

DRAFT

UNIBESTOS HEALTH CONSIDERATIONS

(Summary of Thinking Associated With
Recommendations and Actions Outlined
on the Time Sequence Analysis)

Pittsburgh Corning bought the Unibestos process from UNARCO in 1962. They took over the UNARCO plant in Tyler, Texas, employing about 60 employees. This plant had been operated by UNARCO since 1954; therefore, the employees had been working with asbestos for 8 years. Pittsburgh Corning built a new Unibestos plant in Port Allegany in 1963, which employed about 50 employees. The Port Allegany Unibestos Plant was part of a larger operation where several other non-related non-asbestos-containing products were manufactured.

The Pittsburgh Corning Management were aware that asbestos dust exposure might result in asbestosis. Because of this, ⁽¹⁹⁶³⁾ they asked the Industrial Hygiene Foundation to perform an industrial hygiene survey of the Tyler Plant. Professors Jack Cholak and Lawrence Shaffer of the Kettering Laboratory, University of Cincinnati, participated in this survey which indicated, with one or two exceptions, that the dust exposure was being adequately controlled. ^{according to existing standards} They made recommendations to control dust exposure in the one or two operations where such control was necessary. In 1964, shortly after Dr. Grant became the Medical Director of PFC Industries, Pittsburgh Corning Management, alarmed by an article in the lay press concerning asbestosis being associated with asbestos dust exposure in the building trades, asked him what he knew about it and what significance it had for Pittsburgh Corning so used amosite asbestos. After becoming familiar with ^{the medical literature} that was available on the subject, Dr. Grant advised Pittsburgh Corning that it did not appear to be known whether amosite asbestos would or would not produce malignancies in either animals or man.

In 1965, ^(a summary of the survey was given to the management of PFC Industries by Dr. Grant) Dr. Grant suggested two approaches to ~~ascertain the effects of amosite~~ ^{ascertain the effects of amosite}. In one approach, Dr. Grant advised Pittsburgh Corning



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Birmingham
~~Pittsburgh Corning suggested that since the USPHS medical study would include~~
~~and the Texas State Hospital would perform the study, they suggested that an evaluation of~~
~~basically the same tests, that we should hold up on hospital examination until~~
~~10th thing the USPHS performs the study and accepting them as valid. This, presumably, the USPHS~~
~~then performed the medical study, and Pittsburgh Corning sponsored the work at the Texas State Hospital~~
 In 1969, with the lowering of the asbestos dust standard under Walsh-Healey

to 12 fibers per cubic centimeter, Dr. Grant advised that ~~many of the~~
~~Pittsburgh Corning employees were being exposed to dust levels~~
~~standard and recommended dust level, employee education about the nature of the~~
~~hazard, and medical examinations.~~

Further
 As a result of his visit to Tyler in March, 1970, Dr. Grant recommended that
 more time should be spent waiting for USPHS to do the medical portion of their
 asbestos study, particularly in view of the fact that the 1969 chest x-rays of a
 few of the employees showed findings for which follow-up medical examinations were
 indicated. He recommended that the Texas State Hospital be asked to do the examinations
 in accordance with the agreed protocol in 1967. Dr. Hurst of the Texas State Chest
 Hospital completed the examination of all of the Tyler employees in August of 1971.

In regard to dust control in the Pittsburgh Corning plants, after receiving
 the results of the USPHS dust survey in 1968, Dr. Grant advised Pittsburgh Corning
 Management of the significance of these levels in terms of health effects and
 advised Pittsburgh Corning to ask Dr. Morton Corn of the University of Pittsburgh
 to assist them in designing an adequate ventilation system to control the dust
 hazard. In 1968, Dr. Corn assisted in the design of the ventilation system at
 Port Allegany and in 1969 he did the same for the Tyler Plant. The ventilation controls
 were put in at Port Allegany in 1970 but not completely as Dr. Corn had recommended.
 The ventilation system recommended by Dr. Corn was never installed in the Tyler Plant.
 Part of the reason for this was, for reasons that will be discussed, next, that
 Pittsburgh Corning had decided to get out of the Chabeston business. However, until
 dust controls could be reduced to a safe level, it was recommended that those
 employees who were potentially exposed to dust levels above safe levels be required
 to wear respiratory protection approved by the Bureau of Mines.

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After receiving the results of the ISMHS dust survey in 1968 Dr. Grant advised P. H. Hough's Mining Management of the significance of these dust concentrations in terms of possible effects on the health of employees. He advised P. H. Hough's Mining to ask Dr. Milton Corn of the University of Pittsburgh to assist them with design of an adequate ventilation system to control ^{in airborne} dust. ~~that~~ In 1968 Dr. Corn assisted in the design of a ventilation system at Port Allegany and in 1969 a similar system was designed for the Tyler plant. The system ^{with various modifications} was installed at Port ^{Allegany} in 1970. The ventilation system was not installed at Tyler prior to closure of the plant.

It became apparent to Dr. Grant in early 1969 that the asbestos dust standard would be further lowered, which raised the question in his mind as to whether Unibestos could be installed or removed by the insulation worker without exceeding the asbestos dust standard. In January, 1969, he held a briefing with Pittsburgh Corning Management alerting them to this potential problem. Dr. Grant recommended to Pittsburgh Corning that a study be done at UCER Berkeley by a thoroughly competent group of investigators, including Doctors Irving Tabershaw, Clark Cooper, Bernard Tebbens, and Leroy Balzer, to determine whether Unibestos or three other competitors' products could be used without exceeding the asbestos standard. The study was initiated in 1969 and showed that none of asbestos-containing thermal pipe insulation products could be used without ~~significantly~~ extending the asbestos dust standard. These findings provided a real stimulation to Pittsburgh Corning to develop an asbestos-free product. ~~Pittsburgh Corning also decided at this time that they were going to get out of the Unibestos business as soon as possible.~~ Unibest was a result of this effort in which mineral wool replaced the asbestos. Unibest was also tested by UCER in 1970 and it was found that while it didn't contain asbestos, it produced dust levels above the nuisance dust standard of 10 mg. per cubic meter of air. The findings of both of these studies were reported at an International Health and Safety Meeting in Helsinki in 1971, and later published in the scientific literature.

Unibest development was not successful, so in October, 1971, Pittsburgh Corning Management decided to stop Unibestos manufacturing operations in early 1972 at both locations. This was accomplished at Tyler in February, 1972, ten years after buying the process from UNARCO.

The Texas State Chest Hospital Medical Study of the Tyler employees reported in January, 1972, diagnosed seven (7) employees as having probable early asbestosis. Four of these employees had worked at the Tyler plant for ten years and one each employed for 11, 15, and 17 years. These employees will continue to be followed by Dr. Hurst at the Texas State Chest Hospital.

NIOSH performed a medical study of the Fort Allegany employees and found no asbestos-related disease. It should be remembered that this plant had been in operation about nine years.

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