



Shell Oil Company
Interoffice Memorandum

JULY 28, 1986

PLAINTIFF'S EXHIBIT

SH-2939

FROM: SR. INDUSTRIAL HYGIENIST, HEALTH & SAFETY, MFG. & TECH.
TO: SEE ATTACHED DISTRIBUTION LIST
SUBJECT: PRELIMINARY GUIDANCE FOR THE REVISED ASBESTOS STANDARD

Preliminary guidance from HS&E, S&IH on the revised OSHA Asbestos Standard is attached. While the standard incorporates many procedures now commonly used in the field, various activities will have to occur during the latter part of 1986 in order to come into compliance. In part, the magnitude of the compliance effort will depend on the results of an "initial determination" (guidance for performing this assessment will be provided later).

While HS&E will be providing more detailed guidance by late August, the following comments and recommendations regarding exposure monitoring would appear to be timely.

The revised asbestos regulation outlines requirements for performing an initial determination for the purposes of "identifying jobs which exceed or may reasonably be expected to exceed the action level of 0.1 f/cc." Under the Construction Standard, locations will be able to grandfather past representative exposure data (which may not always be advantageous). Brake repair which falls under the General Industry Standard allows, however, only the grandfathering of data collected in 1986.

A review of Shell's monitoring data for asbestos suggests that exposures be analyzed from the perspective of the following exposure categories.

1. Interior demolition work.
2. Demolition, stripping, cleanup
 - A. major removal (planned work)
 - B. incidental exposure (exposure incidental to another task)
3. Brake repair
4. Transite cutting
5. Transite removal and installation
6. Handling and use of gasketing material
7. Other (to include employees with no apparent exposure)

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It is recommended that the initial determination to be performed be based on the above categories. Further, additional data as it is collected should be similarly coded.

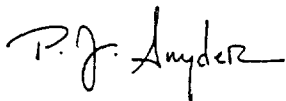
Attached for your review is a computer printout of all valid TWA personnel measurements for asbestos presently in the HSS system for your location. This list's completeness should be verified. Data developed by Shell (but not in the system) should be submitted to this office by September 15. Data collected by contractors on contractor employees need not be included. Subsequent to this verification step, data from all locations will be included in a "pooled" analysis to identify significant differences between locations and opportunities for improvement.

Where the database for any of the above categories is deficient or not arguably representative of current conditions or procedures, additional data should be collected at the earliest opportunity. Where applicable, this monitoring should include contractor personnel. This is particularly important for locations who have data indicating excursions above the action level.

Please note that a (mandatory) revised asbestos sampling procedure is provided as Appendix A. Any additional sampling performed should conform to this procedure. The change in sampling cassette size is noteworthy. Steps are now in place to modify where necessary the analytical steps used at Westhollow. The equivalency of past procedures is also being verified.

In summary, the following actions should be taken as soon as practical.

1. Review available valid (class 01) eight-hour TWA personnel monitoring data and update HSS. Sampling forms should be sent to this office (Health & Safety, Mfg. & Tech., will forward to HS&E).
2. Collect additional (personnel, "breathing zone") data with particular emphasis on exposure categories #2-6.
3. Review the mandatory sampling procedure and make necessary changes to local practices.



P. J. Snyder

PJS:bjd

Attachment

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DISTRIBUTION LIST

ANACORTES REFINERY

MANAGER, HEALTH, SAFETY AND ENVIRONMENT

DEER PARK MANUFACTURING COMPLEX

SUPERINTENDENT, HEALTH, SAFETY AND ENVIRONMENTAL
MANAGER, HEALTH AND SAFETY

GEISMAR PLANT

MANAGER, HEALTH, SAFETY AND ENVIRONMENT

MARIETTA PLANT

MANAGER, HEALTH, SAFETY AND ENVIRONMENT

MARTINEZ MANUFACTURING COMPLEX

MANAGER, HEALTH AND SAFETY

NORCO MANUFACTURING COMPLEX

MANAGER, HEALTH, SAFETY AND MEDICAL

ODESSA REFINERY

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WOOD RIVER MANUFACTURING COMPLEX

MANAGER, SAFETY AND INDUSTRIAL HYGIENE

Shell Oil Company



One Shell Plaza
P.O. Box 2463
Houston, Texas 77001

July 28, 1986

Shell Agricultural Chemical Company
Mr. R. G. Powell

Pursuant to the service agreement between Shell Oil Company and Shell Agricultural Chemical Company, the attached memo regarding guidance for the revised asbestos standard is for your information.

Sincerely,

A handwritten signature in cursive script, appearing to read "P. J. Snyder". The signature is written in dark ink and is positioned above the typed name.

P. J. Snyder
Sr. Industrial Hygienist
Health and Safety,
Manufacturing and Technical

PJS:bjd

Attachment

BT8618401

ABS-060489

LAM 031065

Shell Oil Company



One Shell Plaza
P.O. Box 2463
Houston, Texas 77001

July 28, 1986

Shell Agricultural Chemical Company, Inc.
Mr. R. R. Houston

Pursuant to the service agreement between Shell Oil Company and Shell Agricultural Chemical Company, Inc. the attached memo regarding guidance for the revised asbestos standard is for your information.

Sincerely,

A handwritten signature in cursive script, appearing to read "P. J. Snyder". The signature is written in dark ink and is positioned above the typed name.

P. J. Snyder
Sr. Industrial Hygienist
Health & Safety,
Manufacturing & Technical

PJS:bjd

Attachment

BT8618401

ABS-060490

LAM 031066

ANACORTES REFINERY
ASBESTOS IH EXPOSURE DATA

No eight-hour TWA personnel measurements
reported to be in HSS for asbestos.

DEER PARK MANUFACTURING COMPLEX
ASBESTOS IH EXPOSURE DATA
8-HOUR TWA DATA ONLY, ALL YEARS
DATA CLASS 01 AND 02

JULY 17, 1986
CLH

LOCATION	JOB	YR MO DA	EMPLOYEE NUMBER	SMPLIDEN	TIME (MIN)	RESULT (F/CC)
-----	---	---	-----	-----	-----	-----
DEER PARK	EH0007517 UTIL OPER-6 OPRNS-CHEM OPRNS	82 03 26		E0203032682	17168	422 0.010
		04 14		E0203041482	17172	450 < 0.010
	EH0099552 PAYNE & KELLER DIAPHRAGM DEPOSITION	82 02 17		E020-021782	637	420 0.020

ABS-060492

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GEISMAR CHEMICAL PLANT
 ASBESTOS IN EXPOSURE DATA
 8-HOUR TWA DATA ONLY, ALL YEARS
 DATA CLASS 01 AND 02

JULY 17, 1986
 CLH

LOCATION	JOB	YR MO DA	EMPLOYEE NUMBER	SHPLIDEN	TIME (MIN)	RESULT (F/CC)
-----	---	---	-----	-----	-----	-----
GEISMAR	E60011502 PROC TECH-ETHOX-ROVER-OPRNS	83 04 22		6E1-042283-05	423	0.020
	E60061510 MTC TECH-MULT-SKILL-ED/EG	82 11 18		6E1-111882-02	373	0.020
	E60063502 STOREMAN-DELIVERY-PURCH	83 08 30		6E1-083083-01	415	< 0.010
				6E1-083083-03	406	0.020
				6E1-083083-02	410	0.020
		31		6E1-083183-01	439	0.010
				6E1-083183-03	428	0.010
				6E1-083183-02	410	0.020
		09 01		6E1-090183-02	362	< 0.010
				6E1-090183-01	410	< 0.010

ABS-060493

LAM 031069

MARIETTA CHEMICAL PLANT
ASBESTOS IH EXPOSURE DATA

No eight-hour TWA personnel measurements
reported to be in HSS for asbestos.

MARTINEZ MANUFACTURING COMPLEX
 ASBESTOS IN EXPOSURE DATA
 8-HOUR TWA DATA ONLY, ALL YEARS
 DATA CLASS 01 AND 02

JULY 17, 1988
 CLH

LOCATION	JOB	YR	MO	DA	EMPLOYEE NUMBER	SAMPLE ID	TIME (MIN)	RESULT (F/CC)
MARTINEZ	EM0014502 PROC & AREA OPER-BOILER/H2O TRTR-UT	84	01	05		MMC010584-18	430	< 0.001
						MMC010584-17	446	0.038
				06		MMC010684-19	429	0.001
						MMC010684-20	420	0.001
	EM0019502 PROC OPER-SULFUR DIOXIDE-LUBRICATIN	82	09	09		MMC-090982-36	470	< 0.001
				10		MMC-091082-47	467	0.001
		83	04	04		EG2130404B30 21001	444	< 0.001

ABS-060495

LAM 031071

NORCO MANUFACTURING COMPLEX
ASBESTOS IN EXPOSURE DATA
8-HOUR TWA DATA ONLY, ALL YEARS
DATA CLASS 01 AND 02

JULY 17, 1986
CLH

LOCATION	JOB	YR MO DA	EMPLOYEE NUMBER	SMPLIDEN	TIME (MIN)	RESULT (F/CC)
-----	---	---	-----	-----	-----	-----
NORCO	EN0000121 CONTR LBR/GENL HELPER	85 11 21		112185-SML1	447	0.200
				112185-SML2	443	0.310
		22		112285-SML1	466	0.070
				112285-SML2	451	0.180
		25		112585-AKM1	487	0.050
				112585-AKM2	484	0.020
				112585-AKM3	486	0.350

ABS-060496

LAM 031072

ODESSA REFINERY
ASBESTOS IH EXPOSURE DATA

No eight-hour TWA personnel measurements
reported to be in HSS for asbestos.

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ABS-060497

LAM 031073

TAFT CHEMICAL PLANT
ASBESTOS IH EXPOSURE DATA

No eight-hour TWA personnel measurements
reported to be in HSS for asbestos.

WILMINGTON MANUFACTURING COMPLEX
 ASBESTOS IN EXPOSURE DATA
 8-HOUR TWA DATA ONLY, ALL YEARS
 DATA CLASS 01 AND 02

JULY 17, 1986
 CLH

LOCATION	JOB	YR MO DA	EMPLOYEE NUMBER	SHPLIDEN	TIME (MIN)	RESULT (F/CC)	
WILMINGTON	EK0012502 COMPOUNDER 2 BLENDING-CMPDNG/OPRNS	85 05 17		8406-910	460	0.010	
	EK0012503 COMPOUNDER 3-LDNG DOCK-CMPDNG/OPRNS	85 05 17		8406-908	455	0.050	
				8406-924	455	0.020	
	EK0035501 B/M-WIL/DOH-CEN MTC	81 11 09		E022-110981	11551	439	0.020
				E022-110981	11548	433	0.020
				E022-110981	11549	448	0.070
				E022-110981	11550	442	0.050
		10		E022-111081	11552	441	0.010
				E022-111081	11554	452	0.040
				E022-111081	11553	444	< 0.010
				E022-111081	11555	451	0.050
		12		E022-111281	11557	451	0.020
				E022-111281	11558	451	0.070
				E022-111281	11556	451	0.010
				E022-111281	11559	434	0.030
		13		E022-111381	11561	451	0.030
				E022-111381	11560	448	0.010
				E022-111381	11563	446	0.020
				E022-111381	11562	443	< 0.010
		82 08 06		W-282-37		427	0.010
		83 01 05		W-1082-119		445	< 0.010
		07		W1082-130		448	0.030
				W1082-129		450	0.010
	EK0035502 B/M-CHEM-MTC	81 12 02		W-781-A131		458	< 0.010
				W-781-A105		458	0.030
				W-781-A129		458	0.020
	EK0035505 CARP-WIL/DOH-MTC	81 08 03		E022 080381	9629	457	0.030
		04		E022 080481	9630	455	0.010
		05		E022 080581	9631	464	0.020
		10		E022 081081	9632	450	0.020
				E022 081081	9633	450	0.010
	11		E022 081181	9634	458	0.020	
			E022 081181	9635	459	0.030	
	82 08 03		W-282-14		420	0.090	
	83 07 25		8210710		460	0.010	

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WILMINGTON MANUFACTURING COMPLEX
 ASBESTOS IN EXPOSURE DATA
 8-HOUR TWA DATA ONLY, ALL YEARS
 DATA CLASS 01 AND 02

PAGE 2

JULY 17, 1988
 CLH

LOCATION	JOB	YR	MO	DA	EMPLOYEE NUMBER	SMPLIDEN	TIME (MIN)	RESULT (F/CC)				
WILMINGTON	EK0035505 CARP-WIL/DM-MTC	83	07	26		8210708 HOS64148RD	454	< 0.010				
				27		8210717	448	< 0.010				
				28		8210711	455	< 0.010				
				29		8210712 HOS64148RB	443	< 0.010				
				08	03		8210700 HOS64148RB	449	0.010			
					08		8210721 & 8210722	219	0.020			
					10		8210701 LOT#HOS64148R	447	< 0.010			
					11		8210709 LOT#HOS64148	441	0.010			
					12		8210706 LOT#HOS64148	444	0.020			
					15		8210704	456	0.020			
					16		8210705	453	0.020			
					17		8210716 LOT#HOS64148	435	0.010			
					18		8210750 LOT#HOS64148	434	0.010			
					19		8210751 LOT#HOS64148	431	0.010			
					22		8210752 HOS64148RB	437	0.020			
					23		8210766	444	0.080			
					24		8210771	440	0.090			
					EK0035508 ELECT-MTC	82	01	18		E02210118820 1722	429	0.010
										E02210118820 1721	451	0.010
										E02210118820 1723	458	0.040
									E02210118820 1720	465	0.020	
				19					E02210119820 1725	452	0.030	
									E02210119820 1727	453	0.030	
									E02210119820 1724	455	0.010	
	E02210119820 1726	453	0.010									
21		E02210121820 1730	456	0.040								
		E02210121820 1729	451	0.010								
		E02210121820 1731	456	0.010								
		E02210121820 1728	459	0.020								
22		E02210122820 1733	459	0.010								
		E02210122820 1735	450	0.010								
		E02210122820 1732	465	0.020								
		E02210122820 1734	458	0.030								
	02	02			W-781-A227	460	0.030					
					W-781-A223	452	0.030					

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WILMINGTON MANUFACTURING COMPLEX
 ASBESTOS IH EXPOSURE DATA
 8-HOUR TWA DATA ONLY, ALL YEARS
 DATA CLASS 01 AND 02

JULY 17, 1986
 CLH

LOCATION	JOB	YR MO DA	EMPLOYEE NUMBER	SMPLIDEN	TIME (MIN)	RESULT (F/CC)	
WILMINGTON	EK0035508 ELECT-MTC	82 02 05		W-781-A224	447	0.010	
				W-781-A218	451	0.040	
		08		W-781-A222	459	0.030	
				W-781-A216	465	0.030	
				W-781-A228	457	0.040	
		09		W-781-A229	459	< 0.010	
				W-781-A225	461	0.010	
		11		W-781-A230	452	0.020	
				W-781-A234	460	< 0.010	
				W-781-A236	467	0.010	
		12		E0221021282	1754	453	0.020
				W-781-A232	453	0.010	
	EK0035511 INSUL-WIL/DOM-MTC	78 09 21		WMC 9-21-4	429	0.050	
		28		WMC 9-28-2	422	0.020	
		81 07 06		E0221070681	12702	464	0.030
		09		E0221070981	12705	470	0.060
		10		E0221071081	12706	425	0.060
		82 01 07		W-1082-127	446	0.060	
		08 05		W-282-46	433	0.040	
		83 01 05		W-1082-117	442	0.070	
				W-1082-113	433	0.040	
		06		W-1082-122	437	0.100	
				W-1082-121	442	0.050	
		07		W1082-128	449	0.030	
	EK0035514 INSTR REPAIRMAN-DOM.-MTC	05 09		W-1082-138	462	0.030	
				W-1082-133	458	0.040	
		10		W-1082-136	231	0.030	
		81 12 28		W-781-A171	462	0.010	
				W-781-A170	470	0.010	
				W-781-A169	464	< 0.010	
				W-781-A169	464	< 0.010	
29			W-781-A186	449	0.010		
			W-781-A178	445	< 0.010		
		W-781-A174	448	< 0.010			
		W-781-A183	473	< 0.010			

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WILMINGTON MANUFACTURING COMPLEX
 ASBESTOS IN EXPOSURE DATA
 8-HOUR TWA DATA ONLY, ALL YEARS
 DATA CLASS 01 AND 02

JULY 17, 1986
 CLH

LOCATION	JOB	YR MO DA	EMPLOYEE NUMBER	SMPLIDEN	TIME (MIN)	RESULT (F/CC)	
WILMINGTON	EK0035514 INSTR REPAIRMAN-DOM.-MTC	81 12 31		W-781-A173	455	0.010	
				W-781-A179	473	< 0.010	
		82 01 06		E0226010682	7530	456	0.020
				E0226010682	7531	462	0.020
				E0226010682	7532	459	0.020
		07		E0226010782	7533	456	0.030
				E0226010782	7534	455	0.040
				E0226010782	7535	456	0.020
		11		E0226011182	7536	452	0.010
		EK0035515 INSTR REPAIRMAN-WIL.-MTC	82 01 08		E022 010882	1821	447
				E022 010882	1823	442	0.020
				E022 010882	1822	444	0.020
	11			E022 011182	1825	455	0.010
				E022 011182	1826	467	0.010
				E022 011182	1824	451	0.010
	12			E022 011282	1825	423	< 0.010
				E022 011282	1828	444	< 0.010
				E022 011282	1827	450	0.020
				E022 011282	1830	449	0.010
	EK0035523 MACH-WIL.-MTC	78 02 27		WMC 2-27-4	424	0.040	
		81 10 30		E0225103081	4944	453	0.010
				E0225103081	4943	373	0.010
		11 03		E0225110381	4947	416	0.030
				E0225110381	4945	437	< 0.010
				E0225110381	4946	438	0.020
04			E0225110481	4948	445	< 0.010	
			E0225110481	4949	451	0.040	
05			E0225110581	4951	444	0.020	
			E0225110581	4952	445	< 0.010	
EK0035524 MACH-DISP/DOM.-MTC	81 12 22		W-781-A162	453	0.010		
	23		W-781-A166	460	< 0.010		
EK0035525 MACH-XING-MTC	81 12 21		W-781-A135	462	0.010		
			W-781-A136	456	0.020		
	22		W-781-A137	465	0.030		

ABS-060502

LAM 031078

WILMINGTON MANUFACTURING COMPLEX
 ASBESTOS IN EXPOSURE DATA
 8-HOUR TWA DATA ONLY, ALL YEARS
 DATA CLASS 01 AND 02

JULY 17, 1986
 CLH

LOCATION	JOB	YR	MO	DA	EMPLOYEE NUMBER	SMPLIDEN	TIME (MIN)	RESULT (F/CC)					
WILMINGTON	EK0035525 MACH-XING-MTC	81	12	22	W-781-A161		456	< 0.010					
				23	W-781-A167		465	0.020					
					W-781-A168		449	< 0.010					
	EK0035526 MACH-CHEM-MTC	81	11	30	W-781-A112		449	0.030					
					W-781-A115		453	0.170					
				12	01	W-781-A120		455	< 0.010				
						W-781-A127		460	< 0.010				
						W-781-A128		454	< 0.010				
				03		W-781-A121		456	< 0.010				
						W-781-A126		457	< 0.010				
					04		W-781-A119		459	< 0.010			
						W-781-A116		464	< 0.010				
				EK0035527 MACH-ALKY/UTLS-MTC	82	08	09	W-282-42		441	0.040		
							78	08	21	WMC B-21-1		448	0.000
									22	WMC B-22-1		458	0.000
		25	WMC B-25-1						463	0.000			
	81	12	21				W-781-A138		450	0.030			
							22	W-781-A163		447	0.020		
				23	W-781-A165		465	0.010					
	EK0035528 MACH-SHOP-CEN MTC	84	01	03	W-781-A165		465	0.010					
					B210-765		430	0.020					
					B210-758		438	0.010					
				04	25	B00		450	0.020				
	26	B09			459	0.020							
	EK0035531 MECH-GARAGE-CEN MTC	82	02	17	W781A233		445	0.010					
					W781-239		435	0.040					
				18		W781 A256		449	< 0.010				
						W781A253		444	0.020				
				19	W781-A246		440	< 0.010					
	EK0035534 PAINTER-WIL/DOH-MTC	81	11	23	W-781-A106		470	0.020					
				82	09	22	B210770		456	0.060			
						83	09	02	B210-719		456	0.020	
					12	B210762			458	0.010			
				13	B210772			461	0.020				

ABS-060503

LAM 031079

WILMINGTON MANUFACTURING COMPLEX
 ASBESTOS IN EXPOSURE DATA
 8-HOUR TWA DATA ONLY, ALL YEARS
 DATA CLASS 01 AND 02

JULY 17, 1986
 CLH

LOCATION	JOB	YR	MO	DA	EMPLOYEE NUMBER	SMFLIDEN	TIME (MIN)	RESULT (F/CC)
WILMINGTON	EK0035534 PAINTER-WIL/DOH-MTC	83	09	14	8210761		433	< 0.010
				15	8210760		480	0.015
				16	8210755		465	< 0.010
				19	8210714		461	0.020
				20	8210764		456	0.025
			23	8210 773		456	0.030	
	EK0035537 P/F-DISP/UTILS/DOH-MTC	78	06	01	WMC 6-1-1		457	0.090
				05	WMC 6-5-1		446	0.010
				07	WMC 6-7-1		446	0.001
				09	WMC 6-9-1		438	0.010
	EK0035538 ALKY/HYDRO/UTILS	79	07	13	WMC 7-13-2		469	0.007
		79	04	11	WMC 4-11-4		426	0.010
				12	WMC 4-12-1		447	0.004
		81	12	07	W-781-A152		460	0.040
				W-781-A143		436	0.060	
				W-781-A144		440	0.030	
		08		W-781-A149		428	0.050	
				W-781-A148		449	0.040	
				W-781-A156		440	0.040	
	EK0035539 P/F-XING-MTC	78	07	07	WMC 7-7-4		448	0.010
				12	WMC 7-12-1		458	0.010
				17	WMC 7-17-1		458	0.010
			09	21	WMC 9-21-5		445	0.000
				28	WMC 9-28-1		431	0.020
			10	03	WMC 10-3-2		423	0.020
		79	01	15	WMC 1-15-6		420	1.030
		81	12	09	W-781-A145		456	0.020
					W-781-A142		452	0.030
					W-781-A151		444	0.040
					W-781-A135		460	0.020
			10		W-781-A132		462	0.020
					W-781-A139		455	0.050
					W-781-A134		454	0.060
				W-781-A141		460	0.010	
	84	01	04	8307-775		445	0.020	

ABS-060504

LAM 031080

WILMINGTON MANUFACTURING COMPLEX
 ASBESTOS IN EXPOSURE DATA
 8-HOUR TWA DATA ONLY, ALL YEARS
 DATA CLASS 01 AND 02

JULY 17, 1986
 CLH

LOCATION	JOB	YR	MO	DA	EMPLOYEE NUMBER	SMPLIDEN	TIME (MIN)	RESULT (F/CC)	
WILMINGTON	EK0035541 P/F-CHEM-MTC	81	11	30		W-781-A114	436	0.020	
						W-781-A110	452	0.020	
			12	01		W-781-A117	458	< 0.010	
				03		W-781-A124	455	0.020	
						W-781-A125	460	< 0.010	
				04		W-781-A123	441	0.010	
						W-781-A122	458	< 0.010	
			82	05	03	W-781-A267	474	0.020	
			84	08	22	8406-901	452	0.020	
			81	12	07	W-781-A153	455	0.040	
	EK0035542 ALKY/HYDRO/UTILITES-MTC			08		W-781-A155	441	0.180	
		EK0035543 P/F-WIL.-MTC	78	02	27		WMC 2-27-5	426	0.020
							WMC 2-27-6	461	0.050
				79	04	18	WMC 4-18-4	443	0.010
					19		WMC 4-19-1	443	0.015
				81	10	09	W-781-A45	450	< 0.006
			84	10	18		8406-920	461	0.030
						8406-914	454	0.200	
						8406-914	454	0.170	
				19		8406-927	460	0.030	
					8406-916	450	0.080		
	EK0035546 RIGGER-CMPLX-MTC	85	01	03		8406-915	460	< 0.030	
		81	11	03		E0221110381	11254	459	< 0.010
				04		E0221110481	11256	446	< 0.010
						E0221110481	11255	446	0.020
				05		E0221110581	11257	455	0.020
	EK0035552 TRUCK DRIVER-WIL/DOH-CEN MTC	84	09	19		8406-909	464	0.020	
		82	02	17		W781 A235	449	0.010	
				18		W781 A252	458	0.010	
	EK0035558 WELDER-WIL/DOH-CEN MTC			19		W781A-241	454	0.010	
81		11	16		E0227111681	5516	434	< 0.010	
					E0227111681	5515	431	< 0.010	
					E0227111681	5514	441	0.050	
					E0227111681	5513	438	< 0.010	
			17		E0227111781	5520	449	< 0.010	

ABS-060505

LAM 031081

WILMINGTON MANUFACTURING COMPLEX
 ASBESTOS IN EXPOSURE DATA
 8-HOUR TWA DATA ONLY, ALL YEARS
 DATA CLASS 01 AND 02

JULY 17, 1986
 CLH

LOCATION	JOB	YR MO DA	EMPLOYEE NUMBER	SMPLIDEN	TIME (MIN)	RESULT (F/CC)
WILMINGTON	EK0035558 WELDER-WIL/DOM-CEN MTC	81 11 17		E0227111781	5519	446 0.010
				E0227111781	5518	447 < 0.010
				E0227111781	5517	457 < 0.010
		18		E0227111881	5521	438 0.020
				E0227111881	5523	438 0.010
				E0227111881	5524	435 0.020
				E0227111881	5522	438 0.020
		20		W-781-A107	455	< 0.010
				W-781-A101	461	0.020
				W-781-A103	457	< 0.010
	EK0035700 CONTR-SUPPLEMENTAL LBR-MTC	78 12 19		WMC 12-19-4	430	0.070
				WMC 12-19-6	426	0.040
				WMC 12-19-7	425	0.070
				WMC 12-9-5	428	0.090
		20		WMC 12-20-2	455	0.030
				WMC 12-20-3	452	0.060
				WMC 12-20-4	449	0.040
		81 08 03		E0222080381	7044	456 0.010
		04		E0223080481	7055	455 0.020
		05		E0223080581	7056	457 0.080
		82 02 17		W781-A237	243	0.010
		18		W781 A238	444	0.010
		19		W781 A258	466	0.020
		83 05 09		W-1082-137	461	0.130
		10		W-1082-132	454	0.080
				W-1082-134	456	< 0.010
		84 04 23		785	451	< 0.020
				787	452	0.020
		24		779	459	0.020
				780	460	0.030
		07 17		812-8307	455	0.090
				813-8307	455	0.040
				821-8307	456	0.020
				8307-814	455	0.120
		18		811-8307	455	0.020

ABS-060506

LAM 031082

WILMINGTON MANUFACTURING COMPLEX
ASBESTOS 1H EXPOSURE DATA
8-HOUR TWA DATA ONLY, ALL YEARS
DATA CLASS 01 AND 02

JULY 17, 1956
CLH

LOCATION	JOB	YR MO DA	EMPLOYEE NUMBER	SMPLIDEN	TIME (MIN)	RESULT (F/CC)
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WILMINGTON	EK0035700 CONTR-SUPPLEMENTAL LBR-MTC	84 07 18		8307810	455	0.050
				900-8406	453	0.100
				901-8406	454	0.050
		09 19		8406-900	464	0.030
		20		8406-912	452	0.070
				8406-912	452	0.070
				8406-918	450	0.150
		21		8406-917	456	0.040
		85 05 29		8406-922	468	0.070
				8406-923	461	0.060
				8406-925	456	0.030
				8406-926	468	0.120
		11 04		8406-939	95	0.090

ABS-060507

LAM 031083

WOODBURY CHEMICAL PLANT
ASBESTOS IH EXPOSURE DATA

No eight-hour TWA personnel measurements
reported to be in HSS for asbestos.

WOODRIVER MANUFACTURING COMPLEX
 ASBESTOS IN EXPOSURE DATA
 8-HOUR TWA DATA ONLY, ALL YEARS
 DATA CLASS 01 AND 02

JULY 17, 1986
 CLH

LOCATION	JOB	YR MO DA	EMPLOYEE NUMBER	SMPLIDEN	TIME (MIN)	RESULT (F/CC)
WOOD RIVER	EW0072677 INSUL-DISP-MTC	77 02 09		E00840209771	549 420	2.151
WOOD RIVER	EW0045503 OPER-BOILER/POWER/UCC-ENVIRL OPER./	83 02 01		E0048020183	7893 388	0.050
		03 30		E004 033083-	7895 393	0.100
	EW0045504 OPER-VAC. BRKR-ENVIRL OPER./UTILS	81 07 24		WRR 7-24-B1-1	420	0.050
		83 01 19		E004 011983	11977 389	0.010
	EW0063506 OPER-(CR-3/HDU 2)-A OPER-AROM E./HO	86 01 03		WRMC010386-1	434	0.040
	EW0072627 B/M/WELDER-GENL CMPLX-MTC	80 02 11		E0041021180-	28065 450	0.050
	EW0072675 INSUL-GENL REF.-MTC	82 05 15		WRMC 051582-1	440	1.050
	EW0072676 INSUL-LT OIL PROC-MTC	79 11 14		E00411114790	3355 390	0.230
		83 06 17		WRMC 061783-2	393	0.280
				WRMC 061783-1	396	0.590
		18		WRMC 061883-3	415	0.540
		85 01 05		WRMC 010585-1	170	0.080
		05 04		WRMC 050485-2	469	0.240
				WRMC050485-1	469	0.300
	EW0072677 INSUL-DISP-MTC	77 04 01		E00440401771	552 420	1.255
	EW0072678 INSUL-UTILS-MTC	79 07 06		E0047070679	9570 450	0.260
				E0047070679	9571 450	0.340
				E0047070679	9569 450	0.290
		09		E0047070979	9572 450	0.107
		10		E0047071079	9573 450	0.150
		11		E0047071179	9576 450	0.570
				E0047071179	9575 450	0.610
				E0047071179	9574 450	0.180
	EW0072680 INSUL-HYDROPROC-MTC	83 06 18		WRMC 061883-4	406	0.110
				WRMC 061883-1	420	0.240
		84 04 14		WRMC-041484-2	434	0.130
	EW0072683 INSUL-SULFUR PLT-MTC	82 05 15		WRMC 051582-4	446	0.510
		84 04 14		WRMC 041484-1	437	0.070
	EW0072685 INSUL-SHOFS-MTC	82 05 15		WRMC051582-2	440	0.180
	EW0072694 LBR-S/D-MTC	79 11 27		E0047112779-	8140 430	0.120
	EW0072696 LBR-LUBE OPNS-MTC	85 03 07		WRMC 030785-1	452	0.110
				WRMC 030785-2	452	0.110
				WRMC 030785-3	417	0.120
	EW0072699 LBR-CONST-MTC	84 04 14		WRMC 041484-3	430	0.170

ABS-060509

LAM 031085

WOODRIVER MANUFACTURING COMPLEX
 ASBESTOS IN EXPOSURE DATA
 8-HOUR TWA DATA ONLY, ALL YEARS
 DATA CLASS 01 AND 02

JULY 17, 1986
 CLH

LOCATION	JOB	YR MO DA	EMPLOYEE NUMBER	SAMPLEIDEN	TIME (MIN)	RESULT (F/CC)
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WOOD RIVER	EW0072735 P/F-GENL/S/D REF.-MTC	83 05 12		WRMC 051283-1	415	0.050
				WRMC 051283-2	415	0.030
	EW0072738 P/F-UTILS-MTC	81 07 24		WRR7-24-81-2	360	0.080
	EW0072744 P/F-CONST-MTC	79 11 14		E0049111479- 15098	375	0.290
		80 02 20		E0049022080- 15096	420	0.120
	EW0072771 TINNER-MTC	80 03 24		E004 032480 12741	450	0.040
		04 15		E004 041580 12742	450	0.120
		29		E004 042980 12743	450	0.030
		06 02		E004 060280 12744	440	0.040

END

ABS-060510

LAM 031086

EL PASO CHEMICAL PLANT
ASBESTOS IH EXPOSURE DATA

No eight-hour TWA personnel measurements
reported to be in HSS for asbestos.

MOBILE CHEMICAL PLANT
ASBESTOS IN EXPOSURE DATA

No eight-hour TWA personnel measurements
reported to be in HSS for asbestos.

JULY 29, 1986

A. D. DITMAR
J. L. RIVARD

The attached memo regarding preliminary guidance for the revised asbestos standard is for your information.

Attachment

Phil *BP*
P. J. SNYDER

ABS-060513

LAM 031089