



INTERNAL
CORRESPONDENCE

JUL 2 1985

UNION CARBIDE CORPORATION P O BOX 2004, SOUTH CHARLESTON, WV 25303
SILICONES AND URETHANE INTERMEDIATES
SOUTH CHARLESTON PLANT

To: J. R. Dean
D. Gossage
B. G. Stump

Date: June 28, 1985

Originating Dept:

Subject:

From: C. E. Fry
D. A. Gosselin
R. W. Holland, Jr., M.D.
D. J. McNeil
T. G. Swanson
Managers Department

Subject: Asbestos Exposure Effects
Potential of Non-Insulator
Crafts

Asbestos dust measurements in the plant are consistently below OSHA permissible exposure limits (see attached summary). However, when we detect even a fraction of those limits in our air samples I get a feeling of apprehension because I question if any level of inhalation exposure is safe in absence of respiratory protection.

Airborne asbestos dust measurements are expressed in terms of the number of fibers that are 5 microns or more in length in one cubic centimeter of air. Numerical estimates should be evaluated with caution according to OSHA, because air concentrations used are a matter of convenience and "should not be evaluated without interpreting the meaning of the units."⁽¹⁾ For example, the OSHA permissible limit for an 8-hour day is 2.0 fibers (5 μ or longer) per cc of air. This may seem like a small amount of asbestos which is conventionally determined using a microscope, but in my opinion represents a potentially hazardous condition. In physical terms 2.0 f/cc equals 2,000,000 fibers per cubic meter of air (f/m³). Humans inhale about one cubic meter of air per hour, depending on degree of activity. Thus, at this concentration a worker would inhale roughly 16,000,000 fibers 5 microns in length over an 8-hour day - disregarding the possibility of an infinite number of shorter fibers being present under some conditions.

Based on our measurements such conditions rarely exist in plant workplace environments. Nevertheless, existing, natural defense mechanisms alone (respiratory system mucous and nasal hair) may be inadequate for even concentrations at the lowest reliable detection limits.

I feel good about the manner in which exposure control has improved among Insulator craft groups due to establishment and maintenance of adequate standards. My feeling of apprehension, however, is due to concern about potential chronic health effects among all other crafts whose exposure concentration may be comparatively lower, perhaps less frequent but, in any case, generally without the benefit of respiratory protection.

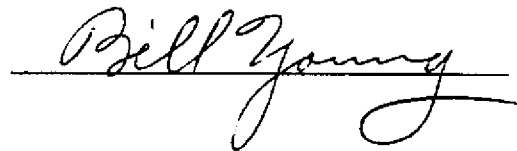
(1) Bureau of National Affairs, Occupational Safety & Health Reporter, November 11, 1983.

As you know, total elimination of asbestos-contained materials in the plant is unlikely and impractical because of cost, safety or lack of suitable replacement material-reasons. A gasket failure, for example, due to use of an unsuitable substitute could potentially cause a far more hazardous condition than any conceivable one related to use of asbestos-contained gasket material.

Occupational exposure to asbestos can be effectively controlled in most plant situations by using wet-method handling procedures and an appropriate dust mask commonly used by Insulators throughout the plant. I urge you to consider taking action necessary for strict enforcement of mandatory use of respiratory protection by all employees who use or handle any asbestos-contained materials, e.g., gasket fabrication/removal/disposal, brake lining replacement or even inspections, insulation removal/disturbance related to a wide variety of job tasks performed by various craft groups, etc. Such action would virtually prevent occurrence of any inhalation exposure.

Please call me if you have any questions or comments.

Thank you.

A handwritten signature in cursive script, reading "Bill Young", written over a horizontal line.

WCY:bl

Attachment

JOB CLASSIFICATION/EEO CODE

JOB CODE					S U B C O D E
CLASS	E 40	E 41	O 42	E 43	
AUTOMECH	H	5	Z		Automobile Mechanic
BLKSMITH	H	9	Z		Blacksmith
BLRMAKR	H	9	Z	1	Boilermaker
C DRIVER	J	4	Z		Non-Plant Truck Driver
C FMAN	B	F	H	2	Non-Plant Foreman or Shift Leader
C MAINT	J	M	Z	3	Non-Plant Maintenance People (Contract, SCWTW, Etc.)
C OPER	H	1	Z	2	Non-Plant Operator
CARPNTN	H	D	Z		Carpenter
CAR UNLD	K	X	Z		Car Unloader
CHEMIST	C	3	Z		Chemist
CORRTECH	D	X	Z	2	Corrosion Technician
ELECTN	H	B	Z		Electrician
XPDITR	G	X	Z		Expediter
ENGR	C	7	Z		Engineer
F S ATT	L	S	Z		Fire Station Attendant
FMAN	B	F	H	1	Foreman, Supervisor of Hourly Personnel
GEN FMAN	B	D	Z		General Foreman, Shift Super
H E OPER	H	2	Z		Heavy Equipment Operator
I H TECH	D	X	Z	1	Industrial Hygiene Technician
INDHYGST	C	P	Z		Industrial Hygienist
INSP T&I	J	F	Q		Inspector T&I
INST MECH	H	A	Z		Instrument Mechanic
INSUL	H	Q	Z		Insulator
LAB ASST	D	3	Z	1	Laboratory Assistant
LAB TECH	D	3	Z	2	Laboratory Technician
LABORER	K	B	Z		Laborer
MACH	H	S	Z	1	Machinist
METL WKR	H	V	Z		Sheetmetal Worker
MILWRT	H	S	Z	2	Millwright
OPER	H	1	Z	1	Operator (Chemical, Plant 514 Only, Including Pumper Operator)
PAINTER	H	N	Z		Painter
PIPE FITR	H	R	Z		Pipefitter
P M OPER	H	X	Z	1	Pipeline Machine Operator
P L MECH	H	X	Z	2	Pipeline Mechanic
Q C ANAL	D	F	Z		Quality Control Analyst
REL OPER	H	1	Z	3	Vacation Relief Operator
RIGGER	H	L	Z		Rigger
SALVMECH	J	M	Z	2	Salvage Mechanic
SD BLSTR	H	X	Z		Sandblaster
SR CLERK	G	X	Z		Senior Clerk
S&R CLK	G	X	Z	2	Stores & Receiving Clerk
SUPRVISR	B	F	Z		Supervisor Non Technical (Does Not Supervise Hourly People)
TOOL CLK	G	X	Z	3	Tool Clerk
TK DRIVR	J	4	Z	1	Truck Driver - Plant 514 Only
UTIL MECH	J	M	Z	1	Utility Mechanic
WELDER	H	7	Z		Welder
WGHMASTR	J	6	Z		Weighmaster

CIHRKLES 3.2.2.3

SUBJECT

LINES 400-490: PERSONNEL DATA

Entries and Comments

Cannot be blank; Z=none. If a respirator is worn, use the appropriate code letter from the following list:

A-Supplied Air, Full Face Mask
B-Supplied Air, Full Face Mask, Positive Pressure Demand
C-Supplied Air, Half Face Mask
D-Supplied Air, Half Face Mask, Positive Pressure Demand
E-Supplied Air, Abrasive Blasting Hood
F-Gas Mask, General Purpose
G-Gas Mask, Specific
H-Cartridge, Dust, Nuisance, Full Face Mask
I-Cartridge, Dust, Nuisance, Half Face Mask
J-Cartridge, Dust, Specific
K-Cartridge, Acid Gas, Full Face Mask
L-Cartridge, Acid Gas, Half Face Mask
M-Cartridge, Organic Vapor, Full Face Mask
N-Cartridge, Organic Vapor, Half Face Mask
O-Cartridge, Specific, Full Face Mask
P- Cartridge, Specific, Half Face Mask
Q-Dust Mask
R-Dust Mask-Disposable
S-Dust Mask, Toxic
T-Supplied Air, Hood
X-Other
Z-None

CONTAMINANT NAME DEPT. PROCESS AT JOB SAMP 8-HOUR EXPOSURE RESP

NO. OR UNIT CLASS TOTL AIR T.W.A. STANDARD CONC. CONC.

ASBESTOS	FABRICATION SHOP	79 03 07	17	1500	2.000
ASBESTOS	FABRICATION SHOP	79 03 07	17	5000	2.000
ASBESTOS	IPH	79 09 18	315	1000	2.000
ASBESTOS	IPH	79 09 18	315	0100	2.000
ASBESTOS	IPH	79 09 18	314	1000	2.000
ASBESTOS	IPH	79 09 18	306	0100	2.000
ASBESTOS	IPH	80 04 22	290	0170	2.000
ASBESTOS	IPH	80 05 05	360	0170	2.000
ASBESTOS	IPH	80 05 05	360	0320	2.000
ASBESTOS	IPH	80 05 05	360	0130	2.000
ASBESTOS	IPH	80 05 06	420	0050	2.000
ASBESTOS	IPH	80 05 07	420	1300	2.000
ASBESTOS	IPH	80 05 08	397	0210	2.000
ASBESTOS	IPH	80 05 22	425	0150	2.000
ASBESTOS	IPH	80 05 23	395	0110	2.000
ASBESTOS	IPH	80 05 27	420	0210	2.000
ASBESTOS	IPH	80 05 28	415	0340	2.000
ASBESTOS	IPH	80 05 29	360	0370	2.000
ASBESTOS	IPH	80 06 04	389	0200	2.000
ASBESTOS	IPH	80 06 10	380	0200	2.000
ASBESTOS	IPH	83 10 11	43	5800	2.000
ASBESTOS	IPH	83 10 11	43	10100	2.000
ASBESTOS	IPH	83 10 11	43	3800	2.000
ASBESTOS	IPH	84 04 06	123	0860	500
ASBESTOS	IPH	84 04 06	123	1040	500
ASBESTOS	IPH	84 06 14	345	0230	500
ASBESTOS	IPH	84 06 14	345	0310	500
ASBESTOS	IPH	84 06 14	345	0270	500
ASBESTOS	IPH	84 06 14	345	0240	500
ASBESTOS	IPH	84 06 14	345	0110	500
ASBESTOS	IPH	84 06 14	345	0120	500
ASBESTOS	IPH	84 06 14	345	0330	500
ASBESTOS	IPH	84 06 14	345	0360	500
ASBESTOS	IPH	84 07 03	150	0740	500
ASBESTOS	IPH	84 07 03	150	0840	500
ASBESTOS	IPH	84 07 03	150	0640	500
ASBESTOS	IPH	84 07 03	150	0740	500
ASBESTOS	IPH	84 07 09	150	0930	500
ASBESTOS	IPH	84 07 09	150	3590	500
ASBESTOS	IPH	84 07 09	150	2310	500
ASBESTOS	IPH	84 07 09	150	1130	500
ASBESTOS	IPH	84 07 10	195	1020	500
ASBESTOS	IPH	84 07 10	195	0940	500
ASBESTOS	IPH	84 07 10	195	0640	500
ASBESTOS	IPH	84 07 11	205	1290	500
ASBESTOS	IPH	84 07 11	205	1440	500
ASBESTOS	IPH	84 07 11	205	0970	500
ASBESTOS	IPH	84 07 11	205	1470	500

CONTAMINANT NAME	DEPT.	PROCESS	OR UNIT	AT JOB	SAMP	AIR	8-HOUR	EXPOSURE	RESP
NO.				CLASS	TOTL	CONC	T.W.A.	STANDARD	
				CODE	TIME		CONC.		
ASBESTOS	004320	IPH		80 06 04	H1Z1	387	-0710	2-000	Z
ASBESTOS	004320	IPH		80 06 04	H1Z1	387	-0220	2-000	Z
ASBESTOS	004320	IPH		80 06 04	H1Z1	407	-0190	2-000	Z
ASBESTOS	004320	IPH		80 06 10	H1Z1	397	-0190	2-000	Z
ASBESTOS	004320	IPH		80 06 10	H1Z1	394	-0280	2-000	Z
ASBESTOS	004320	IPH		80 06 10	H1Z1	395	-0370	2-000	Z
ASBESTOS	223020	MAINTENANCE		85 02 04	JGZ	85	-3100	2-000	R
ASBESTOS	327000	FABRICATION SHOP		79 03 07	HVZ	17	-2300	2-000	Z
ASBESTOS	327000	IPH		79 09 10	HQZ	17	-6700	2-000	R
ASBESTOS	327000	IPH		79 09 10	HQZ	33	-3200	2-000	R
ASBESTOS	327000	IPH		79 09 11	HQZ	80	-1000	2-000	R
ASBESTOS	327000	IPH		79 09 11	HQZ	80	-0500	2-000	R
ASBESTOS	327000	IPH		79 09 11	HQZ	180	-0900	2-000	R
ASBESTOS	327000	IPH		79 09 11	HQZ	180	-1100	2-000	R
ASBESTOS	327000	IPH		79 09 12	HQZ	327	-5000	2-000	R
ASBESTOS	327000	IPH		79 09 12	HQZ	325	-0700	2-000	R
ASBESTOS	327000	IPH		79 10 01	HQZ	317	-2000	2-000	R
ASBESTOS	327000	IPH		79 10 02	HQZ	321	-1600	2-000	R
ASBESTOS	327000	IPH		79 10 02	HQZ	380	-1000	2-000	R
ASBESTOS	327000	IPH		79 10 02	HQZ	382	-1600	2-000	R
ASBESTOS	327000	IPH		82 06 23	HQZ	10	-6000	2-000	R
ASBESTOS	327000	IPH		82 06 29	HLZ	5	3-7000	2-000	R
ASBESTOS	327000	IPH		83 04 26	HLZ	65	-2200	2-000	Z
ASBESTOS	327000	IPH		83 04 26	HLZ	65	-2300	2-000	Z
ASBESTOS	327000	IPH		83 11 04	HQZ	72	-2910	500	R
ASBESTOS	327000	IPH		83 11 04	HQZ	69	-1390	500	R
ASBESTOS	327000	IPH		84 01 11	HQZ	88	-4100	500	R
ASBESTOS	327000	IPH		84 01 11	HQZ	88	-3600	500	R
ASBESTOS	327000	IPH		84 01 13	HQZ	30	-4910	500	R
ASBESTOS	327000	IPH		84 01 13	HQZ	30	-4180	500	R
ASBESTOS	327000	IPH		84 01 20	HQZ	12	-1840	500	R
ASBESTOS	327000	IPH		84 01 20	HQZ	12	-0310	500	R
ASBESTOS	327000	IPH		84 03 02	HQZ	125	-3540	500	P
ASBESTOS	327000	IPH		84 04 06	HQZ	121	-3010	500	R
ASBESTOS	327000	IPH		84 04 06	HQZ	120	-2570	500	P
ASBESTOS	327000	IPH		84 04 17	HQZ	111	-3925	500	R
ASBESTOS	327000	IPH		84 04 30	HQZ	145	-1270	500	R
ASBESTOS	327000	IPH		84 04 30	HQZ	145	-3150	500	I
ASBESTOS	327000	IPH		84 05 21	HQZ	20	-5670	500	R
ASBESTOS	327000	IPH		84 05 21	HRZ	50	-5900	500	R
ASBESTOS	327000	IPH		84 05 21	JFQ	40	-3390	500	R
ASBESTOS	327000	IPH		84 05 21	HLZ	50	-1030	500	R
ASBESTOS	327000	IPH		85 04 22	HQZ	95	-1710	2-000	R
ASBESTOS	327000	IPH		85 04 22	HQZ	95	-2480	2-000	R
ASBESTOS	327000	IPH		84 03 17	HQZ	360	-2010	500	R
ASBESTOS	327000	LOWER BRIDGE		84 03 17	KBZ	360	-0980	500	P
ASBESTOS	327000	LOWER BRIDGE		84 03 17	KBZ	360	-1560	500	R
ASBESTOS	327000	LOWER BRIDGE		84 03 17	HQZ	360	-1000	500	R
ASBESTOS	327000	LOWER BRIDGE		84 03 17	HQZ	360	-1210	500	P

CONTAMINANT NAME	DEPT.	PROCESS	OR UNIT	AT JOB	SAMP	AIR	R-HOUR	EXPOSURE	RESP
NO.				CLASS	TOTL	CONC	T.W.A.	STANDARD	
				CODE	TIME		CONC.		
ASBESTOS	327000	MAIN CHEM COMPLEX		84 09 11	HQZ	55	2550	500 Z	
ASBESTOS	327000	MAIN CHEM COMPLEX		84 09 11	HQZ	55	1920	500 Z	
ASBESTOS	327000	MAINTENANCE		80 09 02	HQZ	45	19000	2000 R	
ASBESTOS	327000	MAINTENANCE		80 09 02	HQZ	45	10600	2000 R	
ASBESTOS	327000	MAINTENANCE		80 09 02	HQZ	45	22800	2000 R	
ASBESTOS	327000	MAINTENANCE		80 10 23	HQZ	25	17100	2000 R	
ASBESTOS	327000	MAINTENANCE		80 10 23	HQZ	7	39000	2000 R	
ASBESTOS	327000	MAINTENANCE		80 10 23	HQZ	7	30500	2000 R	
ASBESTOS	327000	MAINTENANCE		80 10 24	HQZ	30	12000	2000 R	
ASBESTOS	327000	MAINTENANCE		80 10 24	HQZ	16	7400	2000 R	
ASBESTOS	327000	MAINTENANCE		80 10 24	HQZ	30	5700	2000 R	
ASBESTOS	327000	MAINTENANCE		80 10 27	HQZ	12	5400	2000 R	
ASBESTOS	327000	MAINTENANCE		80 10 27	HQZ	12	4300	2000 R	
ASBESTOS	327000	MAINTENANCE		80 10 27	HQZ	12	3400	2000 R	
ASBESTOS	327000	MAINTENANCE		80 10 27	HQZ	10	7400	2000 R	
ASBESTOS	327000	MAINTENANCE		80 10 27	HQZ	10	2900	2000 R	
ASBESTOS	327000	MAINTENANCE		80 10 28	HQZ	13	36300	2000 R	
ASBESTOS	327000	MAINTENANCE		80 10 28	HQZ	13	61200	2000 R	
ASBESTOS	327000	MAINTENANCE		83 12 09	HQZ	45	36030	500 R	
ASBESTOS	327000	MAINTENANCE		83 12 30	HQZ	8	9210	500 R	
ASBESTOS	327000	MAINTENANCE		84 03 03	HQZ	400	2250	500 R	
ASBESTOS	327000	MAINTENANCE		84 03 03	HQZ	400	1490	500 R	
ASBESTOS	327000	MAINTENANCE		84 03 03	HQZ	400	0570	500 R	
ASBESTOS	327000	MAINTENANCE		84 03 03	HQZ	400	0280	500 R	
ASBESTOS	327000	MAINTENANCE		84 03 03	HQZ	400	1110	500 R	
ASBESTOS	327000	MAINTENANCE		84 09 06	HQZ	8	8290	500 R	
ASBESTOS	327000	MAINTENANCE		84 11 13	HQZ	120	0610	2000 R	
ASBESTOS	327000	MAINTENANCE		84 11 13	HQZ	155	0290	2000 R	
ASBESTOS	327000	MAINTENANCE		84 11 19	HQZ	30	2460	2000 R	
ASBESTOS	327000	MAINTENANCE		84 11 18	HQZ	132	0850	2000 R	
ASBESTOS	327000	MAINTENANCE		84 11 18	HQZ	113	0590	2000 R	
ASBESTOS	327000	MAINTENANCE		84 11 18	HQZ	148	0810	2000 R	
ASBESTOS	327000	MAINTENANCE		84 11 18	HQZ	127	0320	2000 R	
ASBESTOS	327000	MAINTENANCE		84 11 18	HQZ	275	0290	2000 R	
ASBESTOS	327000	MAINTENANCE		84 11 18	HQZ	275	0320	2000 R	
ASBESTOS	327000	MAINTENANCE		84 11 18	HQZ	150	2060	2000 R	
ASBESTOS	327000	MAINTENANCE		84 11 18	HQZ	150	0880	2000 R	
ASBESTOS	327000	MAINTENANCE		85 02 04	HQZ	85	4900	2000 R	
ASBESTOS	327000	MAINTENANCE		85 02 04	HQZ	85	2300	2000 R	
ASBESTOS	327000	MAINTENANCE		85 02 26	HQZ	255	0370	2000 R	
ASBESTOS	327000	MAINTENANCE		85 02 26	HQZ	255	0340	2000 R	
ASBESTOS	327000	MAINTENANCE		84 05 23	HQZ	18	4090	500 R	
ASBESTOS	327000	MICC		84 05 23	HQZ	18	2460	500 R	
ASBESTOS	327000	MICC		84 05 31	HQZ	32	7300	500 R	
ASBESTOS	327000	MICC		84 05 31	HQZ	32	22100	500 R	
ASBESTOS	327000	MICC		84 06 01	HQZ	170	19300	500 R	
ASBESTOS	327000	MICC		84 06 01	HQZ	305	0510	500 R	
ASBESTOS	327000	MICC		84 06 06	HQZ	45	15900	500 R	
ASBESTOS	327000	MICC		84 06 19	HQZ	100	1400	500 R	

CONTAMINANT NAME DEPT. NO. PROCESS OF UNIT AT JOB SAMP CLASS TOTL CONC AIR 8-HOUR EXPOSURE RESP T.M.A. STANDARD CONC.

ASBESTOS	327000	MICC	84 06 19	HQZ	100	-1400	-500 R
ASBESTOS	327000	DILYARD	80 07 16	HQZ	15	2.2100	2.000 R
ASBESTOS	327000	CILYARD	80 07 16	HQZ	15	2.4600	2.000 R
ASBESTOS	327000	DILYARD	80 07 16	HQZ	15	1.2300	2.000 R
ASBESTOS	327000	CILYARD	80 07 16	HQZ	15	3.3900	2.000 R
ASBESTOS	327000	DILYARD	83 10 24	HQZ	105	-1400	2.000 P
ASBESTOS	327000	CILYARD	83 10 24	HQZ	105	-1330	2.000 R
ASBESTOS	327000	DILYARD	83 11 02	HQZ	42	-8420	2.000 R
ASBESTOS	327000	CILYARD	83 11 02	HQZ	42	-5790	2.000 R
ASBESTOS	327000	DILYARD	84 02 09	HQZ	140	-2160	-500 R
ASBESTOS	327000	CILYARD	84 02 09	HQZ	140	-1210	-500 R
ASBESTOS	327000	DILYARD	84 09 28	HQZ	25	-2950	-500 R
ASBESTOS	327000	CILYARD	84 09 28	HQZ	25	-2650	-500 R
ASBESTOS	327000	OXIDE ADDUCTS	80 05 29	HQZ	370	-1830	2.000 R
ASBESTOS	327000	OXIDE ADDUCTS	80 05 29	HQZ	370	-2010	2.000 R
ASBESTOS	327000	OXIDE ADDUCTS	80 05 30	HQZ	425	-1340	2.000 R
ASBESTOS	327000	OXIDE ADDUCTS	80 05 32	HQZ	425	-2220	2.000 R
ASBESTOS	327000	OXIDE ADDUCTS	80 06 05	HQZ	117	-8690	2.000 Z
ASBESTOS	327000	OXIDE ADDUCTS	83 10 17	HQZ	36	-0680	2.000 R
ASBESTOS	327000	OXIDE ADDUCTS	83 10 17	HQZ	45	-1370	2.000 R
ASBESTOS	327000	OXIDE ADDUCTS	83 10 17	HQZ	40	-0570	2.000 R
ASBESTOS	327000	OXIDE ADDUCTS	84 02 10	HQZ	29	-3050	-500 R
ASBESTOS	327000	OXIDE ADDUCTS	84 02 10	HQZ	29	-1810	-500 F
ASBESTOS	327000	OXIDE ADDUCTS	84 02 17	HQZ	310	-0790	-500 R
ASBESTOS	327000	OXIDE ADDUCTS	84 02 17	HQZ	310	-4490	-500 R
ASBESTOS	327000	OXIDE ADDUCTS	84 02 23	HQZ	330	-0660	-500 P
ASBESTOS	327000	OXIDE ADDUCTS	84 02 23	HQZ	330	-4260	-500 P
ASBESTOS	327000	OXIDE ADDUCTS	84 02 23	HQZ	330	-0870	-500 R
ASBESTOS	327000	OXIDE ADDUCTS	84 05 18	HQZ	15	-4910	-500 R
ASBESTOS	327000	OXIDE ADDUCTS	84 05 18	HQZ	15	-2950	-500 R
ASBESTOS	327000	PLANT MIXTURES	80 06 23	HQZ	15	2.3600	2.000 R
ASBESTOS	327000	PLANT MIXTURES	80 06 23	HQZ	15	4.7700	2.000 R
ASBESTOS	327000	PLANT MIXTURES	80 07 01	HQZ	15	1.3800	2.000 R
ASBESTOS	327000	PLANT MIXTURES	80 07 01	HQZ	15	1.0105	2.000 R
ASBESTOS	327000	PLANT MIXTURES	80 07 01	HQZ	15	2.3500	2.000 R
ASBESTOS	327000	PLANT MIXTURES	80 07 01	HQZ	15	2.3600	2.000 R
ASBESTOS	327000	PLANT MIXTURES	80 07 01	HQZ	15	-6250	-500 R
ASBESTOS	327000	POLYMER POLYOL	83 12 12	HQZ	33	-5140	-500 R
ASBESTOS	327000	POLYMER POLYOL	83 12 14	HQZ	195	-1400	-500 R
ASBESTOS	327000	POLYMER POLYOL	83 12 14	HQZ	206	-1250	-500 R
ASBESTOS	327000	POLYMER POLYOL	83 12 14	HQZ	206	-1860	-500 R
ASBESTOS	327000	POLYMER POLYOL	83 12 14	HQZ	206	-2760	-500 R
ASBESTOS	327000	POLYMER POLYOL	84 07 05	HQZ	30	-3690	-500 R
ASBESTOS	327000	POLYMER POLYOL	84 02 16	HQZ	75	1.2410	-500 R
ASBESTOS	327000	UCAR SOLUTION VINYL	84 02 16	HQZ	75	-8640	-500 P
ASBESTOS	327000	UCAR SOLUTION VINYL	84 07 30	HQZ	33	-5140	-500 R
ASBESTOS	327000	UCAR SOLUTION VINYL	84 07 30	HQZ	33	-2900	-500 R
ASBESTOS	327000	UCAR SOLUTION VINYL	84 02 23	HQZ	60	-3560	-500 R
ASBESTOS	327000	UCAR SOLUTION VINYL	84 03 29	HQZ	60	-4550	-500 R

CONTAMINANT NAME	DEPT.	PROCESS	AT	JOB	SAMP	AIR	B-HOUR	EXPOSURE	RESP
NO.	OR UNIT		CLASS	TOTL	CONC	T.W.A.	STANDARD		

			CODE	TIME		CONC.			

ASBESTOS	327000	UCAR SOLUTION VINYL	84	10 26	HQZ	32	.8750	-500 R	
ASBESTOS	327000	UCAR SOLUTION VINYL	84	10 26	HQZ	32	1.1980	-500 R	
ASBESTOS	327000	UICC	84	01 06	HQZ	53	.5250	-500 R	
ASBESTOS	327000	UICC	84	01 06	HQZ	53	.6950	-500 R	
ASBESTOS	327000	UICC	84	01 06	HQZ	25	.3540	-500 R	
ASBESTOS	327000	UICC	85	03 20	HQZ	30	.2500	2.000 I	
ASBESTOS	327000	UICC	85	03 20	HQZ	30	.1600	2.000 R	
ASBESTOS	327000	UICC	85	03 29	HQZ	210	.3600	2.000 R	
ASBESTOS	327000	UICC	85	03 29	HQZ	210	.3500	2.000 R	
ASBESTOS	327010	IPH	85	03 15	HQZ	25	.9700	2.000 I	
ASBESTOS	327010	IPH	85	03 15	HQZ	25	1.3500	2.000 I	
ASBESTOS	327010	MAINTENANCE	84	12 26	HQZ	15	.0490	2.000 I	
ASBESTOS	327010	MAINTENANCE	84	12 28	HQZ	17	.2600	2.000 I	
ASBESTOS	327010	MAINTENANCE	85	02 20	HQZ	100	.2100	2.000 R	
ASBESTOS	327010	MAINTENANCE	85	03 12	HQZ	35	.0200	2.000 I	
ASBESTOS	327010	MAINTENANCE	85	03 12	HQZ	20	.0400	2.000 I	
ASBESTOS	327880	MAINTENANCE	85	02 20	JGZ	100	.0400	2.000 R	
ASBESTOS	327680	MAINTENANCE	85	02 26	H1Z1	255	.0060	2.000 R	.0030
ASBESTOS	350010	GARAGE	83	04 05	H5Z	30	3.9300	2.000 Z	.2456
ESTOS	350010	GARAGE	83	04 05	H5Z	30	2.0900	2.000 Z	.1306