

BROWN & ROOT U.S.A., INC.

INTEROFFICE MEMO

ENVIRONMENTAL/IND. HYGIENE	
1-5-88	NAME <i>A. J. Schmit</i>
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December 23, 1987

TO: Ken Dessert - Capital
FROM: Bill Smithson
RE: Asbestos Monitoring Results

PLAINTIFF'S EXHIBIT

SH-936

Industrial hygiene monitoring was conducted with your personnel during the month of December. The purpose of the monitoring was to determine employee exposures to asbestos during insulation removal activities on Column C-749 located at the "G" Plant Demolition Project.

As summarized in the Attachment, personal and area air sampling results were within the Occupational Safety and Health Administration (OSHA) permissible exposure limits. A review of the sampling data sheets indicated proper protective clothing and respiratory protection were worn by the employees during the monitoring period. A removal encapsulant (BWE-5000) was used in place of amended water for this removal project.

According to the OSHA regulations you must communicate the report to the affected employees and I would encourage posting of the report in an area accessible to other similar craft personnel for their review also.

If you have any questions concerning this report, call me at 476-6917.

WJS:kc

Attachment

cc: Allen Schmit - Shell Industrial Hygienist
Jerry Stallings - Maintenance

DPMC-05862

LAM 009431

BROWN & ROOT U.S.A., INC.
 ASBESTOS MONITORING RESULTS
 SHELL DEER PARK MANUFACTURING COMPLEX

AREA: "G" AREA / C-749 JOB ACTIVITY: (1) Removed ACM, (2) Bagged ACM,
 (3) Kept ACM Wet During Removal,
 (4) Area Sample Downwind;
 Removal Encapsulant Used.

NAME	SOC. SEC. NUMBER	JOB TITLE	SAMPLE DATE	SAMPLE DURATION (MINUTES)	TIME-WEIGHTED AVERAGE RESULT (FIBER/cc) #1	CALCULATED 8 HOUR TWA
(1)		Insulator	12-09-87	105	0.060	0.013
(2)		Insulator	12-09-87	235	0.040	0.019
(3)		Insulator	12-09-87	245	0.030	0.015
(4)	Area Sample Located 18' Downwind		12-09-87	330	< 0.007	
(1)		Insulator	12-10-87	260	0.030	0.016
(2)		Insulator	12-10-87	260	0.070	0.038
(3)		Insulator	12-10-87	260	0.040	0.021
(4)	Area Sample Located 25' Downwind		12-10-87	340	< 0.006	

Permissible Exposure Limit..... 0.2 F/cc
 1) Fiber/cc - Fibers Of Asbestos Per Cubic Centimeter Of Air.

DPMC-05863

BROWN & ROOT U.S.A., INC.

INTEROFFICE MEMO

1-8-88	R. J. Schmit
☒	Personnel
☒	Training
☒	Health
☒	Environment
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December 23, 1987

TO: Ken Dessert - Capital

FROM: Bill Smithson

RE: Asbestos Monitoring Results

Industrial hygiene monitoring was conducted with your personnel during the month of December. The purpose of the monitoring was to determine employee exposures to asbestos during insulation removal activities on Column C-749 located at the "G" Plant Demolition Project.

As summarized in the Attachment, personal and area air sampling results were within the Occupational Safety and Health Administration (OSHA) permissible exposure limits. A review of the sampling data sheets indicated proper protective clothing and respiratory protection were worn by the employees during the monitoring period. A removal encapsulant (BWE-5000) was used in place of amended water for this removal project.

According to the OSHA regulations you must communicate the report to the affected employees and I would encourage posting of the report in an area accessible to other similar craft personnel for their review also.

If you have any questions concerning this report, call me at 476-6917.

WJS:kc

Attachment

cc: Allen Schmit - Shell Industrial Hygienist
Jerry Stallings - Maintenance

DPMC-05864

LAM 009433

BROWN & ROOT U.S.A., INC.
ASBESTOS MONITORING RESULTS
SHELL DEER PARK MANUFACTURING COMPLEX

AREA: "G" AREA / C-749 JOB ACTIVITY: (1) Removed ACM, (2) Bagged ACM,

(3) Kept ACM Wet During Removal,

(4) Area Sample Downwind;

Removal Encapsulant Used.

NAME	SOC. SEC. NUMBER	JOB TITLE	SAMPLE DATE	SAMPLE DURATION (MINUTES)	TIME-WEIGHTED AVERAGE RESULT (FIBER/cc) #1	CALCULATED 8 HOUR TWA
(1)		Insulator	12-09-87	105	0.060	0.013
(2)		Insulator	12-09-87	235	0.040	0.019
(3)		Insulator	12-09-87	245	0.030	0.015
(4)	Area Sample Located 18' Downwind		12-09-87	330	< 0.007	
(1)		Insulator	12-10-87	260	0.030	0.016
(2)		Insulator	12-10-87	260	0.070	0.038
(3)		Insulator	12-10-87	260	0.040	0.021
(4)	Area Sample Located 25' Downwind		12-10-87	340	< 0.006	

Permissible Exposure Limit..... 0.2 F/cc

1) Fiber/cc - Fibers Of Asbestos Per Cubic Centimeter Of Air.

DPMC-05865

LAM 009434

7243

MLD
add to system
TX
all

BROWN & ROOT U.S.A., INC.

INTEROFFICE MEMO

December 11, 1987

TO: Ken Dessert - Capital
FROM: Bill Smithson
RE: Asbestos Monitoring Results

Industrial hygiene monitoring was conducted with your personnel during the month of December. The purpose of the monitoring was to determine employee exposures to asbestos during insulation removal activities on Column C-749 located at the "G" Plant Demolition Project.

As summarized in the Attachment, personal and area air sampling results were within the Occupational Safety and Health Administration (OSHA) permissible exposure limits. A review of the sampling data sheets indicated proper protective clothing and respiratory protection were worn by the employees during the monitoring period. A removal encapsulant (BWE-5000) was used in place of amended water for this removal project.

According to the OSHA regulations you must communicate the report to the affected employees and I would encourage posting of the report in an area accessible to other similar craft personnel for their review also.

If you have any questions concerning this report, call me at 476-6917.

WJS:kc

Attachment

cc: Allen Schmit - Shell Industrial Hygienist
Jerry Stallings - Maintenance

DPMC-05866

LAM 009435

BROWN & ROOT U.S.A., INC.
ASBESTOS MONITORING RESULTS
SHELL DEER PARK MANUFACTURING COMPLEX

AREA:	"G" AREA / C-749	JOB ACTIVITY:					
		(1) Kept ACM Wet During Removal,					
		(2) Removed ACM, (3) Bagged ACM,					
		(4) Area Sample Downwind at Perimeter;					
		<u>Removal Encapsulant Used.</u>					
	NAME	SOC. SEC. NUMBER	JOB TITLE	SAMPLE DATE	SAMPLE DURATION (MINUTES)	TIME-WEIGHTED AVERAGE RESULT (FIBER/cc) #1	CALCULATED 8 HOUR TWA
(1)			Insulator	12-04-87	328	0.010	0.007
(2)			Insulator	12-04-87	325	0.010	0.007
(3)			Insulator	12-04-87	335	0.007	0.005
(4)	Area Sample Located 20' Downwind @ Same Elevation			12-04-87	430	< 0.005	
(1)			Insulator	12-08-87	265	0.020	0.010
(2)			Insulator	12-08-87	265	0.010	0.006
(3)			Insulator	12-08-87	260	0.009	0.005
(4)	Area Sample Located 15' Downwind @ Same Elevation			12-08-87	390	<0.006	

Permissible Exposure Limit..... 0.2 F/cc

1) Fiber/cc - Fibers Of Asbestos Per Cubic Centimeter Of Air.

DPMC-05867

LAM 009436

ENVIRONMENTAL/IND. HYGIENE	
DATE 11/17/87	NAME A. J. Schmit
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7245
B82

BROWN & ROOT U.S.A., INC.

INTEROFFICE MEMO

November 9, 1987

TO: Ken Dessert - Capital
FROM: Bill Smithson
RE: Asbestos Monitoring Results

Industrial hygiene monitoring was conducted with your personnel during the month of October. The purpose of the monitoring was to determine employee exposures to asbestos during insulation removal activities.

As summarized in the Attachment, air sampling results were within the Occupational Safety and Health Administration (OSHA) permissible exposure limits. A review of the sampling data sheets indicated proper protective clothing and respiratory protection were worn by the employees during the monitoring period.

According to the OSHA regulations you must communicate the report to the affected employees and I would encourage posting of the report in an area accessible to other similar craft personnel for their review also.

If you have any questions concerning this report, call me at 476-6917.

WJS:kc

Attachment

cc: Allen Schmit - Shell Industrial Hygienist
Karl Bartl - Maintenance

DPMC-05868

LAM 009437

BROWN & ROOT U.S.A., INC.
ASBESTOS MONITORING RESULTS
SHELL DEER PARK MANUFACTURING COMPLEX

AREA: "G" Department

JOB ACTIVITY: (1) Removing Insulation from Piping.

(2 & 3) Bagged Insulation from Same.

(4) Kept Insulation Wet with Amended Water.

DPMC-05869

NAME	SOC. SEC. NUMBER	JOB TITLE	SAMPLE DATE	SAMPLE DURATION (MINUTES)	TIME-WEIGHTED AVERAGE RESULT (FIBER/cc) #1	CALCULATED 8 HOUR TWA
(1)		Insulator	10-29-87	213	0.02	0.009
(2)		Insulator	10-29-87	210	0.01	0.004
(3)		Insulator	10-29-87	211	0.07	0.030
(4)		Insulator	10-29-87	202	0.02	0.008

Permissible Exposure Limit..... 0.2 F/cc

1) Fiber/cc - Fibers Of Asbestos Per Cubic Centimeter Of Air.

LAM 009438

1643
BTL

ENVIRONMENTAL/IND. HYGIENE	
DATE 11-17-87	NAME A. J. Schmit
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BROWN & ROOT U.S.A., INC.

INTEROFFICE MEMO

November 6, 1987

TO: Karl Bartl - Maintenance
FROM: Bill Smithson
RE: Asbestos Monitoring Results

Industrial hygiene monitoring was conducted with your personnel during the month of October. The purpose of the monitoring was to determine employee exposures to asbestos during (1) asbestos rope packing installation and (2) removal of damaged cable tray covers containing asbestos.

As summarized in the Attachments, personal and area air sampling results were within the Occupational Safety and Health Administration (OSHA) permissible exposure limits. A review of the sampling data sheets indicated proper protective clothing and respiratory protection were worn by the employees during the monitoring period.

According to the OSHA regulations you must communicate the report to the affected employees and I would encourage posting of the report in an area accessible to other similar craft personnel for their review also.

If you have any questions concerning this report, call me at 476-6917.

WJS:kc

Attachment

cc: ~~Allen Schmit~~ - Shell Industrial Hygienist
Ken Dessert - Capital

DPMC-05870

LAM 009439

BROWN & ROOT U.S.A., INC.
 ASBESTOS MONITORING RESULTS
 SHELL DEER PARK MANUFACTURING COMPLEX

DFMC-05871

AREA: "M" Plant Column C-46

JOB ACTIVITY: Boilermakers Installed 314 Feet - 75% Asbestos

3/4" Rope Packing Between Column Trays and

Column Wall.

NAME	SOC. SEC. NUMBER	JOB TITLE	SAMPLE DATE	SAMPLE DURATION (MINUTES)	TIME-WEIGHTED AVERAGE RESULT (FIBER/cc) #1	CALCULATED 8 HOUR TWA
Boilermaker						
Area Sample 4' North & West of Steam Copus Blower Mounted on C-46 20' Above Ground Level			10-30-87	235	< 0.009	
Area Sample 40' NW of C-46			10-30-87	230	0.010	
Boilermaker			10-31-87	445	0.008	
Area Sample 4' North & West of Steam Copus Blower Mounted on C-46 20' Above Ground Level			10-31-87	475	< 0.005	

Permissible Exposure Limit..... 0.2 F/cc

- 1) Fiber/cc - Fibers Of Asbestos Per Cubic Centimeter Of Air.

BROWN & ROOT U.S.A., INC.
 ASBESTOS MONITORING RESULTS
 SHELL DEER PARK MANUFACTURING COMPLEX

DPMC-05872

AREA: Light Olefins 3

JOB ACTIVITY: Removed Damaged Cable Tray Fireproofing

Covers Which Contain Asbestos. No Controls.

NAME	SOC. SEC. NUMBER	JOB TITLE	SAMPLE DATE	SAMPLE DURATION (MINUTES)	TIME-WEIGHTED AVERAGE RESULT (FIBER/cc) #1	CALCULATED 8 HOUR TWA
		Insulator	10-20-87	150	0.03	0.009
		Insulator	10-20-87	210	0.04	0.017
		Insulator	10-20-87	210	0.05	0.022
		Insulator	10-20-87	215	0.03	0.013
		Insulator	10-21-87	105	0.10	0.020
		Insulator	10-21-87	100	0.20	0.040

Permissible Exposure Limit..... 0.2 F/cc

1) Fiber/cc - Fibers Of Asbestos Per Cubic Centimeter Of Air.

BROWN & ROOT U.S.A., INC.
INTEROFFICE MEMO

1243

ENVIRONMENTAL AND HYGIENE	
10-27-87	NAME: <i>A. J. Schmit</i>
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September 27, 1987	

TO: Karl Bartl - Maintenance
FROM: Bill Smithson
RE: Asbestos Monitoring Results

Industrial hygiene monitoring was conducted with your personnel during the month of September. The purpose of the monitoring was to determine employee exposures to asbestos during insulation removal activities on Column V-1190 located at the CC Gas Unit.

As summarized in the Attachment, results of the personnel monitoring were within the Occupational Safety and Health Administration (OSHA) permissible exposure limits. A review of the sampling data sheets indicated proper protective clothing and respiratory protection were worn by the employees during the monitoring period. A removal encapsulant (BWE-5000) was used in place of amended water for this removal project.

According to the OSHA regulations you must communicate the report to the affected employees and I would encourage posting of the report in an area accessible to other similar craft personnel for their review also.

If you have any questions concerning this report, call me at 476-6917.

WJS:kc

Attachment

cc: Allen Schmit - Shell Industrial Hygienist
Joe Gautreaux - Capital

DPMC-05873

LAM 009442

BROWN & ROOT U.S.A., INC.
 ASBESTOS MONITORING RESULTS
 SHELL DEER PARK MANUFACTURING COMPLEX

AREA: CC Gas V-1190 JOB ACTIVITY: Removed and Bagged Insulation from Column V-1190. Used a Removal Encapsulant BEW 5000.

NAME	SOC. SEC. NUMBER	JOB TITLE	SAMPLE DATE	SAMPLE DURATION (MINUTES)	TIME-WEIGHTED AVERAGE RESULT (FIBER/cc) #1	CALCULATED 8 HOUR TWA
Insulator		Insulator	09-05-87	405	0.076	0.060
Insulator		Insulator	09-05-87	460	0.092	0.086
Insulator		Insulator	09-05-87	447	0.030	0.028
Insulator		Insulator	09-05-87	440	0.050	0.045

Permissible Exposure Limit..... 0.2 F/cc

- 1) Fiber/cc - Fibers Of Asbestos Per Cubic Centimeter Of Air.

DFMC-05874

724

ENVIRONMENTAL AND HYGIENE	
DATE	NAME
9/24/87	A. J. Schmit
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BROWN & ROOT U.S.A., INC.

INTEROFFICE MEMO

September 19, 1987

TO: Karl Bartl - Maintenance
 FROM: Bill Smithson
 RE: Asbestos Monitoring Results

Industrial hygiene monitoring was conducted with your personnel during the month of August. The purpose of the monitoring was to determine employee exposures to asbestos during insulation removal activities on Column V-1190 located at the CC Gas Unit.

As summarized in the Attachment, results of the personnel monitoring were within the Occupational Safety and Health Administration (OSHA) permissible exposure limits. A review of the sampling data sheets indicated proper protective clothing and respiratory protection were worn by the employees during the monitoring period.

According to the OSHA regulations you must communicate the report to the affected employees and I would encourage posting of the report in an area accessible to other similar craft personnel for their review also.

If you have any questions concerning this report, call me at 476-6917.

WJS:kc

Attachment

cc: Allen Schmit - Shell Industrial Hygienist
 Joe Gautreaux - Capital

DPMC-05875

LAM 009444

BROWN & ROOT U.S.A., INC.
ASBESTOS MONITORING RESULTS
SHELL DEER PARK MANUFACTURING COMPLEX

DPMC-05876

AREA: CC Gas V-1190

JOB ACTIVITY: 1 & 6 Handling Bags of Insulation on the Ground.
2 - 5 Removed, Wetted, and Bagged Insulation.

	NAME	SOC. SEC. NUMBER	JOB TITLE	SAMPLE DATE	SAMPLE DURATION (MINUTES)	TIME-WEIGHTED AVERAGE RESULT (FIBER/cc) #1	CALCULATED 8 HOUR TWA
1.	Insulator			08-28-87	390	< 0.006	
2.	Insulator			08-28-87	390	0.030	0.024
3.	Insulator			08-28-87	385	0.010	0.008
4.	Insulator			08-29-87	310	0.089	0.057
5.	Insulator			08-29-87	335	0.030	0.020
6.	Insulator			08-29-87	350	< 0.006	

Permissible Exposure Limit..... 0.2 F/cc

1) Fiber/cc - Fibers Of Asbestos Per Cubic Centimeter Of Air.

LAM 009445

724.3

ENVIRONMENTAL/IND. HYGIENE	
DATE 9/1/87	NAME A. J. Schmit
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BROWN & ROOT U.S.A., INC. SHELL DEER PARK MANUFACTURING COMPLEX	
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September 1, 1987

TO: Karl Bartl

FROM: Bill Smithson

SUBJECT: Asbestos Monitoring Results from V-607 Steam Drum Insulation Removal Project

Industrial hygiene monitoring was conducted with your personnel during the recent insulation removal project on V-607 Steam Drum which is located in CCU. The purpose of the monitoring was to determine employee exposures as well as any environmental asbestos emissions during the project. This project required the erection of a negative pressure enclosure and establishing of a decontamination area.

As summarized in the Attachments, results of the personnel samplings were within the Occupational Safety and Health Administration (OSHA) exposure limits for the respiratory equipment utilized. Results of the area sampling were well below the 0.1 F/cc which indicated that asbestos emission was contained inside the negative pressure enclosure.

According to the OSHA regulation, you must communicate the report to the affected employees and I would encourage posting of the report in an area accessible to other similar craft personnel for their review also.

If you have any questions concerning this report, call me at 476-6917.

WJS:kc

Attachments

cc: Allen Schmit - Shell Industrial Hygienist
Joe Gautreaux - Capital

DPMC-05877

LAM 009446

BROWN & ROOT U.S.A., INC.
 ASBESTOS MONITORING RESULTS
 SHELL DEER PARK MANUFACTURING COMPLEX

AREA: CCU V-607 JOB ACTIVITY: Removed Insulation from V-607 Steam Drum
Using Amended Water, Inside a Negative Pressure
Enclosure.

NAME	SOC. SEC. NUMBER	JOB TITLE	SAMPLE DATE	SAMPLE DURATION (MINUTES)	TIME-WEIGHTED AVERAGE RESULT (FIBER/cc) #1	CALCULATED 8 HOUR TWA
Area Sample East Side of Drum Outside Enclosure			08-14-87	350	< 0.006	
		Insulator	08-14-87	270	0.240	0.13
		Insulator	08-14-87	270	0.280	0.16
		Insulator	08-14-87	275	0.200	0.11
Air Sample East Side of Drum Outside Enclosure			08-15-87	470	0.007	
		Insulator	08-15-87	365	1.800	1.40
		Insulator	08-15-87	360	1.100	0.82
		Insulator	08-15-87	305	2.000	1.27

Permissible Exposure Limit..... 0.2 F/cc
 1) Fiber/cc - Fibers Of Asbestos Per Cubic Centimeter Of Air.
 DPMC-05878

BROWN & ROOT U.S.A., INC.
 ASBESTOS MONITORING RESULTS
 SHELL DEER PARK MANUFACTURING COMPLEX

AREA: CCU V-607 JOB ACTIVITY: Removed Insulation from V-607 Steam Drum
Using Amended Water, Inside a Negative Pressure
Enclosure.

NAME	SOC. SEC. NUMBER	JOB TITLE	SAMPLE DATE	SAMPLE DURATION (MINUTES)	TIME-WEIGHTED AVERAGE RESULT (FIBER/cc) #1	CALCULATED 8 HOUR TWA
Area Sample						
Northeast End of Drum			08-16-87	400	0.70	0.58
Inside Enclosure by		Insulator	08-16-87	360	1.20	0.90
Intake Duct		Insulator	08-16-87	375	0.49	0.38
		Insulator	08-16-87	375	0.29	0.23

Permissible Exposure Limit..... 0.2 F/cc

- 1) Fiber/cc - Fibers Of Asbestos Per Cubic Centimeter Of Air.

DFMC-05879

BROWN & ROOT U.S.A., INC.
 ASBESTOS MONITORING RESULTS
 SHELL DEER PARK MANUFACTURING COMPLEX

AREA: CCU V-607 JOB ACTIVITY: Cleaned Surface of V-607 Steam Drum with
 Amended Water and HEPA Vacuum.
Decontaminated Inside of Enclosure Before
Disassembly.

NAME	SOC. SEC. NUMBER	JOB TITLE	SAMPLE DATE	SAMPLE DURATION (MINUTES)	TIME-WEIGHTED AVERAGE RESULT (FIBER/cc) #1	CALCULATED 8 HOUR TWA
Area Sample East of Drum Outside of Enclosure			08-17-87	410	< 0.005	
		Insulator	08-17-87	340	0.004	0.003
		Insulator	08-17-87	350	0.096	0.070
		Insulator	08-17-87	315	0.040	0.026

Permissible Exposure Limit..... 0.2 F/cc
 1) Fiber/cc - Fibers Of Asbestos Per Cubic Centimeter Of Air.

DFMC-05880

ENVIRONMENTAL/IND. HYGIENE	
DATE: 8-26-87	NAME: A. J. Schmit
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BROWN & ROOT U.S.A., INC.

INTEROFFICE MEMO

August 18, 1987

TO: Karl Bartl - Maintenance
 FROM: Bill Smithson
 RE: Asbestos Monitoring Results

Industrial hygiene monitoring was conducted with your personnel during the month of July. The purpose of the monitoring was to determine employee exposures to asbestos during pipe insulation removal activities.

As summarized in the Attachments, results of the personnel monitoring were within the Occupational Safety and Health Administration (OSHA) permissible exposure limits. A review of the sampling data sheets indicated proper protective clothing and respiratory protection were worn by the employees during the monitoring period.

According to the OSHA regulations you must communicate the report to the affected employees and I would encourage posting of the report in an area accessible to other similar craft personnel for their review also.

If you have any questions concerning this report, call me at 476-6917.

WJS:kc

Attachments

cc: Allen Schmit - Shell Industrial Hygienist
 Joe Gautreaux - Capital

DPMC-05881

LAM 009450

BROWN & ROOT U.S.A., INC.
 ASBESTOS MONITORING RESULTS
 SHELL DEER PARK MANUFACTURING COMPLEX

DPMC-05882

AREA: BEU

JOB ACTIVITY: Removed and Bagged Insulation from Piping.

NAME	SOC. SEC. NUMBER	JOB TITLE	SAMPLE DATE	SAMPLE DURATION (MINUTES)	TIME-WEIGHTED AVERAGE RESULT (FIBER/cc) #1	CALCULATED 8 HOUR TWA
Insulator		Insulator	07-29-87	80	0.41	0.07
Insulator		Insulator	07-29-87	80	0.06	0.01

Permissible Exposure Limit..... 0.2 F/cc

- 1) Fiber/cc - Fibers Of Asbestos Per Cubic Centimeter Of Air.

LAM 009451

BROWN & ROOT U.S.A., INC.
 ASBESTOS MONITORING RESULTS
 SHELL DEER PARK MANUFACTURING COMPLEX

DPMC-05883

AREA: LPA Wax Plant

JOB ACTIVITY: Removed and Bagged Insulation from Piping
 WX-234.

NAME	SOC. SEC. NUMBER	JOB TITLE	SAMPLE DATE	SAMPLE DURATION (MINUTES)	TIME-WEIGHTED AVERAGE RESULT (FIBER/cc) #1	CALCULATED 8 HOUR TWA
Insulator			07-28-87	85	0.03	0.005
Insulator			07-28-87	85	0.05	0.009

Permissible Exposure Limit..... 0.2 F/cc

- 1) Fiber/cc - Fibers Of Asbestos Per Cubic Centimeter Of Air.

LAM 009452

ENVIRONMENTAL/IND. HYGIENE	
DATE	NAME
8/26/87	A. J. Schmit
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BROWN & ROOT U.S.A., INC.

INTEROFFICE MEMO

August 18, 1987

TO: Joe Gautreaux - Capital
 FROM: Bill Smithson
 RE: Asbestos Monitoring Results

Industrial hygiene monitoring was conducted with your personnel during the month of July. The purpose of the monitoring was to determine employee exposures to asbestos during pipe insulation removal activities.

As summarized in the Attachment, results of the personnel monitoring were within the Occupational Safety and Health Administration (OSHA) permissible exposure limits. A review of the sampling data sheets indicated proper protective clothing and respiratory protection were worn by the employees during the monitoring period.

According to the OSHA regulations you must communicate the report to the affected employees and I would encourage posting of the report in an area accessible to other similar craft personnel for their review also.

If you have any questions concerning this report, call me at 476-6917.

WJS:kc

Attachments

cc: Allen Schmit - Shell Industrial Hygienist
 Karl Bartl - Maintenance

DPMC-05884

LAM 009453

BROWN & ROOT U.S.A., INC.
 ASBESTOS MONITORING RESULTS
 SHELL DEER PARK MANUFACTURING COMPLEX

DPMC-05885

AREA: "G" Area Section 200

JOB ACTIVITY: (1) Cut and Removed Insulation from 6" Valve.

(2) Wetted and Bagged Insulation from Same.

NAME	SOC. SEC. NUMBER	JOB TITLE	SAMPLE DATE	SAMPLE DURATION (MINUTES)	TIME-WEIGHTED AVERAGE RESULT (FIBER/cc) #1	CALCULATED 8 HOUR TWA
(1)		Insulator	07-28-87	70	0.10	0.015
(2)		Insulator	07-28-87	70	0.09	0.013

Permissible Exposure Limit..... 0.2 F/cc

1) Fiber/cc - Fibers Of Asbestos Per Cubic Centimeter Of Air.

LAM 009454

7243

ENVIRONMENTAL/IND. HYGIENE	
DATE	NAME
8/7/87	A. J. Schmit
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BROWN & ROOT U.S.A., INC.

INTEROFFICE MEMO

July 28, 1987

TO: Karl Bartl - Maintenance
 FROM: Bill Smithson
 RE: Asbestos Monitoring Results

Industrial hygiene monitoring was conducted with your personnel during the month of July. The purpose of the monitoring was to determine employee exposures to asbestos during insulation removal activities.

As summarized in the Attachments, results of the personnel monitoring were within the Occupational Safety and Health Administration (OSHA) permissible exposure limits. A review of the sampling data sheets indicated proper protective clothing and respiratory protection were worn by the employees during the monitoring period.

According to the OSHA regulations you must communicate the report to the affected employees and I would encourage posting of the report in an area accessible to other similar craft personnel for their review also.

If you have any questions concerning this report, call me at 476-6917.

WJS:kc

Attachments

cc: Allen Schmit - Shell Industrial Hygienist
 Joe Gautreaux - Capital

DPMC-05886

LAM 009455

BROWN & ROOT U.S.A., INC.
ASBESTOS MONITORING RESULTS
SHELL DEER PARK MANUFACTURING COMPLEX

DPMC-05887

AREA: LPA Wax Plant

JOB ACTIVITY:

1 & 2 Removed & Bagged Insulation
Greer circulation line. 3 & 4 Removed &
Bagged Insulation from RD 10 & 11
discharge line.

NAME	SOC. SEC. NUMBER	JOB TITLE	SAMPLE DATE	SAMPLE DURATION (MINUTES)	TIME-WEIGHTED AVERAGE RESULT (FIBER/cc) #1	CALCULATED 8 HOUR TWA
1.		Insulator	7-9-87	110	0.23	0.05
2.		Insulator	7-9-87	110	0.10	0.02
3.		Insulator	7-10-87	70	< 0.03	
4.		Insulator	7-10-87	70	< 0.03	

Permissible Exposure Limit..... 0.2 F/cc

1) Fiber/cc - Fibers Of Asbestos Per Cubic Centimeter Of Air.

BROWN & ROOT U.S.A., INC.
 ASBESTOS MONITORING RESULTS
 SHELL DEER PARK MANUFACTURING COMPLEX

DFMC-05888

AREA: Shell Garage JOB ACTIVITY: Changed Front Brake Pads

on Ford Sedan. Used

water only

NAME	SOC. SEC. NUMBER	JOB TITLE	SAMPLE DATE	SAMPLE DURATION (MINUTES)	TIME-WEIGHTED AVERAGE RESULT (FIBER/cc) #1	CALCULATED 8 HOUR TWA
Mechanic			7-8-87	30	0.2	0.012*

*No additional exposure for remainder of shift.

Permissible Exposure Limit..... 0.2 F/cc

1) Fiber/cc - Fibers Of Asbestos Per Cubic Centimeter Of Air.

BROWN & ROOT U.S.A., INC.
 ASBESTOS MONITORING RESULTS
 SHELL DEER PARK MANUFACTURING COMPLEX

DFMC-05889

AREA: _____

DHT Compressor House

JOB ACTIVITY: (1&4) Removed insulation from intake and discharge

product line., (2) Bagged insulation from same.,
 (3) Kept insulation wet during removal of same.

NAME	SOC. SEC. NUMBER	JOB TITLE	SAMPLE DATE	SAMPLE DURATION (MINUTES)	TIME-WEIGHTED AVERAGE RESULT (FIBER/cc) #1	CALCULATED 8 HOUR TWA
1		Insulator	7-15-87	200	0.18	0.07
2.		Insulator	7-15-87	180	0.09	0.03
3		Insulator	7-15-87	200	0.17	0.07
4.		Insulator	7-15-87	110	0.05	0.01

Permissible Exposure Limit..... 0.2 F/cc

1) Fiber/cc - Fibers Of Asbestos Per Cubic Centimeter Of Air.

BROWN & ROOT U.S.A., INC.
 ASBESTOS MONITORING RESULTS
 SHELL DEER PARK MANUFACTURING COMPLEX

DPMC-05890

AREA: "G" Area JOB ACTIVITY: Removed & Bagged Insulation from 2" Steam line.

NAME	SOC. SEC. NUMBER	JOB TITLE	SAMPLE DATE	SAMPLE DURATION (MINUTES)	TIME-WEIGHTED AVERAGE RESULT (FIBER/cc) #1	CALCULATED 8 HOUR TWA
Insulator			7-14-87	150	0.1	0.03
Insulator			7-14-87	150	0.02	0.006
Insulator			7-17-87	230	0.04	0.02
Insulator			7-17-87	230	0.01	0.005

Permissible Exposure Limit..... 0.2 F/cc

- 1) Fiber/cc - Fibers Of Asbestos Per Cubic Centimeter Of Air.

724
7/29/87 A. J. Schmit
X
BROWN & ROOT U.S.A., INC.

INTEROFFICE MEMO

ECB Sate
July 21, 1987

TO: Joe Gautreaux - Capital
FROM: Bill Smithson
RE: Asbestos Monitoring Results

Industrial hygiene monitoring was conducted with your personnel during the month of July. The purpose of the monitoring was to determine employee exposures to asbestos during insulation removal activities.

As summarized in the Attachment, results of the personnel monitoring were within the Occupational Safety and Health Administration (OSHA) permissible exposure limits. A review of the sampling data sheets indicated proper protective clothing and respiratory protection were worn by the employees during the monitoring period.

According to the OSHA regulations you must communicate the report to the affected employees and I would encourage posting of the report in an area accessible to other similar craft personnel for their review also.

If you have any questions concerning this report, call me at 476-6917.

WJS:kc

Attachments

cc: Allen Schmit - Shell Industrial Hygienist
Karl Bartl - Maintenance

DPMC-05891

LAM 009460

BROWN & ROOT U.S.A., INC.
 ASBESTOS MONITORING RESULTS
 SHELL DEER PARK MANUFACTURING COMPLEX

AREA: OP-3 Tank Car Cleaning Area JOB ACTIVITY: (1) Removed Insulation from Steam Line In-

Service at 325°F.

(2) Wetting and Bagging Insulation from Same.

NAME	SOC. SEC. NUMBER	JOB TITLE	SAMPLE DATE	SAMPLE DURATION (MINUTES)	TIME-WEIGHTED AVERAGE RESULT (FIBER/cc) #1	CALCULATED 8 HOUR TWA
(1)		Insulator	07-02-87	270	0.05	0.028
(2)		Insulator	07-02-87	250	0.05	0.026

Permissible Exposure Limit..... 0.2 F/cc

1) Fiber/cc - Fibers Of Asbestos Per Cubic Centimeter Of Air.

DFMC-05892

724

7/21/87	A. J. Schmit
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BROWN & ROOT U.S.A., INC.

INTEROFFICE MEMO

July 21, 1987

TO: Karl Bartl - Maintenance
 FROM: Bill Smithson
 RE: Asbestos Monitoring Results

Industrial hygiene monitoring was conducted with your personnel during the month of July. The purpose of the monitoring was to determine employee exposures to asbestos during insulation removal activities.

As summarized in the Attachments, results of the personnel monitoring were within the Occupational Safety and Health Administration (OSHA) permissible exposure limits. A review of the sampling data sheets indicated proper protective clothing and respiratory protection were worn by the employees during the monitoring period.

According to the OSHA regulations you must communicate the report to the affected employees and I would encourage posting of the report in an area accessible to other similar craft personnel for their review also.

If you have any questions concerning this report, call me at 476-6917.

WJS:kc

Attachments

cc: ~~Allen Schmit~~ - Shell Industrial Hygienist
 Joe Gautreaux - Capital

DPMC-05893

LAM 009462

AREA: OP-2

JOB ACTIVITY: Patching and Sealing Old Insulation on Piping

Which is In-Service at 325°F.

Permissible Exposure Limit..... 0.2 F/cc

- 1) Fiber/cc - Fibers Of Asbestos Per Cubic Centimeter Of Air.

DFMC-05894

LAM 009463

BROWN & ROOT U.S.A., INC.
 ASBESTOS MONITORING RESULTS
 SHELL DEER PARK MANUFACTURING COMPLEX

AREA: BD-2 JOB ACTIVITY: (1) Removing Insulation from Manways on

CBD 201 Column.

(2) Wetting Insulation on Same.

NAME	SOC. SEC. NUMBER	JOB TITLE	SAMPLE DATE	SAMPLE DURATION (MINUTES)	TIME-WEIGHTED AVERAGE RESULT (FIBER/cc) #1	CALCULATED 8 HOUR TWA
(1)		Insulator	07-01-87	140	0.02	0.006
(2)		Insulator	07-01-87	145	0.02	0.006

Permissible Exposure Limit..... 0.2 F/cc

1) Fiber/cc - Fibers Of Asbestos Per Cubic Centimeter Of Air.

DPMC-05895

LAM 009464

BROWN & ROOT U.S.A., INC.
 ASBESTOS MONITORING RESULTS
 SHELL DEER PARK MANUFACTURING COMPLEX

AREA: DHT JOB ACTIVITY: (1) Removed and Bagged Insulation from 10"

Steam Line.
(2) Wetting Insulation on Same.

NAME	SOC. SEC. NUMBER	JOB TITLE	SAMPLE DATE	SAMPLE DURATION (MINUTES)	TIME-WEIGHTED AVERAGE RESULT (FIBER/cc) #1	CALCULATED 8 HOUR TWA
(1)		Insulator	07-02-87	150	0.06	0.02
(2)		Insulator	07-02-87	150	0.06	0.02

DPMC-05896

Permissible Exposure Limit..... 0.2 F/cc

1) Fiber/cc - Fibers Of Asbestos Per Cubic Centimeter Of Air.

7245

ENVIRONMENTAL/IND. HYGIENE	
DATE <i>8/17/87</i>	NAME <i>A. J. Schmit</i>
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BROWN & ROOT U.S.A.

INTEROFFICE MEMO

August 17, 1987

TO: Joe Gautreaux - Capital

FROM: Bill Smithson

RE: Asbestos Monitoring Results

Industrial hygiene monitoring was conducted with your personnel during the month of August. The purpose of the monitoring was to determine employee exposures to asbestos during pipe insulation removal activities.

As summarized in Attachment 1, results of the personnel monitoring were within the Occupational Safety and Health Administration (OSHA) permissible exposure limits. A review of the sampling data sheets indicated proper protective clothing and respiratory protection were worn by the employees during the monitoring period.

According to the OSHA regulations you must communicate the report to the affected employees and I would encourage posting of the report in an area accessible to other similar craft personnel for their review also.

If you have any questions concerning this report, call me at 476-6917.

WJS:kc

Attachments

cc: Allen Schmit - Shell Industrial Hygienist
Karl Bartl - Maintenance

DPMC-05897

LAM 009466

BROWN & ROOT U.S.A., INC.
 ASBESTOS MONITORING RESULTS
 SHELL DEER PARK MANUFACTURING COMPLEX

AREA: "G" Area JOB ACTIVITY: Removed and Bagged Insulation from Piping.

NAME	SOC. SEC. NUMBER	JOB TITLE	SAMPLE DATE	SAMPLE DURATION (MINUTES)	TIME-WEIGHTED AVERAGE RESULT (FIBER/cc) #1	CALCULATED 8 HOUR TWA
Insulator		Insulator	08-04-87	265	0.08	0.04
Insulator		Insulator	08-04-87	265	0.03	0.02

DPMC-05898

LAM 009467

Permissible Exposure Limit..... 0.2 F/cc

- 1) Fiber/cc - Fibers Of Asbestos Per Cubic Centimeter Of Air.

724.5

ENVIRONMENTAL/IND. HYGIENE	
DATE <u>8-11-87</u>	NAME <u>A. J. Schmit</u>
☐	Return Document to File
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BROWN & ROOT U.S.A., INC. SHELL DEER PARK MANUFACTURING COMPLEX	
Circulate:	

August 7, 1987

TO: Karl Bartl

FROM: Bill Smithson

SUBJECT: Asbestos Monitoring Results CCU V-607 Steam Drum

Industrial hygiene sampling was conducted with your personnel during the insulation demolition on V-607 Steam Drum located in the Regenerator and Reactor structure area of the Cat Cracking Unit. The purpose of the monitoring was to determine employee exposures to asbestos during the removal activities and to determine asbestos emission in proximity to the removal operation.

As summarized in Attachment 1, results of the personnel monitoring were above the OSHA permissible exposure limits of 0.2 Fiber per cubic centimeter of air calculated as an eight hour time weighted average. An enclosure made of plastic sheeting was erected around the equipment prior to demolition. As indicated by the area sample results which were taken at the downwind side, outside the enclosure the asbestos emission was well below the 0.2 F/cc.

A review of the sampling data sheets indicated proper protective clothing and respiratory protection were worn by the employees during the monitoring period.

Since air concentration of asbestos fiber was above the PEL of 0.2 F/cc, the asbestos regulation OSHA 29 CFR 1926.58 requires (1) a negative pressure enclosure be erected; (2) a decontamination area be established consisting of a clean change room, shower, and an equipment room. The above requirements will have to be accomplished prior to continuation of this project.

According to the OSHA regulations, you must communicate the report to the affected employees and I would encourage posting of the report in an area accessible to other similar craft personnel for their review also.

If you have any questions concerning this report, call me at 476-6917.

WJS:kc

Attachment

cc: Allen Schmit - Shell
Joe Gautreaux - Capital

DPMC-05899

LAM 009468

BROWN & ROOT U.S.A., INC.
ASBESTOS MONITORING RESULTS
SHELL DEER PARK MANUFACTURING COMPLEX

<u>AREA:</u>	<u>CCU</u>	<u>JOB ACTIVITY:</u>
		(1) Removed Insulation from V-607 Steam Drum.
		(2) <u>Bagged Insulation from Same.</u>
		(3) <u>Kept Insulation Wet During Same.</u>
		(4) <u>Area Sample at NE Corner, Outside of</u>
		<u>Enclosure.</u>

NAME	SOC. SEC. NUMBER	JOB TITLE	SAMPLE DATE	SAMPLE DURATION (MINUTES)	TIME-WEIGHTED AVERAGE RESULT (FIBER/cc) #1	CALCULATED 8 HOUR TWA
(1)		Insulator	08-06-87	270	2.000	1.10 *
(2)		Insulator	08-06-87	280	3.400	1.98 *
(3)		Insulator	08-06-87	275	0.680	0.39 *
(4)		Area Sample	08-06-87	275	<0.008	

* No Additional Exposure for Remainder of Shift

Permissible Exposure Limit..... 0.2 F/cc

1) Fiber/cc - Fibers Of Asbestos Per Cubic Centimeter Of Air.

DPMC-05900

LAM 009469

724.3

ENVIRONMENTAL/IND. HYGIENE	
DATE	NAME <i>A. F. Schmit</i>
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Circulate:	

BROWN & ROOT U.S.A., INC.

INTEROFFICE MEMO

August 17, 1987

TO: Karl Bartl - Maintenance
 FROM: Bill Smithson
 RE: Asbestos Monitoring Results

Industrial hygiene monitoring was conducted with your personnel during the months of July and August. The purpose of the monitoring was to determine employee exposures to asbestos during pipe insulation removal activities.

As summarized in the Attachments, results of the personnel monitoring were within the Occupational Safety and Health Administration (OSHA) permissible exposure limits. A review of the sampling data sheets indicated proper protective clothing and respiratory protection were worn by the employees during the monitoring period.

According to the OSHA regulations you must communicate the report to the affected employees and I would encourage posting of the report in an area accessible to other similar craft personnel for their review also.

If you have any questions concerning this report, call me at 476-6917.

WJS:kc

Attachments

cc: Allen Schmit - Shell Industrial Hygienist
 Joe Gautreaux - Capital

DPMC-05901

LAM 009470

BROWN & ROOT U.S.A., INC.
 ASBESTOS MONITORING RESULTS
 SHELL DEER PARK MANUFACTURING COMPLEX

AREA: CCU JOB ACTIVITY: Removed and Bagged Insulation from Steam Line.
Piping In-Service at 125° F.

NAME	SOC. SEC. NUMBER	JOB TITLE	SAMPLE DATE	SAMPLE DURATION (MINUTES)	TIME-WEIGHTED AVERAGE RESULT (FIBER/cc) #1	CALCULATED 8 HOUR TWA
Insulator			07-23-87	125	0.05	0.01 *
Insulator			07-23-87	125	0.20	0.05 *
Insulator			07-24-87	185	0.16	0.06 *
Insulator			07-24-87	190	0.08	0.03 *

DPMC-05902

* No Additional Exposure for Remainder of Shift

Permissible Exposure Limit..... 0.2 F/cc

- 1) Fiber/cc - Fibers Of Asbestos Per Cubic Centimeter Of Air.

BROWN & ROOT U.S.A., INC.
 ASBESTOS MONITORING RESULTS
 SHELL DEER PARK MANUFACTURING COMPLEX

AREA: LPA Wax Plant JOB ACTIVITY: Removed and Bagged Insulation from Greer Line.
Equipment In-Service at 100° F.

NAME	SOC. SEC. NUMBER	JOB TITLE	SAMPLE DATE	SAMPLE DURATION (MINUTES)	TIME-WEIGHTED AVERAGE RESULT (FIBER/cc) #1	CALCULATED 8 HOUR TWA
		Insulator	07-21-87	140	0.04	0.01 *
		Insulator	07-21-87	140	0.27	0.08 *
		Insulator	07-22-87	180	0.24	0.09 *
		Insulator	07-22-87	180	0.50	0.18 *
		Insulator	07-23-87	290	0.21	0.13 *
		Insulator	07-23-87	290	0.14	0.08 *
		Insulator	07-24-87	115	0.56	0.13 *
		Insulator	07-24-87	125	0.52	0.14 *

* No Additional Exposure for Remainder of Shift

Permissible Exposure Limit..... 0.2 F/cc

1) Fiber/cc - Fibers Of Asbestos Per Cubic Centimeter Of Air.

DPMC-05903

LAM 009472

AREA:

LPA Wax Plant

JOB ACTIVITY:

(1) Removed and Bagged Insulation from Valves
and Piping on WX-241.

(2) Wetted and Bagged Insulation from Same.

In-Service at 100° F.

NAME	SOC. SEC. NUMBER	JOB TITLE	SAMPLE DATE	SAMPLE DURATION (MINUTES)	TIME-WEIGHTED AVERAGE RESULT (FIBER/cc) #1	CALCULATED 8 HOUR TWA
(1)		Insulator	08-04-87	225	0.01	0.005
(2)		Insulator	08-04-87	220	0.01	0.005

Permissible Exposure Limit.....	0.2 F/cc
---------------------------------	----------

- 11) Fiber/cc - Fibers Of Asbestos Per Cubic Centimeter Of Air.

BROWN & ROOT U.S.A., INC.**INTEROFFICE MEMO**

July 7, 1987

TO: Karl Bartl - Maintenance
FROM: Bill Smithson
RE: Asbestos Monitoring Results

Industrial hygiene monitoring was conducted with your personnel during the month of June. The purpose of the monitoring was to determine employee exposures to asbestos during (1) pipe insulation removal activities and (2) brake change-out activities.

As summarized in the Attachments, results of the personnel monitoring were within the Occupational Safety and Health Administration (OSHA) permissible exposure limits. A review of the sampling data sheets indicated proper protective clothing, when required, and respiratory protection were worn by the employees during the monitoring period.

According to the OSHA regulations you must communicate the report to the affected employees and I would encourage posting of the report in an area accessible to other similar craft personnel for their review also.

If you have any questions concerning this report, call me at 476-6917.

WJS:kc

Attachments

cc: Allen Schmit - Shell Industrial Hygienist
Joe Gautreaux - Capital

DPMC-05905

LAM 009474

BROWN & ROOT U.S.A., INC.
 ASBESTOS MONITORING RESULTS
 SHELL DEER PARK MANUFACTURING COMPLEX

AREA: Brown & Root Mechanic Shop JOB ACTIVITY: Replaced Front Brake Pads on F-150 Truck;
Removed Rear Wheels and Inspected Brake Shoes.
Used Spray Solvent Method.

NAME	SOC. SEC. NUMBER	JOB TITLE	SAMPLE DATE	SAMPLE DURATION (MINUTES)	TIME-WEIGHTED AVERAGE RESULT (FIBER/cc) #1	CALCULATED 8 HOUR TWA
		Mechanic	06-25-87	60	0.04	

Handwritten notes:
 1) 0.04 (1)
 2) 0.04 (1)
 3) 0.04 (1)
 4) 0.04 (1)

Permissible Exposure Limit..... 0.2 F/cc

- 1) Fiber/cc - Fibers Of Asbestos Per Cubic Centimeter Of Air.

BROWN & ROOT U.S.A., INC.
ASBESTOS MONITORING RESULTS
SHELL DEER PARK MANUFACTURING COMPLEX

AREA: SGP-1

JOB ACTIVITY: (1) & (2) Cleaned Up Insulation on Ground in Area

Around SS-353, Inside and Outside Firewall.

(3) Kept Insulation Wet with Amended Water on
Steam Line in Rack, North of SS-353.

(4) Removed and Bagged Insulation From Steam
Line in Rack, North of SS-353.

NAME	SOC. SEC. NUMBER	JOB TITLE	SAMPLE DATE	SAMPLE DURATION (MINUTES)	TIME-WEIGHTED AVERAGE RESULT (FIBER/cc) #1	CALCULATED 8 HOUR TWA
(1)		Insulator	06-25-87	81	< 0.03	
(2)		Insulator	06-25-87	81	0.05	
(3)		Insulator	06-26-87	60	0.04	
(4)		Insulator	06-26-87	60	< 0.04	

1.22 (b)
material (b)
St. Catag (b)
Removal (b)
Initial (b)

1.54 (B)
St. Catag (A)
Removal (A)
Initial (A)

Permissible Exposure Limit..... 0.2 F/cc

1) Fiber/cc - Fibers Of Asbestos Per Cubic Centimeter Of Air.

DPMC-05907

BROWN & ROOT U.S.A., INC.
 ASBESTOS MONITORING RESULTS
 SHELL DEER PARK MANUFACTURING COMPLEX

AREA: ACU JOB ACTIVITY: Drilled Inspection Holes with Pneumatic Drill into

Pipe Insulation on V-907A.

NAME	SOC. SEC. NUMBER	JOB TITLE	SAMPLE DATE	SAMPLE DURATION (MINUTES)	TIME-WEIGHTED AVERAGE RESULT (FIBER/cc) #1	CALCULATED 8 HOUR TWA
		Insulator	06-24-87	90	0.07	
		Insulator	06-24-87	90	0.08	

*Material (b)
 Sx 3000 gha (a)
 Removal (a)
 10000 (a)*

Permissible Exposure Limit..... 0.2 F/cc

- 1) Fiber/cc - Fibers Of Asbestos Per Cubic Centimeter Of Air.

DPMC-05908

101.2

BROWN & ROOT U.S.A., INC.

INTEROFFICE MEMO

BJM
MCD
data input
All

July 7, 1987

TO: Joe Gautreaux - Capital
FROM: Bill Smithson
RE: Asbestos Monitoring Results

Industrial hygiene monitoring was conducted with your personnel during the month of June. The purpose of the monitoring was to determine employee exposures to asbestos during insulation removal activities.

As summarized in the Attachments, results of the personnel monitoring were within the Occupational Safety and Health Administration (OSHA) permissible exposure limits. A review of the sampling data sheets indicated proper protective clothing and respiratory protection were worn by the employees during the monitoring period.

According to the OSHA regulations you must communicate the report to the affected employees and I would encourage posting of the report in an area accessible to other similar craft personnel for their review also.

If you have any questions concerning this report, call me at 476-6917.

WJS:kc

Attachments

cc: Allen Schmit - Shell Industrial Hygienist
Karl Bartl - Maintenance

DPMC-05909

LAM 009478

BROWN & ROOT U.S.A., INC.
 ASBESTOS MONITORING RESULTS
 SHELL DEER PARK MANUFACTURING COMPLEX

AREA: Lube Wax Plant JOB ACTIVITY: Removed and Bagged Insulation from Product
Pumps P-1450 and P-145.
Pumps In Service 2009P.

NAME	SOC. SEC. NUMBER	JOB TITLE	SAMPLE DATE	SAMPLE DURATION (MINUTES)	TIME-WEIGHTED AVERAGE RESULT (FIBER/cc) #1	CALCULATED 8 HOUR TWA
Insulator			06-26-87	121	0.2	0.050
Insulator			06-26-87	121	0.1	0.025

*Insulator (C)
 SX Catalyst (A)
 Removed Seal (A)
 Catalyst (A)*

Permissible Exposure Limit..... 0.2 F/cc

1) Fiber/cc - Fibers Of Asbestos Per Cubic Centimeter Of Air.

DFMC-05910

BROWN & ROOT U.S.A., INC.
 ASBESTOS MONITORING RESULTS
 SHELL DEER PARK MANUFACTURING COMPLEX

AREA: CR-3 JOB ACTIVITY: (1) Stripped 4' X 4' Section of Insulation from
V-5360.
(2) Kept Insulation Wet with Amended Water
During Removal.

NAME	SOC. SEC. NUMBER	JOB TITLE	SAMPLE DATE	SAMPLE DURATION (MINUTES)	TIME-WEIGHTED AVERAGE RESULT (FIBER/cc) #1	CALCULATED 8 HOUR TWA
(1)		Insulator	06-26-87	30	<0.07	
(2)		Insulator	06-26-87	25	<0.09	

*Material (C)
 SX Category (A)
 Removal Site (D)
 Controllable (A)*

DPMC-05911

Permissible Exposure Limit..... 0.2 F/cc

- 1) Fiber/cc - Fibers Of Asbestos Per Cubic Centimeter Of Air.

7d Y.3

ENVIRONMENTAL/IND. HYGIENE	
DATE <i>7/1/87</i>	NAME <i>A. J. Schmit</i>
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BROWN & ROOT U.S.A., INC.

INTEROFFICE MEMO

June 29, 1987

TO: Karl Bartl - Maintenance
 FROM: Bill Smithson
 RE: Asbestos Monitoring Results

Industrial hygiene monitoring was conducted with your personnel during the month of June. The purpose of the monitoring was to determine employee exposures to asbestos during (1) pipe insulation removal activities, (2) brake change-out activities and (3) column skirt insulation removal activities.

As summarized in the Attachments, results of the personnel monitoring were within the Occupational Safety and Health Administration (OSHA) permissible exposure limits. A review of the sampling data sheets indicated proper protective clothing, when required, and respiratory protection were worn by the employees during the monitoring period.

According to the OSHA regulations you must communicate the report to the affected employees and I would encourage posting of the report in an area accessible to other similar craft personnel for their review also.

If you have any questions concerning this report, call me at 476-6917.

WJS:kc

Attachments

cc: Allen Schmit - Shell Industrial Hygienist
 Joe Gautreaux - Capital

DPMC-05912

LAM 009481

BROWN & ROOT U.S.A., INC.
 ASBESTOS MONITORING RESULTS
 SHELL DEER PARK MANUFACTURING COMPLEX

AREA: Brown & Root Mechanic Shop JOB ACTIVITY: (1) & (2) Replaced Front Brake Pads on P-150 Truck;
(3) Replaced Front Brake Pads and Rear Brake Shoes on P-150 Truck;
Used Spray Solvent Method.

NAME	SOC. SEC. NUMBER	JOB TITLE	SAMPLE DATE	SAMPLE DURATION (MINUTES)	TIME-WEIGHTED AVERAGE RESULT (FIBER/cc) #1	CALCULATED 8 HOUR TWA
		Mechanic	06-10-87	60	0.04	
		Mechanic	06-10-87	135	0.02	
		Mechanic	06-11-87	250	0.01	

DPMC-05913

Permissible Exposure Limit..... 0.2 F/cc

- 1) Fiber/cc - Fibers Of Asbestos Per Cubic Centimeter Of Air.

BROWN & ROOT U.S.A., INC.
 ASBESTOS MONITORING RESULTS
 SHELL DEER PARK MANUFACTURING COMPLEX

AREA: BD-2 JOB ACTIVITY: Removed and Bagged Insulation from Inside Skirt
of CBD-102.

NAME	SOC. SEC. NUMBER	JOB TITLE	SAMPLE DATE	SAMPLE DURATION (MINUTES)	TIME-WEIGHTED AVERAGE RESULT (FIBER/cc) #1	CALCULATED 8 HOUR TWA
Insulator			06-17-87	Invalid Sample *		
Insulator			06-17-87	210	0.05	0.02

* Pump Failure
 Permissible Exposure Limit..... 0.2 F/cc
 1) Fiber/cc - Fibers Of Asbestos Per Cubic Centimeter Of Air.

DPMC-05914

BROWN & ROOT U.S.A., INC.
 ASBESTOS MONITORING RESULTS
 SHELL DEER PARK MANUFACTURING COMPLEX

AREA: Alky JOB ACTIVITY: Removed and Bagged Insulation from Utility
Column Reboiler E-412

NAME	SOC. SEC. NUMBER	JOB TITLE	SAMPLE DATE	SAMPLE DURATION (MINUTES)	TIME-WEIGHTED AVERAGE RESULT (FIBER/cc) #1	CALCULATED 8 HOUR TWA
		Insulator	06-11-87	55	0.10	0.01 *
		Insulator	06-11-87	55	0.20	0.02 *

* No Exposure for Remainder of Shift

Permissible Exposure Limit..... 0.2 F/cc

- 1) Fiber/cc - Fibers Of Asbestos Per Cubic Centimeter Of Air.

DFMC-05915

LAM 009484

BROWN & ROOT U.S.A., INC.

INTEROFFICE MEMO

ENVIRONMENTAL/IND. HYGIENE	
6-9-87	NAME <i>A. J. Schmit</i>
☐	Return Document to File
☒	Record Copy in File
☐	Information Copy
☐	Record Copy in <i>ECB Sub.</i>
☐	Copy:
☐	Circulars:

June 12, 1987

TO: Joe Gautreaux - Capital
FROM: Bill Smithson
RE: Asbestos Monitoring Results

Industrial hygiene monitoring was conducted with your personnel during the month of May. The purpose of the monitoring was to determine employee exposures to asbestos during transite hole drilling activities at the West Operation Building. An area air sample was also taken in the area where electricians were working.

As summarized in Attachment 1, results of the personnel monitoring were within the Occupational Safety and Health Administration (OSHA) permissible exposure limits. A review of the sampling data sheets indicated proper respiratory protection was worn by the employees during the monitoring period. Also a HEPA vacuum was utilized during the activities.

According to the OSHA regulations you must communicate the report to the affected employees and I would encourage posting of the report in an area accessible to other similar craft personnel for their review also.

If you have any questions concerning this report, call me at 476-6917.

WJS:kc

cc: Allen Schmit - Shell Industrial Hygienist
Karl Bartl - Maintenance

DPMC-05916

LAM 009485

BROWN & ROOT U.S.A., INC.
ASBESTOS MONITORING RESULTS
SHELL DEER PARK MANUFACTURING COMPLEX

AREA: West Operations Building

JOB ACTIVITY:

Drilled Holes In Transite Wall at WOB Room 107:
Area Sample of Room 107 Where Electricians
Were Working

NAME	SOC. SEC. NUMBER	JOB TITLE	SAMPLE DATE	SAMPLE DURATION (MINUTES)	TIME-WEIGHTED AVERAGE RESULT (FIBER/cc) #1	CALCULATED 8 HOUR TWA
Area Sample		Electrician	05-29-87	100	< 0.02 *(1)	
			05-29-87	335	0.009	

DPMC-05917

(1) < = Less Than; Non-detectable; The Value Listed is the Limit of Detection Based on the Air Sample Volume.

* No Additional Exposure for Remainder of Shift

Permissible Exposure Limit..... 0.2 F/cc

- 1) Fiber/cc - Fibers Of Asbestos Per Cubic Centimeter Of Air.

LAM 009486

BROWN & ROOT U.S.A., INC.

INTEROFFICE MEMO

*MLD
add to
asbestos data base
FF
Added to
data base 6/1/87
mls*

June 1, 1987

TO: Karl Bartl
FROM: Bill Smithson
RE: Asbestos Monitoring Results

Industrial hygiene monitoring was conducted with your personnel during the month of May. The purpose of the monitoring was to determine employee exposures to asbestos during (1) pipe insulation removal activities and (2) brake change-out activities.

As summarized in Attachment 1, results of the personnel monitoring were within the Occupational Safety and Health Administration (OSHA) permissible exposure limits. A review of the sampling data sheets indicated proper protective clothing and respiratory protection were worn by the employees during the monitoring period.

According to the OSHA regulations you must communicate the report to the affected employees and I would encourage posting of the report in an area accessible to other similar craft personnel for their review also.

If you have any questions concerning this report, call me at 476-6917.

WJS:kc

DPMC-05918

LAM 009487

BROWN & ROOT U.S.A., INC.
 ASBESTOS MONITORING RESULTS
 SHELL DEER PARK MANUFACTURING COMPLEX

AREA: Brown & Root Mechanic Shop JOB ACTIVITY: Removed front wheels on F-150 truck;

Replaced front brake pads--spray solvent method.

NAME	SOC. SEC. NUMBER	JOB TITLE	SAMPLE DATE	SAMPLE DURATION (MINUTES)	TIME-WEIGHTED AVERAGE RESULT (FIBER/cc) #1	CALCULATED 8 HOUR TWA
		Mechanic G/F	5-11-87	50	0.06*	

* No additional exposure for remainder of shift

DPMC-05919

Permissible Exposure Limit..... 0.2 F/cc

- 1) Fiber/cc - Fibers Of Asbestos Per Cubic Centimeter Of Air.

BROWN & ROOT U.S.A., INC.
ASBESTOS MONITORING RESULTS
SHELL DEER PARK MANUFACTURING COMPLEX

III

AREA: Girboto1 JOB ACTIVITY: Removed and bagged insulation from steam line
from steam header to E 1119

NAME	SOC. SEC. NUMBER	JOB TITLE	SAMPLE DATE	SAMPLE DURATION (MINUTES)	TIME-WEIGHTED AVERAGE RESULT (FIBER/cc) #1	CALCULATED 8 HOUR TWA
		Insulator	5-12-87	210	0.15	0.07*
		Insulator	5-12-87	210	0.10	0.04*
		Insulator	5-13-87	250	0.06	0.03*
		Insulator	5-13-87	250	0.12	0.06*
		Insulator	5-14-87	120	0.30	0.07*
		Insulator	5-14-87	120	0.54	0.13*

DPMC-05920

* No additional exposure for remainder of shift

Permissible Exposure Limit..... 0.2 F/cc

1) Fiber/cc - Fibers Of Asbestos Per Cubic Centimeter Of Air.

LAM 009489

BROWN & ROOT U.S.A., INC.
INTEROFFICE MEMO

MLD
add to asbestos
database
rx
AL

May 4, 1987

TO: Karl Bartl
FROM: Bill Smithson
RE: Asbestos Monitoring Results

Industrial hygiene monitoring was conducted with your personnel during the month of April. The purpose of the monitoring was to determine employee exposures to asbestos during pipe insulation removal activities.

As summarized in Attachment 1, results of the personnel monitoring were within the Occupational Safety and Health Administration (OSHA) permissible exposure limits. A review of the sampling data sheets indicated proper protective clothing and respiratory protection were worn by the employees during the monitoring period.

According to the OSHA regulations you must communicate the report to the affected employees and I would encourage posting of the report in an area accessible to other similar craft personnel for their review also.

If you have any questions concerning this report, call me at 476-6917.

WJS:kc

cc Allen Schmit - Shele

DPMC-05921

LAM 009490

BROWN & ROOT U.S.A., INC.
 ASBESTOS MONITORING RESULTS
 SHELL DEER PARK MANUFACTURING COMPLEX

DPMC-05922

AREA: "A" Dept.

JOB ACTIVITY: Removed and bagged insulation from

steamline located south of V-1213
 tanks.

NAME	SOC. SEC. NUMBER	JOB TITLE	SAMPLE DATE	SAMPLE DURATION (MINUTES)	TIME-WEIGHTED AVERAGE RESULT (FIBER/cc) #1	CALCULATED 8 HOUR TWA
Insulator			4-8-87	245 Min.	0.20	0.10*
Insulator			4-9-87	60 Min.	0.77	0.10*

* No exposure for remainder of shift

Permissible Exposure Limit..... 0.2 F/cc

1) Fiber/cc - Fibers Of Asbestos Per Cubic Centimeter Of Air.

LAM 009491

BROWN & ROOT U.S.A., INC.
 ASBESTOS MONITORING RESULTS
 SHELL DEER PARK MANUFACTURING COMPLEX

DPMC-05923

AREA: Wax Plant

JOB ACTIVITY: Removed and bagged insulation from

WX-254-257 wax line.

NAME	SOC. SEC. NUMBER	JOB TITLE	SAMPLE DATE	SAMPLE DURATION (MINUTES)	TIME-WEIGHTED AVERAGE RESULT (FIBER/cc) #1	CALCULATED 8 HOUR TWA
Insulator			4-9-87	295	0.12	0.07*

* No exposure for remainder of shift

Permissible Exposure Limit..... 0.2 F/cc

- 1) Fiber/cc - Fibers Of Asbestos Per Cubic Centimeter Of Air.