

BFG AKRON CHEMICAL PLANT

General Information Regarding PVC-Angiosarcoma at BFG Louisville Plant and Environment at BFG Akron Plant

- Most employees here are aware of the Company's discovery of employee deaths at the Louisville (KY) Chemical Plant from a rare liver cancer (ie: angiosarcoma) and investigation into the possible occupational relationships thereto of chlorinated hydrocarbons used in the production of PVC resins.
- Some PVC resins were produced in Akron on a pilot plant basis in the late 1930's and early 1940's, but none have been produced here since that time.
- BFG Akron has furnished names of deceased employees, both wage and salary, to be used in epidemiological studies being conducted.
- PVC resins are not manufactured in the Akron Plant, and there is no known connection between the discoveries made at the BFG Louisville Plant and this plant.

03/25/74
CVJ

22976001

BFG AKRON CHEMICAL PLANT

General Information Regarding Apparent Blood Abnormality and Liver Disorder Findings Among BFG Louisville Plant Hycar Workers and Possible Connection With Hycar Workers in the Akron Plant

- Following the announcement of a possible occupational relationship between the deaths from angiosarcoma and chlorinated hydrocarbons used in production of PVC at the Louisville Plant, reports were received that various blood abnormalities and liver disorders had been discovered among Hycar workers there.
- Upon the discovery of the deaths from angiosarcoma, an extensive physical examination program was conducted among all Louisville Plant PVC workers. To serve as a control group, approximately 205 Louisville Plant Hycar workers were also examined. Approximately 25% of these Hycar workers tested were found to have one of a varied number of types of blood abnormality and/or liver disorders. Approximately 5% were found to have at least two or more varied types of these conditions.
- The types of blood abnormalities and/or liver disorders among Louisville Hycar workers were so varied that no conclusive connection could be drawn as to a causative relationship with exposure to the monomers used in producing the Hycar rubbers. No positive signs of cancer were found. Additional tests are being conducted on employees affected so as to provide more definitive medical information.
- Of the BFG locations producing Hycar and other synthetic rubbers, only Louisville Hycar workers have undergone a broad program of testing for blood abnormalities and liver disorders. The decision to conduct such examinations elsewhere (including Akron) is being withheld until definitive medical information is obtained as to exactly what type of tests are needed, if any. To conduct further tests in other plants without more positive medical information would only serve as a source for confusion.
- Monitoring of all systems and precautionary safety activities relating to Hycar production in the Akron Plant have been stepped up.

03/25/74
CVJ

22976002

BFG AKRON CHEMICAL PLANT

General Information Regarding Temporary Curtailment of Agerite White (ARW) Production at the BFG Akron Plant

- On January 29, 1974 the Occupational Safety and Health Administration (OSHA) of the U.S. Department of Labor issued new standards on allowable levels of concentration and exposures to beta naphthylamine (BNA). The new standards which became effective March 1, 1974 reduced the threshold standards from 1% (ie: 10,000 PPM) to one-tenth of 1% (ie: 1,000 PPM). BNA is listed by OSHA as a known bladder carcinogen.
- Beta Naphthylamine (BNA) is present in the manufacture of Agerite White (ARW) and PBNA. Periodic testing of the production processes revealed BNA levels to be well within the old standard. However, recent tests revealed BNA levels to be in excess of the new standard at certain stations of the ARW production process. The PBNA process remains well within the new standard.
- On March 1, 1974 the ARW production process was shut down temporarily to prepare the operation for experimental runs which were developed by BFG technical and scientific personnel.
- Cleaning and preparation of the ARW system has been conducted under strict surveillance including wearing of protective clothing and air ventilation respirators by direct workers.
- The expected outcome is to modify the ARW manufacturing process so as to exceed prescribed health and safety standards as well as to continue to meet customer quality and quantity requirements.
- Modifications have been effected, and the process is now back in operation with BNA levels well within specification at all stations of the system. Careful monitoring is continuing so as to further refine the production process.

03/25/74
CVJ

22976003