November 8, 1973

M.C.

President
American Academy of Occupational Medicine

I would like to share my concern with you about a series of articles now appearing in the New Yorker magazine. These articles are entitled, "Annals of Industry - Casualties of the Workplace". The author is Paul Brodeur. My perception of Brodeur's purpose in writing this series of articles is that he desired that the reader conclude that any errors, delays, inepness, which he could associate with the case of Pittsburgh-Corning in Tyler, Texas, are also associated, in general, with the field of occupational health in the United States. In order to achieve this purpose, which is not explicitly stated but rather skillfully implied, Brodeur stresses those contributions of the professionals which can be faulted or at least questioned. He has not provided a complete record of efforts in the case.

The articles take the position associated with the union involved, namely that "industrial workers are the victims of a conspiracy designed to suppress knowledge of occupational health hazards and to delay the passage and enforcement of laws to cope with them". The articles depict the Tyler Plant of Pittsburgh Corning Corporation, in the words of a union official, as the "epitome of what is wrong with the way our country was dealing with the problem of industrial disease". In my opinion, this position is supported only by stretching the truth and in some cases altering or omitting the record.

Corn Exh #64
BW 12-2-83

Mack Exh #2
erm 4/5/84

SJ 01462.169

The articles allege that the Tyler Plant from its beginning has grosaly exceeded the asbesto: dust standards in most all of its operations. On the basis of results of surveys of airborne dust in the Tyler Plant prior to 1969, this was not true. There was evidence that excessive dust exposures occurred only at selected plant sites and that these excursions in airborne concentrations of dust were not consistent. The same surveys suggested permissible exposures (as calculated by then existing standards) at most sampling sites. It was only in 1969 when the Walsh-Healey Standards changed the entire concept of the standard from 5 MPPCF in a sample collected by impinger to 12 fibers per cubic centimeter collected by filter that concentrations were deemed excessive throughout the plant. As you know, late in 1971 the asbestos dust standard was further lowered by the OSHA Temporary Emergency Standard for Asbestos to 5 fibers/cc.

The articles lead the reader to believe that the scientific world has known the biological response to all forms of asbestos since at least 1964. On the contrary, the effects of Amosite with respect to lung cancer and mesotheliomas were not reported until September 1972. Amosite is the type of asbestos used in "Unibestos", Pittsburgh Corning Corporation's asbestos-containing thermal pipe insulation. The facts are that in 1965 a study reported on miners exposed to amosite in the Transvaal Region of South Africa, where the amosite used in Unibestos came from, showed no evidence of either lung cancer or mesothelioma being caused by exposure to amosite dust. This study suggested that amosite might be a safe

type of asbestos that could be used in place of other asbestos that had been shown to be associated with malignancies. These facts may have had an influence in the greater demand for amosite that was experienced. Further facts are that it was in September, 1972, several months after Pittsburgh Corning Corporation had closed its Unibestos manufacturing operations that Selikoff published the first paper which suggested a relationship between amosite asbestos and malignancies. Selikoff states in this article that "there has been no evidence concerning whether the amosite variety is carcinogenic".

It is because of my concern as a Board Certified Specialist in Occupational Medicine, not because I happen to be one of the several targets of these articles, that I feel a peer review is essential in this case to determine whether or not the professionals involved and the actions taken by Pittsburgh Corning Corporation were in the best interest of workmen involved in the manufacturing process and also the workmen using Unibestos. Our profession is being libelously attacked in the articles and somehow the record should be set straight. I, therefore, invite the Academy to make an in-depth study into the Pittsburgh Corning Corporation's handling of the health aspects of Unibestos.

For the convenience of those who will conduct the review, I have provided an annotated time sequence analysis of Unibestos health considerations, which is a synopsis of recommendations made and actions taken. It is, of course, understood that my complete files

are available for review again at the convenience of the reviewers. I have provided a written summary of the thinking that accompanied the recommendations and the actions. As you note from this record, Dr. Morton Corn, Professor of Industrial Health and Air Engineering at the Graduate School of Public Health, University of Pittsburgh, provided, at my request, industrial hygiene services to Pittsburgh Corning. Dr. Corn has agreed to cooperate fully with such a review either personally or by making his records available.

The Management of Pittsburgh Corning and myself are ready to assist in any way possible the Academy's review of this matter.

Very truly yours,

Lee B. Grant, M.D.
Medical Director

PPG INDUSTRIES

PPG INDUSTRIES, INC./ONE GATEWAY CENTER/PITTSBURGH, PENNSYLVANIA 15222/AREA 412/434-3846

November 9, 1973

LEE E. GRANT, M.D.
Medical Director

Dr. Morton Corn
University of Pittsburgh
Graduate School of Public Health
Pittsburgh, Pennsylvania 15213

Dear Mort:

Attached is an annotated time sequence analysis and the copies of the annotated materials. Also attached is the summary of the thinking associated with recommendations and actions. I particularly would like your comments and suggested improvements on the summary.

Very truly yours,

LEG

Lee E. Grant, M.D.
Medical Director

LEG:lc
Attachments

Slade Ltr #3
env: 4/3/84

Corn Ltr #65
BW 12-2-83

SJ 01462.173

TIME SEQUENCE ANALYSIS OF THE ASBESTOS HEALTH CONSIDERATIONS

YR	PITTSBURGH CORNING	DR. L. D. GRANT	DR. M. CORN	ASBESTOS DUST STANDARD	INDUSTRIAL HEALTH FOUNDATION	USPH SCHOOL	TEXAS STATE CHEST HOSPITAL	UCLA	LITERATURE ON MALIGNAN... ASSOCIATED WITH ASBEST...
2	Purchased Unibestos process from UNARCO including Tyler Plant in operation since 1954 (amosite containing thermal pipe insulation)			ACGIH TLV 5 MPPCF					Although asbestosis ha... many years. In England in 1955 suggested an a... tion of lung cancer wi... asbestosis and Wagner claimed a relationshi... asbestos exposure & m... lioma but exposures were to mixed typ... asbestos.
3	1. Built Unibestos plant at Port Allegany 2. Asks IHF to survey Tyler Plant			ACGIH TLV 5 MPPCF	Surveys Tyler Plant + recommends controls to reduce dust	USPH initiate asbestos industry study			No Change.
4	Asks Dr. Grant about mesothelioma	Becomes Occupational Medical Consultant to P-C		ACGIH TLV 5 MPPCF					1. In the U.S. Selikoff reported ...neoplasms in the building trade... insulation workers who were exp... asbestos. Again exposure were... types of asbestos. 2. Gilson raised at least two qu... be answered. First, is the typ... bestos an important factor in... of malignancy in the asbestos...
5	Asks Dr. Grant to visit their plants	Visits P-C plants + recommends periodic industrial hygiene surveys and chest x-rays to be read by Board Certified Radiologist (?)		ACGIH TLV 5 MPPCF					1. Smither, Newhouse, Elmes provide furt... evidence. 2. Sluis-Cremer does find malignancies associated with pu... amosite exposures miners.
6	1. Asks Destefano to survey Tyler plant. 2. Approves Dr. Grant's USPHS recommendation 3. Approves Dr. Grant's IHF recommendation	Recommends Tyler ...ant industrial hygiene survey by ...istefano. ... Recommends USPHS ...nclude Unibestos Plants ...n industry study. ... Recommends IHF do animal intubation and		ACGIH TLV 5 MPPCF	Initiates 3-yr. animal study for P-C on amosite-animal intubation and inhalation				No Change.

SJ 01462.174

TIME SEQUENCE ANALYSIS OF THE ASBESTOS HEALTH CONSIDERATIONS

	PITTSBURGH CORNING	DR. I. H. GRANT	DR. N. CORN	ASBESTOS DUST STANDARD	INDUSTRIAL HEALTH FOUNDATION	USPHS NIOSH	TEXAS STATE CHEST HOSPITAL	OCAA	LITERATURE ON MALIGNANCY ASSOCIATED WITH ASBESTS
'6 (1)	6. Approves Dr. Grant's recommendation for expanded medical examination of Tyler employees by Texas State Chest Hospital	6. Recommends expanded medical examination for Tyler employees by Texas State Chest Hospital					Prepares protocol for expanded medical examination for Tyler employees		
'7	1. Recommends deferring medical examinations by Texas State Chest Hospital on basis that USPHS may do same type of examination (5)	1. Advises Texas State Hospital of decision to defer medical examinations 2. Queries USPHS on status of medical portion of their study for P-C employees.	ACGIH TLV 5 MPPCF	Continues annulte study		USPHS performs industrial hygiene survey at Tyler & Port Allegany as part of their asbestos industry study	Obtains approval to do medical examinations from higher authorities.		Borow provides further evidence but pure exposure not involved.
'8	1. Asks Dr. N. Corn to provide assistance recommended by Dr. Grant at Port Allegany plant.	1. Advises Performs P-C of significance industrial hygiene survey of USPHS (2) & assists in findings. designing of (4) 2. Recommends ventilation Dr. N. Corn controls at to assist in Pt. Allegany designing (3) ventilation controls for hazardous dust exposures at both Tyler & Pt. Allegany. 3. Queries USPHS on status of medical portion of their study for P-C employees	ACGIH TLV 5 MPPCF	Continues annulte study		USPHS provides P-C with results of industrial hygiene survey			Selikoff, Anspach, Hu and Ashcroft provides evidence but pure exposure not involved.

SJ 01462.175

TIME SEQUENCE ANALYSIS OF THE PERTINENT HEALTH CONSIDERATIONS

#	PITTSBURGH CORNING	DR. L. B. GRANT	DR. M. CORN	ASBESTOS DUST STANDARD	INDUSTRIAL HEALTH FOUNDATION	OSHA NIOSH	TEXAS STATE CHEST HOSPITAL	UCLA	LITERATURE ON MALIGNAN ASSOCIATED WITH ASBEST
5	1. Asks Dr. M. Corn to provide assistance recommended by Dr. Grant at Tyler. 2. Asks UCLA to perform study on asbestos-containing thermal pipe insulation. 3. Initiates R&D effort toward removing asbestos from Unibestos	1. Briefing of P-C on hazards associated with manufacture and use of (16) asbestos-containing thermal pipe insulations. Recommends either elimination of asbestos from Unibestos or controls necessary to minimize hazards. 2. Recommends study by UCLA of dust exposure from use of asbestos-containing thermal pipe insulations. 3. Advises P-C on significance to their plants of new Walsh- (18) Healey Asbestos Standard. Recommends dust control, employee education and medical examinations.	1. Performs industrial hygiene survey and assists in design of ventilation controls at Tyler. 2. Briefing of P-C on hazards of (17) asbestos dust exposure.	Walsh-Healey Standard 12 fibers/cubic centimeter > 5 microns in length	1. Reports on amosite study - no malignancies produced. 2. Submitted the study for publication to an environmental health journal.	Department of Labor performs inspection at Tyler and issues non-compliance citations. (19)		Initiates study for P-C of dust exposure from use of asbestos-containing thermal pipe insulation.	Wagner produces mesotl- in rats by putting am- into the pleural cavit

SJ 01462.176

PITTSBURGH CORNING	DR. L. B. GRANT	DR. N. CORN	ASBESTOS DUST STANDARD	INDUSTRIAL HEALTH FOUNDATION	NIOSH NIOSH	TEXAS STATE CHEST HOSPITAL	UCLA	LITERATURE ON ASBESTOS ASSOCIATED WITH PUBLIC
1. Asks Dr. Grant to visit Tyler 2. Asks UCLA to perform study on Unibest, an asbestos-free thermal pipe insulation. 3. Installed Corn designed ventilation system at Port Allegany. 4. Asks Dr. N. Corn to evaluate new ventilation system at Pt. Allegany. 5. Initiates Unibest production at Pt. Allegany. 6. Requests variance from Walsh-Healey Asbestos Dust Standard.	1. Visits Tyler - recommends ventilation controls, medical (10) examinations by Texas State Chest Hospital and health education of employees. Advises 69 chest x-rays of employees suggests need for further follow-up. 2. Recommends UCLA do identical testing of Unibest an asbestos-free thermal pipe insulation developed by P-C R&D.	Evaluated new ventilation system at Pt. Allegany.	OSHA Health Standard 12 fibers/cc.	NIOSH performs industrial hygiene survey at Tyler & Pt. Allegany - (5) finds dust levels above asbestos dust standard.			1. Reports on study indicating that none of materials tested (13) could be used without exceeding the asbestos dust standard. 2. Initiates study on Unibest for P-C.	No Change.
1. Asks Texas State Chest Hospital to perform medical examinations of Tyler employees 2. Asks Dr. Grant to perform employee education at Tyler and Pt. Allegany. 3. Requests variance from OSHA Asbestos Standard.	1. Recommends to NIOSH that Texas State Chest Hospital study of Tyler employees be coordinated with NIOSH study. 2. Performed health education of employees at P-C plants. (6)	OSHA Temporary Emergency (8) Standard for Asbestos 5fibers/cc.		1. NIOSH advises they will do an industrial(7) hygiene & medical study at Tyler & Pt. Allegany. 2. NIOSH performed study. 3. NIOSH advised OCAW of the results of their findings.	Performs expanded medical examination for Tyler employees.		1. Reports on Unibest study.(14) 2. Presents findings of both studies at the International Symposium on Safety & Health in Shipbuilding and Repairing in Helsinki. 3. Submitted both studies for publication to an environmental health journal.	Wagner states position clear with respect to asbestosis from anthophyllite since only one sample found in Transvaal at

SJ 01462.177

TIME SEQUENCE ANALYSIS OF THE JOHNSTON HEALTH CONSIDERATIONS

PITTSBURGH CORNING	DR. L.K. GRANT	DR. M. CORN	ASBESTOS DUST STANDARD	INDUSTRIAL HEALTH FOUNDATION	NIOSH	TEXAS STATE CHEST HOSPITAL	UCLA	LITERATURE ON MALIGNANCY ASSOCIATED WITH ASBESTOS
A. Encouraged and supported UCLA trip to Helsinki to report their findings at an international meeting. 5. Made decision to stop the manufacture of Unibestos and not to manufacture the asbestos-free Unibest at this time.	3. Met with NIOSH to discuss misunderstanding that had developed (11) between he and Dr. Johnson.				4. Met with Dr. Grant at his request. 5. At NIOSH's request, Texas State Health Department to investigate Tyler (15)			
1. February, 1972, stopped manufacturing Unibestos. 2. Agreed to support follow-up studies recommended by Texas State Chest Hospital.	1. Reviewed final report of Texas State Hospital on Tyler employees with NIOSH and (12) OCAW - 7 employees had been diagnosed as early asbestosis. 2. Reviewed final report of NIOSH medical study of Tyler employees which was basically the same as above.	OSHA Permanent Standard for Asbestos 5 fibers/cc.			1. NIOSH met with Dr. Grant and Texas State Chest Hospital to review the results of Sutter's medical examination program. 2. Provided a report of the NIOSH Tyler study to P-C. 3. Provided employee's results to employee's personal physician. NOTE: The final NIOSH report on the Fort Allegany medical study has not been received as of November, 1973)	1. Presented results of Tyler employee medical examinations to Dr. Grant, NIOSH, and OCAW. 2. Performed follow-up counseling for employees with positive medical findings. 3. Provided employee's results to employee's personal physician. 4. Recommended that he provide follow-up examinations of some employees.		Selikoff (September, ly reported results exposure caused malignancies.