



SURVEY
OF THE
PITTSBURGH - CORNING PLANT
AT
PORT ALLEGANY, PENNSYLVANIA
SEPTEMBER 16, 1971

Introductions & General Comments

The plant is located in a town of about 3,000 population, 25 miles from Bradford, Pennsylvania and has at present approximately 400 employees, 325 of which are hourly workers.

The plant occupies about 100 acres and consists of approximately 15 buildings with a combined floor space of 440,000 feet square.

With the exception of the polyurethane and unibestos finishing operations, the plant works three shifts.

The company has a full time Safety Director with no staff. There is no doctor or nurse, but a forty bed hospital is nearby in Port Allegany. There is a corporate medical consultant in Pittsburgh, Dr. Lee Grant, whose services are available. Chest x-rays (70mm) are taken yearly on all production personnel. Beginning this year 14" x 17" plates are to be taken biennially. At present the wearing of respirators is mandatory on a full time basis in the unibestos area. Safety equipment consists principally of gloves, hard hats and heat shields and respirators. Currently the management is working on the introduction of a company sponsored eye protection program, which would involve supplying personnel with plano as well as prescription safety glasses. Coveralls are issued to men working in scrap bins in the unibestos area and employees in this area are supplied with aprons. These clothes are not permitted to be taken home by the employee.

The plant has four major product lines:

		Number of Production Employees	
Plant 1	Glass Blocks	53	(Maintenance and other
Plant 2 & 5	Foam Glass	95	service people make :
Plant 6	Polyurethane Foam	10	rest of hourly rate
Plant 8	Unibestos	36	population.)

The glass feed stock, for plant (1) and (2) for the producing of glass block and foam glass, is made in Batch House (1) and (2). Major ingredients of mix for plant (1) are: Silica Sand in addition minor amounts of: NaNO_3
Soda Ash Fluorspar
Dolomite Sodium Sulfate
Nepheline Syenite Antimony Oxide
Rasorite #1 Batch

A list of raw materials used in all the plants is appended.

Description of Manufacturing Processes

To make glass, the ingredients tabulated above are fused together in a huge batch tank.

In plant (1) glass blocks are made by pressing a glob of molten glass. The pressing of the glass is done in a metal form where half of a block is produced at a time. Then the two halves are welded together in a subsequent operation to form the completed block which is coated on the edge with ground lime stone in a vinyl resin so as to enable mortar to hold to the glass. Blocks are decorated with spray type enamels in paint spray booths.

In plant (2) the foam glass operation starts out with the melting of the glass making ingredients in a batch tank. The molten glass is run from the batch tank like viscous cold molasses to form a tube of glass which is conveyed as a continuous tube all the way from the top of the building to the first floor. Here the tube is crushed and ground up to < 100 mesh powder, mixed with carbon, put in a stainless steel pan which has been dusted with an Al_2O_3 parting compound and baked in an oven for about an hour, (where it rises like bread) removed from mold and annealed for about 11 hours. At this point the foamglass blocks are faced, trimmed and in some instances ground to shape in hooded ventilated enclosures. Glass foam blocks are further fabricated to make foam glass boards. This is done by asphalt coating glass blocks and wrapping the coated sides with Kraft paper.

Plant 6 Polyurethane Foam

Polyurethane foam is manufactured on a semi continuous basis by mixing at 75°F two streams that contain ingredients consisting of TDI, a resin, a catalyst and a fluoro carbon. These chemicals begin to polymerize almost immediately to produce heat which vaporizes the fluoro carbons and the mass rises like a loaf of bread to produce a "bun" approximately 2 feet high by

five feet wide which after a curing period is cut to desired sizes by hot wires under a canopy hood. Some of the material is further fabricated but most is sold to the customer in huge chunks and in slices of various thickness.

Plant 8 Unibestos

Unibestos, an insulation material, is manufactured principally from amosite asbestos which arrives in Port Allegany via rail, packed in plastic lined burlap bags. Bags are opened in a hooded enclosure which covers the bin and feeding mechanism. In the processing, the asbestos is wetted with sodium silicate. Diatomaceous earth is then mixed with it and the material is rolled and dried. The dried rolls of insulation are trimmed and slit with a band saw and the finished roll may be fabricated further, or wrapped in Kraft paper and shipped. All scrap asbestos generated in the trimming process is reintroduced into the processes thru the feeder hoods.

General Impression of the Plant

Housekeeping: The housekeeping in general was good. The floors are cleaned with a sweeper that has a vacuum pick up which exhausts thru a bag filter which appeared to be doing a good job. Materials were piled so that passage ways were not obstructed. Some congestion was noted in the area where glass blocks were decorated but the management is aware of this and plans to improve this area.

Respirator Protection: Respiratory protection is probably necessary only in the Unibestos plant and here was the only place where respirators were used and here their use was mandatory for a full eight hour day ---- cloth dust masks were worn in and around areas where chemicals were fed into glass pots but these type masks offer no respiratory protection. The type respirator used in the Unibestos plant is made by Mine Safety Appliances and equipped with an ultra filter which is adequate for asbestos.

Potential Health Hazard: Based on observation only, there appear to be the following potential health hazards:

1. Free silica from handling sand and diatomaceous earth
2. Lead from spray painting blocks
3. TDI from the manufacturing of polyurethane foam
4. Amosite asbestos.

The only real hazard that exists appears to be from exposure to air borne amosite asbestos in the unibestos operations and this opinion appears to be in agreement with that of the Commonwealth of Pennsylvania Department of Environmental Resources, Occupational Health Division, June 17, 1971. (copy of report appended)

Potential Safety Hazards: Though a complete safety survey was not made there were the following items worth mentioning:

1. There exists a hazard in cutting some of the salvage glass blocks with a band saw which could possibly result in the amputation of a finger or hand. Though there is no sure way to guard a band saw, some of the suggestions in the National Safety Council's book, "Accident Prevention Manual For Industrial Operation" Fifth Edition, Page 25-10 thru 13 would be applicable.
2. The chain drive on the polymerization step of the polyurethane "bun" production equipment should be guarded.
3. The compressed air outlets should all be removed from the plant so that the men can no longer use compressed air to clean clothes or equipment.

Ventilation

- A. General Comments: Ventilation systems running to dust collectors are present in foam glass fabrication (plant #2) and foam glass finishing (plant #5) and also in the unibestos (plant #8).

In all there are four bag houses consisting of two 30,000 cfm units in the foam glass operations and two 15,000 cfm units in the unibestos plant.

No air is recycled and this is good from the view point of reintroduction of toxic material into the plant. However, since there is no makeup air being supplied, this could cause a deficiency of air in the winter time when the plant is buttoned up and this could interfere with the efficient functioning of the ventilation system during cold weather, since the blowers will be starved for air, and will be pulling cold air by infiltration from the out of doors or from other unheated areas, hence, creating excessive draftiness.

- B. Ventilation on Unibestos Operations: There is ventilation of some sort on most unibestos operations. A sketch of the ventilation on the feed end as described by Mr. Lemen and Mr. Wallingford is appended.

The ventilation at feeder bin hoods was found to be more than adequate with face velocities in which one reading ran as low as 150 ft/min with all others from 200-275 ft/min. This indicated that the ventilation design was good and that the ventilation was working properly but it does not guarantee that the dust levels will meet current TLV's.

Openings on the large scrap bin showed a velocity of 200-275 ft/min which again indicates good ventilation.

On the finishing operation ventilation was sorely lacking. There was definite lack of hooding and ventilation associated with these operations. The band saw operation is not hooded. It does have two 6 inch ducts beside the band saw pulling with a face velocity of only 80 ft/min. Such low velocities do little or nothing to pick up asbestos dust or any other level of dust.

The drying hoods have at the canopy entrance 100 ft/min ventilation which appears to be low but could be adequate. The adequacy of the ventilation can only be determined by monitoring for air borne asbestos.

There is a practice of dropping the finished roll of unibestos from the table onto a "bun" of polyurethane foam and this produces dust (it produced more dust when it was dropped directly on the floor). Probably the roll should be lowered to the floor mechanically and in addition it should be set on a grating equipped with down draft ventilation for the purpose of preventing loosely held dust from becoming air borne.

Summary and Conclusion

Though there are potential health hazards in the operations of the Pittsburgh-Corning, Port Allegany plant and these include silica, lead and TDI, the only serious health problem is apparently the handling and processing of amosite asbestos in the unibestos plants.

The company recognizes their problem but since they plan to be out of the amosite asbestos insulation business in mid 1972, they hesitate to spend near \$100,000. for hooding and ventilation which their engineering study indicates is necessary to control this hazard. As a result they have applied to the Labor Department for a variance (copy attached).

Though the amosite feed end of the process has a well designed ventilation system which pulls air through hood openings at recommended velocities, the finishing end where the unibestos rolls are trimmed and split with a band saw, has for all practical purposes no ventilation at all. The finishing end is operating as a non-controlled operation.

An heroic attempt has been made to protect personnel from air borne asbestos by making it mandatory to wear respirators in Plant 8 for as long as one is in the area. In most cases this amounts to a workman wearing a respirator for practically his whole 8-hour day, which is not a desirable practice and such practice may not be affording the respiratory protection that it is thought to, since respirators are easily defeated. For example, it was noticed in one instance where only one strap was used on the respirator, in another instance the respirator was repeatedly lifted off face so as to carry on a conversation. Most important of all, respirators are made so that theoretically they fit everyone, but they don't. Some people can not get a good seal with a respirator because their faces don't fit the normal pattern.

In addition to the above, respirators are fatiguing due to high breathing resistance and on an 8-hour day basis there is bound to be a tendency in an atmosphere lacking irritant gases as in Plant 8 to wear the respirator in such a way as to defeat it by allowing air to leak in around the face seals.

In summary, I believe that such use of respirators on an 8-hour basis is no guarantee that the desired respiratory protection is being achieved.

A greater confidence in guaranteeing respiratory protection could be achieved with supplied air respirators since the breathing resistance would be practically eliminated and where a positive air flow would prevail. However, no respirator is a substitute for local exhaust ventilation and the best guarantee of adequate respiratory protection would be to install adequate local exhaust ventilation and hooding on the finishing operations. Then TLV's should be approached more closely.

Another point that should be considered is that in working with asbestos there could be a potential outplant problem from the women laundering the men's work clothes at home and from asbestos dust taken home on the hair of the workmen. This can be prevented by company furnished work clothes and compulsory showering at the end of each shift. Clothing should be supplied from the skin out and must be laundered on the plant site or at a commercial laundry facility especially set up to wash work clothes contaminated with toxic chemicals.

Recommendations

In view of the fact that there is essentially no local exhaust ventilation or hooding on the finishing operation in the unibestos plant 8 where amosite asbestos is processed and since the use of 8-hour respiratory protection should not be tolerated over a prolonged period of time, it is recommended that the company be given some reasonable time to install ventilation and hooding on the unibestos operation or else the operation should be terminated.

If after the installation of ventilation and hooding, TLV's are not met, then further hygienic measures should be instigated so as to meet current TLV's.

ASBESTOS ENVIRONMENTAL DATA
 PERSONAL SAMPLES
 PLANT #31
 PITTSBURGH-CORNING CORPORATION
 PORT ALLEGANY, PENNSYLVANIA
 10/18/71
 PENNSYLVANIA STATE HEALTH DEPARTMENT
 (Ken Wallingford, Assisting)

OPERATION AND JOB		SAMPLE #	CONCENTRATION FIBERS >5μ/cc	AIR VOLUME LITERS
700	Mining			
	Feeder Operator	006	44.94	65.3
	Feeder Operator	012	60.06	62.9
	Feeder Operator	025	59.70	78.2
	Feeder Operator	044	26.67	122.4
	Feeder Operator	053	34.24	71.4
	Feeder Operator	065	74.21	34.0
	Feeder Operator	069	24.56	95.2
710	Forming			
	Foreman	002	4.12	93.5
	Utility Operator	003	14.97	95.2
	Builder	004	13.47	56.1
	Builder	005	18.47	62.9
	Utility Operator	008	38.23	71.4
	Builder	009	15.41	90.1
	Foreman	010	2.27	100.3
	Builder	011	28.66	62.9
	Builder (mineral wool)	013	10.10	74.8
	Builder	016	25.40	88.4
	Builder	018	35.59	69.7
	Builder	026	23.73	79.9
	Builder	027	42.26	85.0
	Builder	028	34.76	81.6
	Builder	034	28.39	134.3
	Builder	035	44.88	120.7
	Builder	037	35.61	130.9
	Builder	039	20.09	130.9

Pittsburgh-Corning Corporation
Plant #31 Personal Samples of 10/19/71
Page 2

OPERATION AND JOB	SAMPLE #	CONCENTRATION FIBERS >5μ/cc	AIR VOLUME LITERS
710 Forming (continued)			
Builder (mineral wool)	041	7.29	117.3
Foreman	043	14.65	127.5
Builder	051	35.69	69.9
Builder (mineral wool)	054	14.19	66.3
Foreman (builder)	055	65.92	61.2
Builder	056	63.10	66.3
Builder	057	69.02	66.3
Builder	058	25.38	64.6
Foreman (office)	059	3.34	91.9
Builder	061	18.93	56.1
Builder	062	13.86	83.3
Builder	066	12.35	62.9
Builder	067	16.14	34.0
Utility Operator	070	10.43	73.1
720 Finishing			
Foreman	015	1.05	88.4
Band Saw Operator	019	14.67	91.8
Wrapper	023	8.16	93.5
Wrapper	029	10.70	129.2
Saw Operator	030	24.22	137.7
Material Handler	031	14.56	129.2
Material Handler	033	13.28	132.6
Utility Operator	042	15.75	132.6
Material Handler	046	18.14	78.2
Saw Operator	047	28.93	68.0
Material Handler	049	17.29	65.0
Utility Operator	050	20.64	65.3
Wrapper	052	31.18	66.3
Utility Operator	060	16.07	71.4
Band Saw Operator	072	8.01	76.5
Fork Lift Operator	078	5.37	42.5
Fork Lift Operator	080	6.13	44.2
740 Inspection and Packing			
Fork Lift Operator	001	6.29	98.6
Fork Lift Operator	007	6.83	73.1
Box Marker	014	3.06	107.1
Fork Lift Operator	017	8.24	100.3
Packer	020	9.07	93.5

OPERATION AND JOB	SAMPLE #	CONCENTRATION FIBERS >5u/cc	AIR VOLUME LITERS
740 Inspection and Packing (continued)			
Packer	021	19.30	107.1
Packer	022	10.23	100.3
Packer	032	12.29	125.8
Box Maker	040	6.62	129.2
Box Maker	048	11.15	69.7
Fork Lift Operator	063	8.73	62.9
Utility Operator	064	29.10	86.7
Fork Lift Operator	071	9.49	90.1
Box Maker	073	4.79	71.4
Packer	074	37.73	68.0
Fork Lift Operator	075	3.61	73.1
Packer	076	5.93	98.6
Packer	077	10.90	51.0
Box Maker	079	5.43	45.9
750 Miscellaneous			
Fork Lift Operator (warehouse)	024	1.66	98.6
Fork Lift Operator (warehouse)	035	3.53	64.6
Foreman	038	4.30	197.2
Fork Lift Operator (warehouse)	045	0.57	124.1
Foreman	068	3.58	81.6

Memorandum

TO : Director *H.D.*
Division of Field Studies & Clinical Investigations

DATE: September 24, 1971

FROM : Harry M. Donaldson *H.M.D.*
Research Industrial Hygienist

SUBJECT: Trip Report

Place Visited: Pittsburgh - Corning Plant at Port Allegany, Pennsylv

Purpose of Trip: To make a walk thru Industrial Hygiene Survey of the plant.

Persons Contacted: Richard Murray - Personnel
Richard Lambden - Plant Engineering
George Gregory - Safety Director

Date of Trip: September 16 - 17, 1971



RAW MATERIAL COST COMPARISONS
Port Allegany, Pa. Works
Plant No. 1
Variance to Standard
6-30-71 Vs 12-30-70

<u>RAW MATERIALS</u>	<u>Quantity Used 1-1-71 to 6-30-71</u>
Sand	3,562 tons
Soda Ash	1,203 tons
Limestone	984.6 tons
Nepheline Syonite	523.0 tons
Salt Cake	38.0 tons
Nitrate of Soda	72.0 tons
Antimony	8,598 Lbs.
Vinyl	9,160 gals.
Ethyl Alcohol	797 gals.
Ethyl Silicate	25 gals.
Ind. Limestone	132 bags
Red Enamel	240 Lbs.
White Enamel	3,350 Lbs.
Gray Enamel	150 Lbs.
Yellow Enamel	300 Lbs.
Black Enamel	11,050 Lbs.
Blue-Green Enamel	
Walnut Enamel	570 Lbs.
Ludox	4,950 Lbs.
White Enamel	1,450 Lbs.
Opax	120 Lbs.

- = Current Gain (Present Saving)
 + = Current Loss (Present Additi

RAW MATERIAL COST COMPARISONS
Port Allegany, Pa. Works
Plant No. 1
Variance to Standard
6-30-71 Vs 12-30-70

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<u>RAW MATERIALS</u>	<u>Quantity Used 1-1-71 to 6-30-71</u>
<u>0-C Fiberglass</u>	
9-inch	284 rolls
14-inch	83 rolls
28-inch	208 rolls
<u>Cartons</u>	
400	61
402-3	
403	
406	115,276
407	67,314
411	10,855
417	1,427
440	2,652
443	17,192

- = Current Gain (Present Savings)
- + = Current Loss (Present Additional)

RAW MATERIAL COST COMPARISONS
Port Allegany, Pa. Works
Plant No. 2
Variance to Standard
6-30-71 Vs 12-30-70

<u>RAW MATERIALS</u>	<u>Quantity Used 1-1-71 to 6-30-71</u>
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Sand	4,711.4 tons
Soda Ash	942 tons
Limestone	966 tons
Nepheline Syenite	1,487 tons
Salt Cake	143 tons
Nitrate of Soda	97 tons
Rasorite	503 tons
Fluorspar	76 tons
Carbon	46,850 Lbs.
French Pebbles	67 tons
Alumina Hydrate	479,600 Lbs.
Hydrol 705	17,460 Lbs.
Clay	5,880 Lbs.
Dextrine	2,105 Lbs.
Kendex 4233	276,830 Lbs.
11-1/2 x 17 Shoksorb	6,960 Lbs.
17-1/2 x 23 Shoksorb	64,030 Lbs
18 x 12 Pads	8,800 Pcs.
17-3/4 x 17-3/4 Pads	21,000 Pcs.
17-3/4 x 20 Pads	50,500 Pcs.

- = Current Gain (Present Savings)
+ = Current Loss (Present Addition)

RAW MATERIAL COST COMPARISONS
Port Allegany, Pa. Works
Plant No. 2
Variance to Standard
6-30-71 Vs 12-30-70

RAW MATERIALS	Quantity Used
	1-1-71 to 6-30-71
<u>Cartons</u>	
CL18R	1,882 Pcs.
CL20R	42,671 Pcs.
LcL17	21 Pcs.
LcL21	14,764 Pcs.
LcL18	7,149 Pcs.
LcL22	30,030 Pcs.
LcL23	12,314 Pcs.
LcL20	7,870 Pcs.
LcL24	127,055 Pcs.
7-1/2" Taped Tube	20,500
8" Taped Tube	40,529
8-3/4" Taped Tube	4,454

- = Current Gain (Present Savings)
+ = Current Loss (Present Addition)

RAW MATERIAL COST COMPARISONS
 Port Allegany, Pa. Works
 Plant No. 5
 Variance to Standard
6-30-71 Vs 12-30-70

<u>RAW MATERIALS</u>	<u>Quantity Used 1-1-71 to 6-30-71</u>
Acoustic White Paint	1,823 gals.
23-1/2" Glasfab	2 rolls
2" Glasfab	28 rolls
Asphalt RD 2813	5,460 Lbs.
Kendex 4233	1,218 Lbs.
3" Pyro-Kure Foil	466 rolls
18" Stay Dry	21 rolls
24" Pyro-Kure	414 rolls
11-1/2 x 17-1/2 Shoksorb	3,000 Lbs.
17-1/2 x 23-1/2 Shoksorb	2,480 Lbs.
18 x 12 Pads	41,960 Pcs.
18 x 18 Pads	9,501 Pcs.
18 x 24 Pads	21,400 Pcs.
18 x 35-3/4 Pads	8,210 Pcs.
LcL21	522
LcL18	147
LcL22	54
LcL24	207
18C6	36
319A	99

- = Current Gain (Present Saving)
 + = Current Loss (Present Additi

RAW MATERIAL COST COMPARISONS
Port Allegany, Pa. Works
Plant No. 5
Variance to Standard
6-30-71 Vs 12-30-70

Page

RAW MATERIALS	Quantity Used 1-1-71 to 6-30-71
320	2,258
321	65
323	48
518E2	7,781
PI 1/4	49
PI 1/2	57
PI 1	811
PI 2	503
PI 3	787
359S	246
358	4,271
532U	87

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+ = Current Loss (Present Addit

RAW MATERIAL COST COMPARISONS
 Port Allegany, Pa. Works
 Plant No. 6
 Variance to Standard
6-30-71 Vs 12-30-70

<u>RAW MATERIALS</u>	<u>Quantity Used 1-1-71 to 6-30-71</u>
Niax T-900	371,005 Lbs.
Niax Polyol BE 375	7,000 Lbs.
Niax D-22	252 Lbs.
Ucon 11-B	13,474
Niax 3-CF	3,442
Prepolymer 6403	82,142
AFPI	197,390
DC-193	4,816
L-5340	37
TMBO	347
DMEA	24
20" Kraft paper	1,781
52" Kraft paper	2,005
72" Kraft paper	5,505
60" Kraft paper	453
370 Carton	43
372 Carton	664
373 Carton	55
374 Carton	68
372-1/2 Carton	1,013

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RAW MATERIAL COST COMPARISONS
 Port Allegany, Pa. Works
 Plant No. 8
 Variance to Standard
6-30-71 Vs 12-30-70

<u>RAW MATERIALS</u>	Quantity Used 1-1-71 to 6-30-71
Sand	4.6 tons
Tape	176 rolls
<u>Cartons</u>	
306U	3,946
307U	4,264
319U	2,056
325U	3,428
358U	3,832
531U	7,974
532U	4,887
533U	2,933
534U	4,455
535U	5,915
537U	4,689
538U	4,202
540U	1,101
541U	12
600U	815
556U	117

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RAW MATERIAL COST COMPARISONS
 Port Allegany, Pa. Works
 Plant No. 8
 Variance to Standard
6-30-71 Vs 12-30-70

Page

<u>RAW MATERIALS</u>	<u>Quantity Used 1-1-71 to 6-30-71</u>
Asbestos Fiber	2,737,110 Lbs.
Sodium Silicate	2,596,910 Lbs.
Sno-Brite Clay	28.46 tons
Dicalite 185	13.0 tons
Scrim Cloth	
4 oz. canvas	5,289
6 oz. canvas	291
8 oz. canvas	993

- = Current Gain (Present Saving)
 + = Current Loss (Present Addition)

COMMONWEALTH of PENNSYLVANIA



DEPARTMENT OF ENVIRONMENTAL RESOURCES
Occupational Health
996 South Main Street
Headville, Pennsylvania 16335

June 17, 1971

Pittsburgh Corning Corporation
Port Allegany, Pennsylvania 16734

Attention: J. Richard Murray
Manager, Personnel Services

Gentlemen:

On May 20, 1971, Mr. J. L. Woodring, industrial hygienist, discussed with you dust and toluene di-isocyanate (TDI) levels determined from air samples collected previously and reinspected areas where asbestos materials are handled. As reported, no TDI vapor was detected in the air in Building No. 6. The dust levels determined in Building No. 8 are listed in the attached Table.

The threshold limit value for dust containing asbestos is 5 million particles per cubic foot of air, based on exposure for an 8-hour working day. This is currently a provision of Article 432, "Regulations Establishing Threshold Limits in Places of Employment"; however, a reduction of this value has been proposed and is expected to be adopted.

In view of the above and information indicating no significant change in operations since our latest samples were collected in September of 1970, the following recommendations are made:

1. Continue the periodic medical chest x-ray examination program for employees exposed to dust. Examinations of workers exposed to asbestos dust should be made once every two years, if you utilize a 14 x 17 inch chest x-ray and annually if you utilize a 70 mm chest x-ray.

Report the name and address of the physician in charge of the x-ray program and the results of chest x-ray examinations to this office.

2. Reduce workers' asbestos dust exposures to safe levels. This may be effected by:

*Advised Bureau that on-line inspection
Mon. 9/12/71.*

June 17, 1971

- check
list
compliance*
- A. Instituting and maintaining a good housekeeping program, especially at the feeding and fluffing machines in the Forming Department.
 - B. Maintaining the exhaust ventilation ducts and dust collectors in good repair and operating condition.
 - C. Providing air-tight seals in the ducts in the pressurized part of the ventilation system in the Forming Department.
 - D. Improving the ventilation control provided at the sawing operation in the Finishing Department through more effective enclosure and increased ventilating capacity.
 - E. Precleaning cut pieces before packaging or provide exhaust ventilation controls during packaging in the Finishing Department.
3. Enforce the use of respirators approved by the U. S. Bureau of Mines for protection against toxic dusts until other effective controls are provided. Respirators should be maintained in accordance with the provisions of Section 4, paragraph C of Article 432.

Please notify this office within 60 days of the steps taken to comply with above recommendations.

Enclosed for your information are copies of our Hygienic Information Guide entitled "Asbestos", "Personal Respiratory Protective Equipment" and "Toluene 2,4 Diisocyanate", and a copy of Article 432, as amended.

H. J. Surovic
H. J. Surovic
Regional Industrial Hygienist

HJS:JLW:ilp

enclosures

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES
OCCUPATIONAL HEALTH

Dust Concentrations

Pittsburgh Corning Corporation
Port Allegany, Pennsylvania

Location	Concentrations* (millions of particles per cubic foot of air)	Remarks
Forming Department	1.7	Worker's breathing zone, loading feeding machines, respirator worn
	2.2	
	5.7	Same as above, clean out dust on conveyor accidentally let open
	2.6	General air
	1.2	Worker's breathing zone
No. 2 Building Machine	1.2	
	0.7	General air
No. 1 Building Machine	0.8	
	0.5	
Finishing Department	2.8	Worker's breathing zone, f ing material to intermediate
	2.9	
	8.8	Worker's breathing zone, r ing and packing material f intermediate saw
	4.1	
	4.6	Worker's breathing zone, f material to small saw
	1.1	
	5.2	Worker's breathing zone, r ing and packing material f small saw
	26.3	
	8.4	Worker's exposure feeding transferring material on l saw
	2.9	
By scrap grinder	5.0	Worker's breathing zone, t ferring and packaging mate from large saw
	3.3	
	3.0	General air, only intermedia saw in operation
	2.3	

Location	Concentrations* (millions of particles per cubic foot of air)	Remarks
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Shipping Department	1.3	Worker's breathing zone,
	3.7	weighing and sealing boxes

*Threshold limit value (TLV), 5 million particles per cubic foot of air, based on exposure for an 8-hour working day

Survey by: John Pierro
W. G. Reiser

Industrial Hygienists

REED SMITH SHAW & McCLAY

UNION TRUST BUILDING

PITTSBURGH, PA. 15230

CABLE ADDRESS
REEDSMITH PPH

WRITERS DIRECT DIAL NUMBER

238-3352

(412) 288-3131

MAILING ADDRESS
110 BLS BLDG
PITTSBURGH PA 15230
WASHINGTON OFFICE
SUITE 404 MUISON BLDG
WASHINGTON D C 20001
202 833 3060
HARRISBURG OFFICE
604 STATE STREET BLDG
HARRISBURG PA 17101
717 234-5000

August 4, 1971

Mr. George Gregory
Pittsburgh Corning Corporation
P. O. Box 37
Port Allegany, Pennsylvania 15743

Dear Greg:

Please find a copy of the Application for Variance filed with the Department of Labor on behalf of Pittsburgh Corning Corporation on August 3, 1971.

If you recall, according to the regulations it is incumbent upon you to supply to the employees of Port Allegany a copy of the Application for Variance, information to the effect that they have a right to petition the Assistant Secretary of Labor for a hearing on such application, and information as to where they review actual copies of said application.

If you have any problem concerning the above, please contact me, but I am sure you realize that your duty under Sect 1905.10 (9) must be fulfilled with reasonable dispatch.

Yours truly,



Paul Bartha

IM:omc

Enclosures

Assistant Secretary For
Occupational Safety and Health,
U. S. Department of Labor
Washington, D. C. 20210

Re: Application of Pittsburgh Corning Corporation
For a Variance From Occupational Safety and
Health Standards

Gentlemen:

Pittsburgh Corning Corporation (the "Applicant")
hereby makes application for a variance from the provisions
of the Williams-Stieger Occupational Safety and Health Act
of 1970 pursuant to the rules of practice of Subpart E §1905.10
under Section 6(b)(6)(a) of such Act.

The Applicant's principal office is located at

One Gateway Center
Pittsburgh, Pennsylvania 15222

and hereby applies for a variance from Part 50-204 of the Safety
and Health Standards for Federal Supply Contracts, Subpart D
Section 50-204.50 as it applies to the Applicant's facilities at
the following locations;

Port Allegany Works
Main Street
P. O. Box 37
Port Allegany, Pennsylvania 16743

Tyler Works
Owentown Industrial District
P. O. Box 3057
Tyler, Texas 75705

The Applicant, at Port Allegany, Pennsylvania and Tyler, Texas, manufactures an insulation material known commercially as UNIDESTOS which is composed primarily of asbestos. In some areas of Applicant's Port Allegany Works and Tyler Works, during the production process, the Threshold Limit Value for asbestos required by Section 50-205.50 is exceeded.

To protect its employees at the aforementioned locations, the Applicant has;

- (1) Supplied, and will continue to supply, respirators approved by the Bureau of Mines and require the use of said respirators;
- (2) Provided and will continue to provide dust collection and ventilation apparatus;
- (3) Provided and will continue to provide health education programs that fully explain to its employees the health hazards associated with asbestos exposure and how they can protect themselves;
- (4) Expanded the periodic medical examination program for employees to include not only X-rays but also, on all employees with more than five years exposure an extensive medical history and physical examination and pulmonary function tests performed biennially;

- (5) Purchased and is experimenting with the use of new and approved respirators with ultra filters; and
- (6) Improved housekeeping procedures by the more frequent use of industrial vacuum cleaners.

The Applicant has been unable to attain the Threshold Limit Value required for asbestos at its Port Allegany and Tyler Works because of the unavailability of effective ventilation equipment. The ineffectiveness of such equipment has become particularly significant since the reduction of the TLV for asbestos from twelve to five fibers per milliliter greater than five microns in length. This drastic reduction has rendered previously used equipment inadequate and any replacement equipment only experimental.

The Applicant, as of June, 1971, has spent nearly \$200,000 in the research and development of a mineral wool substance to replace asbestos. Presently, the applicant is examining the production feasibility of the new product according to the following schedule:

-Mineral wool to be utilized in production, in place of asbestos, by one shift per day during the first two weeks of August, 1971.

-Mineral wool to be utilized, in place of asbestos, by three shifts per day during the last two weeks of August, 1971.

-A decision concerning complete conversion to the use of mineral wool in the production process beginning in September, 1971.

The Applicant is optimistic with the results of research and development thus far and hopes to completely substitute mineral wool for asbestos at both the Tyler Works and Port Allegany Works by mid 1972.

The employees at Port Allegany and Tyler have been informed of this Application for Variance and of their right to petition the Assistant Secretary for a hearing by;

- (1) Delivery of a copy of the Application to both Mr. Charles Croop, President of the American Flint Glass Workers Union of North America, the employee representative at the Port Allegany Works, and Mr. Herman L. Yandle, Chairman, Oil, Chemical and Atomic Workers Local 4202, the employee representative at the Tyler Works.
- (2) Posting a summary of the application; including notice that the employees have a right to petition the Assistant Secretary of Labor for Occupational Safety and Health, on the in-plant employee bulletin board at both Port Allegany and Tyler.

Therefore, the applicant requests that it be granted a variance from Section 50-204.50 of the Safety and Health Standards for Federal Supply Contracts for a period of one year.

Respectfully submitted,

PITTSBURGH CORNING CORPORATION

By


E. J. HOLMAN
Vice President
Technology and Manufacturing

Paul Martha
Reed Smith Shaw & McClay
Attorneys For Applicant

Assistant Secretary For
Occupational Safety and Health,
U. S. Department of Labor
Washington, D. C.

Re: Application of Pittsburgh Corning Corporation
For An Interim Order Pending Final Disposition
Of Its Application For Variance.

Gentlemen:

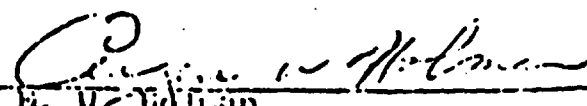
Pittsburgh Corning Corporation hereby makes application for an Interim Order pursuant to Section 6(b)(6)(a) of the Occupational Safety and Health Act of 1970 requesting relief from the enforcement of the Safety and Health Standards for Federal Supply Contracts, Subpart D, Section 50-204.50 pending the final disposition of its Application for a Variance from said standard.

Pittsburgh Corning is unable to reach immediate compliance with the aforementioned standard for the reasons stated in the Application for Variance attached hereto. Therefore, Pittsburgh Corning is applying for the appropriate interlocutory relief so as to avoid the imposition of unwarranted civil and/or criminal liability.

Respectfully submitted,

PITTSBURGH CORNING CORPORATION

Paul Martha
Reed Smith Shaw & McClay
Attorneys For Applicant

By 
E. W. T. Johnson
Vice President
Technology and Manufacturing

A F F I D A V I T

COMMONWEALTH OF PENNSYLVANIA
COUNTY OF ALLEGHENY

} SS:

Before me, the undersigned authority, a Notary Public in and for said Commonwealth and County, personally appeared E. W. Holman, who, being duly sworn according to law, deposes and says that he is Vice President, Technology and Manufacturing for Pittsburgh Corning Corporation; that he has knowledge of the matters set forth in the foregoing application for an interim order and application for variance; that the same are true to the best of his knowledge information and belief; and that he is authorized as Vice President, Technology and Manufacturing, of applicant to make, sign, verify and file said applications.

E. W. Holman

Sworn to and subscribed before me this 2nd day of

December, 1971.

William J. Wilkey
Notary Public

--My Commission Expires:

WILLIAM J. WILKEY, Notary Public
Pittsburgh, Allegheny County, Pa.
My commission expires Oct. 14, 1974

A F F I D A V I T

COMMONWEALTH OF PENNSYLVANIA
COUNTY OF ALLEGHENY

} SS:

Before me, the undersigned authority, a Notary Public in and for said Commonwealth and County, personally appeared Morton Corn, Ph.D., who, being duly sworn according to law, deposes and says that he is Engineering Consultant to Pittsburgh Corning Corporation; that he has knowledge of the matters set forth in the foregoing application for variance, so far as said application pertains to the inability of the applicant to presently attain the revised Threshold Limit Value for asbestos of five fibers per milliliter greater than five microns in length with existing dust collection systems in some areas of its Port Allegany Works and Tyler Works; that the same are true to the best of his knowledge, information and belief; and that he is authorized as Engineering Consultant to applicant to make, sign, verify and file said representation.

Morton Corn

Sworn to and subscribed before me this 2nd day of

August, 1971.

William J. Verity
Notary Public

My Commission Expires:

WILLIAM J. VERITY, Notary Public
Pittsburgh, Allegheny County, Pa.
My commission expires Oct. 14, 1974

A F F I D A V I T

COMMONWEALTH OF PENNSYLVANIA
COUNTY OF ALLEGHENY

} SS:

Before me, the undersigned authority, a Notary Public in and for said Commonwealth and County, personally appeared Lee B. Grant, M.D., who, being duly sworn according to law, deposes and says that he is Medical Director, for PPG Industries and Consultant to Pittsburgh Corning Corporation; that he has knowledge of the matters set forth in the foregoing application for variance, so far as said application states that the applicant has provided for its employees health education programs that explain to said employees the health hazards associated with asbestos exposure and how they can protect themselves; that the same are true to the best of his knowledge, information and belief; and that he is authorized as Medical Consultant to applicant to make, sign, verify and file said representation.

Lee B. Grant, M.D.

Sworn to and subscribed before me this 11th day of August, 1971.

W. J. [Signature]
Notary Public

My Commission Expires:

WILLIAM J. WILSON, Notary Public
Pittsburgh, Allegheny County, Pa.
My commission expires Oct. 14, 1974