriate governmental agencies to form the American National Standards Institute Committee C-107 and helped promulgate guidelines for handling and disposing of dielectric fluids. The actions of this committee reflect a thorough appreciation for and understanding of the need for proper control," he said.

"Following the implementation of these actions, reports from the EPA National Water Monitoring Program for the years 1971 through 1974 stated that PCB levels in the major water basins were not increasing and in many instances, the levels decreased. Despite these positive results, it became apparent that the persistent nature of these compounds was being perceived by society as a greater risk than that presented by using less fire resistant fluids in electrical apparatus. It was at this point that Monsanto made the decision to eventually phase out PCB production for even these sealed dielectric uses.

"The challenge was to assure that this could be accomplished without creating other and potentially greater risks and to do so in a way that would avoid serious power and transportation disruptions in the process. This position was supported by Russell Train, Administrator of the U.S. Environmental Protection Agency. During a December, 1975 press conference Mr. Train said the EPA would not ask Monsanto to cease production.

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He further urged that a way must be found to proceed without shutting down the electrical power industry, the railroads and eventually the country.

"In the interim, Monsanto has continued to work with the Federal Government and the electrical industry and has been instrumental in establishing an accelerated, but realistic program aimed at accomplishing a rapid and orderly withdrawal," he continued.

Mr. Harbison said that it now appears that the industry has zeroed in on replacement candidates and is currently involved in field testing of non-PCB electrical components prior to effecting a total changeover to their use. He said that based on what Monsanto has been told about them, it's likely that they are not going to offer a comparable degree of fire resistance. Historically, PCB dielectrics have filled two functions, combining excellent dielectric performance with inherent fire protection. The prospective replacements appear to provide acceptable dielectric performance, but system redesign has been required to circumvent the fire hazard potential which was introduced. Whether these candidates will, in the final analysis, be "acceptable" is one of the major objectives of the field tests now in progress.

He continued, "The problem is twofold: 1) Industry has relatively little experience using less fire resistant fluids in these applications and 2) because fire resistant PCBs have always

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been used, there has never been a need until now to address the question, 'What degree of fire resistance is acceptable?' The fact is that no standard exists to guide users in their evaluations."

In closing, Mr. Harbison reiterated that the Oct. 31, 1977 withdrawal date, which he reemphasized as firm, is designed to be not only compatible with the electrical industry's timetable but should give it added impetus, as well.

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