

U.S. Army Corps of Engineers Philadelphia District

Volume III - Building Reports for a Comprehensive Asbestos Survey in Various Buildings at Fort Monmouth, New Jersey

Contract Number DACA61-89-D-0013

June 1991

Prepared for:

U.S. ARMY ENGINEER DISTRICT U.S. Custom House Philadelphia, Pennsylvania 19106 Prepared by:



Roy F. Weston, Inc. West Chester, Pennsylvania 19380

TABLE OF CONTENTS

Section		<u>Title</u>	1-01.8	Page Page
SECTION 551	EDUCAT	TION CENTER	55}.	551-1 551-
	551.1	General		551-1
	551.2	ACM and Exposure Assessment		551-1
	551.3	Recommendations/Conclusions		551-2
	en.			4.00
SECTION 2035	FAMILY	HOUSING	· · · · · · · · · · · · · · · · · · ·	2035-1
	OTHE	2717		0.3
	2035.1	General	* * 75	2035-1
	2035.2	ACM and Exposure Assessment		2035-1
	2035.3	Recommendations/Conclusions		2035-2
		,		
SECTION 2067	PRO SH	OP/GOLF CLUB		2067-1
	2067.1	General	77	2067-1
	2067.2	ACM and Exposure Assessment	71011-	2067-1
	2067.3	Recommendations/Conclusions		2067-2
		6.3	_	
SECTION 2100	FAMILY	HOUSING		2100-1
	2100.1	General	11.	2100-1
	2100.2	ACM and Exposure Assessment		2100-1
	2100.3	Recommendations/Conclusions		2100-2
				-100 -
				1 1
SECTION 2232	FAMILY	HOUSING	721	2232-1232-
		Maria	41/42/300	Extra S
	2232.1	General		2232-1232
	2232.2	ACM and Exposure Assessment	rice again, and	2232-1
	2232.3	Recommendations/Conclusion	in AACT 1986	2232-2
			rout size of the	
SECTION 2287	FAMILY	HOUSING EAT	900	2287-1287-
	2287.1	General 38 50.	730	2207 1397
	2287.2	1		2287-1287-
		ACM and Exposure Assessment	7.4	2287-1
	2287.3	Recommendations/Conclusions		2287-2

TABLE OF CONTENTS (continued)

<u>Section</u>	<u>Title</u>	Page
SECTION 2473	FAMILY HOUSING	<u>2</u> 473-1
3	2473.1 General	2473-1
SECTION 2473	FAMILY HOUSING, QUARTER NO. 42	2473-7
	2473.2 General	2473-7
\$::	FAMILY HOUSING, QUARTER NO. 44	2473-9
√.	2473.3 General	24.73.9
	FAMILY HOUSING, QUARTER NO. 46	2473-10
	2473.4 General	2473 :10
•	FAMILY HOUSING, QUARTER NO. 48	2473-12
	2473.5 General	22473 :12
	FAMILY HOUSING, QUARTER NO. 50	2473-13
	2473.6 General	2473-13
	FAMILY HOUSING, QUARTER NO. 52	2473-15
	2473.7 General	2478515
· "	FAMILY HOUSING, QUARTER NO. 54	2473516
	2473.8 General	2 478 -16
(Page 1	FAMILY HOUSING, QUARTER NO. 56	2473-18
• ,	2473.9 General	242473-18

₹.

TABLE OF CONTENTS (continued)

<u>Section</u>		<u>Title</u>		<u>Page</u>
SECTION 2501	WAREH	IOUSE		2501-1
	2501.1	General		2501-1
	2501.2	ACM and Exposure Assessment	,	2501-1
	2501.3	Recommendations/Conclusions		2501-2
SECTION 2508	LAVAT	ORY		.2508-1
	2508.1	General		2508-1
	2508.2	ACM and Exposure Assessment		2508-1
	2508.3	Recommendations/Conclusions		2508-2
SECTION 2525	ADMIN	ISTRATION (AVRADA)		2525-1
	2525.1	General		2525-1
	2525.2	ACM and Exposure Assessment		2525-1
	2525.3	Recommendations/Conclusions		2525-2
	2525.4	Photographs		2525-30
SECTION 2534	ADMIN	ISTRATION BUILDING		2534-1
	2534.1	General		2534-1
	2534.2	ACM and Exposure Assessment		2534-1
	2534.3	Recommendations/Conclusions		2534-2
SECTION 2536	FIREH	OUSE 3		2536-1
	2536.1	General		2536-1
	2536.2	ACM and Exposure Assessment		2536-1
	2536.3	Recommendations/Conclusions	•	2536-2
	2536.4	Photographs		2536-8
SECTION 2704	LABOR	ATORY (TEST CHAMBER)		2704-1
	2704.1	General		2704-1
	2704.2	ACM and Exposure Assessment		2704-1
	2704.3	Recommendations/Conclusions		2704-2
	2704.4	Photographs		2704-10

TABLE OF CONTENTS (continued)

<u>Section</u>		<u>Title</u>	<u>Page</u>
SECTION 9003	FAMIL	Y HOUSING	9003-1
	9003.1	General	9003-1
	9003.2	ACM and Exposure Assessment	9003-1
	9003.3	Recommendations/Conclusions	9003-2
SECTION 9009	STORE	HOUSE (SERV-AIR)	9009-1
	9009.1	General	9009-1
	9009.2	ACM and Exposure Assessment	9009-1
	9009.3	Recommendations/Conclusions	9009-2
	9009.4	Photographs	9009-8
SECTION 9011	WORKS	SHOP	9011-1
	9011.1	General	9011-1
	9011.2	ACM and Exposure Assessment	9011-1
	9011.3	Recommendations/Conclusions	9011-2
	9011.4	Photographs	9011-12
SECTION 9015	LABOR	ATORY (EW/RSTA)	9015-1
•	9015.1	General	9015-1
	9015.2	ACM and Exposure Assessment	9015-1
	9015.3	Recommendations/Conclusion	9015-2
	9015.4	Photographs	9015-8
SECTION 9019	LABOR	ATORY (RADAR DIV.)	9019-1
	9019.1	General	9019-1
	9019.2	ACM and Exposure Assessment	9019-1
	9019.3	Recommendations/Conclusions	9019-2
SECTION 9023	ADMIN	ISTRATION (ESA)	9023-1
	9023.1	General	9023-1
·	9023.2	ACM and Exposure Assessment	9023-1
	9023.3	Recommendations/Conclusions	9023-2
	9023.4	Photographs	9023-8

TABLE OF CONTENTS (continued)

Section		<u>Title</u>	<u>Page</u>
SECTION 9031	FIREH	OUSE	9031-1
	9031.1	General	9031-1
	9031.2	ACM and Exposure Assessment	9031-1
	9031.3	Recommendations/Conclusions	9031-2
SECTION 9041	SIGNA	L BUILDING	9041-1
	9041.1	General	9041-1
	9041.2	ACM and Exposure Assessment	9041-1
	9041.3	Recommendations/Conclusions	9041-2
	9041.4	Photographs	9041-8
SECTION 9041 SECTION 9042 SECTION 9061	ADMIN	ISTRATION (SIGNAL)	9042-1
	9042.1	General	9042-1
	9042.2	ACM and Exposure Assessment	9042-1
	9042.3	Recommendations/Conclusions	 9042-2
	9042.4	Photographs	9042-8
SECTION 9061	CARPE	NTRY/METAL SHOP	9061-1
	9061.1	General	9061-1
	9061.2	ACM and Exposure Assessment	9061-1
	9061.3	Recommendations/Conclusions	9061-2
	9061.4	Photographs	9061-12
SECTION 9090	STORE	HOUSE	9090-1
	9090.1	General	9090-1
	9090.2	ACM and Exposure Assessment	9090-1
	9090.3	Recommendations/Conclusion	9090-2
SECTION 9307	STORE	HOUSE	9307-1
,	9307.1	General	9307-1
	9307.2	ACM amd Exposure Assessment	9307-1
	9307.3	Recommendations/Conclusions	9307-2

551 EDUCATION CENTER

EDUCATION CENTER

551.1 GENERAL

Building 551 was surveyed by WESTON technicians on 11 February 1991.

The first three portions of this facility report summarize the results of this inspection.

Polarized Light Microscopy (PLM) with dispersion staining was used to analyze 17 samples of suspect material collected from the building. Of these samples, 12 were found to be asbestos-containing materials (ACM). Table 551.1 lists the analytical results for the bulk samples.

551.2 ACM AND EXPOSURE ASSESSMENT

The location, description, and analytical results for each bulk sample from Building 551 are presented in Table 551.1. An area-by-area inventory of ACM is provided in Tables 551.2 and 551.3. "Other Asbestos-Containing Materials," listed in Table 551.3, are materials that do not correspond to the standard caption categories listed in Table 551.2. A prioritized listing of exposure assessments is presented in Table 551.4. An itemized area-by-area cost estimate for removal and replacement is provided in Table 551.5. The method by which removal/replacement costs are calculated is described in the ISSUES COMMON TO ALL BUILDINGS Section of this report. Building floor plans (see attachment) indicate sample locations and building area names as they are listed in Tables 551.2 and 551.5.

551.3 RECOMMENDATIONS/CONCLUSIONS

WESTON recommends:

• Asbestos-containing floor tile, pipe insulation, fitting insulation, boiler packing, duct insulation, tank insulation, expansion joint, and plaster ceiling should be labeled under the O&M Program.

TABLE 551.1

BULK SAMPLE ANALYSIS RESULTS - BUILDING 551, EDUCATION CENTER

SAMPLE				PERC	_		
NO.	LOCATION	ITEM	DESCRIPTION	CH	AM	OT	LAYERED
FH645	RESOURCE CENTER, BELOW CEILING	CEILING TILE	WHITE,OTH,2X4 CL TL,HORIZONTAL		-	-	NO
FH646	RESOURCE CENTER, BELOW CEILING	CEILING TILE	WHITE, OTH, 1X1 CL TL, HORIZONTAL	-	-	-	NO
FH647	CORRIDOR (ALL), BELOW CEILING	FLOOR TILE	TÁN,OŤH,12X12 FT,HOŘIZONTAL	-	-	-	NO
FH648	STORAGE A, BELOW CEILING	FLOOR TILE	TAN,OTH,9X9 FL TL,HORIZONTAL	2	-	-	NO
FH649	STORAGE B, BELOW CEILING	OTHER MATERIAL	WHITE, OTH, PLAST. CL, HORIZONTAL	-	-	-	YES
FH650	CORRIDOR, BELOW CEILING	<4" PIPE FITTING	WHITE, DOM, <41N. FIT, HORIZONTAL	10	-	-	NO
FH651	CLASSROOM 14, 15, 16, BELOW CEILING	CEILING TILE	WHITE,OTH,2X4 CL TL,HORIZONTAL	-	-	-	NO
FH652	CLASSROOM 14, 15, 16, BELOW CEILING	<4" PIPE FITTING	WHITE, HHW, <41N. FIT, HORIZONTAL	10	-	-	NO
FH653	CLASSROOM 14, 15, 16, BELOW CEILING	<4" PIPE FITTING	WHITE, HHW. <41N. FIT, HORIZONTAL	5	-	-	NO
FH654	MECH. ROOM, BELOW CEILING	4-8" PIPE FITTING	WHITE, HHW, 4-8IN. FIT, HORIZONTAL	5	•	-	NO
FH655	MECH. ROOM, BELOW CEILING	4-8" PIPE FITTING	WHITE, HHW, 4-8IN. FIT, HORIZONTAL	5	-	-	NO
FH656	MECH. ROOM, BELOW CEILING	AIR HANDLING EQUIPMENT	WHITE, OTH, DUCT INSUL, HORIZONTAL	45	-	-	NO
FH657	MECH. ROOM, BELOW CEILING	BOILERS/TANKS	WHITE, OTH, TANK INSUL, HORIZONTAL	5	-	-	NO
FH658	MECH. ROOM, BELOW CEILING	9-14" PIPE RUN	WHITE, OTH, BOILER PCK, HORIZONTAL	5	-	-	NO
FH659	MECH. ROOM, BELOW CEILING	EXPANSION JOINT(S)	WHITE, OTH, EXP. JOINT, HORIZONTAL	65	-	-	YES
FH660	MECH. ROOM, BELOW CEILING	OTHER MATERIAL	WHITE, OTH, BOILER PCK, HORIZONTAL	1	-	-	NO
FH661	ADMIN. HALLWAY BELOW CEILING	OTHER MATERIAL	WHITE, OTH, PLASTER CL, HORIZONTAL	5	-	-	NO

^aAsbestos content presented for layered samples represents the highest concentration layer.

Quadrant Codes	System Codes	Asbestos Types
C = Center	STM = Steam	CH = Chrysotil
N = North	CHW = Chilled Water	AM = Amosite
E = East	HHW = Heating Hot Water	OT = Other
S = South	DOM = Domestic Water	
W = West	OTH = Other	
NE = Northeast	UNK = Unknown	
NW = Northwest		
SE = Southeast		
SW = Southwest		

TABLE 551.2

ASBESTOS-CONTAINING MATERIALS - BUILDING 551, EDUCATION CENTER

	PIPE FITTINGS (EA)					PIPE RU	NS (LF)		SPRAY/TROWELED	FLOOR TILE	BOILERS/	AIR HANDLING	
AREA	<4"	4-8"	9-14"	>14"	<4"	4-8"	9-14"	>14"	CEILINGS (MSF)	(MSF)	TANKS (MSF)	EQUIPMENT (MSF)	OTHE
Admin. Hallway	-	-	-	-	-	-	-	-	-	-	-	•	*
Classroom 10A and B	-	-	-	-	-	-	-	-	•	-	-	-	*
Classroom 11	4	-	-	-	-	-	-	-	-	-	•	-	-
Classroom 12	4	-	-	•	-	-	-	-	-	•	-	-	-
Classroom 14, 15, 16	12	-	-	-	-	-	-	-	•	-	-	-	-
Classroom 17, 18, 19	12	-	-	-	-	-	-	-	-	-	-	-	-
Corridor	6	-	-	-	-	-	-	-	-	-	-	•	-
Corridor Area 1	-	-	-	-	-	-	-	-	•	-	•	0.30	-
Janitor's Closet	-	-	-	-	_	-	-	-	-	-	-	0.10	-
Mech. Room	-	36	-	-	-	-	70	-	-	-	0.08	0.35	*
Storage A	-	-	-	-	· •	-		-	-	0.29	-	•	-
Storage B	<u> </u>	<u> </u>		:		<u>-</u>			-	0.29	-		
TOTALS	. 38	36	_	-	_	-	70	<u> </u>	-	0.58	0.08	0.75	*

^{*}Other Material Present In Various Units Of Measure

EA - Each

LF - Linear Feet

MSF - Thousand Square Feet

Other Asbestos-Containing Material - Building 551, Education Center Type Occupancy: Adults (Public)

Area	Material Type	Quantity (Unit)
Admin. Hallway	Plaster Ceiling	0.600 (MSF)
Mech. Room	Boiler Packing	1 (EA)
Classroom 10 A & B	Plaster Ceiling	14.0 (MSF)

EA - Each

LF - Linear Feet

MSF - Thousand Square Feet

TABLE 551.4 EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 551, EDUCATION CENTER

			PRIOR.	PRIORITY						AVG.	•	
SAMPLE		MATERIAL	INDEX	INDEX	E)			FAC	TORS	EXP.	X	
NO.	AREA.	ТУРЕ	CODE	NUMBER	1	2	3	4	5	HOURS	ASB.	
FH656	Mech. Room	AIR HANDLING EQUIPMENT	В	2.650E02	3	2	2	1	1	2.00	45	
FH659	Mech. Room	EXPANSION JOINTS	В	2.650E02	3	2	2	1	1	2.00	65	
FH650	Corridor	<4" PIPE FITTING	A	5.920E01	2	1	1	1	160	40.00	10	
FH652	Classroom 11	<4" PIPE FITTING	Α	5.920E01	2	1	1	1	160	40.00	10	
FH652	Classroom 12	<4" PIPE FITTING	Á	5.920E01	2	1	1	1	160	40.00	10	
FH652	Classroom 14, 15, 16	<4" PIPE FITTING	·A	5.920E01	2	1	1	1	160	40.00	10	
FH652	Classroom 17, 18, 19	<4" PIPE FITTING	A	5.920E01	2	1	1	1	160	40.00	10	
FH654	Mech. Room	4-8" PIPE FITTING	A	1.650E01	3	2	2	1	1	2.00	5	
FH655	Mech. Room	4-8" PIPE FITTING	A	1.650E01	3	2	2	1	1	2.00	5	
FH657	Mech. Room	BOILERS/TANKS	A	1.650E01	3	2	2	1	1	2.00	5	
FH657	Mech. Room	BOILERS/TANKS	À	1.650E01	3	Ž	2	1	1	2.00	5	
FH658	Mech. Room	9-14" PIPE RUN	Ā	1.650E01	3	2	2	1	1	2.00	5	
FH660	Mech. Room	GASKET	Ä	1.650E01	3	Ž	2	1	Ì	2.00	Ī	
FH653	Classroom 14, 15, 16	<4" PIPE FITTING	Ā	1.040E01	2	1	1	1	160	40.00	5	
FH656	Corridor Area 1	AIR HANDLING EQUIPMENT	Ä	1.000E01	2	1	1	1	10	40.00	45	
FH661	Admin. Hallway	PLASTER CEILINGS & WALLS	À	1.950E00	2	1	1	1	30	40.00	5	
FH661	Classroom 10A and B	PLASTER CEILINGS & WALLS	Â	1.950E00	2	1	1	1	30	40.00	5	
FH656	Janitor's Closet	AIR HANDLING EQUIPMENT	Ā	5.000E-2	2	1	1	1	1	2.00	45	
FH645	Administration Area	CEILING TILE	Ä	0	2	1	1	1	20	40.00	Ö	
FH645	Classroom 10A and B	CEILING TILE	Ā	Ö	2	1	1	1	30	40.00	Ö	
FH645	Classroom 11	CEILING TILE	Ä	Ŏ	Ž	1	1	1	160	40.00	Ŏ	
FH645	Classroom 12	CEILING TILE	Ā	Õ	2	1	1	1	160	40.00	Ŏ -	
FH645	Classroom 19	CEILING TILE	Ä	Ŏ	1	ż	1	2	15	40.00	Ŏ	
FH645	Corridor (All)	CEILING TILE	Ä	Ŏ	ż	1	1	1	20	40.00	Ō	
FH645	Resource Center	CEILING TILE	Ä	ŏ	3	1	1	1	10	40.00	Ŏ	
FH645	Storage A	CEILING TILE	Ä	Ď	1	1	1	1	1	2.00	Ŏ	
FH646	Corridor (Vending)	CEILING TILE	Ā	Ŏ	ż	1	1	1	20	40.00	Ŏ	
FH646	New Office 116	CEILING TILE	Ä	Ŏ	3	1	1	1	10	40.00	Ŏ	
FH646	Resource Center	CEILING TILE	Ä	Ŏ	3	1.	· 1	1	10	40.00	Ō	
FH646	Storage B	CEILING TILE	Δ	Ŏ	. 1	1	1	1	1	2.00	Ŏ	

Priority Index Codes

Priority Index Numbers Are In Scientific Notation

A [=] Long Term Corrective Measure

B [=] Review Management Special Considerations/Remarks

C [=] Army Asbestos Deficiency Abatement Project

Exposure Factors
1 [=] Material Friability

^{2 [=]} Occupant Accessability 3 [=] Material Condition

^{4 [=]} Level Of Activity

^{5 [=]} Number Of Assigned Occupants

TABLE 551.4 (continued)

EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 551, EDUCATION CENTER

			PRIOR.	PRIORITY				AVG.		
SAMPLE		MATERIAL	INDEX	INDEX	EXPOSU	RE FA	CTORS	EXP.	X	
NO.	AREA	TYPE	CODE	NUMBER	1 2	3 4	5	HOURS	ASB.	
FH649	Entire Area 1 (Old)	PLASTER CEILINGS & WALLS	A	0	2 1	1 1	10	40.00	0	
FH649	Storage B	PLASTER CEILINGS & WALLS	A	Ō	1 1	1 1	1	2.00	Ō	
FH651	Classroom 14, 15, 16		A	Ö	2 1	1 1	160	40.00	Ó	
FH651	Classroom 17, 18, 19	CEILING TILE	A	0	2 1	1 1	160	40.00	0	

Priority Index Codes
A [=] Long Term Corrective Measure

B [=] Review Management Special Considerations/Remarks

C [=] Army Asbestos Deficiency Abatement Project

Priority Index Numbers Are In Scientific Notation

- Exposure Factors
 1 [=] Material Friability
- 2 [=] Occupant Accessability 3 [=] Material Condition

- 4 [=] Level Of Activity 5 [=] Number Of Assigned Occupants

TABLE 551.5

COST ESTIMATE* - BUILDING 551, EDUCATION CENTER

DESCRIPTION	UNIT COST (\$)	AREA	AREA	AREA	AREA 4	AREA	AREA	AREA	AREA 8	AREA	AREA 10	AREA
Pipe Fittings (EA) 4-8" 9-14" >14"	70.30 85.80 1216.00	:	:	0.3 :	0.3 :	0.8 -	0.8	0.4 -	:	:	3. 1	:
Pipe Runs (LF) 4-8" 9-14" >14"	26-50 30-50 60-80	:	: /	:	:	. :	:	:	:	:	3.0	:
Sprayed/Troweled Ceilings (SF)	9.60	-	-	-	-	-	-	-	-		-	•
Floor Tile (SF)	5.60	•	-	-	•	•	-	-	-	-	-	1.6
Boilers/Tanks (SF)	37.90	•	-	-	-	-	-	-	•	-	3.0	-
Air Handling Equipment (SF)	20.00	-	•	-	-	-	-	-	6.0	1.9	7.0	
Other		4.2	9.8	-	•	-	•	-	•	•	0.7	-
SUBTOTAL	•	4.2	9.8	0.3	0.3	8.0	0.8	0.4	6.0	1.9	16.8	1.0
Difficulty Allowance		8.4	19.6	0.6	0.6	0.8	0.8	0.2	21.0	1.0	6.1	-
SUBTOTAL		12.6	29.4	0.8	0.8	1.7	1.7	0.6	27.0	2.9	22.9	1.6
Decontamination Units Mobilization		8:3	8:3	8:3	8:3	8:2	8:3	8:2	8:2	8:8	8:2	8:
SUBTOTAL		13.6	30.4	1.9	1.9	2.7	2.7	1.7	28.0	3.9	23.9	2.
Contingency @ 15.00%		2.0	4.6	0.3	Ô.3	0.4	0.4	0.3	4.2	0.6	3.6	0.4
SUBTOTAL		15.7	35.0	2.2	2.2	3.1	3.1	1.9	32.2	4.5	27.5	3.
Design Fee @ 10.00%		1.6	3.5	0.2	Ó.2	0.3	0.3	0.2	3.2	0.5	2.7	0.3
SUBTOTAL		17.3	38.5	2.4	2.4	3.5	3.5	2.1	35.5	5.0	30.2	3.4
Air Monitoring a 10.00%	**************************************	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
TOTAL		18.5	39.7	3.6	3.6	4.7	4.7	3.3	36.7	6.2	31.5	4.6

^{*}Amounts Are In Thousands Of Dollars

^{**}Less Than \$100 For The Area; Amount Not Printed But Included In Total(s)

^{****}The Minimum Air Monitoring Fee is \$500.00 Per Building

AREA 1: Admin. Hallway
AREA 3: Classroom 11, 15, 16
AREA 5: Classroom 14, 15, 16
AREA 6: Corridor
AREA 11: Storage A

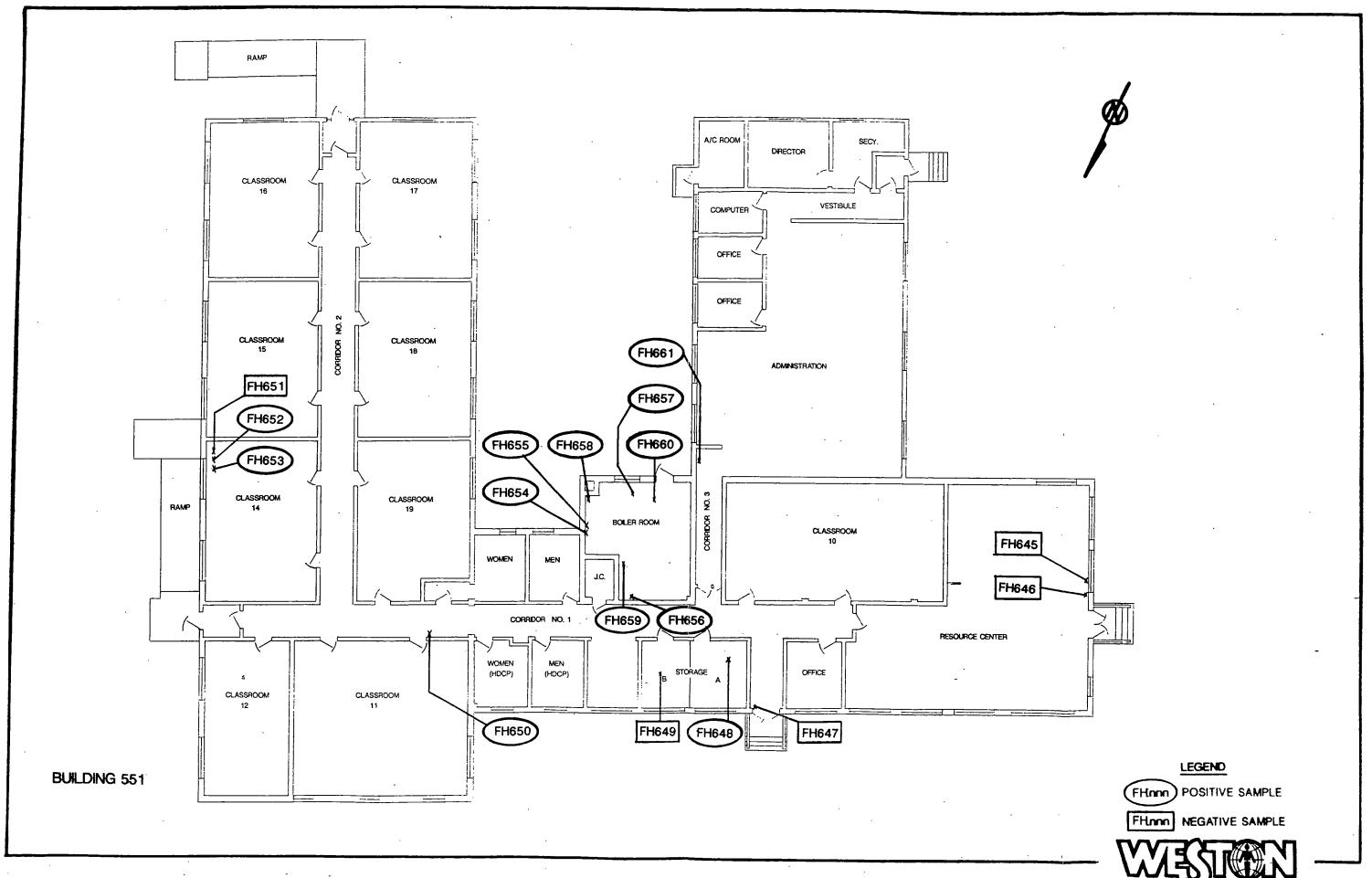
TABLE 551.5 (continued) COST ESTIMATE* - BUILDING 551, EDUCATION CENTER

DESCRIPTION	UNIT COST (\$)	AREA	TOTAL
Pipe Fittings (EA) 4-8" 9-14" >14"	70.30 85.80 147.00 216.00	: :	3:7
Pipe Runs (LF)	26.50 30.50 60.80	- - -	- 3.0
Sprayed/Troweled Ceilings (SF)	9.60	-	-
Floor Tile (SF)	5.60	1.6	3.2
Boilers/Tanks (SF)	37.90	•	3.0
Air Handling Equipment (SF)	20.00	-	14.9
Other		-	14.7
SUBTOTAL		1.6	44.6
Difficulty Allowance		-	59.0
SUBTOTAL		1.6	103.7
Decontamination Units Mobilization		8:8	10.5 2.0
SUBTOTAL		2.7	116.2
Contingency a 15.00%		0.4	17.4
SUBTOTAL		3.1	133.6
Design Fee a 10.00%		0.3	13.4
SUBTOTAL		3.4	146.9
Air Monitoring a 10.00%	· .	<u> </u>	14.7
TOTAL		4.6	161.6

^{*}Amounts Are In Thousands Of Dollars

AREA 12: Storage B

^{***}Less Than \$100 For The Area; Amount Not Printed But Included In Total(s)
****The Minimum Air Monitoring Fee is \$500.00 Per Building



2035 FAMILY HOUSING

FAMILY HOUSING

2035.1 GENERAL

Building 2035 was surveyed by WESTON technicians on 28 January 1991.

The first three portions of this facility report summarize the results of this inspection.

Polarized Light Microscopy (PLM) with dispersion staining was used to analyze 6 samples of suspect material collected from the building. Of these samples, 3 were found to be asbestos-containing materials (ACM). Table 2035.3 lists the analytical results for the bulk samples.

2035.2 ACM AND EXPOSURE ASSESSMENT

The location, description, and analytical results for each bulk sample from Building 2035 are presented in Table 2035.1. An area-by-area inventory of ACM is provided in Tables 2035.2 and 2035.3. "Other Asbestos-Containing Materials," listed in Table 2035.3, are materials that do not correspond to the standard caption categories listed in Table 2035.2. A prioritized listing of exposure assessments is presented in Table 2035.4. An itemized area-by-area cost estimate for removal and replacement is provided in Table 2035.5. The method by which removal/replacement costs are calculated is described in the ISSUES COMMON TO ALL BUILDINGS Section of this report. Building floor plans (see attachment) indicate sample locations and building area names as they are listed in Tables 2035.2 and 2035.5.

2035.3 RECOMMENDATIONS/CONCLUSIONS

WESTON recommends:

• The basement and basement crawlspace in Building 2035 qualify for the Army Asbestos Deficiency Abatement Project.

TABLE 2035.1

BULK SAMPLE ANALYSIS RESULTS - BUILDING 2035, FAMILY HOUSING

SAMPLE		PERCE	_				
NO.	LOCATION ITEM DESCRIPTION		LOCATION ITEM DESCRIPTION CH		AM	OT LAYERED	
FH666	BASEMENT, BELOW CEILING	<4" PIPE RUN	WHITE,STM,<41N. RUN,HORIZONTAL	15	-	-	YES
FH667	BASEMENT, BELOW CEILING	4-8" PIPE RUN	WHITE, STM, 4-8IN. RUN, HORIZONTAL	30	-	-	NO
FH668	KITCHEN & STORAGE, BELOW CEILING	FLOOR TILE	TAN,OTH,1X1 FL TL,HORIZONTAL	-	-	-	YES
FH669	ATTIC INSULATION, BELOW CEILING	OTHER MATERIAL	BROWN,OTH,ATTIC INSU,HORIZONTAL	-	-	-	NO
FH670	BASEMENT CRAWL SPACE, BELOW CEILING	4-8" PIPE RUN	WHITE, STM, 4-8IN. RUN, HORIZONTAL	50	-	-	NO
FH671	KITCHEN STORAGE, BELOW CEILING	FLOOR TILE	TAN,OTH,1X1 FL TL,HORIZONTAL	-	-	-	NO

 $^{^{\}mathbf{a}}$ Asbestos content presented for layered samples represents the highest concentration layer.

Quadrant Codes	System Codes	Asbestos Types
C = Center	STM = Steam	CH = Chrysotile
N = North	CHW = Chilled Water	AM = Amosite
E = East	HHW = Heating Hot Water	OT = Other
S = South	DOM = Domestic Water	
W = West	OTH = Other	
NE = Northeast	UNK = Unknown	
NW = Northwest		
SE = Southeast		
SW = Southwest	•	

1

	PI	PE FITT	INGS (EA)			PIPE RUNS (LF)			SPRAY/TROWELED	FLOOR TILE	BOILERS/	AIR HANDLING	
AREA	<4 ¹¹	4-8"	9-14"	>14"	<411	4-8"	9-14"	>14"	CEILINGS (MSF)	(MSF)	TANKS (MSF)	EQUIPMENT (MSF)	OTHE
asement	_	-	-		1000	1000	-	-	-	-	•	-	
asement Crawl Space						1	-					<u> </u>	<u></u>
OTALS	-	-	_	-	1000	1001		-		-	-	-	_

Other Material Present In Various Units Of Measure

EA - Each

LF - Linear Feet MSF - Thousand Square Feet

Table 2035.3

Other Asbestos-Containing Material - Building 2035, Family Housing Type Occupancy: Adults (Public)

Area	Material Type	Quantity (Unit)
No Other A	Asbestos-Containing Material Found in th	is Building

EA - Each

LF - Linear Feet

MSF - Thousand Square Feet

TABLE 2035.4 EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 2035, FAMILY HOUSING

SAMPLE		MATERIAL	PRIOR. INDEX	PRIORITY INDEX	EX	POS	URE	FAC	TORS	AVG. Exp.	x
NO.	AREA	TYPE	CODE	NUMBER		2	3	4	5	HOURS	ASB.
FH670	Basement Crawl Space	4-8" PIPE RUN	С	3.750E03	3	3	2	1.	2	5.00	50
FH666	Basement	<4" PIPE RUN	C	1.325E03	3	3	2	1	2	5.00	15
FH667	Basement	4-8" PIPE RUN	C	1.325E03	3	3	2	1	2	5.00	30

Priority Index Codes

A [=] Long Term Corrective Measure

B [=] Review Management Special Considerations/Remarks

C [=] Army Asbestos Deficiency Abatement Project

Priority Index Numbers Are In Scientific Notation

Exposure Factors

1 [=] Material Friability
2 [=] Occupant Accessability
3 [=] Material Condition
4 [=] Level Of Activity
5 [=] Number Of Assigned Occupants

TÂBLE 2035.5

COST ESTIMATE* - BUILDING 2035, FAMILY HOUSING

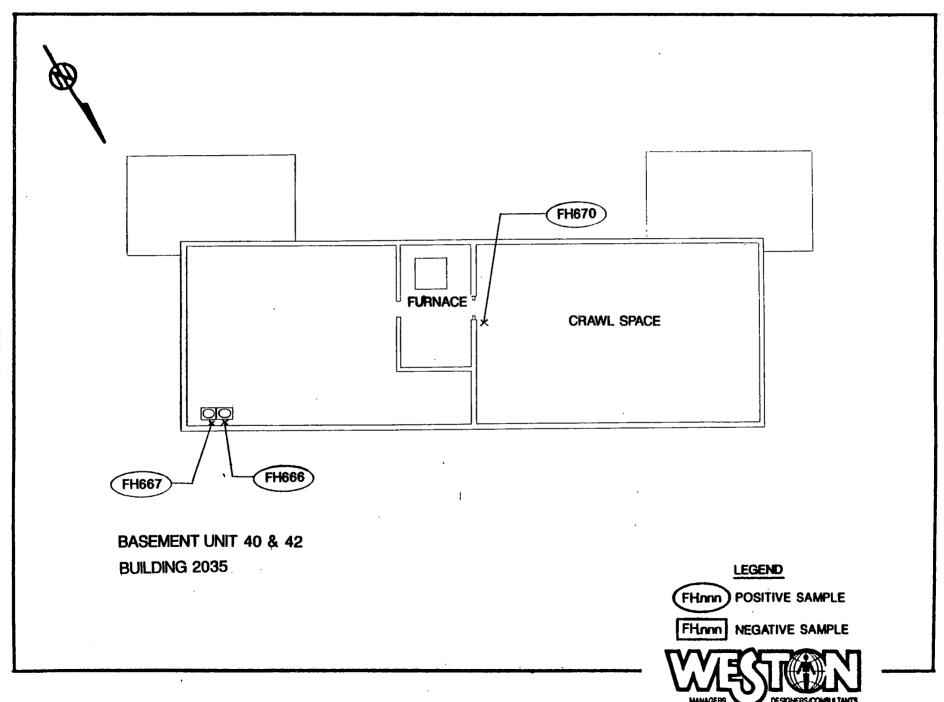
DESCRIPTION	UNIT COST (\$)	AREA	AREA	TOTAL
Pipe Fittings (EA) 4-8" 9-14" >14"	70-30 85-80 147-80 216-80	:	:	- -
Pipe Runs (LF)	26-50 30-50 42-50 60-80	36:5 -	**	36.5 30.5
Sprayed/Troweled Ceilings (SF)	9.60	-	_	-
Floor Tile (SF)	5.60	-	-	-
Boilers/Tanks (SF)	37.9 0	-	-	-
Air Handling Equipment (SF)	20.00	-	-	-
Other		-	-	-
SUBTOTAL		57.0	**	57.0
Difficulty Allowance		•	-	•
SUBTOTAL		57.0	**	57.0
Decontamination Units Mobilization		1:5	1:8	3 :8
SUBTOTAL		59.5	2.5	62.0
Contingency a 15.00%		8.9	0.4	9.3
SUBTOTAL		68.4	2.9	71.3
Design Fee a 10.00%		6.8	0.3	7.1
SUBTOTAL	t-1-1-	75.3	3.2	78.5
Air Monitoring a 10.00%	лля ,	<u>3.9</u>	3.9	7.8
TOTAL		79.2	7.1	86.3

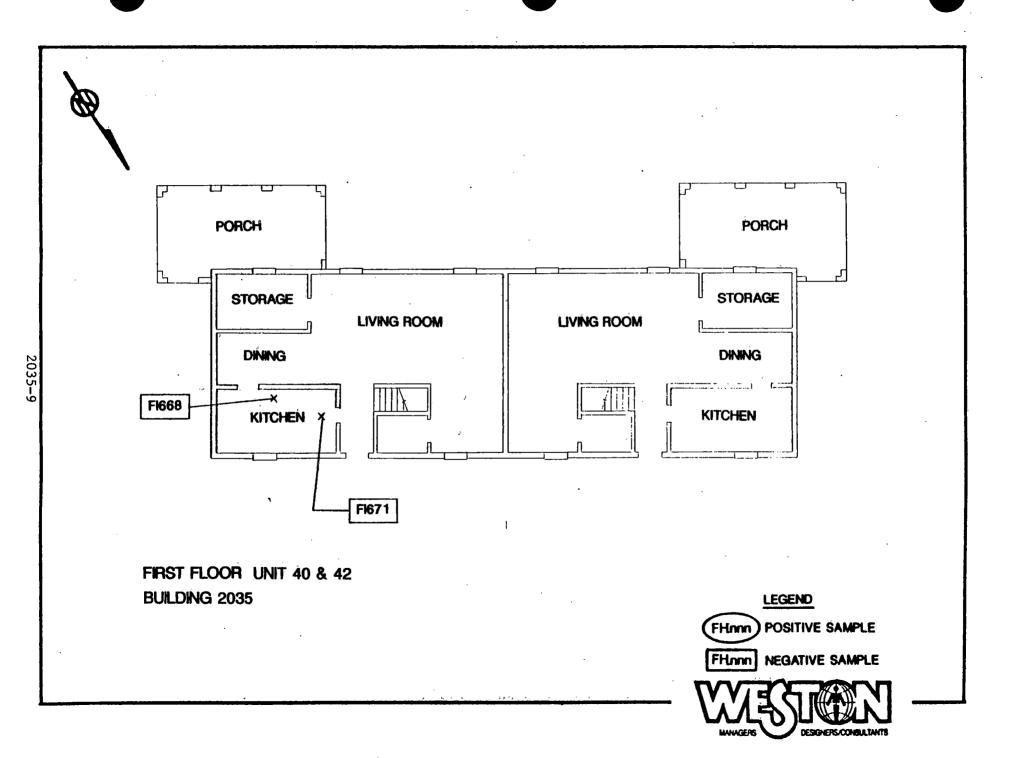
^{*}Amounts Are In Thousands Of Dollars

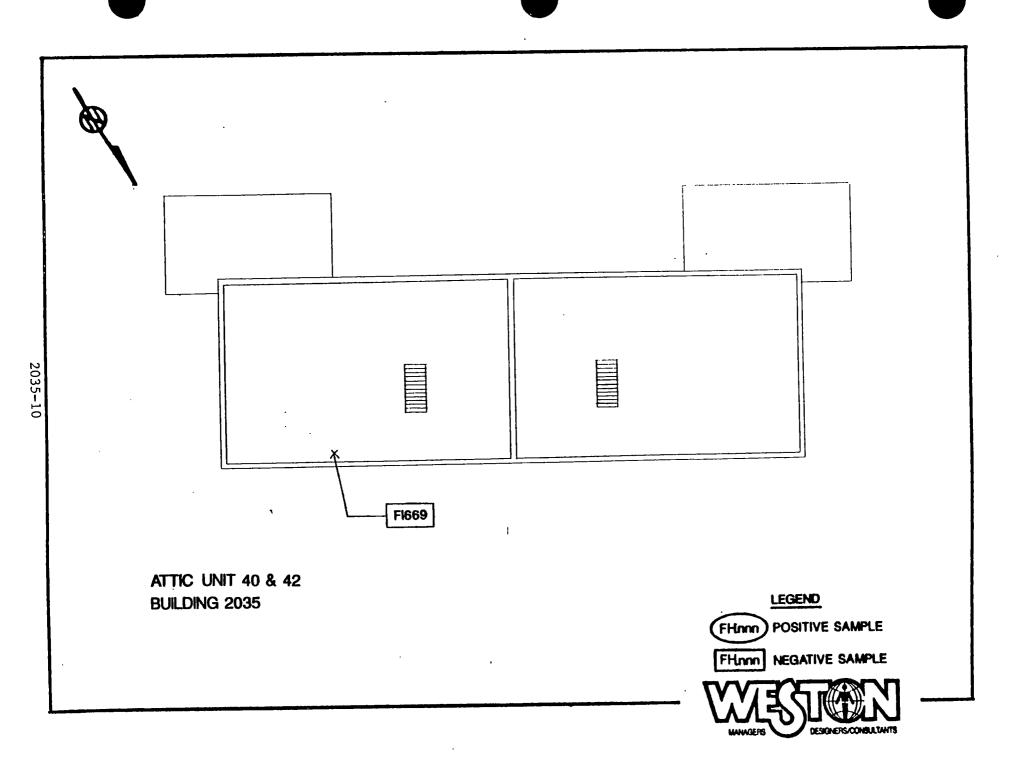
AREA 1: Basement

^{**}Less Than \$100 For The Area; Amount Not Printed But Included In Total(s)

^{***}The Minimum Air Monitoring Fee is \$500.00 Per Building







2067

PRO SHOP/GOLF CLUB

PRO SHOP/GOLF CLUB

2067.1 GENERAL

Building 2067 was surveyed by WESTON technicians on 9 January 1991.

The first three portions of this facility report summarize the results of this inspection.

Polarized Light Microscopy (PLM) with dispersion staining was used to analyze 2 samples of suspect material collected from the building. Of these samples, 1 was found to be asbestos-containing materials (ACM). Table 2067.1 lists the analytical results for the bulk samples.

2067.2 ACM AND EXPOSURE ASSESSMENT

The location, description, and analytical results for each bulk sample from Building 2067 are presented in Table 2067.1. An area-by-area inventory of ACM is provided in Tables 2067.2 and 2067.3. "Other Asbestos-Containing Materials," listed in Table 2067.3, are materials that do not correspond to the standard caption categories listed in Table 2067.2. A prioritized listing of exposure assessments is presented in Table 2067.4. An itemized area-by-area cost estimate for removal and replacement is provided in Table 2067.5. The method by which removal/replacement costs are calculated is described in the ISSUES COMMON TO ALL BUILDINGS Section of this report. Building floor plans (see attachment) indicate sample locations and building area names as they are listed in Tables 2067.2 and 2067.5.

2067.3 RECOMMENDATIONS/CONCLUSIONS

WESTON recommends:

• The cart storage in Building 2067 qualifies for the Army Asbestos Deficiency Abatement Project.

TABLE 2067.1

BULK SAMPLE ANALYSIS RESULTS - BUILDING 2067, PRO SHOP/GOLF CLUB

SAMPLE			PERCENT ASBESTOS						
NO.	LOCATION	ITEM	DESCRIPTION	CH	MA	OT	LAYERED		
FH512	EXIT. CART STORAGE, BELOW CEILING	BOILERS/TANKS	GRAY, OTH, FURN. INSUL, HORIZONTAL	35	-	-	NO		
FH513	PRO SHOP, BELOW CEILING	CEILING TILE	TAN,OTH,1X1 CL TL,HORIZONTAL	-	-	-	NO		

 $^{^{\}mathbf{a}}$ Asbestos content presented for layered samples represents the highest concentration layer.

SW = Southwest

Quadrant Codes	System Codes	Asbestos Types
C = Center	STM = Steam	CH = Chrysotile
N = North	CHW = Chilled Water	AM = Amosite
E = East	HHW = Heating Hot Water	OT = Other
S = South	DOM = Domestic Water	
W = West	OTH = Other	
NE = Northeast	UNK = Unknown	
NW = Northwest		
SE = Southeast		

ł

	P	PE FITT	INGS (EA)			PIPE RU	NS (LF)		SPRAY/TROWELED	FLOOR TILE	BOILERS/	AIR HANDLING	
AREA	<4"	4-8"	9-14"	>14"	<4"	4-8"	9-14"	>14 ^{II}	CEILINGS (MSF)	(MSF)	TANKS (MSF)	EQUIPMENT (MSF)	OTHER
Exit. Cart Storage									<u> </u>		0.01	<u>. </u>	
TOTALS	-	-		-		_	-	-	-	-	0.01	-	_

Other Material Present In Various Units Of Measure

EA - Each LF - Linear Feet MSF - Thousand Square Feet

Table 2067.3

Other Asbestos-Containing Material - Building 2067, Pro Shop/Golf Club Type Occupancy: Adults (Public)

Area	Material Type	Quantity (Unit)
No Other	Asbestos-Containing Material Found in th	is Building

EA - Each

LF - Linear Feet

MSF - Thousand Square Feet

EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 2067, PRO SHOP/GOLF CLUB

:	SAMPLE		MATERIAL	PRIOR. INDEX	PRIORITY INDEX	EX	POS	URE	FAC	TORS	AVG.	×	
	NO.	AREA	TYPE	CODE	NUMBER	1	2	3	4	5	HOURS	ASB.	
1	FH512	Exit. Cart Storage	BOILERS/TANKS	С	1.650E03	3	2	2	2	3	2.00	35	
	FH513	Pro Shop	CEILING TILE	A	0	1	2	1	2	3	40.00	0	

Priority Index Codes
A [=] Long Term Corrective Measure

B [=] Review Management Special Considerations/Remarks
C [=] Army Asbestos Deficiency Abatement Project

Priority Index Numbers Are In Scientific Notation

Exposure Factors

1 [=] Material Friability
2 [=] Occupant Accessability
3 [=] Material Condition
4 [=] Level Of Activity
5 [=] Number Of Assigned Occupants

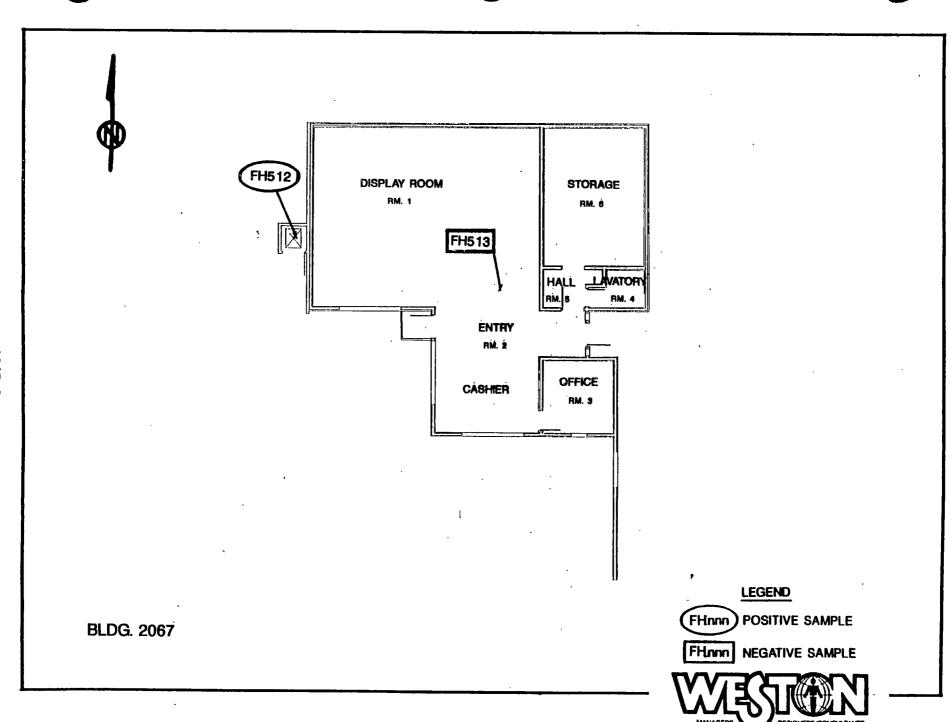
TABLE 2067.5 COST ESTIMATE* - BUILDING 2067, PRO SHOP/GOLF CLUB

nroon in the	UNIT COST (\$)	AREĄ					
DESCRIPTION	COSI (\$)		TOTAL		 	 	
Pipe Fittings (EA)	70.30	• •	-				
4-8" 9-14" >14"	70.30 85.80 147.00 216.00	-	:				
Pipe Runs (LF)							
4-8"	36:5 8	Ξ.	<u>-</u>				
4-8" 9-14" >14"	26.50 30.50 22.50 60.80	-	-				
Sprayed/Troweled Ceilings (SF)	9.60						
Floor Tile (SF)	5.60	<u>.</u>	-				
Boilers/Tanks (SF)	37.90	0.5	0.5				
	37.90	0.5	0.5				
Air Handling Equipment (SF)	20.00	- .	-				
Other		-	-				
SUBTOTAL		0.5	0.5			•	
Difficulty Allowance		•	-				
SUBTOTAL		0.5	0.5				
Decontamination Units Mobilization		0:5 2:6	2:5				
SUBTOTAL		3.0	3.0				•
Contingency a 15.00%		0.4	0.4	f ,			
SUBTOTAL		3.4	3.4				
Design Fee @ 10.00%		0.3	0.3				
SUBTOTAL		3.7	3.7				
Air Monitoring a 10.00%*	Ŕŵ	0.5	0.5				
TOTAL		4.2	4.2				

^{*}Amounts Are In Thousands Of Dollars

AREA 1: Exit. Cart Storage

^{***}Less Than \$100 For The Area; Amount Not Printed But Included In Total(s)
****The Minimum Air Monitoring Fee is \$500.00 Per Building



2100 FAMILY HOUSING

FAMILY HOUSING

2100.1 GENERAL

Building 2100 was surveyed by WESTON technicians on 30 January 1991.

The first three portions of this facility report summarize the results of this inspection.

Polarized Light Microscopy (PLM) with dispersion staining was used to analyze 3 samples of suspect material collected from the building. Of these samples, 1 was found to be asbestos-containing materials (ACM). Table 2100.1 lists the analytical results for the bulk samples.

2100.2 ACM AND EXPOSURE ASSESSMENT

The location, description, and analytical results for each bulk sample from Building 2100 are presented in Table 2100.1. An area-by-area inventory of ACM is provided in Tables 2100.2 and 2100.3. "Other Asbestos-Containing Materials," listed in Table 2100.3, are materials that do not correspond to the standard caption categories listed in Table 2100.2. A prioritized listing of exposure assessments is presented in Table 2100.4. An itemized area-by-area cost estimate for removal and replacement is provided in Table 2100.5. The method by which removal/replacement costs are calculated is described in the ISSUES COMMON TO ALL BUILDINGS Section of this report. Building floor plans (see attachment) indicate sample locations and building area names as they are listed in Tables 2100.2 and 2100.5.

2100.3 RECOMMENDATIONS/CONCLUSIONS

WESTON recommends:

• Asbestos-containing floor tile in Building 2100 should be labeled under the O&M Program.

TABLE 2100.1

BULK SAMPLE ANALYSIS RESULTS - BUILDING 2100, FAMILY HSG#1MARSHALL

SAMPLE				PERC	ENT ASBE	ESTOS	
NO.	LOCATION	ITEM	DESCRIPTION	CH	AM	ОТ	LAYERED
FH672	DINING ROOM, BELOW CEILING	FLOOR TILE	GRAY,OTH,1X1 FL TL,HORIZONTAL		-	•	NO
FH673	KITCHEN, BELOW CEILING	FLOOR TILE	TAN,OTH, 1X1 FL TL,HORIZONTAL	10	-	-	YES
FH674	BEDROOMS 3, BELOW CEILING	FLOOR TILE	GRAY,OTH,1X1 FL TL,HORIZONTAL	10	-	-	YES

 $^{^{\}mathbf{a}}$ Asbestos content presented for layered samples represents the highest concentration layer.

Quadrant Codes	System Codes	Asbestos Types
C = Center	STM = Steam	CH = Chrysotile
N = North	CHW = Chilled Water	AM = Amosite
E = East	HHW = Heating Hot Water	OT = Other
S = South	DOM = Domestic Water	
W = West	OTH = Other	
NE = Northeast	UNK = Unknown	
NW = Northwest		
SE = Southeast		
SW = Southwest		

	Pi	PE FITT	INGS (EA)			PIPE RU	NS (LF)		SPRAY/TROWELED	FLOOR TILE	BOILERS/	AIR HANDLING	
AREA	<4 ¹¹	4-8"	9-14"	>14"	<4"	4-8"	9-14"	>14"	CEILINGS (MSF)	(MSF)	TANKS (MSF)	EQUIPMENT (MSF)	OTHE
Bedrooms 3	-	-		-	-	-	-	-	-	0.50		-	_
Citchen	-	-	-	-	-	-	<u> -</u>	-	-	0.24	-	•	-
Kitchen & Dining Rm.										0.12			<u>.</u>
TOTALS	-	•	_	-	-	-	-	-	-	0.86	•	-	

Other Material Present In Various Units Of Measure

EA - Each

LF - Linear Feet MSF - Thousand Square Feet

Table 2100.3

Other Asbestos-Containing Material - Building 2100, Family Housing Type Occupancy: Adults (Public)

Area	Material Type	Quantity (Unit)
No Other	Asbestos-Containing Material Found in th	nis Building

EA - Each

LF - Linear Feet

MSF - Thousand Square Feet

TABLE 2100.4

EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 2100, FAMILY HOUSING

											
				PRIOR.	PRIORITY				AVG.		
SAMPLE			MATERIAL	INDEX	INDEX	EXPOSURE	E FACTO	DRS	EXP.	X	
NO.	AREA		TYPE	CODE	NUMBER	1 2 3	4	5	HOURS	ASB.	

Only Non-Friable Material Was Detected In This Building Exposure Assessments Are Not Available

Priority Index Codes

A [=] Long Term Corrective Measure

B [=] Review Management Special Considerations/Remarks

C [=] Army Asbestos Deficiency Abatement Project

Priority Index Numbers Are In Scientific Notation

Exposure Factors

1 [=] Material Friability

2 [=] Occupant Accessability 3 [=] Material Condition

4 [=] Level Of Activity

5 [=] Number Of Assigned Occupants

TABLE 2100.5 COST ESTIMATE* - BUILDING 2100, FAMILY HOUSING

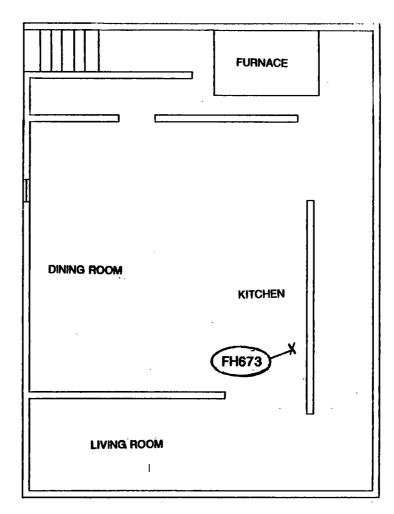
DESCRIPTION	UNIT COST (\$)	AREĄ	AREA 2	AREA 3	TOTAL
Pipe Fittings (EA)		-		-	-
4-8" 9-14" >14"	70.30 85.80 147.00 216.00	:	=	Ξ	Ξ
Pipe Runs (LF)	26.50	-	-	-	.
4-8" 9-14" >14"	26.50 30.50 60.80	<u>.</u>	:	Ξ.	:
Sprayed/Troweled Ceilings (SF)	9.60	-	-	-	-
Floor Tile (SF)	5.60	2.8	1.3	0.7	4.8
Boilers/Tanks (SF)	37.90	-	-	-	-
Air Handling Equipment (SF)	20.00	-	-	-	-
Other		-	-	-	-
SUBTOTAL		2.8	1.3	0.7	4.8
Difficulty Allowance		-	-	-	-
SUBTOTAL		2.8	1.3	0.7	4.8
Decontamination Units Mobilization		∂: 9	∂: 9	∂: 9	3 :8
SUBTOTAL		4.5	3.0	2.3	9.8
Contingency a 15.00%		0.7	0.5	0.4	1.5
SUBTOTAL		5.1	3.5	2.7	11.3
Design Fee @ 10.00%		0.5	0.3	0.3	1.1
SUBTOTAL		5.7	3.8	3.0	12.4
Air Monitoring a 10.00%	***	0.4	0.4	0.4	1.2
TOTAL		6.1	4.2	3.4	13.7

^{*}Amounts Are In Thousands Of Dollars

1: Bedroom 3: Kitchen & Dining Rm.

^{***}Less Than \$100 For The Area; Amount Not Printed But Included In Total(s)
****The Minimum Air Monitoring Fee is \$500.00 Per Building

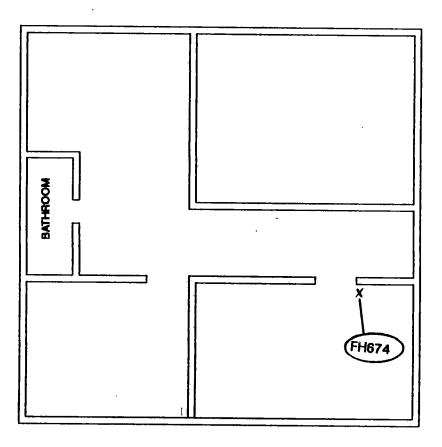




BLDG 2100 UNIT 1 FIRST FLOOR PLÁN







BLDG. 2100 UNIT 1 SECOND FLOOR PLAN





FHnnn POSITIVE SAMPLE



FHINN NEGATIVE SAMPLE



2232 FAMILY HOUSING

FAMILY HOUSING

2232.1 GENERAL

Building 2232 was surveyed by WESTON technicians on 25 January 1991.

The first three portions of this facility report summarize the results of this inspection.

Polarized Light Microscopy (PLM) with dispersion staining was used to analyze 5 samples of suspect material collected from the building. Of these samples, 3 were found to be asbestos-containing materials (ACM). Table 2232.1 lists the analytical results for the bulk samples.

2232.2 ACM AND EXPOSURE ASSESSMENT

The location, description, and analytical results for each bulk sample from Building 2232 are presented in Table 2232.1. An area-by-area inventory of ACM is provided in Tables 2232.2 and 2232.3. "Other Asbestos-Containing Materials," listed in Table 2232.3, are materials that do not correspond to the standard caption categories listed in Table 2232.2. A prioritized listing of exposure assessments is presented in Table 2232.4. An itemized area-by-area cost estimate for removal and replacement is provided in Table 2232.5. The method by which removal/replacement costs are calculated is described in the ISSUES COMMON TO ALL BUILDINGS Section of this report. Building floor plans (see attachment) indicate sample locations and building area names as they are listed in Tables 2232.2 and 2232.5.

2232.3 RECOMMENDATIONS/CONCLUSIONS

WESTON recommends:

• The basement crawlspace, mechanical room, and storage room in Building 2232 qualify for the Army Asbestos Deficiency Abatement Project.

TABLE 2232.1

BULK SAMPLE ANALYSIS RESULTS - BUILDING 2232, FAMILY HOUSING

SAMPLE				PERC	ENT ASB	estos	_
NO.	LOCATION	ITEM	DESCRIPTION	CH	AM	OT	LAYERED
FH639	BASEMENT MECH. ROOM, BELOW CEILING	4-8" PIPE RUN	WHITE,STM,4-8IN. RUN,HORIZONTAL	65	•		NO
FH640	BASEMENT STORAGE, BELOW CEILING	4-8" PIPE RUN	WHITE, STM, 4-8IN. RUN, HORIZONTAL	60	-	-	NO
FH641	BASEMENT STORAGE, BELOW CEILING	<4" PIPE RUN	WHITE,STM,<41N. RUN,HORIZONTAL	25	-	-	YES
FH642	KITCHEN, BELOW CEILING	FLOOR TILE	GRAY, OTH, 1X1 FL TL, HORIZONTAL	-	•	· -	NO
FH643	UTILITY ROOM, BELOW CEILING	FLOOR TILE	GRAY, OTH, 1X1 FL TL, HORIZONTAL	-	-	-	NO

 $^{^{\}mathbf{a}}$ Asbestos content presented for layered samples represents the highest concentration layer.

Qua	adı	rant Codes		9	System Codes	Asl	e:	stos Types
C	=	Center	STM	=	Steam	CH	=	Chrysotile
N	=	North	CHW	=	Chilled Water	MA	=	Amosite
Е	=	East	HHW	=	Heating Hot Water	OT	=	Other
S	=	South	DOM	=	Domestic Water			
W	=	West	OTH	=	Other			
NE	=	Northéast	UNK	=	Unknown			
NW	=	Northwest						
SE	=	Southeast						
SW	=	Southwest						

TABLE 2232.2 ASBESTOS-CONTAINING MATERIALS - BUILDING 2232, FAMILY HOUSING

	PI	PE FITT	INGS (EA)			PIPE RU	NS (LF)		SPRAY/TROWELED	FLOOR TILE	BOILERS/	AIR HANDLING	
AREA	<4"	4-8"	9-14"	>14"	<4"	4-8"	9-14"	>14"	CEILINGS (MSF)	(MSF)	TANKS (MSF)	EQUIPMENT (MSF)	OT
asement	-	-	-	-	80	-	-	-	-	-	-	-	
sement Crawl Space	-	-	-	-	-	400	•-	-	-	-	_	•	
asement Mech. Room	-	· •	-	-	-	400	-	-	-	-	•	-	
asement Storage			:	_	80	1		-	-				_
TALS	_	-	-	-	160	801	-	-	-	-	-	•	

Other Material Present In Various Units Of Measure

EA - Each LF - Linear Feet MSF - Thousand Square Feet

Table 2232.3

Other Asbestos-Containing Material - Building 2232, Family Housing Type Occupancy: Adults (Public)

Area	Material Type	Quantity (Unit)
No Other A	Asbestos-Containing Material Found in th	nis Building

EA - Each

LF - Linear Feet

MSF - Thousand Square Feet

TABLE 2232.4 EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 2232, FAMILY HOUSING

SAMPLE		MATERIAL	PRIOR. INDEX	PRIORITY INDEX	EXF	osu	IRE	FAC	TORS	AVG. Exp.	×	
NO.	AREA	TYPE	CODE	NUMBER	1	2_	3	4_	5	HOURS	ASB.	•
FH639	Basement Crawl Space	4-8" PIPE RUN	Ċ	3.750E03	3	3	2	1	2	5.00	65	
FH639	Basement Mech, Room	4-8" PIPE RUN	C	3.750E03	3	3	2	1	2	5.00	65	
FH640	Basement Storage	4-8" PIPE RUN	C	3.750E03	3	3	Ž	1	2	5.00	60	
FH641	Basement	<4" PIPE RUN	C	1.325E03	3	3	2	1	2	5.00	25	
FH641	Basement Storage	<4" PIPE RUN	Ċ	1.325E03	3	3	2	1	Ž	5.00	25	

Priority Index Codes
A [=] Long Term Corrective Measure

B [=] Review Management Special Considerations/Remarks C [=] Army Asbestos Deficiency Abatement Project

Priority Index Numbers Are In Scientific Notation

- Exposure Factors
 1 [=] Material Friability
 2 [=] Occupant Accessability
 3 [=] Material Condition

- 4 [=] Level Of Activity
 5 [=] Number Of Assigned Occupants

TABLE 2232.5

COST ESTIMATE* - BUILDING 2232, FAMILY HOUSING

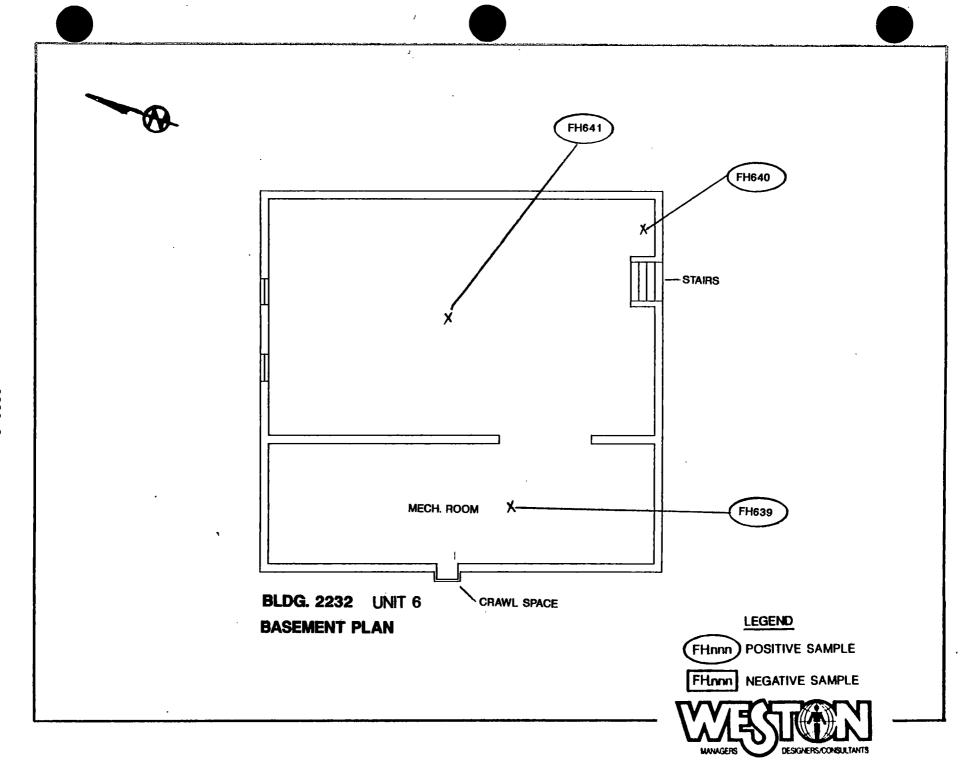
DESCRIPTION	UNIT COST (\$)	AREA	AREA 2	AREA 3	AREA 4	TOTAL
Pipe Fittings (EA) 4-8" 9-14" >14"	70.30 85.80 147.00 216.00		-	:	:	:
Pipe Runs (LF) 4-8" 9-14" >14"	26.50 32.50 60.80	2.1 -	12.2	12.2	.2.1 ** -	24.2
Sprayed/Troweled Ceilings (SF)	9.60	-	-	-	•	-
Floor Tile (SF)	5.60	-	-	-	•	-
Boilers/Tanks (SF)	37.90	-	-	-	-	•
Air Handling Equipment (SF)	20.00	-	-	-	•	-
Other		-	-	-	-	•
SUBTOTAL		2.1	12.2	12.2	2.2	28.7
Difficulty Allowance		-	-	•	-	-
SUBTOTAL		2.1	12.2	12.2	2.2	28.7
Decontamination Units Mobilization	•	8:8	8:5	8:8	8:5	3:5
SUBTOTAL		3.5	13.6	13.6	3.5	34.2
Contingency a 15.00%		0.5	2.0	2.0	0.5	5.1
SUBTOTAL		4.0	15.6	15.6	4.1	39.3
Design Fee a 10.00%		0.4	1.6	1.6	0.4	3.9
SUBTOTAL	***	4.4	17.2	17.2	4.5	43.2
Air Monitoring a 10.00%	***	<u> </u>	<u> </u>	1.1	<u> </u>	4.3
TOTAL		5.5	18.3	18.3	5.5	47.5

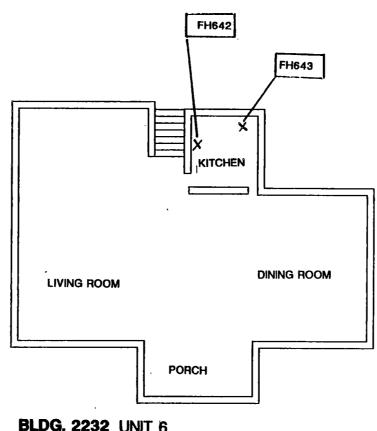
^{*}Amounts Are In Thousands Of Dollars

AREA 1: Basement AREA 3: Basement Mech. Room

^{**}Less Than \$100 For The Area; Amount Not Printed But Included In Total(s)

^{***}The Minimum Air Monitoring Fee is \$500.00 Per Building





BLDG. 2232 UNIT 6 FIRST FLOOR PLAN





POSITIVE SAMPLE



FHnnn NEGATIVE SAMPLE



2287 FAMILY HOUSING

FAMILY HOUSING

2287.1 GENERAL

Building 2287 was surveyed by WESTON technicians on 28 January 1991. Complete inspections (CI) for ACM were performed in Units 49 and 51 of this building. The inspections confirmed two different results. The sample collected in Unit 49 was found to be non-ACM while the sample collected in Unit 51 was found to be ACM.

The rest of the units in Building 2287, Units 41, 43, 45, 47, 53, 55, 57, 59, 61, and 63 were assumed to have similar type and quantity of ACM found in Unit 51 in order to show the "worst case scenario" with respect to asbestos abatement. No actual inspection or sampling for ACM was performed in the similar units. Refer to the guide document for further discussions on complete inspections (CI) and similar unit(s).

The first three portions of this facility report summarize the results of this inspection.

Polarized Light Microscopy (PLM) with dispersion staining was used to analyze 2 samples of suspect material collected from the building. Of these samples, one was found to be asbestos-containing materials (ACM). Table 2287.1 lists the analytical results for the bulk samples.

2287.2 ACM AND EXPOSURE ASSESSMENT

The location, description, and analytical results for each bulk sample from Building 2287 are presented in Table 2287.1. An area-by-area inventory of ACM is provided in Tables 2287.2 and 2287.3. "Other Asbestos-Containing Materials," listed in Table 2287.3, are materials that do not correspond to the standard caption categories listed in Table 2287.2. A prioritized listing of exposure assessments is presented in Table 2287.4. An itemized area-by-area cost

estimate for removal and replacement is provided in Table 2287.5. The method by which removal/replacement costs are calculated is described in the ISSUES COMMON TO ALL BUILDINGS Section of this report. Building floor plans (see attachment) indicate sample locations and building area names as they are listed in Tables 2287.2 and 2287.5.

2287.3 RECOMMENDATIONS/CONCLUSIONS

WESTON recommends:

Asbestos-containing floor tile should be labeled under the O&M Program.

TABLE 2287.1

BULK SAMPLE ANALYSIS RESULTS - BUILDING 2287, FAMILY HOUSING

SAMPLE				PERCE	NT ASB	STOS	_
NO.	LOCATION	ITEM	DESCRIPTION	CH	AM	OT	LAYERED
FH672	KITCHEN GTRS. NO. 49, BELOW CEILING	FLOOR TILE	GRAY,OTH,1X1 FL TL	-		_	NO
FH675	KITCHEN QTRS. #51, BELOW CEILING	FLOOR TILE	BROWN,OTH,9X9 FL TL	2	-	-	NO.

 $^{^{\}mathbf{a}}$ Asbestos content presented for layered samples represents the highest concentration layer.

SW = Southwest

Quadrant Codes	System Codes	Asbestos Types
C = Center	STM = Steam	CH = Chrysotile
N = North	CHW = Chilled Water	AM = Amosite
E = East	HHW = Heating Hot Water	OT = Other
S = South	DOM = Domestic Water	
W = West	OTH = Other	
NE = Northeast	UNK = Unknown	
NW = Northwest		
SE = Southeast		

TABLE 2287.2 ASBESTOS-CONTAINING MATERIALS - BUILDING 2287, FAMILY HOUSING

	PI	PE FITT	INGS (EA)			PIPE RU	NS (LF)		SPRAY/TROWELED	FLOOR TILE	BOILERS/	AIR HANDLING	
AREA	<4"	4-8"	9-14"	>14"	<4"	4-8"	9-14"	>14"	CEILINGS (MSF)	(MSF)	TANKS (MSF)	EQUIPMENT (MSF)	OTHER
JNIT 41 (S)	-	_	-	-	-	-		-	-	0.08	-	-	
JNIT 43 (S)	-	-	-	-	-	-	-	-		0.08	•	-	-
JNIT 45 (S)	-	-	-	-	-	-	-	-	· •	0.08	-	•	-
JNIT 47 (S)	-	-	-	-	-	-	-	-	-	0.08	-	-	-
JNIT 51 (CI)	-	-	_	-	-	-	-	-	-	0.08	-	-	-
JNIT 53 (S)	-	-	-	-	-	-	-	-	•	0.08	-	-	-
JNIT 55 (S)	•		-	-	-	•	-	_	-	0.08	-	-	-
JNIT 57 (S)	-	-	-	-	-	-	-	-	-	0.08	-	-	-
JNIT 59 (S)	-	-	-	-	-	-	-	-	•	0.08	-	•	-
JNIT 61 (S)	-	-	-	-	-	-	-	-	-	0.08	-	-	-
JNIT 63 (S)		-	-	-	-	-	-	_	•	0.08	-	-	-
TOTALS	-	-	-	-	-	-	-	-	-	0.88	•	-	-

^{*} Other Material Present, In Various Units Of Measure

EA - Each LF - Linear Feet, MSF - Thousand Square Feet .

Other Asbestos-Containing Material - Building 2287 - Family Quarters Type Occupancy: Adults (Public)

Area	Material Type	Quantity (Unit)
No Other	Asbestos-Containing Material Found in th	nis Building

EA - Each

LF - Linear Feet

MSF - Thousand Square Feet

TABLE 2287.4

EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 2287, FAMILY HOUSING

	_						
e- 12 11 11 11 11 11 11 11 11 11 11 11 11			PRIOR.	PRIORITY		AVG.	
SAMPLE		MATERIAL .	INDEX	INDEX	EXPOSURE FACTORS	EXP.	*
NO.	AREA	TYPE	CODE	NUMBER	1 2 3 4 5	HOURS	ASB.

Only Non-Friable Material Was Detected In This Building Exposure Assessments Are Not Available

Priority Index Codes

A [=] Long Term Corrective Measure

B [=] Review Management Special Considerations/Remarks

C [=] Army Asbestos Deficiency Abatement Project

Priority Index Numbers Are In Scientific Notation

Exposure Factors
1 [=] Material Friability

2 [=] Occupant Accessability

3 [=] Material Condition

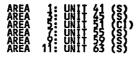
4 [=] Level Of Activity

5 [=] Number Of Assigned Occupants

TABLE 2287.5 COST ESTIMATE* - BUILDING 2287, FAMILY HOUSING

DESCRIPTION	UNIT COST (\$)	AREA	AREA	AREA	AREA 4	AREA	AREA	AREA	AREA	AREA	AREA	AREA
Pipe Fittings (EA) 4-8" 9-14" >14"	70.30 85.80 147.80 216.00		:	:	:	:	:	:	:	:	- - - -	:
Pipe Runs (LF)	26.50 30.50 60.80	:	:	:	:	:	:	:	:	:	:	:
Sprayed/Troweled Ceilings (SF)	9.60	-	-	-	-	_	•		-	-	_	_
Floor Tile (SF)	5.60	. 0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Boilers/Tanks (SF)	37.90	-	-	-	•	-	-	-	•	•	•	-
Air Handling Equipment (SF)	20.00	-	-		-	-	-	-	_	-	_	-
Other	-	-	-	-	-	-	•	-	-	-	-	-
SUBTOTAL		0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Difficulty Allowance		-	-	÷	•	•	•	•	-	-	•	• •
SUBTOTAL		0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Decontamination Units Mobilization		8:3	8:3	8:3	8:3	8:3	8:3	8:3	8:3	8:3	8:3	0: <u>3</u>
SUBTOTAL	•	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Contingency a 15.00%		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
SUBTOTAL		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Design Fee a 10.00%		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
SUBTOTAL		1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Air Monitoring a 10.00%	ran	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
TOTAL		1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3

^{*}Amounts Are In Thousands Of Dollars



AREA 2: UNIT 43 (\$)
AREA 6: UNIT 53 (\$)
AREA 10: UNIT 51 (\$)

^{**}Less Than \$100 For The Area; Amount Not Printed But Included In Total(s)

***The Minimum Air Monitoring Fee is \$500.00 Per Building

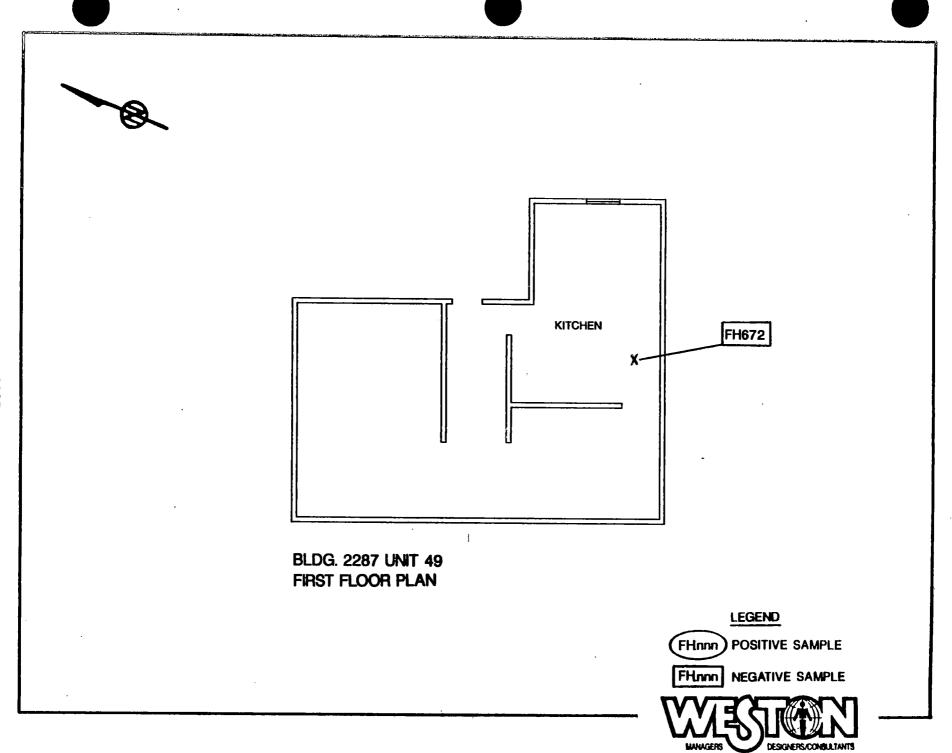
TABLE 2287.5 (continued) COST ESTIMATE* - BUILDING 2287, FAMILY HOUSING

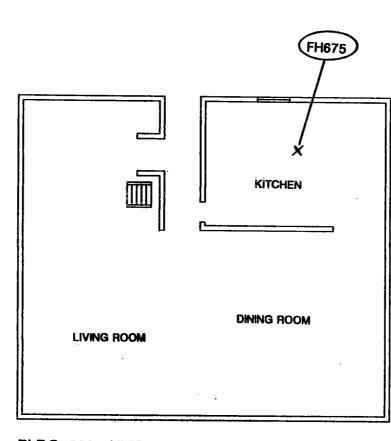
DESCRIPTION	UNIT COST (\$)	TOTAL				·		
Pipe Fittings (EA)		-			,			
4-8" 9-14" >14"	70-30 85-80 147-80 216-80	-	,					
	210.00	-						
Pipe Runs (LF)	2 6-50	-		•			•	
4-8" 9-14" >14"	26-50 20-50 20-80	-						
Sprayed/Troweled Ceilings (SF)	9.60	-						
Floor Tile (SF)	5.60	4.9						
Boilers/Tanks (SF)	37.90	-						
Air Handling Equipment (SF)	20.00	-						
Other		-						
SUBTOTAL		4.9						
Difficulty Allowance		-						
SUBTOTAL		4.9						
Decontamination Units Mobilization		3:8						
SUBTOTAL		9.9						
Contingency a 15.00%		1.5	1					
SUBTOTAL		11.4						
Design Fee @ 10.00%		1.1						
SUBTOTAL		12.6		,				
Air Monitoring a 10.00%***	•	1.3						
TOTAL		13.8						

^{*}Amounts Are In Thousands Of Dollars

^{**}Less Than \$100 For The Area; Amount Not Printed But Included In Total(s)

^{***}The Minimum Air Monitoring Fee is \$500.00 Per Building





BLDG. 2287 UNIT 51 FIRST FLOOR PLAN



2473 FAMILY HOUSING

FAMILY HOUSING

2473.1 GENERAL

Building 2473 was surveyed by WESTON technician on 24 January 1991.

Polarized Light Microscopy (PLM) with dispersion staining was used to analyze 5 samples of suspect materials collected from Units 42, 46, 50, and 54 in Building 2473. These 5 samples were found to be asbestos-free materials. Table 2473.1 lists the analytical results for the bulk samples.

Units 44, 48, 52, and 56 in Building 2473 were also inspected during the survey period. No sample of suspect material was collected in these units. The materials found in these units were similar to those found in Units 42, 46, 50, and 54. Building 2473 is designated as an asbestos-free building.

TABLE 2473.1

BULK SAMPLE ANALYSIS RESULTS - BUILDING 2473, FAMILY HOUSING

SAMPLE				PERCI	ENT ASBE	STOS	
NO.	LOCATION	ITEM	DESCRIPTION	CH	AM ·	OT	LÁYERED'
FH634	KITCHEN, BELOW CEILING	FLOOR TILE	GRAY,OTH.1X1 FL TL	-	•	-	NO
FH635	CLOSET, BELOW CEILING	FLOOR TILE	GRAY,OTH,1X1 FL TL	-	-	-	YES
FH636	CLOSET, BELOW CEILING	AIR HANDLING EQUIPMENT	BROWN, OTH, DUCT INSUL	-	-	•	NO
FH637	KITCHEN, BELOW CEILING	FLOOR TILE	GRAY,OTH,1X1 FL TL	-	-	-	YES
FH638	CLOSET, BELOW CEILING	FLOOR TILE	GRAY,OTH,1X1 FL TL		-	-	NO

^aAsbestos content presented for layered samples represents the highest concentration layer.

Quadrant Codes	System Codes	Asbestos Types
C = Center	STM = Steam	CH = Chrysotile
N = North	CHW = Chilled Water	AM = Amosite
E = East	HHW = Heating Hot Water	OT = Other
S = South	DOM = Domestic Water	
W = West	OTH = Other	
NE = Northeast	ÙNK = Ùnknown	
NW = Northwest		
SE = Southeast		
SW = Southwest		
	:	

TABLE 2473.2

ASBESTOS-CONTAINING MATERIALS - BUILDING 2473, FAMILY HOUSING

	PIPE FITTINGS (EA)	PIPE RUNS (LF)	SPRAY/TROWELED FLOOR TILE BOILERS/ AIR HANDLING
AREA	<4" 4-8" 9-14" >14"	<4" 4-8" 9-14" >14"	CEILINGS (MSF) (MSF) TANKS (MSF) EQUIPMENT (MSF) OTHER

No Asbestos Containing Material Detected In This Building

EA - Each

LF - Linear Feet

MSF - Thousand Square Feet

Other Material Present In Various Units Of Measure

Table 2473.3

Other Asbestos-Containing Material - Building 2473 - Family Housing Type Occupancy: Adults (Public)

Area	Material Type	Quantity (Unit)
No Othe	r Asbestos-Containing Material Found in the	his Building

EA - Each

LF - Linear Feet

MSF - Thousand Square Feet

TABLE 2473.4

EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 2473, FAMILY HOUSING

SAMPLE	4054	MATERIAL	PRIOR. INDEX	INDEX	EXPOS	URE F	ACTORS	AVG.	*	
NO. FH636	AREA Closet	AIR HANDLING EQUIPMENT	CODE	NUMBER	1.2	<u> 3 4</u> 1 3	`` _	HOURS 40.00	ASB.	

Priority Index Codes

A [=] Long Term Corrective Measure

B [=] Review Management Special Considerations/Remarks

C [=] Army Asbestos Deficiency Abatement Project

Priority Index Numbers Are In Scientific Notation

- Exposure Factors
 1 [=] Material Friability
- 2 [=] Occupant Accessability 3 [=] Material Condition
- 4 [=] Level Of Activity
- 5 [=] Number Of Assigned Occupants

TABLE 2473.5

COST ESTIMATE* - BUILDING 2473, FAMILY HOUSING

No Asbestos Containing Material Detected In This Building

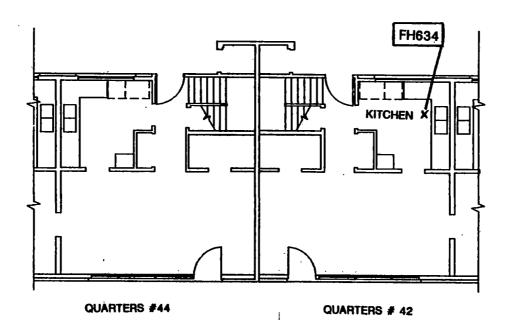
2473.2 GENERAL

Building 2473, Quarter No. 42 was surveyed by WESTON technicians on 24 January 1991.

Section 2473.1 of this facility report summarizes the results of this inspection.

Polarized Light Microscopy (PLM) with dispersion staining was used to analyze one sample of suspect material collected from Unit No. 42 in Building 2473. This sample was found to be asbestos-free material. Table 2473.1 lists the analytical results for the bulk samples.





BLDG. 2473



2473.3 GENERAL

Building 2473, Quarter No. 44 was surveyed by WESTON technicians on 24 January 1991.

The first three portions of this facility report summarize the results of this inspection.

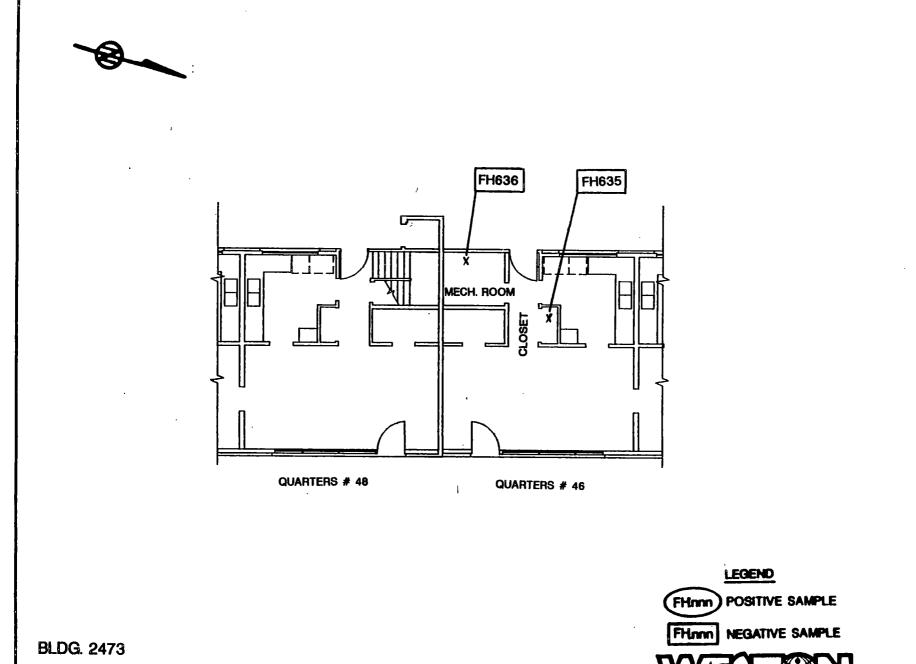
The suspect asbestos-containing material (ACM) found in Quarter No. 44 is similar to the suspect ACM found in Quarter No. 42. Therefore, the suspect ACM in Quarter No. 44 was referenced back to the sample collected in Quarter No. 42, which was found to be asbestos-free material.

2473.4 GENERAL

Building 2473, Quarter No. 46 was surveyed by WESTON technicians on 24 January 1991.

The first three portions of this facility report summarize the results of this inspection.

Polarized Light Microscopy (PLM) with dispersion staining was used to analyze 2 samples of suspect material collected from Unit No. 46 in Building 2473. Of these samples, both were found to be asbestos-free materials. Table 2473.1 lists the analytical results for the bulk samples.



2473.5 GENERAL

Building 2473, Quarter No. 48 was surveyed by WESTON technicians on 24 January 1991.

The first three portions of this facility report summarize the results of this inspection.

The suspect asbestos-containing material (ACM) found in Quarter No. 48 is similar to the suspect ACM found in Quarter No. 46. Therefore, the suspect ACM in Quarter No. 48 was referenced back to the sample collected in Quarter No. 46, which was found to be asbestos-free material.

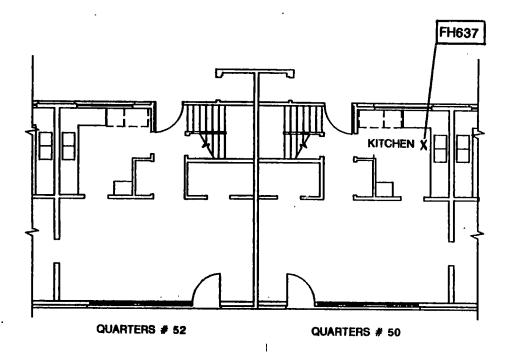
2473.6 GENERAL

Building 2473, Quarter No. 50 was surveyed by WESTON technicians on 24 January 1991.

The first three portions of this facility report summarize the results of this inspection.

Polarized Light Microscopy (PLM) with dispersion staining was used to analyze one sample of suspect material collected Unit No. 50 in Building 2473. This sample was found to be asbestos-free material. Table 2473.1 lists the analytical results for the bulk samples.





LEGEND



POSITIVE SAMPLE



NEGATIVE SAMPLE



BLDG. 2473

2473.7 GENERAL

Building 2473, Quarter No. 52 was surveyed by WESTON technicians on 24 January 1991.

The first three portions of this facility report summarize the results of this inspection.

The suspect asbestos-containing material (ACM) found in Quarter No. 52 is similar to the suspect ACM found in Quarter No. 50. Therefore, the suspect ACM in Quarter No. 52 was referenced back to the sample collected in Quarter No. 50, which was found to be asbestos-free material.

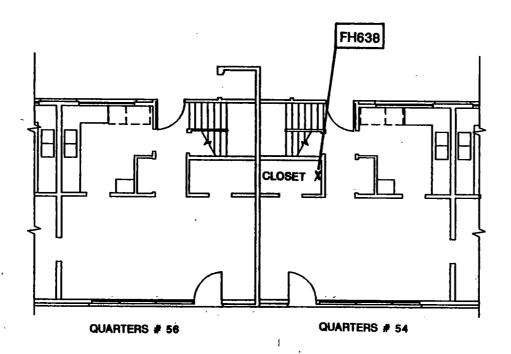
2473.8 GENERAL

Building 2473, Quarter No. 54 was surveyed by WESTON technicians on 24 January 1991.

The first three portions of this facility report summarize the results of this inspection. Photographs of some sample locations are provided in Section 2473.4.

Polarized Light Microscopy (PLM) with dispersion staining was used to analyze one sample of suspect material collected from unit No. 54 in Building 2473. This sample was found to be asbestos-free material. Table 2473.1 lists the analytical results for the bulk samples.





LEGEND



FHnnn POSITIVE SAMPLE



NEGATIVE SAMPLE



BLDG. 2473

2473.9 GENERAL

Building 2473, Quarter No. 56 was surveyed by WESTON technicians on 24 January 1991.

The first three portions of this facility report summarize the results of this inspection.

The suspect asbestos-containing material (ACM) found in Quarter No. 56 is similar to the suspect ACM found in Quarter No. 54. Therefore, the suspect ACM in Quarter No. 56 was referenced back to the sample collected in Quarter No. 54, which was found to be asbestos-free material.

2501 WAREHOUSE

WAREHOUSE

2501.1 GENERAL

Building 2501 was surveyed by WESTON technicians on 14 January 1991.

The first three portions of this facility report summarize the results of this inspection.

Polarized Light Microscopy (PLM) with dispersion staining was used to analyze 2 samples of suspect material collected from the building. Of these samples, one was found to be asbestos-containing material (ACM). Table 2105.1 lists the analytical results for the bulk samples.

2501.2 ACM AND EXPOSURE ASSESSMENT

The location, description, and analytical results for each bulk sample from Building 2501 are presented in Table 2501.1. An area-by-area inventory of ACM is provided in Tables 2501.2 and 2501.3. "Other Asbestos-Containing Materials," listed in Table 2501.3, are materials that do not correspond to the standard caption categories listed in Table 2501.2. A prioritized listing of exposure assessments is presented in Table 2501.4. An itemized area-by-area cost estimate for removal and replacement is provided in Table 2501.5. The method by which removal/replacement costs are calculated is described in the ISSUES COMMON TO ALL BUILDINGS Section of this report. Building floor plans (see attachment) indicate sample locations and building area names as they are listed in Tables 2501.2 and 2501.5.

2501.3 RECOMMENDATIONS/CONCLUSIONS

WESTON recommends:

• Asbestos-containing floor tile should be labeled under the O&M Program.

TABLE 2501.1

BULK SAMPLE ANALYSIS RESULTS - BUILDING 2501, WAREHOUSE

SAMPLE				PERCE	NT ASB	<u>ESTOS</u>	
NO.	LOCATION	ITEM	DESCRIPTION	CH	MA	OT	LAYERED'
FH538	MECH. ROOM, BELOW CEILING	FLOOR TILE	BROWN,OTH,9X9 FL TL,HORIZONTAL	15	-	-	YES
FH539	MECH. ROOM, BELOW CEILING	ACOUSTICAL WALL TILE	WHITE,OTH,1X1 WL TL,VERTICAL	-	-	-	YES

 $^{^{\}mathbf{a}}$ Asbestos content presented for layered samples represents the highest concentration layer.

SW = Southwest

Quadrant Codes	System Codes	Asbestos Types
C = Center	STM = Steam	CH = Chrysotile
N = North	CHW = Chilled Water	AM = Amosite
E = East	KHW = Heating Hot Water	OT = Other
S = South	DOM = Domestic Water	
W = West	OTH = Other	
NE = Northeast	UNK = Unknown	
NW = Northwest		
SE - Southoast		

-

ASBESTOS-CONTAINING MATERIALS - BUILDING 2501, WAREHOUSE

	PI	PE FITT	INGS (EA)			PIPE RU	NS (LF)		SPRAY/TROWELED	FLOOR TILE	BOILERS/	AIR HANDLING	
AREA	<4 ¹¹	4-8"	9-14"	>14"	<4"	4-8"	9-14"	>14"	CEILINGS (MSF)	(MSF)	TANKS (MSF)	EQUIPMENT (MSF)	OTHER
Mech. Room	 .	:		<u> </u>		:			<u> </u>	0.60			
TOTALS	-			-		_	-	-	-	0.60	-	•	-

Other Material Present In Various Units Of Measure

EA - Each

LF - Linear Feet MSF - Thousand Square Feet

Other Asbestos-Containing Material - Building 2501, Warehouse Type Occupancy: Adults (Public)

Area	Material Type	Quantity (Unit)							
No Other Asbestos-Containing Material Found in this Building									

EA - Each

LF - Linear Feet

MSF - Thousand Square Feet

EXPOSURE ASSESSMENTS (PRIORITY ORDER) -BUILDING 2501, WAREHOUSE

SAMPLE NO.	AREA	MATERIAL Type	PRIOR. INDEX CODE	PRIORITY INDEX NUMBER	EXPOSU	RE F#	ACTORS 5	AVG. EXP. Hours	% ASB.
FH539 Mech.	Room	ACOUSTICAL WALL TILE	A	0	2 2 3	, ,	1	2.00	0

Priority Index Codes
A [=] Long Term Corrective Measure

B [=] Review Management Special Considerations/Remarks
C [=] Army Asbestos Deficiency Abatement Project

Priority Index Numbers Are In Scientific Notation

Exposure Factors

1 [=] Material Friability 2 [=] Occupant Accessability 3 [=] Material Condition

4 [=] Level Of Activity 5 [=] Number Of Assigned Occupants

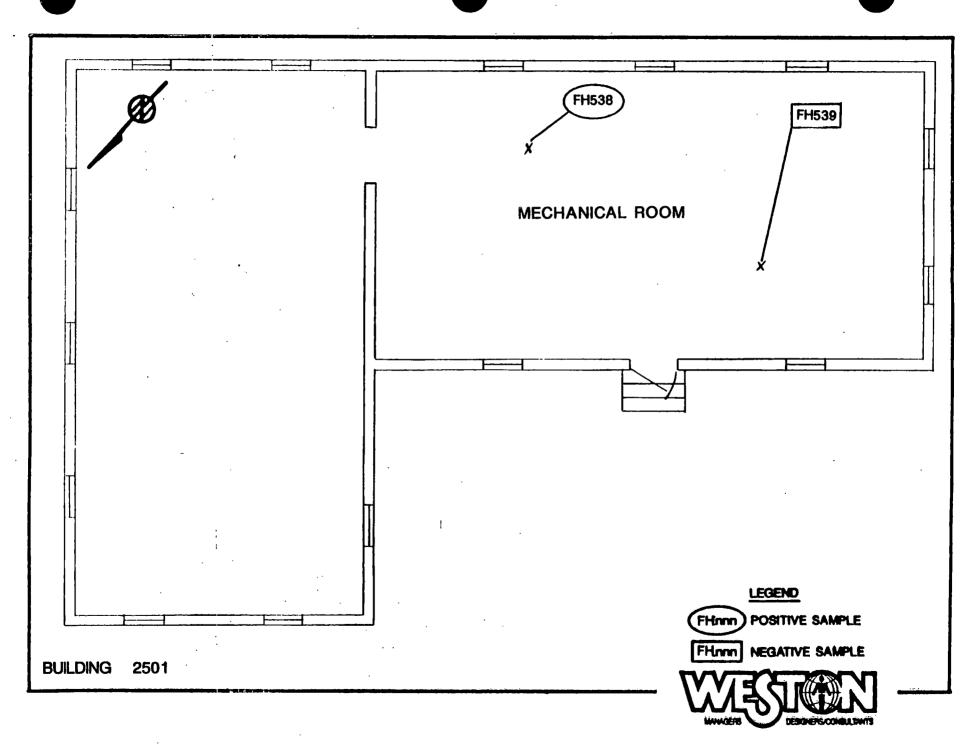
TABLE 2501.5 COST ESTIMATE* - BUILDING 2501, WAREHOUSE

DESCRIPTION	UNIT COST (\$)	AREA	TOTAL				
Pipe Fittings (EA) 4-8" 9-14" >14"	70.30 85.80 147.80 216.00	; : :	:				
Pipe Runs (LF) 44" 9-14" >14"	26-50 30-50 22-50 60-80	:	: :		·		
Sprayed/Troweled Ceilings (SF)	9.60	_	-				
Floor Tile (SF)	5.60	3.4	3.4				
Boilers/Tanks (SF)	37.90	-	-				
Air Handling Equipment (SF)	20.00	-	-				
Other		-	•				
SUBTOTAL		3.4	3.4				
Difficulty Allowance		-	-				
SUBTOTAL		3.4	3.4				
Decontamination Units Mobilization		3:8	3 :8				
SUBTOTAL		8.4	8.4				
Contingency a 15.00%		1.3	1.3	1			
SUBTOTAL		9.6	9.6				
Design Fee @ 10.00%		1.0	1.0				
SUBTOTAL		10.6	10.6				
Air Monitoring a 10.00%**	*	1.1	1.1				
TOTAL		11.6	11.6			· 	

^{*}Amounts Are In Thousands Of Dollars

AREA 1: Mech. Room

^{***}Less Than \$100 For The Area; Amount Not Printed But Included In Total(s)
****The Minimum Air Monitoring Fee is \$500.00 Per Building



2508

LAVATORY

LAVATORY

2508.1 GENERAL

Building 2508 was surveyed by WESTON technicians on 9 January 1991.

The first three portions of this facility report summarize the results of this inspection.

Polarized Light Microscopy (PLM) with dispersion staining was used to analyze 2 samples of suspect material collected from the building. Of these samples, both were found to be asbestos-containing materials (ACM). Table 2508.1 lists the analytical results for the bulk samples.

2508.2 ACM AND EXPOSURE ASSESSMENT

The location, description, and analytical results for each bulk sample from Building 2508 are presented in Table 2508.1. An area-by-area inventory of ACM is provided in Tables 2508.2 and 2508.3. "Other Asbestos-Containing Materials," listed in Table 2508.3, are materials that do not correspond to the standard caption categories listed in Table 2508.2. A prioritized listing of exposure assessments is presented in Table 2508.4. An itemized area-by-area cost estimate for removal and replacement is provided in Table 2508.5. The method by which removal/replacement costs are calculated is described in the ISSUES COMMON TO ALL BUILDINGS Section of this report. Building floor plans (see attachment) indicate sample locations and building area names as they are listed in Tables 2508.2 and 2508.5.

2508.3 RECOMMENDATIONS/CONCLUSIONS

WESTON recommends:

- The men's room in Building 2508 qualifies for the Army Asbestos Deficiency Abatement Project.
- Asbestos-containing floor tile should be labeled under the O&M Program.

TABLE 2508.1

BULK SAMPLE ANALYSIS RESULTS - BUILDING 2508, LAVATORY

SAMPLE				PERCE	ENT ASB	STOS	
NO.	LOCATION	<u>ITEM</u>	DESCRIPTION	СH	AM	OT	LAYERED
FH510	LADIES/MECH., BELOW CEILING	FLOOR TILE	GRAY,OTH,TRAN.PANEL,HORIZONTAL	35	-	_	NO
FH511	MENS, BELOW CEILING	OTHER MATERIAL	WHITE, OTH, WALL BOARD, VERTICAL	40	-	-	NO

^aAsbestos content presented for layered samples represents the highest concentration layer.

SW = Southwest

Quadrant Codes	System Codes	Asbestos Types
C = Center	STM = Steam	CH = Chrysotile
N = North	CHW = Chilled Water	AM = Amosite
E = East	HHW = Heating Hot Water	OT = Other
S = South	DOM = Domestic Water	
W = West	OTH = Other	
NE = Northeast	UNK = Unknown	
NW = Northwest		
SE = Southeast		

1

	P	PE FITT	INGS (EA))		PIPE RU	NS (LF)		SPRAY/TROWELED	FLOOR TILE	BOILERS/	AIR HANDLING	
AREA	<4 ¹¹	4-8"	9-14"	>14"	<411	4-8"	9-14"	>14"	CEILINGS (MSF)	(MSF)	TANKS (MSF)	EQUIPMENT (MSF)	OTHER
adies/Mech.	-	-	-	-	-	-	•	-	•	0.04	•	-	-
ens									-	0.25			*
OTALS	-	-	_	-	-	-		•	-	0.29	-	•	*

^{*} Other Material Present In Various Units Of Measure

EA - Each

LF - Linear Feet

MSF - Thousand Square Feet

Other Asbestos-Containing Material - Building 2508, Rest Rooms
Type Occupancy: Adults (Public)

Area	Material Type	Quantity (Unit)
Men's Room	Wallboard	0.080 (MSF)

EA - Each

LF - Linear Feet

MSF - Thousand Square Feet

EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 2508, LAVATORY

SAMPLE NO. AREA	MATERIAL Type	PRIOR. INDEX CODE	PRIORITY INDEX NUMBER	EXPOSI 1 2	URE F	ACTORS 5	AVG. EXP. HOURS	% ASB.	
FH511 Mens	INSULATION BOARD	C	5.300E03	2 2	2 2	8	5.00	40	

Priority Index Codes

A [=] Long Term Corrective Measure

B [=] Review Management Special Considerations/Remarks

C [=] Army Asbestos Deficiency Abatement Project

Priority Index Numbers Are In Scientific Notation

Exposure Factors

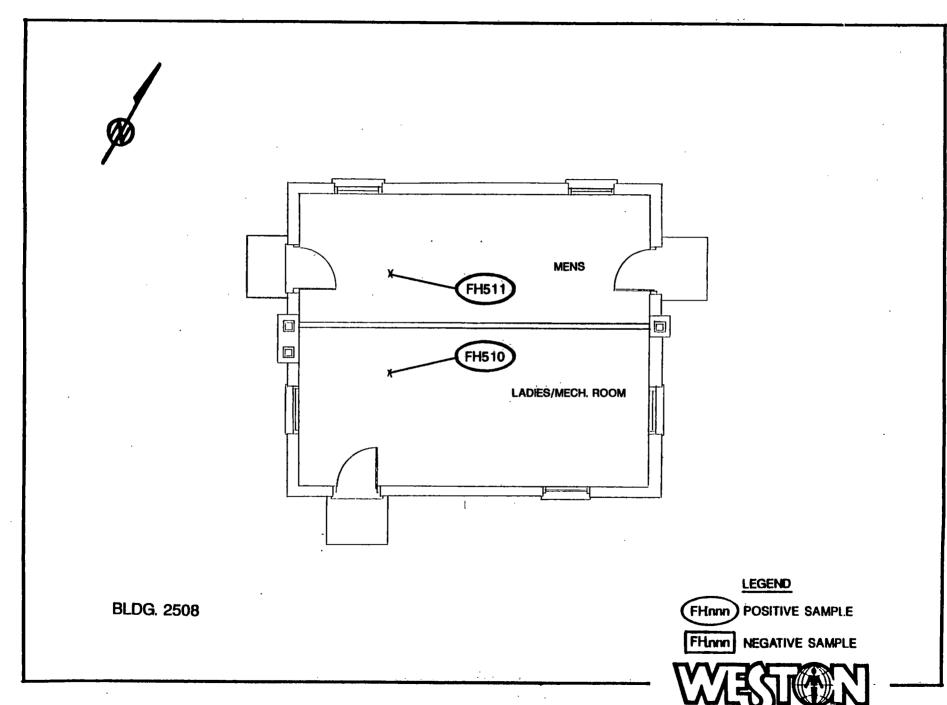
1 [=] Material Friability
2 [=] Occupant Accessability
3 [=] Material Condition
4 [=] Level Of Activity
5 [=] Number Of Assigned Occupants

TABLE 2508.5 COST ESTIMATE* - BUILDING 2508, LAVATORY

DESCRIPTION	UNIT COST (\$)	AREA 1	AREA	TOTAL
Pipe Fittings (EA)	72-30	-	-	-
4-8" 9-14" >14"	70-30 85-80 147-00 216-00	- -	=	:
Pipe Runs (LF)	24 F0			
}4-8" 9-14" >14"	26.50 30.50 42.50 60.80	-	-	-
314ii [™]	26:88	•	-	-
Sprayed/Troweled Ceilings (SF)	9.60	-	-	-
Floor Tile (SF)	5.60	0.2	1.4	1.6
Boilers/Tanks (SF)	37.90	-	-	-
Air Handling Equipment (SF)	20.00	-	-	-
Other		-	0.3	0.3
SUBTOTAL		0.2	1.7	2.0
Difficulty Allowance		•	-	-
SUBTOTAL		0.2	1.7	2.0
Decontamination Units Mobilization		1:8	1:8	3:8
SUBTOTAL		2.7	4.2	7.0
Contingency a 15.00%		0.4	0.6	1.0
SUBTOTAL		3.1	4.9	8.0
Design Fee a 10.00%		0.3	0.5	0.8
SUBTOTAL	***	3.4	5.4	8.8
Air Monitoring a 10.00%	,	0.4	0.4	0.9
TOTAL		3.9	5.8	9.7

^{*}Amounts Are In Thousands Of Dollars

^{***}Less Than \$100 For The Area; Amount Not Printed But Included In Total(s)
****The Minimum Air Monitoring Fee is \$500.00 Per Building



2525 ADMINISTRATION (AVRADA)

ADMINISTRATION (AVRADA)

2525.1 GENERAL

Building 2525 was surveyed by WESTON technicians on 7 January through 8 January 1991.

The first three portions of this facility report summarize the results of this inspection. Photographs of some sample locations are provided in Section 2525.4.

Polarized Light Microscopy (PLM) with dispersion staining was used to analyze 26 samples of suspect material collected from the building. Of these samples, all 15 were found to be asbestos-containing materials (ACM). Table 2525.1 lists the analytical results for the bulk samples.

2525.2 ACM AND EXPOSURE ASSESSMENT

The location, description, and analytical results for each bulk sample from Building 2525 are presented in Table 2525.1. An area-by-area inventory of ACM is provided in Tables 2525.2 and 2525.3. "Other Asbestos-Containing Materials," listed in Table 2525.3, are materials that do not correspond to the standard caption categories listed in Table 2525.2. A prioritized listing of exposure assessments is presented in Table 2525.4. An itemized area-by-area cost estimate for removal and replacement is provided in Table 2525.5. The method by which removal/replacement costs are calculated is described in the ISSUES COMMON TO ALL BUILDINGS Section of this report. Building floor plans (see attachment) indicate sample locations and building area names as they are listed in Tables 2525.2 and 2525.5.

2525.3 RECOMMENDATIONS/CONCLUSIONS

WESTON recommends:

• The following areas in Building 2525 qualify for the Army Asbestos Deficiency Abatement Project:

Room 2105A Room 2110A Room 4105 Room 5112 Corridor 21A Room 2110B Room 4106 Room 5114 Room 2102 Room 3101 Room 4107 Room 6103 Room 2103 Room 3102 Room 4108A Room 6105 Room 2104 Room 3103 Room 4108B Corridor 31A	
Room 2102 Room 3101 Room 4107 Room 6103 Room 2103 Room 3102 Room 4108A Room 6105	
Room 2103 Room 3102 Room 4108A Room 6105	
Room 2104 Room 3103 Room 4108B Corridor 31A	
Room 2105B Room 3104 Room 4109 Closet 6	
Room 2106 Room 3105A Room 4110 Corridor 31B	
Room 2102A Room 3105B Room 5100 Room 6100	
Room 2108 Room 3106 Room 5100A Room 6101 M	ens
Corridor 21B Room 3107 Room 5101 Room 5206	
Corridor 21C Room 3108A Room 5102 Room 2200	
Corridor 41A Room 3108B Room 5103 Room 2204	
Corridor 41B Room 3109 Room 5105 Room 2206	
Corridor 51A Room 3110 Room 5106 Room 3207	
Corridor 51B Room 4100 Room 5107 Room 4205	
Corridor 61A Room 4101 Room 5109A Room 5201	
Corridor 61B Room 4101A Room 5109B Room 5212	
Mens 3100 Room 4102 Room 5110	

• Other asbestos-containing materials should be labeled under the O&M Program.

TABLE 2525.1

BULK SAMPLE ANALYSIS RESULTS - BUILDING 2525, ADMIN.(AVRADA)

SAMPLE				PERC	<u>ent asbe</u>	STOS	_
NO.	LOCATION	ITEM	DESCRIPTION	CH	AM	OT	LAYERED ⁸
FH476	ROOM 2101, BELOW CEILING	CEILING TILE	WHITE, OTH, CEIL. TILE	-	-	-	NO
FH477	ROOM 2101, BELOW CEILING	FLOOR TILE	TAN,OTH,1X1 FL TL	5	-	-	NO
FH478	ROOM 2101, BELOW CEILING	4-8" PIPE RUN	WHITE, STM, 4-8IN. RUN	20	20	-	NO
FH479	ROOM 2102, BELOW CEILING	CEILING TILE	WHITE, OTH, CEIL. TILE	-	-	-	NO
FH480	ROOM 2102, BELOW CEILING	4-8" PIPE RUN	WHITE,STM,4-8IN. RUN	15	15	-	NO
FH481	ROOM 2102A, BELOW CEILING	<4" PIPE FITTING	WHITE, STM, 4-8IN. FIT	10	1	-	NO
FH482	ROOM 2105A, BELOW CEILING	4-8" PIPE FITTING	WHITE,STM,4-8IN. FIT	40	1	-	NO
FH483	ROOM 2106, BELOW CEILING	ACOUSTICAL WALL TILE	BLUE, OTH, 1X1 WL TL	-	1	-	NO
FH484	ROOM 2108, BELOW CEILING	4-8" PIPE FITTING	WHITE,STM,4-8IN. FIT	15	15	-	NO
FH485	CORRIDOR 21A, BELOW CEILING	FLOOR TILE	TAN,OTH,1X1 FL TL	1	-	-	NO
FH486	CORRIDOR 21B, BELOW CEILING	<4" PIPE FITTING	WHITE,STM,<4IN. FIT.	-	-	-	NO
FH487	CORRIDOR 21B, BELOW CEILING	4-8" PIPE RUN	WHITE,STM,4-8IN. RUN	15	20	-	NO
FH488	CORRIDOR 21B, BELOW CEILING	4-8" PIPE FITTING	WHITE,STM,4-8IN. FIT	-	-	-	NO
FH489	ROOM 2108B, BELOW CEILING	ACOUSTICAL WALL TILE	WHITE,OTH,1X1 WL TL	-	-	-	YES
FH490	ROOM 2108B, BELOW CEILING	CEILING TILE	WHITE,OTH,2X4 CL TL	-	-	-	NO
FH491	ROOM 2110A, BELOW CEILING	FLOOR TILE	BROWN, OTH, 9X9IN. FL	5	-	•	NO
FH492	ROOM 2110A,BELOW CEILING	FLOOR TILE	RED,OTH,1X1 FL TL	2	-	-	NO
FH493	ROOM 3110, BELOW CEILING	<4" PIPE RUN	WHITE,OTH,<4IN. RUN	15	20	3	NO
FH494	CORRIDOR 31B, BELOW CEILING	<4" PIPE FITTING	WHITE,STM,<4IN. FIT	20	15	-	NO
FH495	ROOM 4100, BELOW CEILING	<4" PIPE RUN	WHITE,STM,<4IN. RUN	10	25	-	NO
FH496	ROOM 4100, BELOW CEILING	<4" PIPE RUN	WHITE,STM,<4IN. RUN	10	25	-	NO
FH497	ROOM 4101, BELOW CEILING	CEILING TILE	WHITE, OTH, 2X2 CL TL	-	-	-	NO
FH498	ROOM 4101, BELOW CEILING	CEILING TILE	WHITE,OTH,2X2 CL TL	-	-	•	NO
FH499	ROOM 4109, BELOW CEILING	ACOUSTICAL WALL TILE	WHITE, OTH, 1X1 WL TL	•	-	-	NO
FH514	BOILER HOUSE, BELOW CEILING	BOILERS/TANKS 1	WHITE, OTH, BREECHING	-	-	-	YES

 $^{^{\}mathbf{a}}$ Asbestos content presented for layered samples represents the highest concentration layer.

Quadrant Codes	System Codes	Asbestos Types
C = Center	STM = Steam	CH = Chrysotile
N = North	CHW = Chilled Water	AM = Amosite
E = East	HHW = Heating Hot Water	OT = Other
S = South	DOM = Domestic Water	
W = West	OTH = Other	
NE = Northeast	UNK = Unknown	
NW = Northwest		
SE = Southeast		
SW = Southwest		

BULK SAMPLE ANALYSIS RESULTS - BUILDING 2525, ADMIN. (AVRADA)

SAMPLE				PERCE	NT ASBE	STOS	
NO.	LOCATION	1TEM	DESCRIPTION	CH	AM	OT	LAYERED
FH515	BOILER HOUSE, BELOW CEILING	BOILERS/TANKS	WHITE,OTH,BREECHING	•		-	NO

^aAsbestos content presented for layered samples represents the highest concentration layer.

Quadrant Codes C = Center N = North E = East S = South W = West	System Codes STM = Steam CHW = Chilled Water HHW = Heating Hot Water DOM = Domestic Water OTH = Other	Asbestos Types CH = Chrysotile AM = Amosite OT = Other
NE = Northeast	UNK = Unknown	
NW = Northwest SE = Southeast		
SU = Southwest		·

TABLE 2525.2 ASBESTOS-CONTAINING MATERIALS - BUILDING 2525, ADMIN. (AVRADA)

	P1	IPE FITT	INGS (EA)			PIPE RUI	(S (LF)		SPRAY/TROWELED	FLOOR TILE	BOILERS/	AIR HANDLING	
AREA	~4"	4-8"	9-14"	>14"	<4"	4-8"	9-14"	>14"	CEILINGS (MSF)	(MSF)	TANKS (MSF)	EQUIPMENT (MSF)	OTHE
Closet 6	2	-	-	-	-	-	-		-	0.04	-	_	
orridor 21A	-	-	-	-	-	. 16	-	_	-	0.25	-	_	_
orridor 21B	-	•	-	-	-	110	-	•	· -	0.86	-	_	_
orridor 21C	-	-	-	-	-	5	-	-	_	0.12	-	-	_
orridor 2A	-	-	-	-	-	-	-	_	-	0.94	-	-	_
orridor 31A	-	-	-	-	2	14	-	-	-	0.25	•	_	_
orridor 31B	13	-	-	-	-	•	-	-		0.86	_	_	_
orridor 3A	•	-	_	-	_	-	-	-	_	1.18	_	_	-
orridor 41A	_	-	-	-	8	128	-	_	_	1.06	_	_	-
orridor 41B	-	-	_	-	Ř	8	_	-	_	0.19	_	-	-
orridor 4A	-		_	_	-		_	_	_ _	1.18	_	•	-
orridor 51A	26	-	_	-	_	118	_	-	-		•	•	-
orridor 51B		_	-	_	_	37	_	_	-	0.99	•	-	•
orridor 61A	11	-	_		_	130	_	_	- -	0.12	-	•	-
orridor 61B	'.'	_	_	_	_	16	-	-	•	1.30	-	•	-
orridor 6A	_	_	_	_	_	10	-	-	•	0.12	-	•	-
ens Room 3100	_	_	_	Ξ.	_	40	-	-	•	0.66	-	-	-
om 2101	_	_	_	-	-	18	-	-	-	-	•	•	-
oom 2102	-	•	-	-	-	34	-	-	•	0.37	•	-	-
	- ;	•	-	-	-	17	-	•	-	-	•	-	-
oom 2102A	4	-	-	-	•		•	-	•	-	-	-	-
oom 2103		-	-	-	-	56	-	-	•	0.84	•	-	-
oom 2104	•	-	-	-	-	20	-	•	-	0.24	-	-	-
oom 2105A	-	8	-	-	-	60	-	-	•	0.38	-	•	-
oom 2105B	-	-	-	-	-	100	-	-	-	0.58	-	-	-
oom 2106	-	-	-	-	-	20 '	-	•	-	0.29	-	•	*
oom 2108	-	4	-	-	-	46	-	-	-	0.38	-	•	-
om 2108B	-	-	-	-	-	60	-	-	-	0.67	<u>.</u>	-	-
om 2110A	-	-	-	-	-	36	-	-	-	1.30	-	•	
oom 2110B	-	-	-	-	-	28	-	-	•	1.01	•	_	_
oom 2200	-	-	-	-	-	-	-	-		-		-	*
om 2200A	-	-	-	<u> </u>	-	-	-	-	•	0.09	_	_	-
om 2201		-	_			-		-	-	0.91	_	- -	-
om 2202	_	_	_	_	_	_	_	_	_	0.48	•	•	-

Other Material Present In Various Units Of Measure

EA - Each LF - Linear Feet

MSF - Thousand Square Feet

TABLE 2525.2 (continued) ASBESTOS-CONTAINING MATERIALS - BUILDING 2525, ADMIN. (AVRADA)

			INGS (EA)			PIPE RU			SPRAY/TROWELED	FLOOR TILE	BOILERS/	AIR HANDLING	
AREA	<4"	4-8"	9-14"	>14"	<4 ¹¹	4-8"	9-14"	>14"	CEILINGS (MSF)	(MSF)	TANKS (MSF)	EQUIPMENT (MSF)	OTHE
Room 2203	-	-	_				_	_	_	0.86	_	_	
Room 2204	-	-	-	_	-	-	-	_	_	1.20	_	_	Ī
Room 2205	-	-	-	_	_	-	_	-	-	0.29	_	_	•
Room 2206		-	-	_	-	-	-	_		0.19	_	_	-
toom 3101	· <u>-</u>	-	-	-	_	18	•	_	-	0.14	-	_	
toom 3102	-	-	-	-	-	64	-	-	•	0.77	-	-	_
Room 3103	-	-	-	-	-	56		-	-	0.67	-	_	
Room 3104	-	-	-	-	-	40	-	-	-	0.40	-	_	_
Room 3105A	-	-	-	-	-	19	-	_	-	0.24	_	_	_
Room 3105B	-	-	-	_	-	32		· •		0.48	-	-	-
Room 3106	- ·	-	-	-	-	16	<u>.</u>	-	-	0.19	_	<u>-</u>	•
toom 3107	-	-	-	-	-	20	-	-	_	0.24	_	<u>-</u>	•
Room 3108A	-	-	-	-	_	38		-	_	0.48	_	-	-
oom 3108B	-	-	-	-	-	40	-	-	-	0.48	_	_	•
oom 3109	-	-	-	-	_	50	<u> </u>	-	_	0.40	_	<u>-</u>	•
oom 3110	-	-	-	-	18	18	_	-	-	0.24	_	-	•
com 3200	-	-	-	_				-	_	0.26	_	-	•
oom 3201	-	-	-	-	_	-	-	-	-	0.48	_	<u>-</u>	-
oom 3202	-	-	_	_	-	-	_	_	-	1.20	_	•	-
oom 3203	-	-	-	-	-	-	-	_	-	0.38	_	•	-
oom 3204	-	_	_	-	-	-	_	_	_	0.67	-	•	•
oom 3205	-	_	-	-	-	_	-	_	_	0.29	_	•	•
oom 3206	-	-	-	-	-	-	_	_		0.48	- -	•	•
oom 3207.	-	-	_	_	_	-	_	_	_	1.40	_	•	
oom 3209	-	-	-	-	_	1	-	_	_	0.19	-	•	-
oom 4100	1	-	-	-	33	32	_	_	-	0.19	-	•	-
oom 4101		_	-	-	-	88	_	_	_	0.77	-	•	•
oom 4101A	5		-	_	_	5	-	_		_	-	•	•
oom 4102			-	_	22	22	_	_	_	0 50	•	•	•
oom 4104	4	-		-	20	20	-		<u>-</u>	0.58 0.48	-	•	-
oom 4105	ž	-	-	-	30	30	-	-	-		-	•	-
oom 4106	2		_	-	18	18	-	-	•	0.77	•	•	•
oom 4107	2		_	-	16	16	-	-	•	0.44 0.38	•	• .	-

Other Material Present In Various Units Of Measure

EA - Each LF - Linear Feet MSF - Thousand Square Feet

TABLE 2525.2 (continued) ASBESTOS-CONTAINING MATERIALS - BUILDING 2525, ADMIN. (AVRADA)

,			INGS (EA)			PIPE RUI			SPRAY/TROWELED	FLOOR TILE	BOILERS/	AIR HANDLING	
AREA	< 4 "	4-8"	9-14"	>14"	<411	4-8"	9-14"	>14"	CEILINGS (MSF)	(MSF)	TANKS (MSF)	EQUIPMENT (MSF)	OTHE
Room 4108A	-	-	-	-	12	12	-	-	•	0.29	-	-	-
Room 4108B	-	-	-	-	10	10	-	-	-	0.29	-	•	-
Room 4109	-	-	-	-	32	32	-	-	•	0.77	•	-	-
Room 4110	-	-	-	-	10	10	-	-	•	0.24	•	-	-
Room 4200	-	-	-	-	-	-	-	•	-	120.43	•	•	-
toom 4201	-	-	-	-	-	-	-	-	•	0.22	-	-	-
toom 4202	-	-	-	-	-	-		-	-	0.96	-	•	-
toom 4203	-	-	-	-	-	-	-	-	-	1.16	-	-	-
Room 4204	-		-	-	-	-	-	-		0.67	-	•	_
Room 4205	-	-	-	-	-	-	2	-	•	0.22	•	•	*
toom 4206	-	-	_	-	-	-	-	-	-	0.48	-	-	-
toom 4207	-	-	-	-	-	-	-	-	-	0.48	-	-	-
toom 4209	-	-	-	-	-	-	-	-	-	0.62	-	-	-
toom 4211	•		-	-	-	-	<u>-</u>	-	•	0.24	-	-	-
toom 5100	-	-	-	-	-	20	-	-	•	•	•	-	-
Room 5100A	-	-	-	-	-	20	-	-	. •	-	-	•	-
toom 5101	-	-	-	-	20	20	-	-	•	0.46	-	-	-
toom 5102	-	-	-	-	-	20	-	-	•	-	-	-	-
toom 5103	-	-	-	-	-	24	-	-	•	0.29	-	-	-
toom 5105	-	-	-	-	-	24		-	•	0.29	-	-	-
toom 5106	-	-	-	-	-	24		-	•	0.29	-	-	-
toom 5107	-	-	-	-	-	24	-	_	•	0.29	- ,	-	_
toom 5108A and B	-	-	-	-	-	-	-		•	0.72	<u>-</u> ·	-	-
toom 5109A	-	-	-	-	-	58	-	-	•	0.48	-	-	
toom 5109B	-	-	-	-	-	40	-	-	-	0.38	-	•	-
toom 5110	-	-	-	-	-	32	-	-	•	0.38	•	•	-
toom 5111	-	-	-	-	_	40	•	_	-	0.80	-	•	-
oom 5112	•	-	-	-	-	40	-	-	-	0.48	-	-	-
toom 5114	-	-	-	-	-	24	-	-	•	0.29	-	•	_
toom 5200	-	-	-	_	-		•	-	•	1.22	-	-	-
loom 5201	-	_	-	-	-		-	-	•	0.46	-	-	*
toom 5202	_	-	-	-			-		•	0.31	-		
toom 5203	-		-	-	-	_		_	_	0.46	_	_	_

Other Material Present In Various Units Of Measure

EA - Each

LF - Linear Feet MSF - Thousand Square Feet

TABLE 2525.2 (continued) ASBESTOS-CONTAINING MATERIALS - BUILDING 2525, ADMIN. (AVRADA)

	PI	PE FITT	INGS (EA)	·		PIPE RUI	IS (LF)		SPRAY/TROWELED	FLOOR TILE	BOILERS/	AIR HANDLING	
AREA	<4"	4-8"	9-14"	>14"	<4"	4-8"	9-14"	>14"	CEILINGS (MSF)	(MSF)	TANKS (MSF)	EQUIPMENT (MSF)	OTHE
Room 5204	-	-	-	-	-	-	-	-	-	0.28	_	-	-
Room 5205		-	-	-	-	-	-	-	-	0.48	-	-	-
Room 5206	•	-	-	_	-	-	-	-	•	0.48	-	•	*
Room 5207	-	-	-	-	-	-	-	-	-	0.29	-	•	-
Room 5208	-	-	-	-	-	-	-	-	•	0.48	-	•	-
Room 5209	•	-	-	-	-	-	<u> </u>	-	•	0.29	-	-	-
Room 5210	-	-	-	-	-	-	-	-	.	0.67	-	-	-
Room 5212	-	-	-	-	-	-	-	-	•	0.34	-	-	*
Room 5213	_	-	-	-	-		-	-	•	0.39	-	•	_
Room 6100	6	-	-	-	78	240	-	-	-	5.40	-	•	*
Room 6101 Mens	2	-	-	-	-	20	-	-	•	-	-	-	-
Room 6103	-	-	-	-	-	56	-	-	-	0.67	-	•	-
Room 6105	4	-	-	-	63	179	-	_	-	3.60	-	•	_
Room 6200	-	-	-	-	-		-	-	•	0.67	-	-	-
Room 6202A	-	-	-	-	-	-	-	-	•	0.62	-	-	-
Room 6203	_	-	-	-	-	-	-	-	•	0.29	-	-	-
Room 6205	-	-	-	-	-		±	-	•	0.38	•	-	-
Room 6207		-	-	-	-	-	2	-	•	0.57	•	-	-
Room 6210		-		-	<u></u>	-	-			3.00			<u>-</u>
TOTALS	84	12	-	6	400	2688	-	-	-	186.88	•	•	*

Other Material Present In Various Units Of Measure

EA - Each LF - Linear Feet MSF - Thousand Square Feet

Table 2525.3

Other Asbestos-Containing Material - Building 2525, Admin. (AVRADA) Type Occupancy: Adults (Public)

Area	Material Type	Quantity (Unit)
Room 2106 Room 5206 Room 2200 Room 2204 Room 3207 Room 2206 Room 4205 Room 5201 Room 5212	Acoustical Wall Tile	0.216 (MSF) 0.680 (MSF) 1.1 (MSF) 1.2 (MSF) 2.5 (MSF) 0.192 (MSF) 0.410 (MSF) 0.603 (MSF) 0.072 (MSF)
Room 6100	Acoustical Wall Tile	0.900 (MSF)

EA - Each

LF - Linear Feet

MSF - Thousand Square Feet

TÄBLE 2525.4 EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 2525, ADMIN. (AVRADA)

			PRIOR.	PRIORITY		AVG.	
SAMPLE		MATERIAL	INDEX	INDEX	EXPOSURE FACTORS	EXP.	%
NO.	AREA	ТҮРЕ	CODE	- NUMBER	1 2 3 4 5	HOURS	ASB.
FH478	Room 2101	4-8" PIPE RUN	С	2.700E06	3 2 2 2 90	40.00	40
FH482	Room 2105A	4-8" PIPE FITTING	C	2.700E06	3 2 2 2 90	40.00	41
FH480	Corridor 21A	4-8" PIPE RUN	C	9.900E05	3 2 2 2 90	40.00	30
FH480	Room 2102	4-8" PIPE RUN	C	9.900E05	3 2 2 2 90	40.00	3 0
FH480	Room 2103	4-8" PIPE RUN	Ć	9.900E05	3 2 2 2 90	40.00	30
FH480	Room 2104	4-8" PIPE RUN	C	9.900E05	3 2 2 2 90	40.00	30
FH480	Room 2105A	4-8" PIPE RUN	C	9.900E05	3 2 2 2 90	40.00	30
FH480	Room 2105B	4-8" PIPE RUN	C	9.900E05	3 2 2 2 90	40.00	30
FH480	Room 2106	4-8" PIPE RUN	C	9.900E05	3 2 2 2 90	40.00	30
FH480	Room 2108	4-8" PIPE RUN	C	9.900E05	3 2 2 2 90	40.00	30
FH481	Room 2102A	<4" PIPE FITTING	C	9.900E05	3 2 2 2 90	40.00	11
FH484	Room 2108	4-8" PIPE FITTING	C	9.900E05	3 2 2 2 90	40.00	30
FH487	Corridor 21B	4-8" PIPE RUN	C	9.900E05	3 2 2 2 90	40.00	35
FH487	Corridor 21C	4-8" PIPE RUN	C	9.900E05	3 2 2 2 90	40.00	35
FH487	Corridor 31A	4-8" PIPE RUN	C	9.900E05	3 2 2 2 90	40.00	35
FH487	Corridor 41A	4-8" PIPE RUN	C	9.900E05	3 2 2 2 90	40.00	35
FH487	Corridor 41B	4-8" PIPE RUN	C	9.900E05	3 2 2 2 90	40.00	35
FH487	Corridor 51A	4-8" PIPE RUN	C	9.900E05	3 2 2 2 90	40.00	35
FH487	Corridor 51B	4-8" PIPE RUN	C	9.900E05	3 2 2 2 90	40.00	35
FH487	Corridor 61A	4-8" PIPE RUN	C	9.900E05	3 2 2 2 90	40.00	35
FH487	Corridor 61B	4-8" PIPE RUN	C	9.900E05	3 2 2 2 90	40.00	35
FH487	Mens Room 3100	4-8" PIPE RUN	C	9.900E05	3 2 2 2 90	40.00	35
FH487	Room 2108B	4-8" PIPE RUN	Ċ	9.900E05	3 2 2 2 90	40.00	35
FH487	Room 2110A	4-8" PIPE RUN	C	9.900E05	3 2 2 2 90	40.00	35
FH487	Room 2110B	4-8" PIPE RUN	Č	9.900E05	3 2 2 2 90	40.00	35
FH487	Room 3101	4-8" PIPE RUN	Č	9.900E05	3 2 2 2 90	40.00	35
FH487	Room 3102	4-8" PIPE RUN	Č	9.900E05	3 2 2 2 90	40.00	35
FH487	Room 3103	4-8" PIPE RUN	Č	9.900E05	3 2 2 2 90	40.00	35
FH487	Room 3104	4-8" PIPE RUN	č	9.900E05	3 2 2 2 90	40.00	35
FH487	Room 3105A	4-8" PIPE RUN	Č	9.900E05	3 2 2 2 90	40.00	35

Priority Index Codes
A [=] Long Term Corrective Measure

B [=] Review Management Special Considerations/Remarks C [=] Army Asbestos Deficiency Abatement Project

Priority Index Numbers Are In Scientific Notation

Exposure Factors
1 [=] Material Friability

2 [=] Occupant Accessability
3 [=] Material Condition
4 [=] Level Of Activity
5 [=] Number Of Assigned Occupants

TABLE 2525.4 (continued)

EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 2525, ADMIN. (AVRADA)

AREA Room 3105B Room 3106 Room 3107 Room 3108A Room 3108B Room 3109 Room 3110 Room 4100 Room 4101	4-8" PI 4-8" PI 4-8" PI 4-8" PI 4-8" PI 4-8" PI 4-8" PI	PE RUN PE RUN PE RUN PE RUN PE RUN	INDEX CODE C C C C	INDEX NUMBER 9.900E05 9.900E05 9.900E05 9.900E05	3 3 3		2 2	4 2 2	5 90 90	EXP. HOURS 40.00 40.00	% ASB. 35 35	
Room 3105B Room 3106 Room 3107 Room 3108A Room 3108B Room 3109 Room 3110 Room 4100	4-8" PI 4-8" PI 4-8" PI 4-8" PI 4-8" PI 4-8" PI 4-8" PI	PE RUN	ć	9.900E05 9.900E05 9.900E05	3 3 3	2	2 2	2	90	40.00	35	
Room 3106 Room 3107 Room 3108A Room 3108B Room 3109 Room 3110 Room 4100	4-8" PI 4-8" PI 4-8" PI 4-8" PI 4-8" PI 4-8" PI 4-8" PI	PE RUN PE RUN PE RUN PE RUN PE RUN	•_	9.900E05 9.900E05	3	2	2	2	90		35 35	
Room 3107 Room 3108A Room 3108B Room 3109 Room 3110 Room 4100	4-8" PI 4-8" PI 4-8" PI 4-8" PI 4-8" PI 4-8" PI	PE RUN PE RUN PE RUN PE RUN	C C C	9.900E05	3	_				ፈበ . ሰስ	75	
Room 3108A Room 3108B Room 3109 Room 3110 Room 4100	4-8" PI 4-8" PI 4-8" PI 4-8" PI 4-8" PI	PE RUN PE RUN PE RUN	C C		3	2	•				22	
Room 3108B Room 3109 Room 3110 Room 4100	4-8" PI 4-8" PI 4-8" PI 4-8" PI	PE RUN PE RUN	C C	9.900E05	7		2	2	90	40.00	35	
Room 3109 Room 3110 Room 4100	4-8" PI 4-8" PI 4-8" PI	PE RUN	C		3	2	2	2	90	40.00	35	
Room 3110 Room 4100	4-8" PI 4-8" PI			9.900E05	3	2	2	2	90	40.00	35	
Room 4100	4-8" PI	PE RUN	C	9.900E05	3	2	2	2	90	40.00	35	
			C	9.900E05	3	2	2	2	90	40.00	35	
Room 4101	A-RII D1	PE RUN	C	9.900E05	3	2	2	2	90	40.00	35	
	4-0° F1	PE RUN	C	9.900E05	3	2	2	2	90	40.00	35	
Room 4101A	4-8" PI	PE RUN	C	9.900E05	3	2	2	2	90	40.00	35	
Room 4102	4-8" PI		C	9.900E05	3	2	2	2	90	40.00	35	
Room 4104	4-8" PI		C	9.900E05	3	2	2	2	90	40.00	35	•
Room 4105	4-8" PI		C	9.900E05	3	2	2	2	90	40.00	35	
Room 4106	4-8" PI		Č	9.900E05	3	2	2	2	90	40.00	35	
Room 4107	4-8" PI		Č	9.900E05	3	2	Ž	2	90	40.00	35	
Room 4108A	4-8" PI		Č	9.900E05	3	2	2	2	90	40.00	35	
Room 4108B	4-8" PI		Č	9.900E05	3	2	2	Ž	90	40.00	35	
Room 4109	4-8" PI		Č	9.900E05	3	2	2	2	90	40.00	35	
Room 4110	4-8" PI		č	9.900E05	3	Ž	2	2	90	40.00	35	
Room 5100	4-8" PI		č	9.900E05	- - -	Ž	Ž	Ž	90	40.00	35	
Room 5100A	4-8" PI		č	9.900E05	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	2	2	Ž	90	40.00	35	
Room 5101	4-8" PI		Č	9.900E05	3	2	2	2	90	40.00	35	,
Room 5102	4-8" PI		Č	9.900E05	3	2	2	2	90	40.00	35	
Room 5103	4-8" PI		ř	9.900E05	₹	2	2	2	90	40.00	35	
			ŗ		4							
1144111 7147			ŗ		ž	_				•		
			ŗ		3		_				35	
Room 5106			Č			_	_	_			35 35	
Room 5106 Room 5107			r c				-	_				
Room 5106 Room 5107 Room 5109A	/_ DII ht		Č		_		2				35 35	
	Room 5107 Room 5109A	Room 5106 4-8" PII Room 5107 4-8" PII Room 5109A 4-8" PII Room 5109B 4-8" PII	Room 5106 4-8" PIPE RUN Room 5107 4-8" PIPE RUN Room 5109A 4-8" PIPE RUN	Room 5106 4-8" PIPE RUN C Room 5107 4-8" PIPE RUN C Room 5109A 4-8" PIPE RUN C Room 5109B 4-8" PIPE RUN C	Room 5106 4-8" PIPE RUN C 9.900E05 Room 5107 4-8" PIPE RUN C 9.900E05 Room 5109A 4-8" PIPE RUN C 9.900E05 Room 5109B 4-8" PIPE RUN C 9.900E05	Room 5106 4-8" PIPE RUN C 9.900E05 3 Room 5107 4-8" PIPE RUN C 9.900E05 3 Room 5109A 4-8" PIPE RUN C 9.900E05 3 Room 5109B 4-8" PIPE RUN C 9.900E05 3	Room 5106 4-8" PIPE RUN C 9.900E05 3 2 Room 5107 4-8" PIPE RUN C 9.900E05 3 2 Room 5109A 4-8" PIPE RUN C 9.900E05 3 2 Room 5109B 4-8" PIPE RUN C 9.900E05 3 2	Room 5106 4-8" PIPE RUN C 9.900E05 3 2 2 Room 5107 4-8" PIPE RUN C 9.900E05 3 2 2 Room 5109A 4-8" PIPE RUN C 9.900E05 3 2 2 Room 5109B 4-8" PIPE RUN C 9.900E05 3 2 2	Room 5106 4-8" PIPE RUN C 9.900E05 3 2 2 Room 5107 4-8" PIPE RUN C 9.900E05 3 2 2 Room 5109A 4-8" PIPE RUN C 9.900E05 3 2 2 Room 5109B 4-8" PIPE RUN C 9.900E05 3 2 2	Room 5106 4-8" PIPE RUN C 9.900E05 3 2 2 2 90 Room 5107 4-8" PIPE RUN C 9.900E05 3 2 2 2 90 Room 5109A 4-8" PIPE RUN C 9.900E05 3 2 2 2 90 Room 5109B 4-8" PIPE RUN C 9.900E05 3 2 2 2 90	Room 5106 4-8" PIPE RUN C 9.900E05 3 2 2 2 90 40.00 Room 5107 4-8" PIPE RUN C 9.900E05 3 2 2 2 90 40.00 Room 5109A 4-8" PIPE RUN C 9.900E05 3 2 2 2 90 40.00 Room 5109B 4-8" PIPE RUN C 9.900E05 3 2 2 2 90 40.00	Room 5105 4-8" PIPE RUN C 9.900E05 3 2 2 2 90 40.00 35 Room 5106 4-8" PIPE RUN C 9.900E05 3 2 2 2 90 40.00 35 Room 5107 4-8" PIPE RUN C 9.900E05 3 2 2 2 90 40.00 35 Room 5109A 4-8" PIPE RUN C 9.900E05 3 2 2 2 90 40.00 35 Room 5109B 4-8" PIPE RUN C 9.900E05 3 2 2 2 90 40.00 35

Priority Index Codes

A [=] Long Term Corrective Measure

B [=] Review Management Special Considerations/Remarks

C [=] Army Asbestos Deficiency Abatement Project

Priority Index Numbers Are In Scientific Notation

- Exposure Factors
 1 [=] Material Friability
- 2 [=] Occupant Accessability 3 [=] Material Condition 4 [=] Level Of Activity

- 5 [=] Number Of Assigned Occupants

TABLE 2525.4 (continued)

			PRIOR.	PRIORITY				AVG.	
SAMPLE		MATERIAL	INDEX	INDEX			ACTORS	EXP.	*
NO.	AREA	TYPE	CODE	NUMBER	1 2	3 4	5	HOURS	ASB.
FH487	Room 5111	4-8" PIPE RUN	С	9.900E05	3 2	2 2	90	40.00	35
FH487	Room 5112	4-8" PIPE RUN	С	9.900E05	32	2 2	90	40.00	35
FH487	Room 5114	4-8" PIPE RUN	· C	9.900E05	32	2 2	90	40.00	35
FH487	Room 6100	4-8" PIPE RUN	C	9.900E05	32	2 2	90	40.00	35
FH487	Room 6101 Mens	4-8" PIPE RUN	C	9.900E05	32	2 2	90	40.00	3 5
FH487	Room 6103	4-8" PIPE RUN	C	9.900E05	32	2 2	90	40.00	35
FH487	Room 6105	4-8" PIPE RUN	Ċ	9.900E05	32	2 2	90	40.00	35
FH493	Corridor 31A	<4" PIPE RUN	C	9.900E05	32	2 2	90	40.00	38
FH493	Room 3110	<4" PIPE RUN	C	9.900E05	32	2 2	90	40.00	38
FH493	Room 6100	<4" PIPE RUN	C	9.900E05	32	2 2	90	40.00	38
FH493 .	Room 6105	<4" PIPE RUN	C	9.900E05	32	2 2	90	40.00	38
FH494	Closet 6	<4" PIPE FITTING	C	9.900E05	32	2 2	90	40.00	35
FH494	Corridor 31B	<4" PIPE FITTING	C	9.900E05	32	2 2	90	40.00	35
FH494	Corridor 51A	<4" PIPE FITTING	C	9.900E05	32	2 2	90	40.00	35
FH494	Corridor 61A	<4" PIPE FITTING	C	9.900E05	32	2 2	90	40.00	35
FH494	Room 4100	<4" PIPE FITTING	C	9.900E05	32	2 2	90	40.00	35
FH494	Room 4101A	<4" PIPE FITTING	C	9.900E05	32	2 2	90	40.00	35
FH494	Room 4104	<4" PIPE FITTING	C	9.900E05	32	2 2	90	40.00	35
FH494	Room 4105	<4" PIPE FITTING	C	9.900E05	32	2 2	90	40.00	35
FH494	Room 4106	<4" PIPE FITTING	C	9.900E05	32	2 2	90	40.00	35
FH494	Room 4107	<4" PIPE FITTING	C	9.900E05	32	2 2	90	40.00	35
FH494	Room 6100	<4" PIPE FITTING	C	9.900E05	32	2 2	90	40.00	35
FH494	Room 6101 Mens	<4" PIPE FITTING	C	9.900E05	32	2 2	90	40.00	35
FH494	Room 6105	<4" PIPE FITTING	C	9.900E05	32	2 2	90	40.00	35
FH495	Room 4100	<4" PIPE RUN	C	9.900E05	32	2 2	90	40.00	35
FH496	Corridor 41A	<4" PIPE RUN	C	9.900E05	32	2 2	90	40.00	35
FH496	Corridor 41B	<4" PIPE RUN	C	9.900E05	32	2 2	90	40.00	3 5
FH496	Room 4100	<4" PIPE RUN	C	9.900E05	3 2	2 2	90	40.00	35
FH496	Room 4102	<4" PIPE RUN	C	9.900E05	32	2 2	90	40.00	3 5
FH496	Room 4104	<4" PIPE RUN	C	9.900E05	32	2 2	90	40.00	35.

Priority Index Codes

A [=] Long Term Corrective Measure

B [=] Review Management Special Considerations/Remarks

C [=] Army Asbestos Deficiency Abatement Project

Priority Index Numbers Are In Scientific Notation

Exposure Factors
1 [=] Material Friability

2 [=] Occupant Accessability

3 [=] Material Condition

4 [=] Level Of Activity

5 [=] Number Of Assigned Occupants

TABLE 2525.4 (continued)

EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 2525, ADMIN. (AVRADA)

			PRIOR.	PRIORITY						AVG.		
SAMPLE		MATERIAL	INDEX	INDEX				FACT	TORS	EXP.	X	
NO.	AREA	TYPE	CODE	NUMBER	1_	2	3_	4	5	HOURS	ASB.	
FH496	Room 4105	<4" PIPE RUN	. С	9.900E05	3	2	2	2	90	40.00	35	
FH496	Room 4106	<4" PIPE RUN	C	9.900E05	3	2	2	2	90	40.00	35	
FH496	Room 4107	<4" PIPE RUN	C	9.900E05	3	2	2	2	90	40.00	35	
FH496	Room 4108A	<4" PIPE RUN	C	9.900E05	3	2	2	2	90	40.00	35	
FH496	Room 4108B	<4" PIPE RUN	C	9.900E05	3	2	2	2	90	40.00	35	
FH496	Room 4109	<4" PIPE RUN	C	9.900E05	3	2	2	2	90	40.00	35	
FH496	Room 4110	<4" PIPE RUN	C	9.900E05	3	2	2	2	90	40.00	35	
FH496	Room 5101 ·	<4" PIPE RUN	C	9.900E05	3	2	2	2	90	40.00	35	
FH483	Room 2106	ACOUSTICAL WALL TILE	Ċ	1.710E05	3	2	2	2	90	40.00	1	
FH483	Room 2200	ACOUSTICAL WALL TILE	C	1.710E05	3	2	2	2	90	40.00	1	
FH483	Room 2204	ACOUSTICAL WALL TILE	C	1.710E05	3	2	2	2	90	40.00	1	
FH483	Room 2206	ACOUSTICAL WALL TILE	C	1.710E05	3	2	2	2	90	40.00	1	
FH483	Room 3207	ACOUSTICAL WALL TILE	Ċ	1.710E05	3	2	2	2	90	40.00	1	
FH483	Room 4205	ACOUSTICAL WALL TILE	C	1.710E05	3	2	2	2	90	40.00	1	,
FH483	Room 5201	ACOUSTICAL WALL TILE	C	1.710E05	3		2	2	90	40.00	1	
FH483	Room 5206	ACOUSTICAL WALL TILE	C	1.710E05	3	2	2	2	90	40.00	1	
FH483.	Room 5212	ACOUSTICAL WALL TILE	C	1.710E05	3	2	2	2	90	40.00	1	•
FH483	Room 6100	ACOUSTICAL WALL TILE	C	1.710E05	3	2	2	2	90	40.00	1	
FH476	Room 2101	CEILING TILE	A	0	3	2	2	2	90	40.00	0	
FH476	Room 4209	CEILING TILE	A	0	3	2	2	2	90	40.00	0	
FH479	Corridor 21A	CEILING TILE	À	0	3	2	2	2	90	40.00	0	
FH479	Corridor 21B	CEILING TILE	A	0	3	2	2	2	90	40.00	0	
FH479	Corridor 21C	CEILING TILE	A	0	3	2	2	2	90	40.00	0	
FH479	Corridor 2A	CEILING TILE	A	0	3	2	2	2	90	40.00	0	
FH479	Corridor 3A	CEILING TILE	Ā	Ō	3	2	2	2	90	40.00	Ò	
FH479	Corridor 4A	CEILING TILE		Ŏ	3	_	_	2	90	40.00	Ö	
FH479	Corridor 6A	CEILING TILE	Ä	Ō	3		_	2	90	40.00	Ö	
FH479	Room 2102	CEILING TILE	Ä	Ŏ	3	2	2	2	90	40.00	Ŏ	
FH479	Room 2103	CEILING TILE	Ä	Ŏ	3	2	2	Ž	90	40.00	Ŏ	
FH479	Room 2104	CEILING TILE	Ä	ň	3	Ξ	_	2	90	40.00	Ŏ	

Priority Index Codes

Priority Index Numbers Are In Scientific Notation

A [=] Long Term Corrective Measure

B [=] Review Management Special Considerations/Remarks

C [=] Army Asbestos Deficiency Abatement Project

Exposure Factors
1 [=] Material Friability

^{2 [=]} Occupant Accessability 3 [=] Material Condition

^{4 [=]} Level Of Activity

^{5 [=]} Number Of Assigned Occupants

TABLE 2525.4 (continued)

EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 2525, ADMIN. (AVRADA)

			PRIOR.	PRIORITY					AVG.		
SAMPLE		MATERIAL	INDEX	INDEX				ACTORS	EXP.	*	
NO.	AREA	TYPE	CODE	NUMBER	1	2 3	4	5	HOURS	ASB.	
FH479	Room 2105A	CEILING TILE	A	0	3 2	2 2	2	90	40.00	0	
FH479	Room 2105B	CEILING TILE	A	0	3 2	2 2			40.00	Ō	
FH4 7 9	Room 2106	CEILING TILE	Α	0	3 2	2 2		90	40.00	Ö	
FH479	Room 2108	CEILING TILE	À	0	3 2	2 2	2	90	40.00	0	
FH479	Room 2201	CEILING TILE	A	0	3 2	2 2	2	90	40.00	0	
FH479	Room 2202	CEILING TILE	A	0	3 2	2 2	2	90	40.00	0	
FH479	Room 2203	CEILING TILE	Α	0		2 2			40.00	Ō	
FH479	Room 2204	CEILING TILE	Á	Ō	3 2			90	40.00	Ŏ	
FH479	Room 2205	CEILING TILE	Ā	Ō	3 2			90	40.00	Ŏ	
FH479	Room 2206	CEILING TILE	A	Ó	3 2	2 2	2	90	40.00	Ö	
FH479	Room 3200	CEILING TILE	Ä	Ō	3 2				40.00	Ö	
FH479	Room 3201	CEILING TILE	Ā	Ō	3 2		_		40.00	Ŏ	
FH479	Room 3202	CEILING TILE	Ä	Ŏ	3 2				40.00	ŏ	
FH479	Room 3203	CEILING TILE	Ā	Õ	3 2				40.00	Ö	
FH479	Room 3204	CEILING TILE	Ä	ŏ		2 2			40.00	ŏ	
FH479	Room 3205	CEILING TILE	Â	Ď	3 2			90	40.00	Ŏ	
FH479	Room 3206	CEILING TILE	· 🚡	ň	3 2				40.00	ŏ	
FH479	Room 3207	CEILING TILE	Ä	ň		2 2	_	90	40.00	ŏ	
FH479	Room 3209	CEILING TILE	Ä	ň		2 2			40.00	ŏ	
FH479	Room 4200	CEILING TILE	Â	ň	3 2	_	-	• -	40.00	ŏ	
FH479	Room 4201	CEILING TILE	· 🔏	ň	3 2		_		40.00	ŏ	
FH479	Room 4202	CEILING TILE	Ä	ň	3 3	, ,	2	90	40.00	Ŏ	
FH479	Room 4203	CEILING TILE	Ã	ñ	3 2	2	_	90	40.00	Ö	
FH479	Room 4204	CEILING TILE	À	n	3 2	2 2		90	40.00	Ŏ	
FH479	Room 4206	CEILING TILE	Ä	n	3 2			90	40.00	Ö	
FH479	Room 4207	CEILING TILE	^	n	3 2		_	90	40.00	Ö	
FH479	Room 4211	CEILING TILE	. 7	n	3 2			90	40.00	Ö	
FH479	Room 5114	CEILING TILE	· ^	0	3 2		_	90	40.00	0	
FH479	Room 5200	CEILING TILE	2	U							
			A	U	3 2				40.00	0	
FH479	Room 5202	CEILING TILE	A	0	3 2	2	2	90	40.00	0	

Priority Index Codes

A [=] Long Term Corrective Measure

B [=] Review Management Special Considerations/Remarks

C [=] Army Asbestos Deficiency Abatement Project

Priority Index Numbers Are In Scientific Notation

Exposure Factors

- 1 [=] Material Friability
- 2 [=] Occupant Accessability
- 3 [=] Material Condition
- 4 [=] Level Of Activity
- 5 [=] Number Of Assigned Occupants

TABLE 2525.4 (continued)

	*** *		PRIOR.	PRIORITY					AVG.		
SAMPLE		MATERIAL	INDEX	INDEX				CTORS	EXP.	×	
NO.	AREA	TYPE	CODE	NUMBER	1 2	3	_4_		HOURS	ASB.	
FH479	Room 5203	CEILING TILE	A	0	3 2	2	2	90	40.00	0	
FH479	Room 5204	CEILING TILE	A	0	3 2	2	2	90	40.00	0	
FH479	Room 5205	CEILING TILE	, A	0	3 2	2	2	90	40.00	0	
FH479	Room 5206	CEILING TILE	A	0	3 2	2	2	90	40.00	0	
FH479	Room 5207	CEILING TILE	À	0	3 2	2	2	90	40.00	0	
FH479	Room 5208	CEILING TILE	. А	0	3 2	2	2	90	40.00	0	
FH479	Room 5210	CEILING TILE	· À	0	3 2	2	2	90	40.00	0	
FH479	Room 5212	CEILING TILE	Â	0	3 2	2	. 2	90	40.00	0	
FH479	Room 6210	CEILING TILE	Á	0	3 2	2	2	90	40.00	0	
FH486	Corridor 21B	<4" PIPE FITTING	A	0	3 2	2	2	90	40.00	0	
FH488	Corridor 218	4-8" PIPE FITTING	À	0	3 2	2	2	90	40.00	0	
FH488	Corridor 31B	4-8" PIPE FITTING	A	0	3 2	2	2	90	40.00	0	
FH488	Corridor 41A	4-8" PIPE FITTING	Á	0	3 2	2	2	90	40.00	0	
FH488	Room 2108B	4-8" PIPE FITTING	À	0	3 2	2	2	90	40.00	0	
FH488	Room 3109	4-8" PIPE FITTING	Á	0	3 2	2	2	90	40.00	0	
FH488	Room 4101	4-8" PIPE FITTING	A	0	3 2	2	2	90	40.00	0	
FH488	Room 4101A	4-8" PIPE FITTING	A	0	3 2	2	2	90	40.00	0	
FH488	Room 4102	4-8" PIPE FITTING	A	0	3 2	2	2	90	40.00	0	
FH488	Room 4104	4-8" PIPE FITTING	A	0	3 2	2	2	90	40.00	0	
FH488	Room 5100A	4-8" PIPE FITTING	À	0	3 2	2	2	90	40.00	0	•
FH488	Room 5108A and B	4-8" PIPE FITTING	· A	0	3 2	2	2	90	40.00	0	
FH488	Room 5109A ·	4-8" PIPE FITTING	Á	0	32	2	2	90	40.00	0	
FH488	Room 6100	4-8" PIPE FITTING	, A	Ó	3 2	2	2	90	40.00	0	
FH488	Room 6105	4-8" PIPE FITTING	1 A	0	3 2	2	2	90	40.00	0	
FH489	Room 2108B	ACOUSTICAL WALL TILE	Ä	Ö	3 2	2	2	90	40.00	Ō	
FH489	Room 2110A	ACOUSTICAL WALL TILE	Ä	Ŏ	3 2	2	Ž	90	40.00	Ô	
FH489	Room 2110B	ACOUSTICAL WALL TILE	Ä	Ŏ	3 2	2	Ž	90	40.00	Ö	
FH489	Room 3103	ACOUSTICAL WALL TILE	Ä	Ō	3 2	Ž	Ž	90	40.00	Ŏ	
FH489	Room 3105A	ACOUSTICAL WALL TILE	Â	Ŏ	3 2	2	2	90	40.00	Ŏ	
FH489	Room 3105B	ACOUSTICAL WALL TILE	Ä	ŏ	3 2	2		90	40.00	ŏ	

Priority Index Codes

A [=] Long Term Corrective Measure

B [=] Review Management Special Considerations/Remarks

C [=] Army Asbestos Deficiency Abatement Project

Priority Index Numbers Are In Scientific Notation

Exposure Factors
1 [=] Material Friability

2 [=] Occupant Accessability 3 [=] Material Condition

4 [=] Level Of Activity

5 [=] Number Of Assigned Occupants

TABLE 2525.4 (continued)

			. PRIOR.	PRIORITY					AVG.		
SAMPLE		MATERIAL	INDEX	INDEX				CTORS	EXP.	×	
NO.	AREA	TYPE	CODE	NUMBER	1 2	3	4	5	HOURS	ASB.	
FH489	Room 3106	ACOUSTICAL WALL TILE	A.	0	3 2	2	2	90	40.00	0	
FH489	Room 4105	ACOUSTICAL WALL TILE	A	0	3 2	. 2	2	90	40.00	0	
FH489	Room 4109	ACOUSTICAL WALL TILE	. А	0	3 2	. 2	2	90	40.00	0	
FH489	Room 5108A and B	4-8" PIPE RUN	A	0	3 2	2	2	90	40.00	0	
FH489	Room 5109A	ACOUSTICAL WALL TILE	A	0	3 2	2	2	90	40.00	0	
FH489	Room 5109B	ACOUSTICAL WALL TILE	À	0	3 2	2	2	90	40.00	0	
FH490	Corridor 31A	CEILING TILE	À	0	3 2	2	2	90	40.00	0	
FH490	Corridor 31B	CEILING TILE	A	0	3 2	2	2	90	40.00	0	
FH490	Mens Room 3100	CEILING TILE	Á	0	3 2	2	2	90	40.00	Ô	
FH490	Room 2108B	CEILING TILE	A	0	3 2	2	2	90	40.00	0	
FH490	Room 2110A	CEILING TILE	A	Ō	3 2	2	2	90	40.00	Ö	
FH490	Room 2110B	CEILING TILE	A	Ò	3 2	2	2	90	40.00	0	
FH490	Room 3101	CEILING TILE	A	Ō	3 2		Ž	90	40.00	Ö	
FH490	Room 3102	CEILING TILE	Ä	Ö	3 2	2	2	90	40.00	0	
FH490	Room 3103	CEILING TILE	Ä	Ŏ	3 2	2	Ž	90	40.00	Ö	
FH490	Room 3104	CEILING TILE	A	Ö	3 2	_	2	90	40.00	Ō	
FH490	Room 3105A	CEILING TILE	Ā	Ŏ	3 2		Ž	90	40.00	Ö	
FH490	Room 3105B	CEILING TILE	Ä	Ŏ	3 2	2	2	90	40.00	Ŏ	
FH490	Room 3106	CEILING TILE	Ä	Ŏ	3 2	2	2	90	40.00	Ŏ	
FH490	Room 3107	CEILING TILE	A	Ō	3 2	2	2	90	40.00	Ö	
FH490	Room 3108A	CEILING TILE	Ā	Ŏ	3 2	2	Ž	90	40.00	Ö	
FH490	Room 3108B	CEILING TILE	A	ŏ	3 2		2	90	40.00	Ō	
FH490	Room 3110	CEILING TILE	. A	Ŏ	3 2	2	2	90	40.00	Ŏ	
FH490	Room 4100	CEILING TILE		ň	3 2	_	2	90	40.00	Ŏ	
FH490	Room 5100	CEILING TILE	Â	ň	3 2	_	Ž	90	40.00	ŏ	
FH497	Room 4101	CEILING TILE	Ä	ň	3 2		2	90	40.00	Ŏ	
FH497	Room 5102	CEILING TILE	Ä	. ñ	3 2	2	2	90	40.00	ŏ	
FH497	Room 5201	CEILING TILE	7	ň	3 2	2	2	90	40.00	ŏ	
FH497	Room 6201	CEILING TILE	Ä	. n	3 2	=	2	90	40.00	Ŏ	
FH498	Corridor 41A	CEILING TILE	Â	ň	3 2		_	90	40.00	ŏ	

Priority Index Codes

Priority Index Numbers Are In Scientific Notation

A [=] Long Term Corrective Measure

B [=] Review Management Special Considerations/Remarks C [=] Army Asbestos Deficiency Abatement Project

Exposure Factors
1 [=] Material Friability

^{2 [=]} Occupant Accessability 3 [=] Material Condition

^{4 [=]} Level Of Activity

^{5 [=]} Number Of Assigned Occupants

TABLE 2525.4 (continued)

			PRIOR.	PRIORITY						AVG.		
SAMPLE		MATERIAL	INDEX	INDEX	<u>EX</u>				TORS	EXP.	X	•
NO	AREA	TYPE	CODE	NUMBER	1_	2	_3_	_4_	5	HOURS	ASB.	
FH498	Corridor 41B	CEILING TILE	A	0	3	2	2	2	90	40.00	0	
FH498	Corridor 51A	CEILING TILE	À	0	3	2	2	2	90	40.00	0	
FH498	Corridor 51B	CEILING TILE	A	0	3	2	2	2	90	40.00	0	
FH498	Corridor 61A	CEILING TILE	A	0	3	2	2	2	90	40.00	0	
FH498	Corridor 61B	CEILING TILE	A	0	3	2	2	2	90	40.00	0	
FH498	Room 2200	CEILING TILE	A	0	3	2	2	2	90	40.00	0	
FH498	Room 4101	CEILING TILE	A	0	3	2	2	2	90	40.00	0	
FH498	Room 4102	CEILING TILE	. А	0	3	2	2	2	90	40.00	0	
FH498	Room 4104	CEILING TILE	Α	0	3	2	2	2	90	40.00	0	
FH498	Room 4105	CEILING TILE	A	0	3	2	2	2	90	40.00	0	
FH498	Room 4106	CEILING TILE	A	0	3	2	2	2	90	40.00	0	
FH498	Room 4107 ·	CEILING TILE	A	0	3	2	2	2	90	40.00	0	
FH498	Room 4108A	CEILING TILE	A	0	3	2	2	2	90	40.00	0	
FH498	Room 4108B	CEILING TILE	Α	0	3	2	2	2	90	40.00	0	
FH498	Room 4109	CEILING TILE	A	0	3	2	2	2	90	40.00	0	
FH498	Room 4110	CEILING TILE	A	0	3	2	2	2	90	40.00	0	
FH498	Room 5101	CEILING TILE	A	0	3	2	2	2	90	40.00	0	
FH498	Room 5103	CEILING TILE	A	0	3	2	2	2	90	40.00	0	
FH498	Room 5105	CEILING TILE	A	0	3	2	2	2	90	40.00	0	
FH498	Room 5106	CEILING TILE	A	0	3	2	2	2	90	40.00	0	
FH498	Room 5107	CEILING TILE	A	0	3	2	2	2	90	40.00	0	
FH498	Room 5108A and B	CEILING TILE	A	0	3	2	2	2	90	40.00	0	
FH498	Room 5109A	CEILING TILE	A	0	3	2	2	2	90	40.00	0	
FH498	Room 5109B	CEILING TILE	A	0	3	2	2	2	90	40.00	0	
FH498	Room 5110	CEILING TILE	A	0	3	2	2	2	90	40.00	0	
FH498	Room 5111	CEILING TILE	Α	0	3	2	2	2	90	40.00	0	
FH498	Room 5112	CEILING TILE	À	Ó	3	2	Ž	2	90	40.00	Ō	
FH498	Room 6100	CEILING TILE	A	Ó	3	2	2	2	90	40.00	Ö	
FH498	Room 6101 Mens	CEILING TILE	Ä	Ó	3	2	Ž	2	90	40.00	Ŏ	
FH498	Room 6103	CEILING TILE	Ä	Ŏ	3	2	2	2	90	40.00	Ö	

Priority Index Numbers Are In Scientific Notation

Priority Index Codes
A [=] Long Term Corrective Measure

B [=] Review Management Special Considerations/Remarks

C [=] Army Asbestos Deficiency Abatement Project

Exposure Factors
1 [=] Material Friability
2 [=] Occupant Accessability
3 [=] Material Condition
4 [=] Level Of Activity

^{5 [=]} Number Of Assigned Occupants

TABLE 2525.4 (continued)

EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 2525, ADMIN. (AVRADA)

SAMPLE		MATERIAL	PRIOR. INDEX	PRIORITY INDEX	EX	POS	URE	FAC	TORS	AVG. Exp.	%	
NO.	AREA	TYPE	CODE	NUMBER	<u> </u>	2	3	4	5	HOURS	ASB.	
FH498	Room 6105	CEILING TILE	Ä	0	3	2	2	2	90	40.00	0	
FH499	Room 2204	ACOUSTICAL WALL TILE	A	0	3	2	2	2	90	40.00	0	
FH499	Room 2206	ACOUSTICAL WALL TILE	A	0	3	2	2	2	90	40.00	0	
FH499	Room 4109	ACOUSTICAL WALL TILE	A	0	3	2	2	2	90	40.00	0	
FH499	Room 6100	ACOUSTICAL WALL TILE	Á	0	3	2	2	2	90	40.00	0	
FH499	Room 6105	ACOUSTICAL WALL TILE	A	0	3	2	2	2	90	40.00	0	
FH514	Boiler House	BOILERS/TANKS	A	Ō	3	1	2	1	1	2.00	0	
FH515	Boiler House	BOILERS/TANKS	Ä	Ö	3	1	2	1	1	2.00	0	

Priority Index Codes

A [=] Long Term Corrective Measure

B [=] Review Management Special Considerations/Remarks

C [=] Army Asbestos Deficiency Abatement Project

Priority Index Numbers Are In Scientific Notation

Exposure Factors

1 [=] Material Friability

2 [=] Occupant Accessability

3 [=] Material Condition

4 [=] Level Of Activity

5 [=] Number Of Assigned Occupants

TABLE 2525.5 COST ESTIMATE* - BUILDING 2525, ADMIN. (AVRADA)

DESCRIPTION	UNIT COST (\$)	AREA 1	AREA 2	AREA	AREA 4	AREA	AREA	AREA	AREA	AREA	AREA 10	AREA
Pipe Fittings (EA)	70.70	0.1	_	_	_	_		0.9	_	_		
4-8" 9-14" >14"	70.30 85.80 147.00 216.00		-	-	-	-	-	-	:	:	:	-
•	216:00	-	-	-	-	-	-	-	-	-	-	-
Pipe Runs (LF)	26.50	•	-	- ,	-	_	**	-	-	0.2	0.2	
4-8" 9-14" >14"	26.50 30.50 42.50 60.80	=	0.5	3.4	0.2	-	0.4	-	:	3:è	8:5	:
	60.80	-	-	•	-	-	-	•	-	•	-	-
Sprayed/Troweled Ceilings (SF)	9.60	-	-	-	-	-	.•	-	-	-	•	-
Floor Tile (SF)	5.60	0.2	1.4	4.8	Õ.7	5.3	1.4	4.8	6.6	5.9	1.1	6.
Boilers/Tanks (SF)	37.90	•	-	•	•	-	-	-	-	-	-	-
Air Handling Equipment (SF)	20.00	-	_	-	-	-	-	-	-	-	-	-
Other		-	-	•	•	-	-	-	-	-	-	-
SUBTOTAL		0.3	1.9	8.2	0.8	5.3	1.9	5.8	6.6	10.1	1.5	6.
Difficulty Allowance		- '	0.2	1.7	0.4	-	0.2	0.5	-	2.1	0.8	3.
SUBTOTAL		0.3	2.1	9.9	1.2	5.3	2.1	6.2	· 6.6	12.1	2.3	9.
Decontamination Units Mobilization		.0.2	.Q.2	.Q.2	.0.2	* Q .2	.Q.2	.0.2	.0. 2	* 0. 2	.Q.2	. Q.
SUBTOTAL		0.5	2.3	10.1	1.4	5.5	2.3	6.4	6.8	12.3	2.5	10.
Contingency a 15.00%		**	0.3	1.5	0.2	0.8	0.3	1.0	1.0	1.8	0.4	1.
SUBTOTAL		0.6	2.7	11.6	1.6	6.3	2.7	7.4	7.8	14.1	2.9	11.
Design Fee a 10.00%		**	0.3	1.2	0.2	0.6	0,3	0.7	0.8	1.4	0.3	1.
SUBTOTAL		0.7	2.9	12.7	1.8	6.9	2.9	8.1	8.6	15.6	3.1	12.
Air Monitoring a 10.00%***	•	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.
TOTAL		2.6	4.9	14.7	3.8	8.9	4.9	10.0	10.6	17.5	5.1	14.

^{*}Amounts Are In Thousands Of Dollars

^{***}Less Than \$100 For The Area; Amount Not Printed But Included In Total(s)
****The Minimum Air Monitoring Fee is \$500.00 Per Building





TABLE 2525.5 (continued)

COST ESTIMATE* - BUILDING 2525, ADMIN. (AVRADA)

DESCRIPTION :	UNIT COST (\$)	AREA 12	AREA 13	AREA 14	AREA 15	AREA 16	AREA	AREA 18	AREA 19	AREA 20	AREA 21	AREA 22
Pipe Fittings (EA) 4-8" 9-14" >14"	70.30 85.80 147.00 216.00	1.8	:	0.8 -	:	:	:	:	:	0.3 :	į	:
Pipe Runs (LF) 44-8" 9-14" >14"	26.50 30.50 22.50 60.80	3.6	1.1	4.0	0.5	:	ō.5	1.0	ō.5	:	1.7	Ö.(
Sprayed/Troweled Ceilings (SF)	9.60	-	-	, _	-	-	-	-	-	-	-	
Floor Tile (SF)	5.60	5.6	0.7	7.3	0.7	3.7	-	2.1	-	-	4.7	1.
Boilers/Tanks (SF)	37.90	-	-		-	-	-	-	-	-	-	-
Air Handling Equipment (SF)	20.00	-	-	-	-	-	-	-	-	-	-	-
Other		-	•	-	-	-	•	-	•	-	-	-
SUBTOTAL		11.0	1.8	12.0	1.2	3.7	0.5	3.1	0.5	0.3	6.4	2.
Difficulty Allowance		2.7	0.6	2.4	0.2	-	0.3	1.6	0.3	-	3.2	1.
SUBTOTAL		13.7	2.4	14.4	1.4	3.7	0.8	4.7	8.0	0.3	9.6	2.
Decontamination Units Mobilization	•	.Q.2	.0.2 **	<u>.</u> 0.2	.Q.2	,0.2 **	.Q.2	.0.2 **	.0.2 **	.0.2 **	.0.2	*Š-
SUBTOTAL		13.9	2.6	14.6	1.6	3.9	1.0	4.9	1.0	0.5	9.8	3.
Contingency a 15.00%		2.1	0.4	2.2	Ó.2	0.6	0.2	0.7	0.1	**	1.5	0.
SUBTOTAL		16.0	2.9	16.8	1.8	4.5	1.2	5.6	1.1	0.5	11.3	3.
Design Fee @ 10.00%		1.6	0.3	1.7	0.2	0.4	0.1	0.6	0.1	**	1.1	0.
SUBTOTAL		17.6	3.2	18.4	2.0	4.9	1.3	6.2	1.2	0.6	12.4	3.
Air Monitoring a 10.00%**	k .	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.
TOTAL		19.5	5.2	20.4	4.0	6.9	3.2	8.1	3.2	2.6	14.4	5.9

^{*}Amounts Are In Thousands Of Dollars

^{***} The Minimum Air Monitoring Fee is \$500.00 Per Building



AREA 13: Corridor 518 AREA 15: Corridor 618 AREA 17: Mens Room 3100 AREA 17: Room 2102

^{**}Less Than \$100 For The Area; Amount Not Printed But Included In Total(s)

COST ESTIMATE* - BUILDING 2525, ADMIN. (AVRADA)

DESCRIPTION	UNIT COST (\$)	AREA	AREA 24	AREA 25	AREA 26	AREA 27	AREA 28	AREA 29	AREA 30	AREA 31	AREA 32	AREA
Pipe Fittings (EA) 4-8" 9-14" >14"	70.30 85.80 147.00 216.00	<u>.</u> 7	:	:	ō.3	Ë	:	:	:	:	:	:
Pipe Runs (LF) 44-8" 9-14" >14"	26.50 30.50 42.50 60.80	1.8	3.1	0.6	1.4	1.8	1.1	0.9	:	:	:	:
Sprayed/Troweled Ceilings (SF)	9.60	-		-	-	-	•	-	-	-	-	-
Floor Tile (SF)	5.60	2.2	3.2	1.6	2.2	3.8	7.3	5.6	-	0.5	5.1	2.7
Boilers/Tanks (SF)	37.90	-	-	-	-	-	-	-	-	-	-	-
Air Handling Equipment (SF)	20.00	-	-	-	-	-	-	-	-		-	-
Other		-	-	2.4	-	-	-	-	12.1	-	-	-
SUBTOTAL		4.7	6.3	4.6	3.9	5.6	8.4	6.5	12.1	0.5	5.1	2.
Difficulty Allowance	•	2.3	3.1	1.1	1.9	2.8	4.2	3.2	-	-	2.6	1.
SUBTOTAL		7.0	9.4	5.7	5.8	8.4	12.5	· 9.7	12.1	0.5	7.7	4.0
Decontamination Units Mobilization		**-2	.Q.2	.Q.2	.Q.2	.Q.2	.0.2	.Q.2	* 0. 2	.Q.2	. 0.2	.Q.:
SUBTOTAL		7.2	9.6	5.9	6.0	8.6	12.7	9.9	12.3	0.7	7.8	4.
Contingency a 15.00%		1.1	1.4	0.9	0.9	1.3	1.9	1.5	1.8	0.1	1.2	0.0
SUBTOTAL		8.3	11.0	6.8	6.9	9.9	14.6	11.4	14.1	8.0	9.0	4.
Design Fee @ 10.00%		0.8	1.1	0.7	0.7	1.0	1.5	1.1	1.4	**	0.9	0.
SUBTOTAL		9.1	12.1	7.5	7.6	10.8	16.1	12.6	15.5	0.9	9.9	5.3
Air Monitoring a 10.00%**	*	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.
TOTAL		11.1	14.1	9.4	9.6	12.8	18.0	14.5	17.5	2.9	11.9	7.

^{*}Amounts Are In Thousands Of Dollars

^{***} The Minimum Air Monitoring Fee is \$500.00 Per Building





^{**}Less Than \$100 For The Area; Amount Not Printed But Included In Total(s)

COST ESTIMATE* - BUILDING 2525, ADMIN.(AVRADA)

DESCRIPTION	UNIT COST (\$)	AREA 34	AREA	AREA 36	AREA	ÀREA 38	AREA	AREA 40	AREA 41	AREA 42	AREA	AREA 44
Pipe Fittings (EA)	70.30 85.80 147.80 216.00	-	:	:		:	:	<u>:</u>	:	:	:	-
Pipe Runs (LF)	26-50 30-50 42-50 60-80	:	:	:	:	0.5	2.0	1.7	1.2	ō.6	1.0	0.5
Sprayed/Troweled Ceilings (SF)	9.60	•	_	•	-	_	_	_	_	-	-	-
Floor Tile (SF)	5.60	4.8	6.7	1.6	1.1	0.8	4.3	3.8	2.2	1.3	2.7	1.1
Boilers/Tanks (SF)	37.90	-	-	-	-	-	-	-	-	•	•	•
Air Handling Equipment (SF)	20.00			-	•	•	-	_	-		-	
Other		-	13.2	-	2.1	•	•	-	-	-	-	_
SUBTOTAL	,	4.8	19.9	1.6	3.2	1.4	6.3	5.5	3.5	1.9	3.7	1.6
Difficulty Allowance		2.4	16.6	-	2.6	0.7	3.1	0.9	1.7	0.3	0.5	0.8
SUBTOTAL		7.3	36.5	1.6	5.8	2.0	9.4	6.3	5.2	2.2	4.2	2.3
Decontamination Units Mobilization		.0.2 **	.0.2 **	.0.2	*Ď.2	.0.2	.Q.2	.Q.2	.Q.2	.Q.2	.Q.2	.Q.2
SUBTOTAL		7.4	36.7	/ 1.8	6.0	2.2	9.6	6.5	5.4	2.4	4.3	2.5
Contingency @ 15.00%		1.1	5.5	0.3	0.9	0.3	1.4	1.0	0.8	0.4	0.7	0.4
SUBTOTAL		8.6	42.2	, 2.1	6.9	2.6	11.0	7.5	6.2	2.8	5.0	2.9
Design Fee @ 10.00%		0.9	4.2	0.2	0.7	0.3	1.1	0.7	0.6	0.3	0.5	0.3
SUBTOTAL		9.4	46.4	2.3	7.6	2.8	12.1	8.2	6.8	3.0	5.5	3.2
Air Monitoring a 10.00%*	**	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
TOTAL		11.4	48.3	4.2	9.6	4.8	14.1	10.2	8.8	5.0	7.4	5.2

^{*}Amounts Are In Thousands Of Dollars





^{**}Less Than \$100 For The Area; Amount Not Printed But Included In Total(s)
***The Minimum Air Monitoring Fee is \$500.00 Per Building

TABLE 2525.5 (continued) - BUILDING 2525, ADMIN. (AVRADA)

DESCRIPTION	UNIT COST (\$)	AREA 45	AREA 46	AREA	AREA 48	AREA 49	AREA 50	AREA 51	AREA	AREA	AREA 54	AREA
Pipe Fittings (EA) 4-8" 4-8" 9-14" >14"	70.30 85.80 147.80 216.00	- - -	-	- - -	; - - -	:	:	:	:	:	:	:
Pipe Runs (LF) 4-8" 9-14" >14"	26.50 30.50 42.50 60.80	0.6	1.2	1.2	1.5	8:5 :	- -	:	- - -	:	:	:
Sprayed/Troweled Ceilings (SF)	9.60	_	_		-	•		•		-	-	
Floor Tile (SF)	5.60	1.3	2.7	2.7	•	1.3	1.5	2.7	6.7	2.2	3.8	1.6
Boilers/Tanks (SF)	37.90	•	-	-	-		-	•	•	•	•	•
Air Handling Equipment (SF)	20.00	-	-	-	-	-	-	-		_	· <u>-</u>	
Other		-	•	-	•	_	•	-	-	-	-	-
SUBTOTAL		2.0	3.8	3.9	1.5	2.4	1.5	2.7	6.7	2.2	3.8	1.6
Difficulty Allowance		0.3	1.9	2.0	0.8	0.5	-	-	-	-	-	-
SUBTOTAL		2.3	5.8	5.9	2.3	2.9	1.5	2.7	6.7	2.2	3.8	1.6
Decontamination Units Mobilization		.0.2	.0.2	. 0.2	.Ý.2	.0.2 **	.Q.2	.Q.2	.Q.2	. 0.2	. Q.2	.0.2 **
SUBTOTAL		2.4	6.0	6.0	2.5	3.1	1.7	2.9	6.9	2.3	3.9	1.8
Contingency a 15.00%		0.4	0.9	0.9	Ò.4	0.5	0.2	0.4	1.0	0.4	0.6	0.3
SUBTOTAL		2.8	6.9	7.0	2.8	3.5	1.9	3.3	7.9	2.7	4.5	2.1
Design Fee a 10.00%		0.3	0.7	0.7	0.3	0.4	0.2	0.3	0.8	0.3	0.5	0.2
SUBTOTAL		3.1	7.5	7.7	3.1	3.9	2.1	3.6	8.7	3.0	5.0	2.3
Air Monitoring a 10.00%	***	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
TOTAL		5.1	9.5	9.6	5.1	5.8	4.1	5.6	10.7	4.9	7.0	4.2

^{*}Amounts Are In Thousands Of Dollars



^{***}Less Than \$100 For The Area; Amount Not Printed But Included In Total(s)
****The Minimum Air Monitoring Fee is \$500.00 Per Building

COST ESTIMATE* - BUILDING 2525, ADMIN. (AVRADA)

DESCRIPTION	UNIT COST (\$)	AREA 56	AREA	AREA 58	AREA	AREA 60	AREA 61	AREA 62	AREA 63	AREA 64	AREA 65	AREA 66
Pipe Fittings (EA) 4-8" 9-14" >14"	70.30 85.80 147.80 216.00	•	:	:	## - - -	-	0.4 -	-	0.3	0.1 :	0.1 -	0.1
Pipe Runs (LF) 4-8" 9-14" >14"	26-50 30-50 42-50 60-80	:	:	:	<u>1</u> :8	2.7	ō.2	8: 5	8: 5	8:8	8:5 :	8: 5
Sprayed/Troweled Ceilings (SF)	9.60	-	-	-	_	-	-	-	•	-	•	•
Floor Tile (SF)	5.60	2.7	7.8	1.1	4.3	-	-	3.2	2.7	4.3	2.5	2.2
Boilers/Tanks (SF)	37.90	•	•	-	-	-	-	-	-	-	-	-
Air Handling Equipment (SF)	20.00	-	-	-	-	-	•	-	-	_	-	-
Other		•	27.7	-	•	-	-	•	-	-	-	•
SUBTOTAL		2.7	35.6	1.1	6.2	2.7	0.5	4.5	4.1	6.2	3.6	3.2
Difficulty Allowance		-	27.7	-	1.0	1.3	* **	1.4	2.1	0.9	0.6	0.5
SUBTOTAL		2.7	63.3	1.1	7.2	4.0	0.6	5.9	6.2	7.1	4.2	3.7
Decontamination Units Mobilization		.Q.2	. 0.2	.0.2	.Q.2	.0.2	.Q.2	.0.2	* 0 .2	.0.2	.Q.2	.0.2
SUBTOTAL		2.9	63.5	1.3	7.4	4.2	0.8	6.1	6.4	7.3	4.4	3.9
Contingency a 15.00%		0.4	9.5	0.2 ₁	1.1	0.6	0.1	0.9	1.0	1.1	0.7	0.6
SUBTOTAL		3.3	73.0	1.5	8.5	4.8	0.9	7.0	7.3	8.4	5.0	4.5
Design Fee a 10.00%		0.3	7.3	0.1	0.8	0.5	**	0.7	0.7	0.8	0.5	0.5
SUBTOTAL		3.6	80.3	1.6	9.3	5.3	1.0	7.7	8.0	9.2	5.6	5.0
Air Monitoring a 10.00%	T T T T T T T T T T T T T T T T T T T	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
TOTAL		5.6	82.2	3.6	11.3	7.3	2.9	9.7	10.0	11.1	7.5	6.9

^{*}Amounts Are In Thousands Of Dollars





^{***}Less Than \$100 For The Area; Amount Not Printed But Included In Total(s)
****The Minimum Air Monitoring Fee is \$500.00 Per Building

COST ESTIMATE* - BUILDING 2525, ADMIN.(AVRADA)

DESCRIPTION	UNIT COST (\$)	AREA 67	AREA 68	AREA 69	AREA 70	AREA	AREA	AREA	AREA 74	AREA	AREA	AREA
Pipe Fittings (EA) 4-8" 9-14" >14"	70.30 85.80 147.00	:	:	:	:	:	:	:	:	:	:	:
Pipe Runs (LF) 4-8" 9-14" >14"	26.50 30.50 42.50 60.80	0:3 0:4	0:3 0:3	9:8 -	0:3 0:3	:	:	· : :		:	:	:
Sprayed/Troweled Ceilings (SF)	9.60	-	-	•	_	_	_		-	-	_	
Floor Tile (SF)	5.60	1.6	1.6	4.3	1.3	674.4	1.2	5.4	6.5	3.8	1.2	2.7
Boilers/Tanks (SF)	37.90	-	-	-	-	-	-	•	•	•	-	-
Air Handling Equipment (SF)	20.00	-	_	-	_	-	-	-	<u>.</u> :	-	-	
Other		-	-	-	-	-	-	-	-	-	4.5	-
SUBTOTAL		2.3	2.2	6.1	1.9	674.4	1.2	5.4	6.5	3.8	5.7	2.7
Difficulty Allowance		0.3	0.3	3.1	1.0	337.2	-	2.7	3.3	1.9	0.6	1.3
SUBTOTAL		2.6	2.5	9.2	2.9	1011.6	1.2	8.1	9.8	5.6	6.3	4.0
Decontamination Units Mobilization		.Q.2	.0.2	.0.2 **	,0.2 **	.Q.2	.Q.2	.0.2	. 0.2	.0.2	<u>.</u> 0.2	.Q.2
SUBTOTAL		2.8	2.7	9.4	3.1	1011.8	1.4	8.3	10.0	5.8	6.5	4.2
Contingency a 15.00%		0.4	0.4	1.4	0.5	151.8	0.2	1.2	1.5	0.9	1.0	0.6
SUBTOTAL		3.2	3.1	10.8	3.5	1163.6	1.6	9.5	11.5	6.7	7.5	4.9
Design Fee @ 10.00%		0.3	0.3	1.1	0.4	116.4	0.2	0.9	1.1	0.7	0.7	0.5
SUBTOTAL		3.6	3.4	11.9	3.9	1279.9	1.8	10.4	12.6	7.4	8.2	5.3
Air Monitoring a 10.00%**	₩	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
TOTAL	·	5.5	5.3	13.8	5.8	1281.9	3.7	12.4	14.6	9.3	10.2	7.3

^{*}Amounts Are In Thousands Of Dollars

^{***}The Minimum Air Monitoring Fee is \$500.00 Per Building



^{**}Less Than \$100 For The Area; Amount Not Printed But Included In Total(s)

COST ESTIMATE* - BUILDING 2525, ADMIN. (AVRADA)

DESCRIPTION	UNIT COST (\$)	AREA 78	AREA	AREA 80	AREA 81	AREA 82	AREA	AREA 84	AREA	AREA 86	AREA	AREA 88
Pipe Fittings (EA) . 4-8" 9-14" >14"	70.30 85.80 146.80	:	:	:	:	:	:		. :	:	:	:
Pipe Runs (LF)	26-50 30-50 42-50 60-80	<u>:</u> :	: :	:	0.6	ō.6	8:5 -	0.6	0.7	ō.7	0.7	0. <i>†</i>
Sprayed/Troweled Ceilings (SF)	9.60	_	-	_		_	-	-	_	_	_	5
Floor Tile (SF)	5.60	2.7	3.5	1.3	-	-	2.6	-	1.6	1.6	1.6	1.6
Boilers/Tanks (SF)	37.90	-	-	-	-	-	•	•	•	-	-	•
Air Handling Equipment (SF)	20.00		-	-		-	-	-	-		-	•
Other		-	-	-	-	-	•	•	-	-	-	•
SUBTOTAL		2.7	3.5	1.3	0.6	0.6	3.7	0.6	2.3	2.3	2.3	2.3
Difficulty Allowance		1.3	1.7	0.7	Õ.3	0.3	1.8	0.3	1.2	1.2	1.2	1.2
SUBTOTAL		4.0	5.2	2.0	Ó.9	0.9	5.5	0.9	3.5	3.5	3.5	3.5
Decontamination Units Mobilization		. 0.2	.Q.2	.0.2	.0.2 **	.0.2 **	.0.2 **	.0.2	.Q.2	.Q.2	.Q.2	.Q.2
SUBTOTAL		4.2	5.4	2.2	1.1	1.1	5.7	1.1	3.7	3.7	3.7	3.7
Contingency @ 15.00%		0.6	0.8	0.3	0.2	0.2	0.9	0.2	0.6	0.6	0.6	0.6
SUBTOTAL		4.9	6.2	2.5	1.3	1.3	6.6	1.3	4.3	4.3	4.3	4.3
Design Fee a 10.00%		0.5	0.6	0.3	0.1	0.1	0.7	0.1	0.4	0.4	0.4	0.4
SUBTOTAL		5.3	6.9	2.8	1.4	1.4	7.2	1.4	4.7	4.7	4.7	4.7
Air Monitoring a 10.00%*	**	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
TOTAL		7.3	8.8	4.7	3.4	3.4	9.2	3.4	6.6	6.6	6.6	6.6

^{*}Amounts Are In Thousands Of Dollars





^{***}Less Than \$100 For The Area; Amount Not Printed But Included In Total(s)
****The Minimum Air Monitoring Fee is \$500.00 Per Building

TABLE 2525.5 (continued) COST ESTIMATE* - BUILDING 2525, ADMIN.(AVRADA)

DESCRIPTION	UNIT COST (\$)	AREA 89	AREA 90	AREA 91	AREA 92	AREA 93	AREA 94	AREA 95	AREA 96	AREA	AREA 98	AREA
Pipe Fittings (EA) 4-8" 9-14" >14"	70.30 85.80 147.80 216.00	- - -	:	:	:	:	:	:	:	:	:	-
Pipe Runs (LF)	26-50 30-50 42-50 60-80	- - -	1.8	1.2	1.0	1.2	1.2	0.7	:	:	:	-
Sprayed/Troweled Ceilings (SF)	9.60	-	-	-	_	-	_	-	-		-	
Floor Tile (SF)	5.60	4.0	2.7	2.1	2.2	4.5	2.7	1.6	6.8	2.6	1.7	2.6
Boilers/Tanks (SF)	37.90	-	-	-	-	-	-	-	-	-	-	-
Air Handling Equipment (SF)	20.00	-	_	_	-	-		-	-	-	-	_
Other		•	•	-	•	-	•	-	•	6.6	-	•
SUBTOTAL		4.0	4.5	3.4	3.1	5.7	3.9	2.3	6.8	9.2	1.7	2.6
Difficulty Allowance		2.0	2.2	1.7	1.6	0.6	2.0	1.2	3.4	1.3	0.9	1.3
SUBTOTAL		6.0	6.7	5.0	4.7	6.3	5.9	3.5	10.2	10.5	2.6	3.8
Decontamination Units Mobilization		* 0. 2	.0.2	. 0.2	.0.2 **	* 0. 2	. 0.2	.0.2 **	.0.2 **	.Q.2	* 0. 2	.Q.2
SUBTOTAL		6.2	6.9	5.2	4.9	6.5	6.0	3.7	10.4	10.6	2.8	4.0
Contingency @ 15.00%		0.9	1.0	18.0	0.7	1.0	0.9	0.6	1.6	1.6	0.4	0.6
SUBTOTAL		7.2	7.9	6.0	5.6	7.5	7.0	4.3	12.0	12.2	3.2	4.6
Design Fee @ 10.00%		0.7	0.8	0.6	0.6	0.7	0.7	0.4	1.2	1.2	0.3	0.5
SUBTOTAL		7.9	8.7	6.6	6.2	8.2	7.7	4.7	13.2	13.5	3.6	5.1
Air Monitoring a 10.00%*	**	2.0	2.0	2.0	<u></u>	2.0	2.0	2.0	2.0	2.0	2.0	2.0
TOTAL		9.8	10.7	8.6	8.1	10.2	9.6	6.6	15.2	15.4	5.5	7.0

^{*}Amounts Are In Thousands Of Dollars

^{***}The Minimum Air Monitoring Fee is \$500.00 Per Building





^{**}Less Than \$100 For The Area; Amount Not Printed But Included In Total(s)

COST ESTIMATE* - BUILDING 2525, ADMIN. (AVRADA)

DESCRIPTION	UNIT COST (\$)	AREA 100	AREA 101	AREA 102	AREA 103	AREA 104	AREA 105	AREA 106	AREA 107	AREA 108	AREA 109	AREA 110
Pipe Fittings (EA) 4-8" 4-8" 9-14" >14"	70.30 85.80 147.00 216.00	:	:	:	:	:	:	:	:	:	0.4 :	0.1 :
Pipe Runs (LF)	26-50 30-50 40-80	:	:	:	:	<u>:</u>	:	: :	:	:	<u>7:3</u>	<u>0</u> .6
Sprayed/Troweled Ceilings (SF)	9.60	-	-	-	-	_	_	-	-	-	-	_
Floor Tile (SF)	5.60	1.5	2.7	2.7	1.6	2.7	1.6	3.8	1.9	2.2	30.2	-
Boilers/Tanks (SF)	37.90	-	-	-	-	-	-	-	-	-	-	-
Air Handling Equipment (SF)	20.00	-	-	-	-	-	•	-	-		-	•
Other		•	-	7.5	•	-	•		0.8	-	9.9	-
SUBTOTAL		1.5	2.7	10.2	1.6	2.7	1.6	3.8	2.7	2.2	49.9	0.8
Difficulty Allowance		0.8	1.3	7.5	-	1.3	0.8	-	1.7	1.1	29.9	0.4
SUBTOTAL		2.3	4.0	17.6	1.6	4.0	2.4	3.8	4.4	3.2	79.9	1.1
Decontamination Units Mobilization		.0. 2	. 0.2	.Q.2	0.2	.Q.2	.Q.2	.Q.2	.0.2	.Q.2	.Q.2	,Q.2 **
SUBTOTAL		2.5	4.2	17.8	1.8	4.2	2.6	3.9	4.6	3.4	80.1	1.3
Contingency @ 15.00%		0.4	0.6	2.7	0.3	0.6	0.4	0.6	0.7	0.5	12.0	0.2
SUBTOTAL		2.9	4.9	20.5	2.1	4.9	3.0	4.5	5.3	3.9	92.1	1.5
Design Fee a 10.00%		0.3	0.5	2.1	0.2	0.5	0.3	0.5	0.5	0.4	9.2	0.2
SUBTOTAL		3.2	5.3	22.6	2.3	5.3	3.3	5.0	5.8	4.3	101.3	1.7
Air Monitoring a 10.00%	***	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
TOTAL		5.1	7.3	24.5	4.2	7.3	5.3	7.0	7.8	6.3	103.2	3.6

^{*}Amounts Are In Thousands Of Dollars





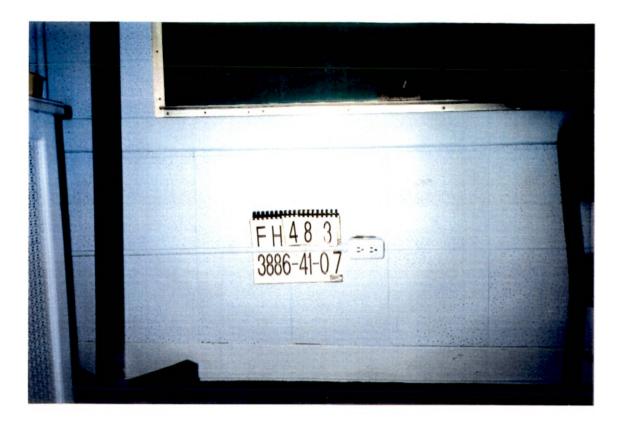
^{***}Less Than \$100 For The Area; Amount Not Printed But Included In Total(s)
****The Minimum Air Monitoring Fee is \$500.00 Per Building

COST ESTIMATE* - BUILDING 2525, ADMIN. (AVRADA)

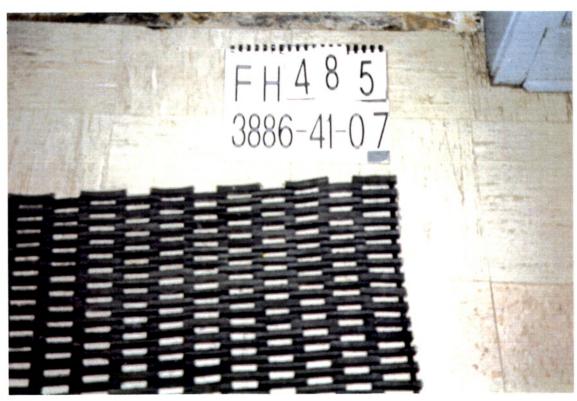
DESCRIPTION	UNIT COST (\$)	AREA 111	AREA	AREA 113	AREA 114	AREA 115	AREA 116	AREA	AREA 118	TOTAL
Pipe Fittings (EA) 4-8" 9-14" >14"	70.30 85.80 147.00 216.00	:	0.3	· :	:	:	:	:	:	<u> </u>
Pipe Runs (LF) 4-8" 9-14" >14"	26.50 30.50 42.50 60.80	1.7	1:7 5:5	<u>:</u> :	<u>:</u> :	<u>:</u> :	:	:	:	10:6 82:0
Sprayed/Troweled Ceilings (SF)	9.60	-	-	•	-		-	-	-	•
Floor Tile (SF)	5.60	3.8	20.2	3.8	3.5	1.6	2.2	3.2	16.8	1046.5
Boilers/Tanks (SF)	37.90	-	-	-	-	-	•	•	•	•
Air Handling Equipment (SF)	20.00	-	<u>.</u> ·	-	-	-	-	-	-	-
Other		-	-	•	-	-	-	-	-	86.8
SUBTOTAL		5.5	27.6	3.8	3.5	1.6	2.2	3.2	16.8	1232.9
Difficulty Allowance		2.7	13.8	1.9	1.7	0.8	1.1	1.6	8.4	572.4
SUBTOTAL		8.2	41.4	5.6	5.2	2.4	3.2	4.8	25.2	1805.3
Decontamination Units Mobilization	,	* Q. 2	.Q.2	<u>.</u> 0.2	, Q.2	.Q.2	. 0.2	* Q. 2	.Q.2	²⁰ :8
SUBTOTAL		8.4	41.5	5.8	5.4	Ź.6	3.4	4.9	25.4	1827.3
Contingency a 15.00%		1.3	6.2	0.9	0.8	0.4	0.5	0.7	3.8	274.1
SUBTOTAL		9.7	47.8	6.7	6.2	3.0	3.9	5.7	29.2	2101.4
Design Fee @ 10.00%		1.0	4.8	0.7	0.6	0.3	0.4	0.6	2.9	210.1
SUBTOTAL		10.6	52.6	7.4	6.9	3.3	4.3	6.3	32.1	2311.5
Air Monitoring a 10.00%**	*	2.0	2.0	2.0	2.0	2.0	2.0	2.0	<u>2.0</u>	231.2
TOTAL		12.6	54.5	9.3	8.8	5.3	6.3	8.2_	34.1	2542.7

^{*}Amounts Are In Thousands Of Dollars

^{**}Less Than \$100 For The Area; Amount Not Printed But Included In Total(s)
***The Minimum Air Monitoring Fee is \$500.00 Per Building



Bldg. 2525 Room 2106: Sample FH483, 12 x 12" acoustical wall tiles tested positive.



Bldg. 2525 Corridor 21A: Sample FH485, 12 \times 12" tan floor tiles tested positive.



Bldg. 2525 Room 2110A;

Sample No. FH491, 9 x 9" brown floor tiles under carpet and 12 x 12" tan floor tiles tested positive; sample FH492, 12 x 12" tan floor tiles also tested positive.



Bldg. 2525 Room 3110:

Sample FH493, < 4" pipe run tested positive. Sample FH494 (not shown) < 4" mud fitting tested positive; sample FH495 (not shown) < 4" pipe run also tested positive.

SECTION 2525.4 PHOTOGRAPHS



Bldg. 2525 Room 2101: Sample FH477, 12 x 12" tan floor tiles tested positive.



Bldg. 2525 Room 2101:

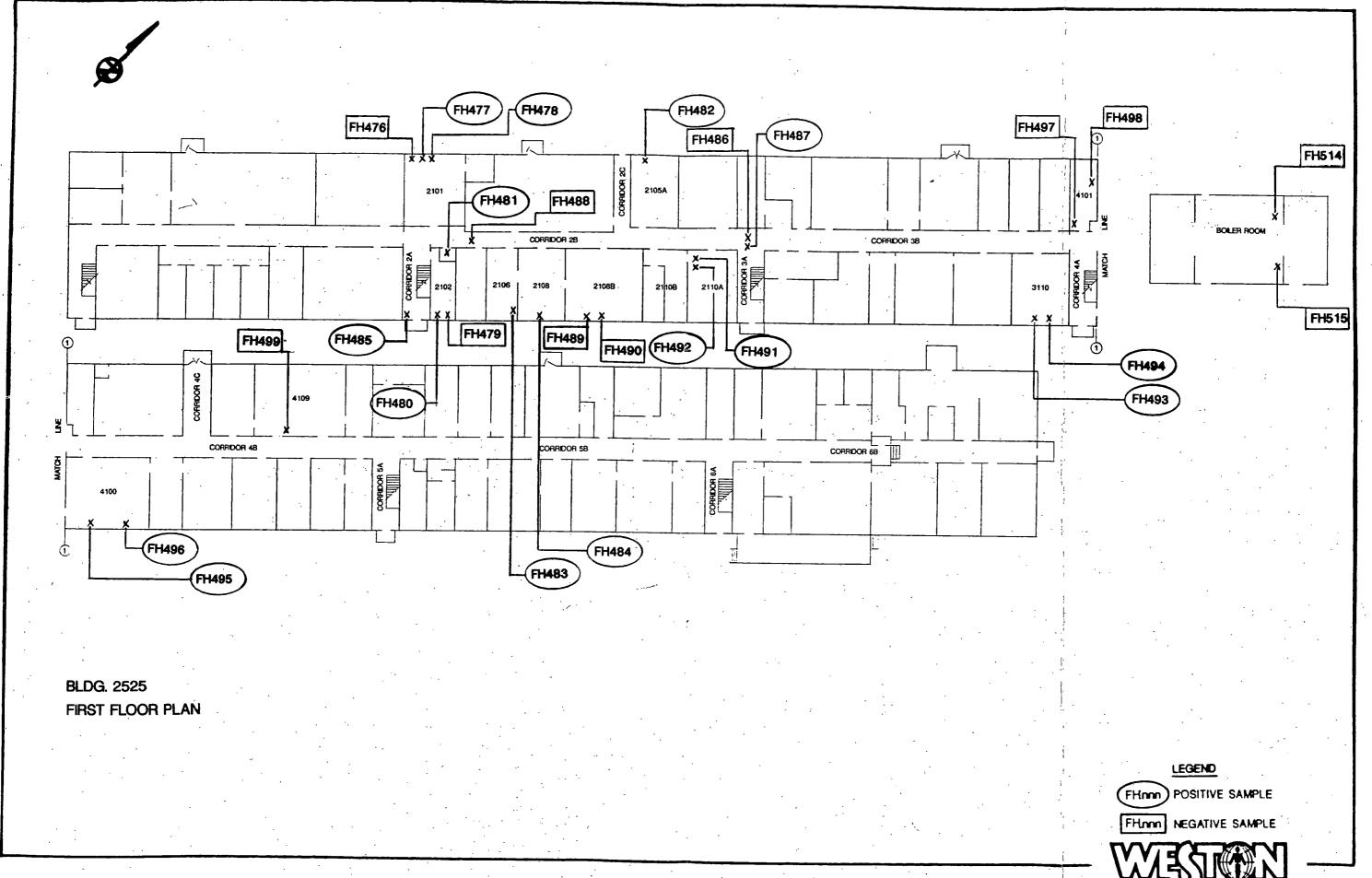
Sample FH478, 4 - 8" pipe run tested positive; sample FH480 (not shown) 4 - 8" pipe run also tested positive.



Bldg. 2525 Room 2102A: Sample FH481, < 4" mud fitting tested positive.



Bldg. 2525 Room 2105A: Sample FH482, 4 - 8" mud fitting tested positive. Samples FH484 (not shown) 4 - 8" mud fitting tested positive.



2534 ADMINISTRATION BUILDING

ADMINISTRATION BUILDING

2534.1 GENERAL

Building 2534 was surveyed by WESTON technicians on 9 January 1991.

The first three portions of this facility report summarize the results of this inspection.

Polarized Light Microscopy (PLM) with dispersion staining was used to analyze 6 samples of suspect material collected from the building. Of these samples, 3 were found to be asbestos-containing materials (ACM). Table 2534.1 lists the analytical results for the bulk samples.

2534.2 ACM AND EXPOSURE ASSESSMENT

The location, description, and analytical results for each bulk sample from Building 2534 are presented in Table 2534.1 An area-by-area inventory of ACM is provided in Tables 2534.2 and 2534.3. "Other Asbestos-Containing Materials," listed in Table 2534.3, are materials that do not correspond to the standard caption categories listed in Table 2534.2. A prioritized listing of exposure assessments is presented in Table 2534.4. An itemized area-by-area cost estimate for removal and replacement is provided in Table 2534.5. The method by which removal/replacement costs are calculated is described in the ISSUES COMMON TO ALL BUILDINGS Section of this report. Building floor plans (see attachment) indicate sample locations and building area names as they are listed in Tables 2534.2 and 2534.5.

2534.3 RECOMMENDATIONS/CONCLUSIONS

WESTON recommends:

• Asbestos-containing floor tile should be labeled under the O&M Program.

TABLE 2534.1

BULK SAMPLE ANALYSIS RESULTS - BUILDING 2534, ADMINISTRATION

SAMPLE				PERC	ESTOS		
NO.	LOCATION	. ITEM	DESCRIPTION	CH	AM	OT	LAYERED ^E
FH504	FIRST FLOOR, BELOW CEILING	FLOOR TILE	GREEN,OTH,9X9 FL TL	5	-	-	NO
FH505	SECOND FLOOR, BELOW CEILING	FLOOR TILE	GREEN,OTH,9X9 FL TL	5	•	-	NO
FH506	SECOND FLOOR BELOW CEILING	FLOOR TILE	GREEN, OTH, 9X9 FL TL	5	-	-	NO
FH507	SECOND FLOOR, BELOW CEILING	CEILING TILE	WHITE, OTH, 1X1 CL TL	-	-	-	YES
FH508	SECOND FLOOR, BELOW CEILING	CEILING TILE	WHITE, OTH, 1X1 CL TL	-	-	-	YES
FH509	FIRST FLOOR, BELOW CEILING	CEILING TILE	WHITE, OTH, 1X1 CL TL	•	-	-	YES

 $^{^{\}mathbf{a}}$ Asbestos content presented for layered samples represents the highest concentration layer.

SW = Southwest

Quadrant Codes	System Codes	Asbestos Types
C = Center	STM = Steam	CH = Chrysotile
N = North	CHW = Chilled Water	AM = Amosite
E´ = East	HHW = Heating Hot Water	OT = Other
S = South	DOM = Domestic Water	
W = West	OTH = Other	
NE = Northeast	UNK = Unknown	
NW = Northwest		
SE = Southeast		

ASBESTOS-CONTAINING MATERIALS - BUILDING 2534, ADMINISTRATION

	PIPE FITTINGS (EA)					PIPE RU	NS (LF)		SPRAY/TROWELED	FLOOR TILE	BOILERS/	AIR HANDLING		
AREA	<4"	4-8"	9-14"	>14"	<4"	4-8"	9-14"	>14"	CEILINGS (MSF)	(MSF)	-	EQUIPMENT (MSF)	OTHE	
irst Floor	-	-	-	-	-	-	-	-	•	2.30	_	-	_	
econd Floor				-			-			2.30		<u> </u>		
OTALS	<u>-</u>	-		-	-	-	-	-	-	4.60	_	-		

Other Material Present In Various Units Of Measure

EA - Each

LF - Linear Feet
MSF - Thousand Square Feet

Other Asbestos-Containing Material - Building 2534, Administration Building Type Occupancy: Adults (Public)

Area	Material Type	Quantity (Unit)
No Other A	Asbestos-Containing Material Found in th	is Building.

EA - Each

LF - Linear Feet

MSF - Thousand Square Feet

TABLE 2534.4 EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 2534, ADMINISTRATION

SAMPLE		MATERIAL	PRIOR. INDEX	PRIORITY INDEX	EX	POSI	JRE	FAC	CTORS	AVG. EXP.	*	
NO.	AREA	TYPE	CODE	NUMBER	1	2	3	4	5	HOURS	ASB.	
FH507	Second Floor	CEILING TILE	A	0	3	1	2	1	0	0.00	0	
FH508	Second Floor	CEILING TILE	A	0	3	1	2	1	0	0.00	0	
FH509	First Floor	CEILING TILE	A	0	3	1	2	1	0	0.00	0	

Priority Index Codes

A [=] Long Term Corrective Measure
B [=] Review Management Special Considerations/Remarks
C [=] Army Asbestos Deficiency Abatement Project

Priority Index Numbers Are In Scientific Notation

Exposure Factors

1 [=] Material Friability
2 [=] Occupant Accessability
3 [=] Material Condition
4 [=] Level Of Activity
5 [=] Number Of Assigned Occupants

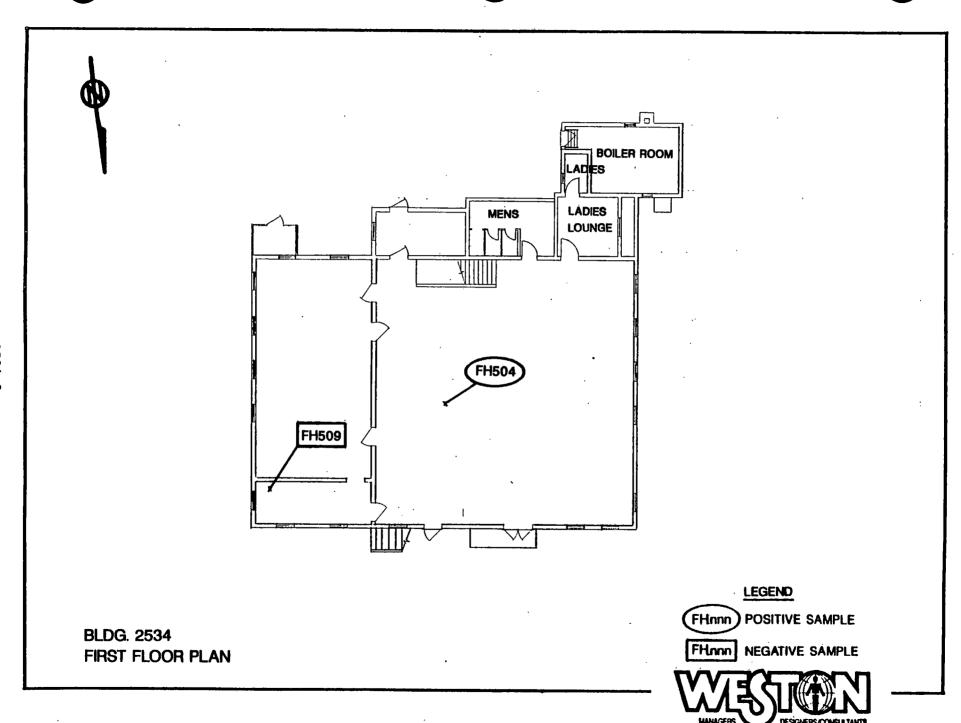
TÄBLE 2534.5 COST ESTIMATE* - BUILDING 2534, ADMINISTRATION

DESCRIPTION	UNIT COST (\$)	AREA	AREA	TOTAL
Pipe Fittings (EA) 4-8" 9-14" >14"	70.30 85.80 185.00 216.00	:	:	
Pipe Runs (LF) 44" 4-8" 9-14" >14"	26.50 30.50 40.80	: :	: :	- - -
Sprayed/Troweled Ceilings (SF)	9.60	-	-	-
Floor Tile (SF)	5.60	12.9	12.9	25.8
Boilers/Tanks (SF)	37.90	-	-	-
Air Handling Equipment (SF)	20.00	•	-	•
Other		-	-	· -
SUBTOTAL		12.9	12.9	25.8
Difficulty Allowance		•	-	. •
SUBTOTAL		12.9	12.9	25.8
Decontamination Units Mobilization		₹:8	₹:8	2:8
SUBTOTAL		16.9	16.9	33.8
Contingency a 15.00%		2.5	2.5	5.1
SUBTOTAL		19.4	19.4	38.8
Design Fee a 10.00%		1.9	1.9	3.9
SUBTOTAL		21.4	21.4	42.7
Air Monitoring a 10.00%		2.1	2.1	4.3
TOTAL		23.5	23.5	47.0

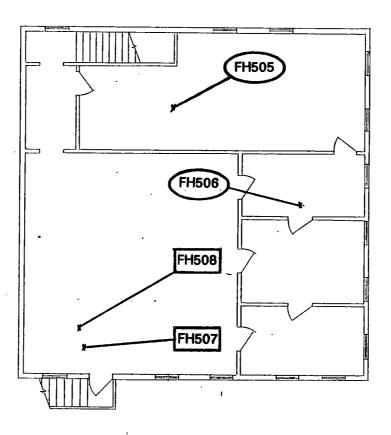
^{*}Amounts Are In Thousands Of Dollars

AREA 1: First Floor

^{***}Less Than \$100 For The Area; Amount Not Printed But Included In Total(s)
****The Minimum Air Monitoring Fee is \$500.00 Per Building







BLDG. 2534 SECOND FLOOR PLAN

LEGEND



POSITIVE SAMPLE



FHnnn NEGATIVE SAMPLE



2536

FIREHOUSE 3

FIREHOUSE 3

2536.1 GENERAL

Building 2536 was surveyed by WESTON technicians on 9 January 1991.

The first three portions of this facility report summarize the results of this inspection. Photographs of some sample locations are provided in Section 2536.4.

Polarized Light Microscopy (PLM) with dispersion staining was used to analyze 4 samples of suspect material collected from the building. Of these samples, one was found to be asbestos-containing materials (ACM). Table 2536.1 lists the analytical results for the bulk samples.

2536.2 ACM AND EXPOSURE ASSESSMENT

The location, description, and analytical results for each bulk sample from Building 2536 are presented in Table 2536.1. An area-by-area inventory of ACM is provided in Tables 2536.2 and 2536.3. "Other Asbestos-Containing Materials," listed in Table 2536.3, are materials that do not correspond to the standard caption categories listed in Table 2536.2. A prioritized listing of exposure assessments is presented in Table 2536.4. An itemized area-by-area cost estimate for removal and replacement is provided in Table 2536.5. The method by which removal/replacement costs are calculated is described in the ISSUES COMMON TO ALL BUILDINGS Section of this report. Building floor plans (see attachment) indicate sample locations and building area names as they are listed in Tables 2536.2 and 2536.5.

2536.3 RECOMMENDATIONS/CONCLUSIONS

WESTON recommends:

Asbestos-containing floor tile should be labeled under the O&M Program.

TABLE 2536.1

BULK SAMPLE ANALYSIS RESULTS - BUILDING 2536, FIREHOUSE 3

SAMPLE				PERC	ENT ASBI	ESTOS	
NO.	LOCATION	ITEM	DESCRIPTION	CH	AM	OT	LAYERED
FH500	DISPATCH/STOR., BELOW CEILING	CEILING TILE	WHITE,OTH,2X2 CL TL,HORIZONTAL		-	_	NO
FH501	CORRIDOR, BELOW CEILING	FLOOR TILE	RED,OTH,1X1 FL TL,HORIZONTAL	1	-	-	NO
FH502	CORRIDOR, BELOW CEILING	CEILING TILE	WHITE, OTH, 2X4 CL TL, HORIZONTAL	-	-	-	NO
FH503	KITCHEN, BELOW CEILING	FLOOR TILE	TAN,OTH,1X1 FL TL,HORIZONTAL	-	-	-	NO

 $^{^{\}mathrm{a}}$ Asbestos content presented for layered samples represents the highest concentration layer.

Quadrant Codes	System Codes	Asbestos Types
C = Center	STM = Steam	CH = Chrysotile
N = North	CHW = Chilled Water	AM = Amosite
E = East	HHW = Heating Hot Water	OT = Other
S = South	DOM = Domestic Water	
W = West	OTH = Other	
NE = Northeast	UNK = Unknown	
NW = Northwest		
SE = Southeast		
SV = Southwest		

	P1	PE FITT	INGS (EA)			PIPE RU	NS (LF)		SPRAY/TROWELED	FLOOR TILE	BOILERS/	AIR HANDLING	
AREA	<4"	4-8"	9-14"	>14"	<4"	4-8"	9-14"	>14"	CEILINGS (MSF)	(MSF)	TANKS (MSF)	EQUIPMENT (MSF)	OTHE
orridor	~	-	-	_		-	-	-	•	0.03	-	-	-
avatory					<u> </u>	<u></u>	-	<u>-</u> -		0.07		<u> </u>	
OTALS	-	-	-	-	-	-	-	-	4	0.10	-	-	-

^{*} Other Material Present In Various Units Of Measure

EA - Each

LF - Linear Feet

MSF - Thousand Square Feet

Table 2536.3

Other Asbestos-Containing Material - Building 2536, Firehouse 3 Type Occupancy: Adults (Public)

Area	Material Type	Quantity (Unit)
No Other	Asbestos-Containing Material Found in th	is Building

EA - Each

LF - Linear Feet

MSF - Thousand Square Feet

TABLE 2536.4 EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 2536, FIREHOUSE 3

			PRIOR.	PRIORITY					AVG.	
SAMPLE		MATERIAL	INDEX	INDEX	EXP	DSUR	E FA	CTORS	EXP.	%
NO.	AREA	ТҮРЕ	CODE	NUMBER	1	2 3	4	5	HOURS	ASB.
FH500	Chief	CEILING TILE	Α	0	1	3 1	3	6	40.00	0
FH500	Dispatch/Stor.	CEILING TILE	Ä	Ŏ	1	3 1	3	6	40.00	Ŏ
FH500	Squad Room	CEILING TILE	Ā	Ō	1	3 1	3	6	40.00	Ō
FH502	Corridor	CEILING TILE	À	0	1 :	3 1	3	6	40.00	0

Priority Index Codes

A [=] Long Term Corrective Measure

B [=] Review Management Special Considerations/Remarks

C [=] Army Asbestos Deficiency Abatement Project

Priority Index Numbers Are In Scientific Notation

- Exposure Factors
 1 [=] Material Friability
 2 [=] Occupant Accessability
 3 [=] Material Condition
 4 [=] Level Of Activity
 5 [=] Number Of Assigned Occupants

TABLE 2536.5 COST ESTIMATE* - BUILDING 2536, FIREHOUSE 3

DESCRIPTION	UNIT COST (\$)	AREA	AREA 2	TOTAL
Pipe Fittings (EA)	7g-30	Ξ	:	· <u>-</u>
4-8" 9-14" >14"	70.30 85.80 147.00 216.00	Ξ	=	:
Pipe Runs (LF)	26.50	_	•	-
4 ⁻ 8" 9-14" >14"	26.50 30.50 42.50 60.80	:	=	<u>:</u> :
Sprayed/Troweled Ceilings (SF)	9.60	-	-	-
Floor Tile (SF)	5.60	0.2	0.4	0.6
Boilers/Tanks (SF)	37.90	-	•	-
Air Handling Equipment (SF)	20.00	-	-	-
Other		-	-	-
SUBTOTAL		0.2	0.4	0.6
Difficulty Allowance		•	-	-
SUBTOTAL		0.2	0.4	0.6
Decontamination Units Mobilization		1:5	1:8	3:8
SUBTOTAL		2.7	2.9	5.6
Contingency @ 15.00%		0.4	0.4	0.8]
SUBTOTAL		3.1	3.3	6.4
Design Fee @ 10.00%		0.3	0.3	0.6
SUBTOTAL	4.4.4	3.4	3.7	7.0
Air Monitoring a 10.00%	***	0.4	0.4	0.7
TOTAL		3.7	4.0	7.7

^{*}Amounts Are In Thousands Of Dollars

AREA 1: Corridor

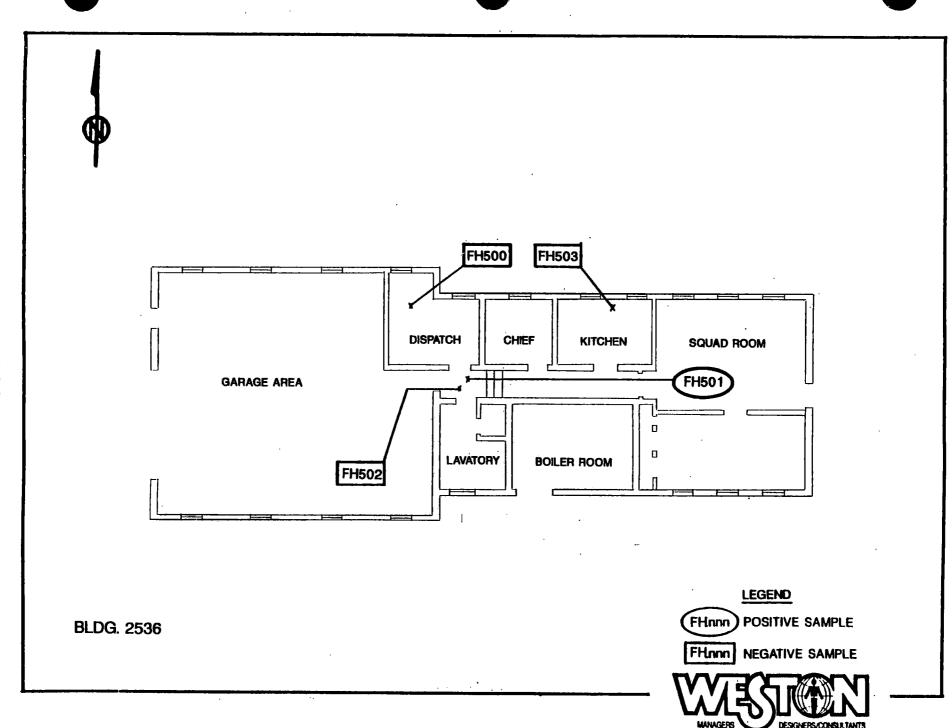
^{**}Less Than \$100 For The Area; Amount Not Printed But Included In Total(s)

***The Minimum Air Monitoring Fee is \$500.00 Per Building

SECTION 2536.4 PHOTOGRAPHS



Bldg. 2536 - Fire Station, Hallway: 12 x 12" red floor tiles tested positive.



2704 LABORATORY (TEST CHAMBER)

LABORATORY (TEST CHAMBER)

2704.1 GENERAL

Building 2704 was surveyed by WESTON technicians on 14 January 1991.

The first three portions of this facility report summarize the results of this inspection.

Polarized Light Microscopy (PLM) with dispersion staining was used to analyze 22 samples of suspect material collected from the building. Of these samples, 7 were found to be asbestos-containing materials (ACM). Table 2704.1 lists the analytical results for the bulk samples.

2704.2 ACM AND EXPOSURE ASSESSMENT

The location, description, and analytical results for each bulk sample from Building 2704 are presented in Table 2704.1. An area-by-area inventory of ACM is provided in Tables 2704.2 and 2704.3. "Other Asbestos-Containing Materials," listed in Table 2704.3, are materials that do not correspond to the standard caption categories listed in Table 2704.2. A prioritized listing of exposure assessments is presented in Table 2704.4. An itemized area-by-area cost estimate for removal and replacement is provided in Table 2704.5. The method by which removal/replacement costs are calculated is described in the ISSUES COMMON TO ALL BUILDINGS Section of this report. Building floor plans (see attachment) indicate sample locations and building area names as they are listed in Tables 2704.2 and 2704.5.

2704.3 RECOMMENDATIONS/CONCLUSIONS

WESTON recommends:

• Asbestos-containing floor tile, pipe insulation, and fitting insulation should be labeled under the O&M Program.

TABLE 2704.1

BULK SAMPLE ANALYSIS RESULTS - BUILDING 2704, LAB. (TEST CHAMBER)

SAMPLE				PERCE	ENT ASB	ESTOS	_
NO.	LOCATION	ITEM	DESCRIPTION	CH	AM	OT	LAYERED
FH516	POWER ROOM, BELOW CEILING	FLOOR TILE	GRAY,OTH,9X9 FL TL	5	-	-	NO
FH517	POWER ROOM, BELOW CEILING	FLOOR TILE	BLACK,OTH,9X9 FL TL	5	-	-	NO
FH518	STORAGE, BELOW CEILING	FLOOR TILE	BROWN,OTH,9X9 FL TL	3	-	-	NO
FH519	STORAGE, BELOW CEILING	FLOOR TILE	TAN,OTH,9X9 FL TL	3	-	-	NO
FH520	TEST AREA, BELOW CEILING	FLOOR TILE	GRAY,OTH,12X12 FL	1	-	-	YES
FH521	OFFICE, BELOW CEILING	ACOUSTICAL WALL TILE	WHITE,OTH,1X1 WL TL	-	-	-	YES
FH522	WOMENS, BELOW CEILING	CEILING TILE	WHITE,OTH,2X4 CL TL	-	-	-	NO
FH523	CORRIDOR I, BELOW CEILING	ACOUSTICAL WALL TILE	WHITE,OTH,1X1 WL TL	-	-	-	YES
FH524	CORRIDOR I, BELOW CEILING	ACOUSTICAL WALL TILE	WHITE,OTH,1X1 WL TL	-	•	-	NO
FK525	CORRIDOR I, BELOW CEILING	ACOUSTICAL WALL TILE	WHITE,OTH,1X1 WL TL	-	-	-	NO
FH526	CORRIDOR I, BELOW CEILING	CEILING TILE	WHITE,OTH,2X4 CL TL	-	-	-	YES
FH527	TEST AREA, BELOW CEILING	ACOUSTICAL WALL TILE	WHITE,OTH,1X1 WL TL	-	-	-	YES
FH528	TEST AREA, BELOW CEILING	ACOUSTICAL WALL TILE	WHITE,OTH,1X1 WL TL	-	-	-	YES
FH529	TEST AREA, BELOW CEILING	ACOUSTICAL WALL TILE	WHITE,OTH,1X1 WL TL	-	-	-	YES
FH530	WORK AREA, BELOW CEILING	CEILING TILE	WHITE,OTH,2X4 CL TL	-	-	-	NO
FH5 31	WORK AREA, BELOW CEILING	ACOUSTICAL WALL TILE	WHITE,OTH,1X1 WL TL	-	-	-	NO
FH532	MEZZ. OFFICE, BELOW CEILING	CEILING TILE	WHITE,OTH,2X4 CL TL	-	-	-	NO
FH533	MENS, BELOW CEILING	<4" PIPE FITTING	WHITE,STM,<4IN. FIT	1	-	-	NO
FH534	POWER ROOM, BELOW CEILING	<4" PIPE FITTING	WHITE,STM,<41N. FIT	-	-	-	NO
FH535	WOMENS ROOM, BELOW CEILING	<4" PIPE FITTING	WHITE,STM,<4IN. FIT	45	•	-	NO
FH536	POWER ROOM, BELOW CEILING	4-8" PIPE FITTING	WHITE,STM,4-8IN. FIT	-	-	-	YES
FH537	POWER ROOM, BELOW CEILING	4-8" PIPE FITTING	WHITE,STM,4-8IN. FIT	-	-	-	YES

 $^{^{\}mathbf{8}}$ Asbestos content presented for layered samples represents the highest concentration layer.

Quadrant Codes	System Codes	Asbestos Types
C = Center	STM = Steam	CH = Chrysotile
N = North	CHW = Chilled Water	AM = Amosite
E = East	HHW = Heating Hot Water	OT = Other
S = South	DOM = Domestic Water	
W = West	OTH = Other	
NE = Northeast	UNK = Unknown	
NW = Northwest		
SE = Southeast		
SW = Southwest		

TABLE 2704.2 ASBESTOS-CONTAINING MATERIALS - BUILDING 2704, LAB. (TEST CHAMBER)

	P1	PE FITT	INGS (EA)	<u> </u>		PIPE RU	NS (LF)		SPRAY/TROWELED	FLOOR TILE	BOILERS/	AIR HANDLING	
AREA	<4"	4-8"	9-14"	>14"	<4"	4-8"	9-14"	>14"	CEILINGS (MSF)	(MSF)	TANKS (MSF)	EQUIPMENT (MSF)	OTHE
Corridor I	-	-	_	-	-	-	•	-	•	0.49	-	-	_
Janitor Closet	7	-	-	-	-	-	-	-	-	•	•	-	-
Mens	4	-	-	-	-	-	-	-	-	-	-	-	-
Mezz. Office	6	-	-	-	-	-	-	-	-	0.84	-	-	-
Office	-	-	-	-	-	-	-	-	-	0.27	-	•	-
Power Room	-	-1	-	-	-	-	-	-	-	0.42	_	-	-
Storage	-	- 9	-	-	-	-	-	-	•	0.13	-	•	-
Test Ārea	-	-	-	-	-	-	-	-	-	4.60	_		-
Womens		-	~	-	-	-	-	-	•	0.08	-	•	-
Womens Room	14	-	-	-	-	-	-	-	-		-	-	
Work Area	·	<u> </u>			:	-	· -	=	•	0.90			
TOTALS	31	_	-	-	•	-	-	, -	-	7.72		•	-

^{*} Other Material Present In Various Units Of Measure

EA - Each LF - Linear Feet MSF - Thousand Square Feet

Other Asbestos-Containing Material - Building 2704, Test Chamber Type Occupancy: Adults (Public)

Area	Material Type	Quantity (Unit)
No Other	Asbestos-Containing Material Found in th	is Building

- Each EΑ

LF - Linear Feet MSF - Thousand Square Feet

TABLE 2704.4 EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 2704, LAB. (TEST CHAMBER)

			PRIOR.	PRIORITY						AVG.		
SAMPLE		MATERIAL	INDEX	INDEX	. <u>E</u>)				CTORS	_ EXP.	%	
NO.	AREA	TYPE	CODE	NUMBER	1	_ 2	<u>3</u>	4	5	HOURS	ASB.	
FH535	Janitor Closet	<4" PIPE FITTING	À	4.640E01	1	2	1	2	8	40.00	45	
FH535	Mezz. Office	<4" PIPE FITTING	À	4.640E01	1	2	1	2	8	40.00	45	
FH535	Womens Room	<4" PIPE FITTING	A	4.640E01	1	2	1	2	8	40.00	45	
FH533	Mens	<4" PIPE FITTING	A	2.960E00	1	2	1	2	8	40.00	1	
FH521	Office	ACOUSTICAL WALL TILE	À	0	1	2	1	2	8	40.00	0	
FH522	Corridor 1	CEILING TILE	A	0	1	2	1	2	8	40.00	0	
FH522	Mens	CEILING TILE	A	0	1	2	1	2	8	40.00	. 0	
FH522	Test Area	CEILING TILE	A	0	1	2	1	2	8	40.00	0	
FH522	Vomens	CEILING TILE	A	0	1	2	1	2	8	40.00	0	
FH522	Work Area	CEILING TILE	A	0	1	2	1	2	8	40.00	Ō	
FH523	Corridor I	ACOUSTICAL WALL TILE	A	0	1	2	1	2	8	40.00	0	
FH523	Office II	ACOUSTICAL WALL TILE	A	0	1	2	1	2	8	40.00	0	
FH524	Corridor I	ACOUSTICAL WALL TILE	Ä	Ō.	1	2	1	2	8	40.00	Ō	
FH525	Corridor I	ACOUSTICAL WALL TILE	Ä	Ō	1	2	1	2	8	40.00	Ŏ	
FH526	Corridor I	CEILING TILE	Ä	Ŏ	1	2	1	2	8	40.00	Ŏ	
FH526	Office II	CEILING TILE	Ä	0	1	2	1	2	8	40.00	Ō	
FH526	Test Area	CEILING TILE	Ä	Ō	1	2	1	2	8	40.00	Ŏ	
FH527	Test Area	ACOUSTICAL WALL TILE	Ä	Ō	1	Ž	1	2	8	40.00	Ŏ	
FH528	Test Area	ACOUSTICAL WALL TILE	A	Ō	1	2	1	2	8	40.00	Ō	
FH529	Mezz. Abv. Work Area	ACOUSTICAL WALL TILE	Ä	Ō	1	2	1	2	8	40.00	Ŏ	
FH529	Mezz. Office	ACOUSTICAL WALL TILE	Ä	Ŏ	1	2	1	2	8	40.00	Ŏ	
FH529	Test Area	ACOUSTICAL WALL TILE	Å	Ō	1	2	1	2	8	40.00	Ŏ	
FH529	Work Area	ACOUSTICAL WALL TILE	Ä	Ŏ	i	2	1	2	8	40.00	Ŏ	
FH530	Work Area	CEILING TILE	`	ň	i	5	1	5	8	40.00	Ď	
FH531	Work Area	ACOUSTICAL WALL TILE	Ä	ň	i	2	i	2	Ř	40.00	ŏ	
FH532	Mezz. Office	CEILING TILE	Ä	ň	i	5	1	5	8	40.00	ň	
FH534	Power Room	<4" PIPE FITTING	Â	ň	i	5	i	5	Ř	40.00	ň	
FK536	Power Room	4-8" PIPE FITTING	· 🚡	ň	i	2	i	2	8	40.00	ŏ	
FH537	Mezz. Office	4-8" PIPE FITTING	Ä	ň	i	5	i	5	Ř	40.00	Ŏ	
FH537	Power Room	4-8" PIPE FITTING	Â	ñ	i	2	i	2	R	40.00	ŏ	

Priority Index Codes

Priority Index Numbers Are In Scientific Notation

- Exposure Factors
 1 [=] Material Friability
 2 [=] Occupant Accessability
 3 [=] Material Condition
- 4 [=] Level Of Activity
- 5 [=] Number Of Assigned Occupants

A [=] Long Term Corrective Measure

B [=] Review Management Special Considerations/Remarks C [=] Army Asbestos Deficiency Abatement Project

EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 2704, LAB. (TEST CHAMBER)

SAMPLE NO. AREA	PRIC MATERIAL INDI	EX INDEX	EXPOSURE FAC	TORS	AVG. EXP. % OURS ASE
FH537 Test Area 4-8" PIPE	FITTING A	0	1 2 1 2	_	0.00 0

<u>Priority Index Codes</u>

A [=] Long Term Corrective Measure

B [=] Review Management Special Considerations/Remarks

C [=] Army Asbestos Deficiency Abatement Project

Priority Index Numbers Are In Scientific Notation

Exposure Factors

1 [=] Material Friability
2 [=] Occupant Accessability
3 [=] Material Condition
4 [=] Level Of Activity

5 [=] Number Of Assigned Occupants

TABLE 2704.5 COST ESTIMATE* - BUILDING 2704, LAB. (TEST CHAMBER)

DESCRIPTION	UNIT COST (\$)	AREA	AREA 2	AREA	AREA 4	ÁREÁ	AREA	AREA	AREA 8	AREA	AREA 10	AREA
Pipe Fittings (EA) 4-8" 9-14" >14"	70.30 85.80 147.800 216.00	:	0.5	0.3	0.4	:	:	-	:	:	1.0	-
Pipe Runs (LF)	26.50 30.50 42.50 60.80	:	:	:	- - - -	:	:	:	:	:	:	:
Sprayed/Troweled Ceilings (SF)	9.60	-	-	-	-	_	•	_	_	•	_	-
Floor Tile (SF)	5.60	2.7	-	•	4.7	1.5	2.3	0.7	25.8	0.4	-	5.0
Boilers/Tanks (SF)	37.90	-	•	-	-	•	-	-	-	•	-	-
Air Handling Equipment (SF)	20.00	-	-	-	_	-			_	-	-	
Other		-	-	-	-	-	-	-	-	-	-	-
SUBTOTAL		2.7	0.5	0.3	Š.1	1.5	2.3	0.7	25.8	0.4	1.0	5.0
Difficulty Allowance		-	-	0.4	Ž. 4	-	-	-	-	-	-	2.5
SUBTOTAL		2.7	0.5	0.7	7.5	1.5	2.3	0.7	25.8	0.4	1.0	7.5
Decontamination Units Mobilization		8:2	8:2	8:2	8:3	8:2	8:2	8:2	8:2	8:2	8:3	8:2
SUBTOTAL	•	3.7	1.4	1.6	8.4	2.4	3.2	1.6	26.7	1.3	1.9	8.4
Contingency a 15.00%		0.5	0.2	0.2 ₁	1.3	0.4	0.5	0.2	4.0	0.2	0.3	1.3
SUBTOTAL		4.2	1.6	1.9	9.6	2.8	3.7	1.9	30.7	1.5	2.2	9.7
Design Fee @ 10.00%	•	0.4	0.2	0.2	1.0	0.3	0.4	0.2	3.1	0.2	0.2	1.0
SUBTOTAL		4.6	1.8	2.0	10.6	3.1	4.1	2.0	33.7	1.7	2.4	10.7
Air Monitoring a 10.00%*	RR	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
TOTAL		5.3	2.5	2.7	11.3	3.8	4.8	2.7	34.4	2.4	3.1	11.4

^{*}Amounts Are In Thousands Of Dollars





^{***}Less Than \$100 For The Area; Amount Not Printed But Included In Total(s)

****The Minimum Air Monitoring Fee is \$500.00 Per Building

TABLE 2704.5 (continued)

COST ESTIMATE* - BUILDING 2704, LAB. (TEST CHAMBER)

• •					
DESCRIPTION	UNIT COST (\$)	TOTAL		 	
Pipe Fittings (EA)	70.30	2.2			
4-8" 9-14" >14"	70.30 85.80 147.00 216.00	-			
Pipe Runs (LF)					
4-8"	3 6:58	-			
9-14" >14"	26.50 30.50 60.80	-			
Sprayed/Troweled Ceilings (SF)	9.60	-			
Floor Tile (SF)	5.60	43.2			
Boilers/Tanks (SF)	37.90	-			
Air Handling Equipment (SF)	20.00	-			
Other		-			
SUBTOTAL		45.4			
Difficulty Allowance		5.3			
SUBTOTAL		50.7			
Decontamination Units Mobilization		8:8			
SUBTOTAL		60.7			
Contingency a 15.00%		9.1	1		
SUBTOTAL		69.8			
Design Fee a 10.00%		7.0			
SUBTOTAL		76.8			
Air Monitoring @ 10.00%**	rit.	7.7			
TOTAL		84.4	·	 	

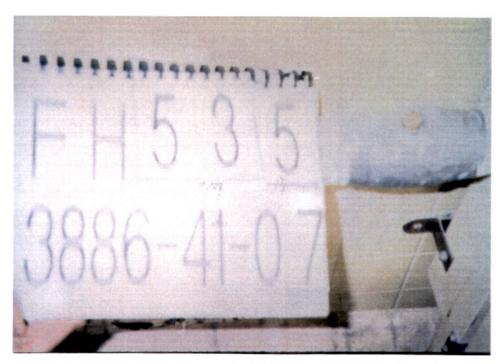
^{*}Amounts Are In Thousands Of Dollars

^{**}Less Than \$100 For The Area; Amount Not Printed But Included In Total(s)
***The Minimum Air Monitoring Fee is \$500.00 Per Building

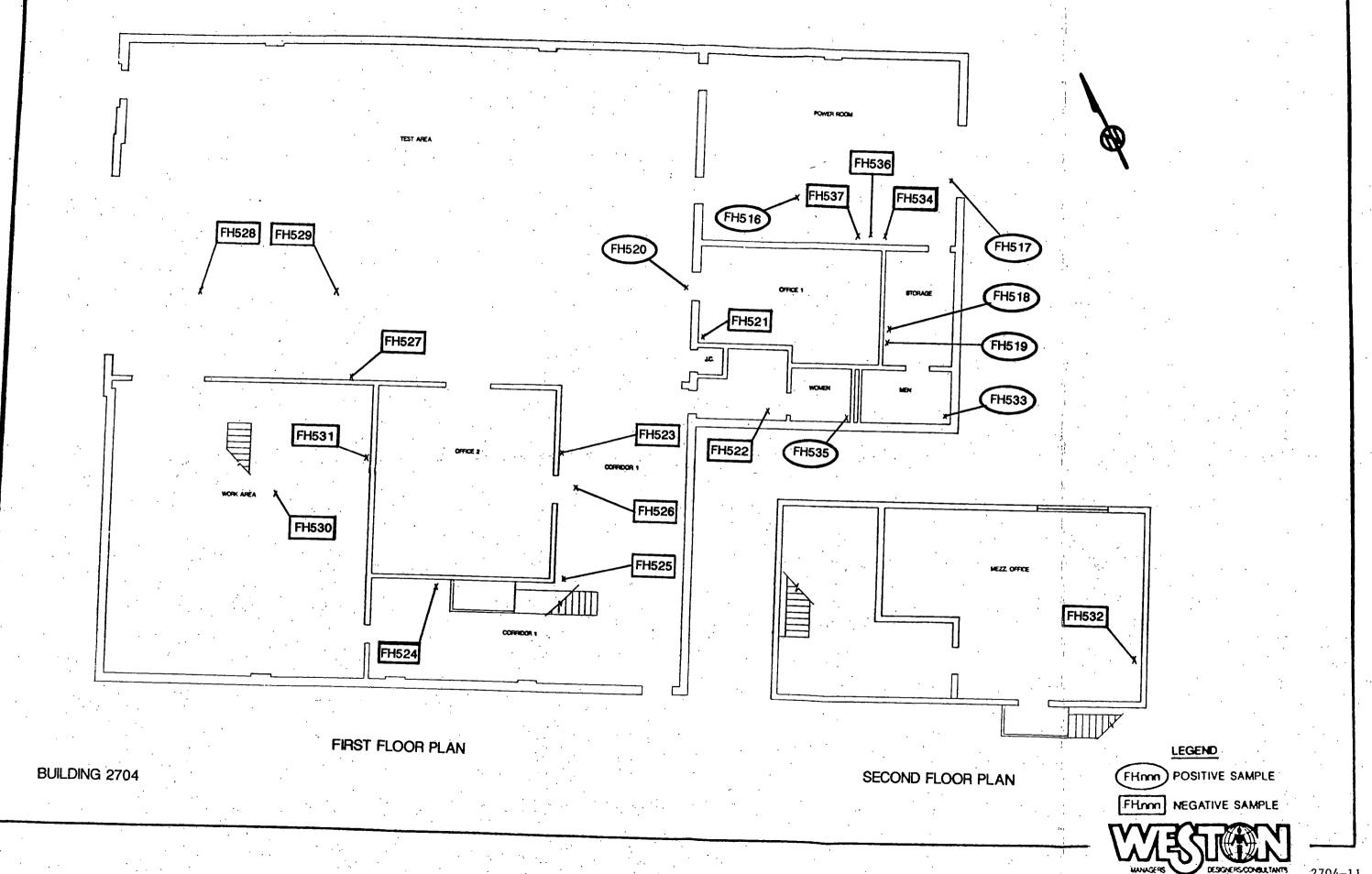
SECTION 2704.4 PHOTOGRAPHS



Bldg. 2704 - Test Chamber, Mechanical Room: 9 x 9" floor tiles tested positive. Samples FH516; FH517; FH519 and FH520, floor tiles (not shown) all tested positive.



Bldg. 2704 - Test Chamber: < 4" mud fitting (Ladies Room) sample FH535 tested positive. Sample FH533 (not shown) also tested positive.



9003 FAMILY HOUSING

FAMILY HOUSING

9003.1 GENERAL

Building 9003 was surveyed by WESTON technicians on 28 January 1991.

The first three portions of this facility report summarize the results of this inspection.

Polarized Light Microscopy (PLM) with dispersion staining was used to analyze one sample of suspect material collected from the building. This sample was found to be asbestoscontaining material (ACM). Table 9003.1 lists the analytical results for the bulk sample.

9003.2 ACM AND EXPOSURE ASSESSMENT

The location, description, and analytical results for the bulk sample from Building 9003 are presented in Table 9003.1. An area-by-area inventory of ACM is provided in Tables 9003.2 and 9003.3. "Other Asbestos-Containing Materials," listed in Table 9003.3, are materials that do not correspond to the standard caption categories listed in Table 9003.2. A prioritized listing of exposure assessments is presented in Table 9003.4. An itemized area-by-area cost estimate for removal and replacement is provided in Table 9003.5. The method by which removal/replacement costs are calculated is described in the ISSUES COMMON TO ALL BUILDINGS Section of this report. Building floor plans (see attachment) indicate sample locations and building area names as they are listed in Tables 9003.2 and 9003.5.

9003.3 RECOMMENDATIONS/CONCLUSIONS

WESTON recommends:

• The basement of Building 9003 qualifies for the Army Asbestos Deficiency Abatement Project.

TABLE 9003.1

BULK SAMPLE ANALYSIS RESULTS - BUILDING 9003, FAMILY HOUSING

SAMPLE		•		PERCE	NT ASBE	STOS	
NO.	LOCATION	ITEM	DESCRIPTION	CH	AM	OT	LAYERED ^a
FH644	BASEMENT, BELOW CEILING	4-8" PIPE RUN	WHITE,OTH,4-BIN. RUN,HORIZONTAL	5	-	-	YES

^aAsbestos content presented for layered samples represents the highest concentration layer.

Quadrant Codes	System Codes	Asbestos Types
C = Center	STM = Steam	CH = Chrysotile
N = North	CHW = Chilled Water	AM = Amosite
E = East	HHW = Heating Hot Water	OT = Other
S = South	DOM = Domestic Water	
W = West	OTH = Other	
NE = Northeast	UNK = Unknown	
NW = Northwest		
SE = Southeast		
SW = Southwest		•

ASBESTOS-CONTAINING MATERIALS - BUILDING 9003, FAMILY HOUSING

	PI	PE FITT	INGS (EA)			PIPE RU	NS (LF)		SPRAY/TROWELED	FLOOR TILE	BOILERS/	AIR HANDLING	
ÁREA	<4"	4-8"	9-14"	>14"	<4"	4-8"	9-14"	>14"	CEILINGS (MSF)	(MSF)	TANKS (MSF)	EQUIPMENT (MSF)	OTHE
asement	-					30		<u></u>					<u>-:</u>
OTALS		_	-	_	-	30	-	-	-	-	-	-	_

^{*} Other Material Present In Various Units Of Measure

EA - Each

LF - Linear Feet MSF - Thousand Square Feet

Table 700.

Other Asbestos-Containing Material - Building 9003, Family Housing Type Occupancy: Adults (Public)

Area	Material Type	Quantity (Unit)
No Other A	Asbestos-Containing Material Found in t	his Building

EA - Each

LF - Linear Feet

MSF - Thousand Square Feet

EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 9003, FAMILY HOUSING

			PRIOR.	PRIORITY			-	•	AVG		
LE		MATERIAL			EXPO	SURE	E FAC	CTORS		*	
).	AREA	TYPE	CODE	NUMBER	1 2	3	4	5	HOURS	ASB.	
.4 Raseme	ent	4-8" PIPE RUN	c	1.590E04	2 3	2	3	3	40.00	5	
	PLE).	D. AREA		D. AREA TYPE CODE	PLE MATERIAL INDEX INDEX D. AREA TYPE CODE NUMBER	PLE MATERIAL INDEX INDEX EXPO D- AREA TYPE CODE NUMBER 1 2	PLE MATERIAL INDEX INDEX EXPOSUR D. AREA TYPE CODE NUMBER 1 2 3	PLE MATERIAL INDEX INDEX EXPOSURE FAI D. AREA TYPE CODE NUMBER 1 2 3 4	PLE MATERIAL INDEX INDEX EXPOSURE FACTORS O. AREA TYPE CODE NUMBER 1 2 3 4 5	PLE MATERIAL INDEX INDEX EXPOSURE FACTORS EXP. D. AREA TYPE CODE NUMBER 1 2 3 4 5 HOURS	PLE MATERIAL INDEX INDEX EXPOSURE FACTORS EXP. % D. AREA TYPE CODE NUMBER 1 2 3 4 5 HOURS ASB.

Priority Index Codes

A [=] Long Term Corrective Measure
B [=] Review Management Special Considerations/Remarks

C [=] Army Asbestos Deficiency Abatement Project

Priority Index Numbers Are In Scientific Notation

Exposure Factors

1 [=] Material Friability
2 [=] Occupant Accessability
3 [=] Material Condition
4 [=] Level Of Activity
5 [=] Number Of Assigned Occupants

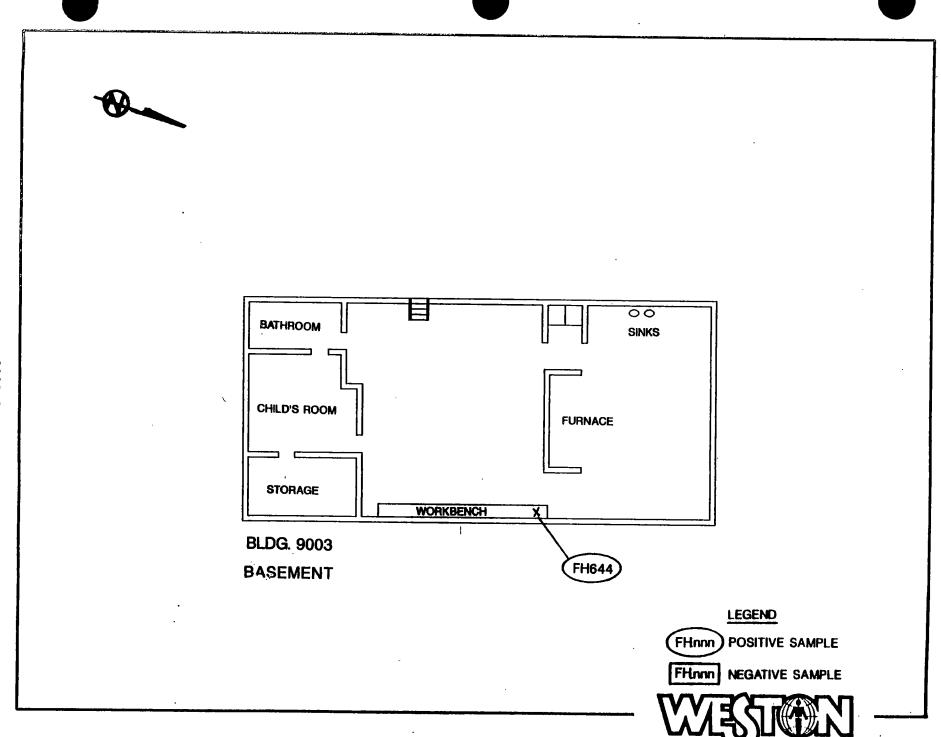
TABLE 9003.5 COST ESTIMATE* - BUILDING 9003, FAMILY HOUSING

DESCRIPTION	UNIT COST (\$)	AREA	TOTAL
Pipe Fittings (EA)		<u> </u>	IVIAL
4-8" 9-14" >14"	70.30 85.80 147.00 216.00	-	=
	276:08	=	-
Pipe Runs (LF)	26.50	-	<u>.</u>
4-8" 9-14" >14"	26.50 30.50 42.50 60.80	0.9	0.9
	60.80	-	-
Sprayed/Troweled Ceilings (SF)	9.60	-	-
Floor Tile (SF)	5.60	-	-
Boilers/Tanks (SF)	37.90	-	-
Air Handling Equipment (SF)	20.00	-	-
Other		-	-
SUBTOTAL		0.9	0.9
Difficulty Allowance		-	-
SUBTOTAL		0.9	0.9
Decontamination Units Mobilization		0:5 2:0	0:5 2:8
SUBTOTAL		3.4	3.4
Contingency a 15.00%		0.5	0.5
SUBTOTAL		3.9	3.9
Design Fee a 10.00%		0.4	0.4
SUBTOTAL		4.3	4.3
Air Monitoring a 10.00%	(77	0.5	0.5
TOTAL		4.8	4.8

^{*}Amounts Are In Thousands Of Dollars

AREA 1: Basement

^{**}Less Than \$100 For The Area; Amount Not Printed But Included In Total(s)
***The Minimum Air Monitoring Fee is \$500.00 Per Building



9009

STOREHOUSE (SERV-AIR)

STOREHOUSE (SERV-AIR)

9009.1 GENERAL

Building 9009 was surveyed by WESTON technicians on 19 January 1991.

The first three portions of this facility report summarize the results of this inspection. Photographs of some sample locations are provided in Section 9009.4.

Polarized Light Microscopy (PLM) with dispersion staining was used to analyze 2 samples of suspect material collected from the building. Of these samples, both were found to be asbestos-containing materials (ACM). Table 9009.1 lists the analytical results for the bulk samples.

9009.2 ACM AND EXPOSURE ASSESSMENT

The location, description, and analytical results for each bulk sample from Building 9009 are presented in Table 9009.1. An area-by-area inventory of ACM is provided in Tables 9009.2 and 9009.3. "Other Asbestos-Containing Materials," listed in Table 9009.3, are materials that do not correspond to the standard caption categories listed in Table 9009.2. A prioritized listing of exposure assessments is presented in Table 9009.4. An itemized area-by-area cost estimate for removal and replacement is provided in Table 9009.5. The method by which removal/replacement costs are calculated is described in the ISSUES COMMON TO ALL BUILDINGS Section of this report. Building floor plans (see attachment) indicate sample locations and building area names as they are listed in Tables 9009.2 and 9009.5.

9009.3 RECOMMENDATIONS/CONCLUSIONS

WESTON recommends:

 Asbestos-containing floor tile and air duct insulation should be labeled under the O&M Program.

TABLE 9009.1

BULK SAMPLE ANALYSIS RESULTS - BUILDING 9009, STOREHOUSE (SERV-AIR)

SAMPLE				PERCE	NT ASB	ESTOS	_
NO.	LOCATION	ITEM	DESCRIPTION	СН	AM	OT	LAYERED
FH580	OFFICE, BELOW CEILING	FLOOR TILE	BROWN,OTH,9X9 FL TL,HORIZONTAL	2	_	-	NO
FH581	GARAGE AREA, BELOW CEILING	AIR HANDLING EQUIPMENT	BLACK, OTH, DUCT INSUL, HORIZONTAL	40	-	-	NO

^aAsbestos content presented for layered samples represents thé highest concentration layer.

<u>Quadrant Codes</u>	System Codes	Asbestos Types
C = Center	STM = Steam	CH = Chrysotile
N = North	CHW = Chilled Water	AM = Amosite
E = East	HHW = Heating Hot Water	OT = Other
S = South	DOM = Domestic Water	
W = West	OTH = Other	
NE = Northeast	UNK = Unknown	
NW = Northwest		
SE = Southeast		
SW = Southwest		

ASBESTOS-CONTAINING MATERIALS - BUILDING 9009, STOREHOUSE (SERV-AIR)

	P1	PE FITT	INGS (EA)			PIPE RU	NS (LF)		SPRAY/TROWELED	FLOOR TILE	BOILERS/	AIR HANDLING	
AREA	<4"	4-8"	9-14"	>14"	<4"	4-8"	9-14"	>14"	CEILINGS (MSF)	(MSF)	TANKS (MSF)	EQUIPMENT (MSF)	OTHER
Garage area	-	-	-	-	-	_	-	-	-	-	-	0.24	
office				<u>-</u>			-	<u> </u>		0.36			
TOTALS		-	-	-	-	-	-	- .	_	0.36	-	0.24	-

^{*} Other Material Present In Various Units Of Measure

EA - Each

LF - Linear Feet MSF - Thousand Square Feet

Other Asbestos-Containing Material - Building 9009, Serv-Air Type Occupancy: Adults (Public)

Area	Material Type	Quantity (Unit)
No Other	Asbestos-Containing Material Found in the	his Building

EA - Each

LF - Linear Feet

MSF - Thousand Square Feet

EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 9009, STOREHOUSE(SERV-AIR)

SAMPLE MATERIAL	PRIOR. PRIORITY INDEX INDEX	EXPOSURE FACTORS	AVG. EXP. %
NO. AREA TYPE FH581 Garage area AIR HANDLING EQUIPMENT	CODE NUMBER A 4.800E01		HOURS ASB. 40.00 40

Priority Index Codes

A [=] Long Term Corrective Measure

B [=] Review Management Special Considerations/Remarks

C [=] Army Asbestos Deficiency Abatement Project

Priority Index Numbers Are In Scientific Notation

Exposure Factors

1 [=] Material Friability

2 [=] Occupant Accessability
3 [=] Material Condition

4 [=] Level Of Activity

5 [=] Number Of Assigned Occupants

TABLE 9009.5 COST ESTIMATE* - BUILDING 9009, STOREHOUSE(SERV-AIR)

DESCRIPTION	UNIT COST (\$)	AREA	AREA	TOTAL			
De Fittings (EA)			-	-			
4 ⁷ 8" 9-14" >14"	70-30 85-80 147-80 216-00	=	=	=			
e Runs (LF)	26.50	-	-	-			
4-8" 9-14" >14"	26.50 30.50 42.50 60.80	=	- -	- -		÷	
ayed/Troweled Ceilings (SF)	9.60	-	-				
or Tile (SF)	5.60	-	2.0	2.0			
lers/Tanks (SF)	37.90	-	-	•			
Handling Equipment (SF)	20.00	4.8	-	4.8			
er		-	-	-			
SUBTOTAL		4.8	2.0	6.8			
ficulty Allowance		2.4	-	2.4			
SUBTOTAL		7.2	2.0	9.2			
ontamination Units ilization		1:8	1:₹	3:8			
SUBTOTAL		9.7	4.5	14.2			
tingency a 15.00%		1.5	0.7	2.1			
SUBTOTAL		11.2	5.2	16.3			
ign Fee @ 10.00%		1.1	0.5	1.6			
SUBTOTAL	**	12.3	5.7	18.0			
Monitoring & 10.00% [*]		0.9 13.2	<u>0.9</u> 6.6	<u>1.8</u> 19.8			

^{*}Amounts Are In Thousands Of Dollars

AREA 1: Garage area

^{***}Less Than \$100 For The Area; Amount Not Printed But Included In Total(s)
****The Minimum Air Monitoring Fee is \$500.00 Per Building

SECTION 9009.4 PHOTOGRAPHS



Bldg. 9009 - Serv-Air Garage/Shop: Expansion joing around metal duct, sample FH581 tested positive.



Bldg. 9009 - Serv-Air Garage/Shop: 9 x 9" floor tiles sample FH580 tested positive.

9011

WORKSHOP

WORKSHOP

9011.1 GENERAL

Building 9011 was surveyed by WESTON technicians on 14 January and 15 January 1991.

The first three portions of this facility report summarize the results of this inspection. Photographs of some sample locations are provided in Section 9011.4.

Polarized Light Microscopy (PLM) with dispersion staining was used to analyze 26 samples of suspect material collected from the building. Of these samples, 19 were found to be asbestos-containing materials (ACM). Table 9011.1 lists the analytical results for the bulk samples.

9011.2 ACM AND EXPOSURE ASSESSMENT

The location, description, and analytical results for each bulk sample from Building 9011 are presented in Table 9011.1. An area-by-area inventory of ACM is provided in Tables 9011.2 and 9011.3. "Other Asbestos-Containing Materials," listed in Table 9011.3, are materials that do not correspond to the standard caption categories listed in Table 9011.2. A prioritized listing of exposure assessments is presented in Table 9011.4. An itemized area-by-area cost estimate for removal and replacement is provided in Table 9011.5. The method by which removal/replacement costs are calculated is described in the ISSUES COMMON TO ALL BUILDINGS Section of this report. Building floor plans (see attachment) indicate sample locations and building area names as they are listed in Tables 9011.2 and 9011.5.

9011.3 RECOMMENDATIONS/CONCLUSIONS

WESTON recommends:

• Asbestos-containing floor tile, pipe insulation, and fitting insulation should be labeled under the O&M Program.

TABLE 9011.1

BULK SAMPLE ANALYSIS RESULTS - BUILDING 9011, WORKSHOP

SAMPLE				PERC	ENT ASBI	ESTOS	
NO.	LOCATION	ITEM	DESCRIPTION	CH	AM	OT	<u>LAYERED^a</u>
FH540	STORAGE, BELOW CEILING	FLOOR TILE	RED,OTH,9X9 FL TL,HORIZONTAL	-	-	-	NO
FH541	STORAGE, BELOW CEILING	FLOOR TILE	TAN,OTH,1X1 FL TL,HORIZONTAL	5	-	-	YES
FH542	MENS, BELOW CEILING	- CEILING TILE	WHITE,OTH,2X4 CL TL,HORIZONTAL	-	_	-	YES
FH543	ATTIC D,BELOW CEILING	<4" PIPE FITTING	WHITE,STM,<4IN. FIT,HORIZONTAL	20	-	-	YES
FH544	ATTIC D, BELOW CEILING	<4" PIPE RUN	WHITE,STM,<4IN. RUN,HORIZONTAL	5	-	-	YES
FH545	ATTIC D,BELOW CEILING	4-8" PIPE FITTING	WHITE, STM, 4-8IN. FIT, HORIZONTAL	15	-	-	NO
FH546	ATTIC D.BELOW CEILING	4-8" PIPE RUN	WHITE, STM, 4-8IN. RUN, HORIZONTAL	50	-	-	YES
FH547	ATTIC D, BELOW CEILING	<4" PIPE FITTING	WHITE, STM, <4IN. FIT, HORIZONTAL	20	-	-	NO
FH548	ATTIC D,BELOW CEILING	<4" PIPE RUN	WHITE,STM,<4IN. RUN,HORIZONTAL	50	-	-	YES
FH549	ATTIC D, BELOW CEILING	4-8" PIPE FITTING	WHITE, STM, 4-8IN. FIT, HORIZONTAL	20	-	-	NO
FH550	ATTIC D,BELOW CEILING	4-8" PIPE RUN	WHITE, STM, 4-8IN. RUN, HORIZONTAL	40	-	-	NO
FH551	CORRIDOR D.BELOW CEILING	, FLOOR TILE	TAN,OTH,1X1 FL TL,HORIZONTAL	5	-	-	NO
FH552	CORRIDOR D, BELOW CEILING	FLOOR TILE	RED,OTH,9X9 FL TL,HORIZONTAL	2	-	-	NO
FH553	OFFICE 1C, BELOW CEILING	ACOUSTICAL WALL TILE	WHITE, OTH, 1X1 PANEL, VERTICAL	-	-	-	YES
FH554	WOOD SHOP, BELOW CEILING	ACOUSTICAL WALL TILE	WHITE,OTH,1X1 PANEL,VERTICAL	-	-	-	YES
FH555	WOOD SHOP, BELOW CEILING	ACOUSTICAL WALL TILE	WHITE, OTH, 1X1 WL TL, VERTICAL	-	-	_	YES
FH556	WOOD SHOP, BELOW CEILING	ACOUSTICAL WALL TILE	WHITE,OTH,1X1 WL TL,VERTICAL	-	-	-	YES
FH557	METAL SHOP, BELOW CEILING	FLOOR TILE	TAN,OTH,1X1 FL TL,HORIZONTAL	3	-	-	YES
FH558	METAL STORAGE, BELOW CEILING	FLOOR TILE	BLACK, OTH, 9X9 FL TL, HORIZONTAL	7	-	-	YES
FH559	OFFICE 1A, BELOW CEILING	FLOOR TILE	BLACK, OTH, 9X9 FL TL, HORIZONTAL	7	-	-	YES
FH560	MECH. RM., BELOW CEILING	FLOOR TILE	BLACK,OTH,9X9 FL TL,HORIZONTAL	5	_	_	NO
FH561	MENS, BELOW CEILING	CEILING TILE	WHITE, OTH, 2X4 CL TL, HORIZONTAL	-	-	_	YES
FH562	ATTIC A, BELOW CEILING	<4" PIPE FITTING	WHITE, STM, <4IN. FIT, HORIZONTAL	15	-	-	NO
FH563	ATTIC A, BELOW CEILING	<4" PIPE RUN	WHITE, STM, <4IN. RUN, HORIZONTAL	60	-	-	YES
FH564	ATTIC A, BELOW CEILING	4-8" PIPE FITTING	WHITE, STM, 4-8IN. FIT, HORIZONTAL	15	-	-	NO

 $^{^{\}mathrm{a}}$ Asbestos content presented for layered samples represents the highest concentration layer.

Quadrant Codes	System Codes	Asbestos Types
C = Center	STM = Steam	CH = Chrysotile
N = North	CHW = Chilled Water	AM = Amosite
E = East	HHW = Heating Hot Water	OT = Other
S = South	DOM = Domestic Water	
W = West	OTH = Other	
NE = Northeast	UNK = Unknown	
NW = Northwest		
SE = Southeast		
SW = Southwest		

TABLE 9011.1 (continued)

BULK SAMPLE ANALYSIS RESULTS - BUILDING 9011, WORKSHOP

SAMPLE				PERCE	NT ASB	ESTOS	
NO.	LOCATION	ITEM	DESCRIPTION	CH	AM	ОТ	LAYERED ^a
FH565	ATTIC A, BELOW CEILING	4-8" PIPE RUN	WHITE,STM,4-8IN. RUN,HORIZONTAL	40	-	-	YES

 $^{^{\}mathbf{a}}$ Asbestos content presented for layered samples represents the highest concentration layer.

Quadrant Codes	System Codes	Asbestos Types
C = Center	STM = Steam	CH = Chrysotile
N = North	CHW = Chilled Water	AM = Amosite
E = East	HHW = Heating Hot Water	OT = Other
S = South	DOM = Domestic Water	
W = West	OTH = Other	
NE = Northeast	UNK = Unknown	
NW = Northwest		
SE = Southeast		
SW = Southwest		

TABLE 9011.2 ASBESTOS-CONTAINING MATERIALS - BUILDING 9011, WORKSHOP

	· <u>PI</u>	PE FITT	INGS (EA)		_	PIPE RU	NS (LF)		SPRAY/TROWELED	FLOOR TILE	BOILERS/	AIR HANDLING	
AREA	<4 ¹¹	4-8"	9-14"	>14"	<4"	4-8"	9-14"	>14"	CEILINGS (MSF)	(MSF)	TANKS (MSF)	EQUIPMENT (MSF)	OTHE
Attic A	136	12	-	_	260	930	-	_	-	-	_	_	_
Attic B	140	11	-	-	238	930	_	-	-	-	-	-	_
Attic C	130	11	-	-	259	920	_	-	-	_	-	_	_
Attic D	139	11	-	-	243	923	-	_	-	_	_	-	-
Closet		-	-	-	-	-	-	-	• •	0.08	· <u>-</u>	-	_
Corridor A	-	-	-	-	-	-	-	-	_	0.98	-		_
Corridor D	-	-	_	-	-	-	-	-	_	1.30	-	-	_
Mech. Rm.	-	-	-	-	-	-	-	-	-	0.09	_	-	_
Metal Shop	-	-	-	_	-	-	-	-	-	10.60	_	-	-
Metal Storage	-	-	-	-	-	-	-	-	-	1.80	_	-	_
Office 10A	-	-	-	-	-	-	-	_	-	0.19	-	-	
Office 11A	-	-	-	-	-	-	-	-		0.43	_	-	_
Office 12A	-	-	-	-	-	-	-	-	_	0.48	_	_	_
Office 1A	-	-	-	-	· -	-	_	_	-	0.14	-	_	_
Office 1B	-	-	-	-	-	_	-	_	_	0.50	-	_	_
Office 1C	-	-	-	-	-	-	-	-	-	0.09	_	_	_
Office 2A	-	-	-	-	_	-	-	_	-	0.31	_	_	_
Office 3A	-	-	-	-	_	-	-	_		0.72	_	_	_
Office 4A	-	-	-	-	-	-	_	_	-	0.29	_	_	_
Office 5A	-	-	-	-	_	-	-	-	_	0.60	_	_	_
Office 6A	-	-	_	-	-	_	_	_	_	0.46	_	_	_
Office 7A	-	-	-	-	-	_	-	-	_	0.46	_	_	
Office 8A	-	-	-	-	-	-	_	_	-	0.77	-	_	_
Office 9A	-	-	-	-	_	-	-	_	-	0.22	_	_	_
Parts and Tools	-	-	_	-	-	-	-	_	_	1.23	_	_	_
Proto Fab Branch	-	_	-	-		-	_	_	_	0.33	_	_	-
Storage	-	-	-	_		_	_	_		1.48	_	_	_
Supply 157	-	-	-	-	_	-	-	-	-	0.87	_	-	_
Vestibule	-	-		-	_	_	-	_		0.06	_	_	_
lood Shop	4		.		4			:	<u> </u>	6.10			_=
TOTALS	549	45	_	_	1004	3703	_	_		30.57			

Other Material Present In Various Units Of Measure

EA - Each LF - Linear Feet

MSF - Thousand Square Feet

Table 9011.3

Other Asbestos-Containing Material - Building 9011, Workshop Type Occupancy: Adults (Public)

Area	Material Type	Quantity (Unit)
No Other A	Asbestos-Containing Material Found in the	his Building

EA - Each

LF - Linear Feet

MSF - Thousand Square Feet

TABLE 9011.4 EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 9011, WORKSHOP

SAMPL	E	MATERIAL	PRIOR. INDEX	PRIORITY INDEX	FY	(PAG	: IDE	F FA	CTORS	AVG. Exp.	%
NO.		TYPE	CODE	NUMBER	1		3		5	HOURS	ASB.
FH548	Wood Shop	<4" PIPE RUN	A	6.380E01	1	2	1	2	11	40.00	50
FH547		<4" PIPE FITTING	A	2.310E01		2	1	2			
FH546		4-8" PIPE RUN	A A	1.450E-1	3	1	4	4	11	40.00	20
FH546		4-8" PIPE RUN	A	1.450E-1	7	1	1	1	1	1.00	50 50
FH546		4-8" PIPE RUN	M A	1.450E-1	3	4	1	1	1	1.00 1.00	50 50
FH548		<4" PIPE RUN	^	1.450E-1	3	1	4	4	<u> </u>		50 50
FH550		4-8" PIPE RUN	A	1.450E-1	3	1	1	1	1	1.00	40
FH563		<4" PIPE RUN	^	1.450E-1	3		4	4	1	1.00	
FH565		4-8" PIPE RUN	A A	1.450E-1	3	1	1	1	1	1.00	60
FH543		<4" PIPE FITTING	^	5.250E-2	3	1	1	4	1	1.00 1.00	40
FH543		<4" PIPE FITTING	A A	5.250E-2	3	1	1	1	1	1.00	20
FH543		<4" PIPE FITTING	^	5.250E-2	3	1	1	1	1	1.00	20
FH545		4-8" PIPE FITTING	A	5.250E-2	3	4	1	1		1.00	20 15
FH545		4-8" PIPE FITTING	A	5.250E-2	3	4	1	1			
FH545		4-8" PIPE FITTING	A	5.250E-2	3	1	1	1	1	1.00 1.00	15
FH547		<4" PIPE FITTING	A	5.250E-2	3	1	1	1			15 20
FH549		4-8" PIPE FITTING	A A	5.250E-2 5.250E-2	3	1	1	1	1	1.00 1.00	20
FH562		<4" PIPE FITTING	^	5.250E-2	3	1	4	1	, 4		20
FH564		4-8" PIPE FITTING	^	5.250E-2	3	1	1	1	4	1.00	15
FH544		<4" PIPE RUN	^	9.250E-2	3	1	4	1	1	1.00	15
FH544		<4" PIPE RUN	A	9.250E-3	3	1	1	1	1	1.00	5
FH544		<4" PIPE RUN	, A	9.250E-3	3	1	1	1	1	1.00	5
FH542		CEILING TILE	M A	9.23UE-3	1	2	1	2	,	1.00	5
FH542		CEILING TILE	A A	0	1	_	1	_	4	40.00	0
FH542		CEILING TILE	A A	0	1	2	1	2	11	40.00	0
FH553		ACOUSTICAL WALL TILE	A A	=	1	4	1	2	4	40.00	0
FH553		ACOUSTICAL WALL TILE	A A	0	1	2	1	1	U	0.00	0
FH553		ACOUSTICAL WALL TILE	M A	_	1	_	1	2	5	40.00	0
FH554		ACOUSTICAL WALL TILE	. ^	0	1	2	1	2	11	40.00	0
FH554		ACOUSTICAL WALL TILE	M A	0	1	2	1	2	0 11	0.00 40.00	0 0

Priority Index Codes

A [=] Long Term Corrective Measure

B [=] Review Management Special Considerations/Remarks

C [=] Army Asbestos Deficiency Abatement Project

Priority Index Numbers Are In Scientific Notation

Exposure Factors
1 [=] Material Friability

2 [=] Occupant Accessability

3 [=] Material Condition

4 [=] Level Of Activity

5 [=] Number Of Assigned Occupants

TABLE 9011.4 (continued)

EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 9011, WORKSHOP

SAMPLE		MATERIAL	PRIOR. INDEX	PRIORITY INDEX	EX	POSI	JRE	FA	CTORS	AVG. EXP.	%
NO.	AREA	TYPE	CODE	NUMBER	1_	2	3	4	5	HOURS	ASB.
FH555	Office 1B	ACOUSTICAL WALL TILE	Α	0	1	2	1	2	5	40.00	0
FH555	Wood Shop	ACOUSTICAL WALL TILE	A	Ŏ	i	2	1	2	11	40.00	ŏ
FH556	Wood Shop	ACOUSTICAL WALL TILE	A	Ō	1	2	1	2	11	40.00	ñ
FH561	Mens	CEILING TILE	A	Ŏ	1	1	1	1	'n	0.00	ñ
FH561	Mens Rm.	CEILING TILE	Ā	ň	1	1	i	1	ñ	0.00	ň

Priority Index Codes

A [=] Long Term Corrective Measure

B [=] Review Management Special Considerations/Remarks

C [=] Army Asbestos Deficiency Abatement Project

Priority Index Numbers Are In Scientific Notation

Exposure Factors

1 [=] Material Friability

2 [=] Occupant Accessability
3 [=] Material Condition

4 [=] Level Of Activity

5 [=] Number Of Assigned Occupants

TABLE 9011.5 COST ESTIMATE* - BUILDING 9011, WORKSHOP

DESCRIPTION	UNIT COST (\$)	AREA	AREA 2	AREA	AREA	AREA	AREA	AREA	AREA	AREĄ	AREA 10	AREA
Pipe Fittings (EA)	70.30	9.6	0.8	0 1	0.8		_	_			<u></u>	
4-8" 9-14" >14"	70.30 85.80 147.00 216.00	1:8 -	8:8 -	8:3	8:8	=	=	-	-	=	=	:
Pipe Runs (LF)			•			_	_	_	-	-	-	•
4-8"	26.50 30.50	28:4	28:4	2 6:9 28:1	28:2	-	-	-	-	:	-	-
4-8" 9-14" >14"	26.50 30.50 42.50 60.80	-	-	-		=	- .	-	Ξ.	:	-	=
Sprayed/Troweled Ceilings (SF)	9.60	-	-	_		-	_	_	_	_	_	_
Floor Tile (SF)	5.60	•	-	-	-	0.4	5.5	7.3	0.5	59.4	10.1	1.1
Boilers/Tanks (SF)	37.90	-	-	-	_	-	-	-	•	-	-	-
Air Handling Equipment (SF)	20.00	-	-	-	-	-	-	-	_	_	-	_
Other		-	-	-	-	-	-	_	-	-	-	_
SUBTOTAL		45.8	45.5	45.0	45.3	0.4	5.5	7.3	0.5	59.4	10.1	1.1
Difficulty Allowance		22.9	- '	17.9	-	-	-	-	-	29.7	2.5	_
SUBTOTAL		68.8	45.5	62.9	45.3	0.4	5.5	7.3	0.5	89.0	12.6	1.1
Decontamination Units Mobilization		.0. 4	* 0.4	. Q.4	.0.4	.0.4	.Q.4	.0-4	.Q.4	. 0.4	.Q.4	*Q-4
SUBTOTAL		69.3	45.9	63.4	45.8	0.9	5.9	7.8	1.0	89.5	13.1	1.6
Contingency a 15.00%		10.4	6.9	9.5	6.9	0.1	0.9	1.2	0.1	13.4	2.0	0.2
SUBTOTAL		79.6	52.8	72.9	52.7	1.1	6.8	8.9	1.1	103.0	15.0	1.8
Design Fee @ 10.00%		8.0	5.3	7.3	5.3	0.1	0.7	0.9	0.1	10.3	1.5	0.2
SUBTOTAL		87.6	58.1	80.2	57.9	1.2	7.5	9.8	1.2	113.2	16.5	2.0
Air Monitoring a 10.00%***	1	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
TOTAL		89.5	60.0	82.1	59.8	3.0	9.4	11.7	3.1	115.1	18.4	3.8

^{*}Amounts Are In Thousands Of Dollars



^{***}Less Than \$100 For The Area; Amount Not Printed But Included In Total(s)
****The Minimum Air Monitoring Fee is \$500.00 Per Building

TABLE 9011.5 (continued) COST ESTIMATE* - BUILDING 9011, WORKSHOP

DESCRIPTION	UNIT COST (\$)	AREA 12	AREA	ARĘA 14	AREA 15	AREA 16	AREA	AREA 18	AREA	AREA 20	AREA 21	AREA
Pipe Fittings (EA) 4-8" 9-14" >14"	70.30 85.80 147.00 216.00	:		:	-	:	:	:	:	:	:	-
Pipe Runs (LF) 44" 9-14" >14"	26.50 30.50 22.50 60.80	:	:	:	:	:	- - - -	:	- - - -	=	:	-
Sprayed/Troweled Ceilings (SF)	9.60	-	_	_	_	-	_	_				
Floor Tile (SF)	5.60	2.4	2.7	0.8	2.8	0.5	1.7	4.0	1.6	3.4	2.6	2.6
Boilers/Tanks (SF)	37.90	-	-	-	-	•	-	-	-	-	-	-
Air Handling Equipment (SF)	20.00	-	_	-	-	-	_	_	_	-	-	_
Other		-	-	-	-	-	-	-	-	_	-	_
SUBTOTAL		2.4	2.7	0.8	2.8	0.5	1.7	4.0	1.6	3.4	2.6	2.6
Difficulty Allowance		-	-	-	1.4	-	-	-	-	•	-	-
SUBTOTAL		2.4	2.7	0.8	4.2	0.5	1.7	4.0	1.6	3.4	2.6	2.6
Decontamination Units Mobilization		* \$ -4	.0.4	.0.4	*Q.4	.Q.4	. Q.4	.0.4	.Q.4	.Q.4	.Q.4	.Q.4
SUBTOTAL		2.9	3.2	1.3	4.7	1.0	2.2	4.5	2.1	3.8	3.0	3.0
Contingency a 15.00%		0.4	0.5	0.2	0.7	0.1	0.3	0.7	0.3	0.6	0.5	0.5
SUBTOTAL		3.3	3.6	1.5	5.4	1.1	2.6	5.2	2.4	4.4	3.5	3.5
Design Fee @ 10.00%		0.3	0.4	0.1	0.5	0.1	. 0.3	0.5	0.2	0.4	0.3	0.3
SUBTOTAL		,3.7	4.0	1.6	5.9	1.2	2.8	5.7	2.7	4.9	3.8	3.8
Air Monitoring a 10.00%***	•	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
TOTAL		5.5	5.9	3.5	7.8	3.1	4.7	7.6	4.5	6.7	5.7	5.7

^{*}Amounts Are In Thousands Of Dollars

AREA AREA AREA AREA AREA AREA	246802	Office Office Office Office Office	11A 1C 3A 5A
AKEA	۲۷:	OTTICE	18

^{**}Less Than \$100 For The Area; Amount Not Printed But Included In Total(s)

***The Minimum Air Monitoring Fee is \$500.00 Per Building

TABLE 9011.5 (continued)

COST ESTIMATE* - BUILDING 9011, WORKSHOP

DESCRIPTION	UNIT COST (\$)	AREA 23	AREA 24	AREA 25	AREA 26	AREA 27	AREA 28	AREA 29	AREA 30	TOTAL	
Pipe Fittings (EA) 4-8" 9-14" >14"	70-30 85-80 147-00 216-00	:	:	:	:	:	:	:	0.3	38:8 -	
Pipe Runs (LF)	26.50 30.50 60.80	- - -	:	:	: :	:	:	- - -	0.1 -	176:8 112:9	
Sprayed/Troweled Ceilings (SF)	9.60	_	_	_	_	_	_	_	_	_	
Floor Tile (SF)	5.60	4.3	1.2	6.9	1.8	8.3	4.9	0.4	34.2	171.2	
Boilers/Tanks (SF)	37.90	-	-	-	-	•	•	-	-	-	
Air Handling Equipment (SF)	20.00	_	-	-	-	_	_	_	_	-	
Other		-	-	-	-	-	-	-	-	-	
SUBTOTAL		4.3	1.2	6.9	1.8	8.3	4.9	0.4	34.5	353.2	
Difficulty Allowance		-	-	-	0.9	-	-	-	-	75.4	
SUBTOTAL		4.3	1.2	6.9	2.8	8.3	4.9	0.4	34.5	428.6	
Decontamination Units Mobilization		. 0.4	.0.4 **	.0.4 **	.0.4	. 0.4	. 0.4	. 0.4	.0.4 **	¹ 2.5	
SUBTOTAL		4.8	1.7	7.4	3.3	8.8	5.4	0.8	35.0	443.1	
Contingency a 15.00%		0.7	0.3	1.1	0.5	1.3	. 0.8	0.1	5.3	66.5	
SUBTOTAL		5.5	1.9	8.5	3.7	10.1	6.2	1.0	40.3	509.5	
Design Fee a 10.00%		0.6	0.2	0.8	0.4	1.0	0.6	**	4.0	51.0	
SUBTOTAL	4.4.4	6.1	2.1	9.3	4.1	11.1	6.8	1.1	44.3	560.5	
Air Monitoring a 10.00%	# # # # # # # # # # # # # # # # # # #	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	<u>56.1</u>	
TOTAL		7.9	4.0	11.2	6.0	13.0	8.6	2.9	46.2	616.6	

^{*}Amounts Are In Thousands Of Dollars

AREA 23: Office 8A AREA 25: Parts and Tools AREA 27: Storage AREA 29: Vestibule AREA 24: Office 9A AREA 26: Proto Fab Branch AREA 28: Supply 157 AREA 30: Wood Shop

^{**}Less Than \$100 For The Area; Amount Not Printed But Included In Total(s)

^{****}The Minimum Air Monitoring Fee is \$500.00 Per Building

SECTION 9011.4 PHOTOGRAPHS



Bldg. 9011A - Attic Area: < 4" steam fitting FH562 tested positive. Sample FH563 < 4" pipe run (not shown) also tested positive.



Bldg. 901lA - Mechanical Room: 9 x 9" black floor tiles FH560 tested positive, Office lA; 9 x 9" black floor tiles FH559 also tested positive. Metal shop storage 9 x 9" black floor tiles FH558 also tested positive.



Bldg. 9011A - Attic Area: 4 - 8" steam pipe insulation sample FH565 tested positive.



Bldg. 9011A - Attic Area: 4 - 8" mud fitting sample FH564 tested positive.



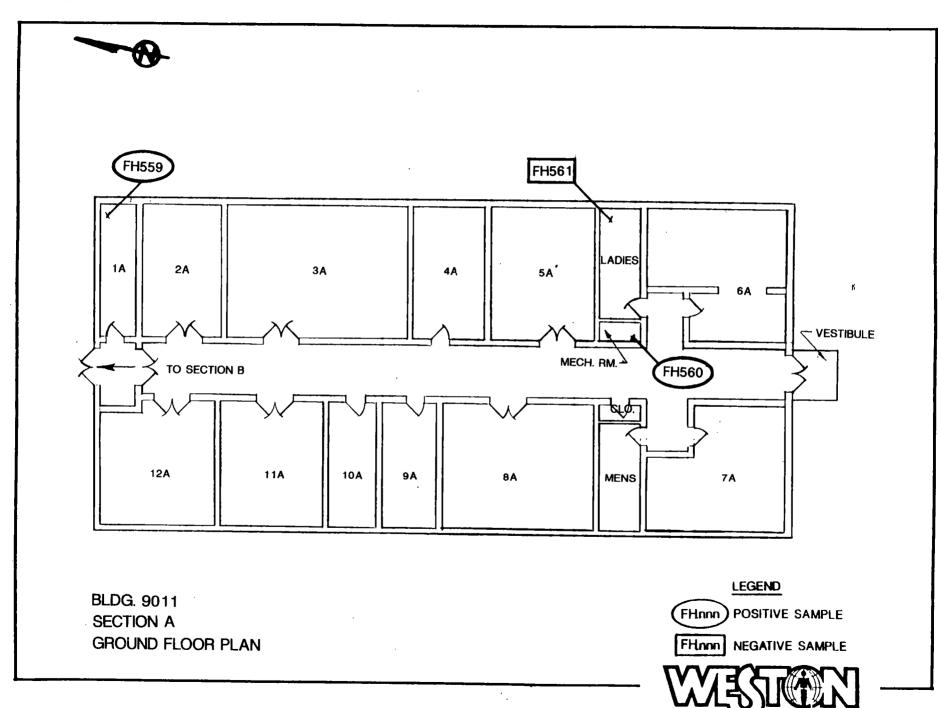
Bldg. 9011D - Attic: < 4" mud fitting sample FH543 tested positive; samples FH545 (not shown) 4 - 8" mud fitting tested positive; sample FH547 < 4" mud fitting tested positive (not shown); also sample FH549 (not shown), 4 - 8" mud fitting tested positive.

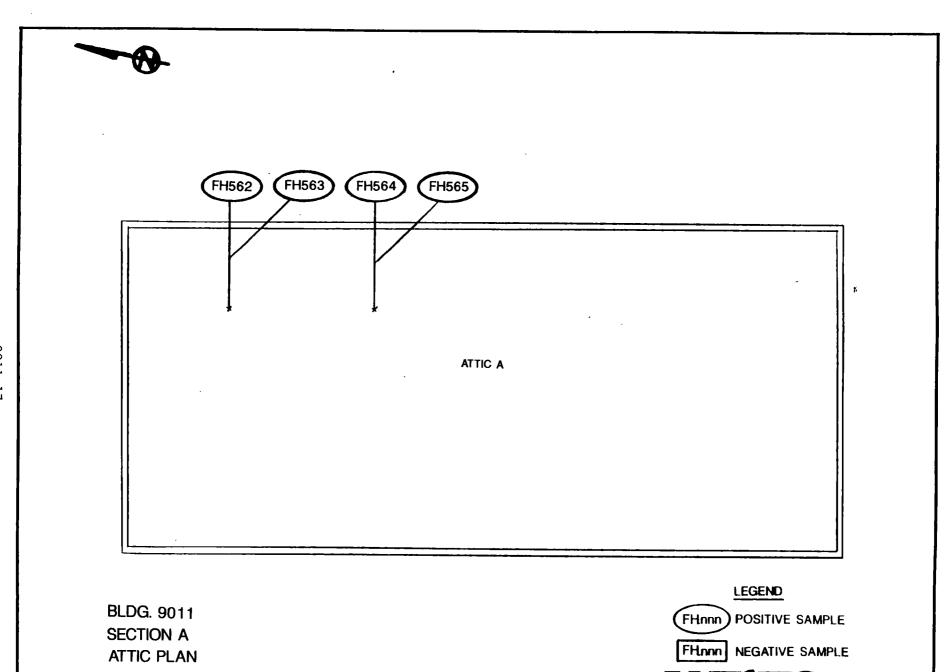


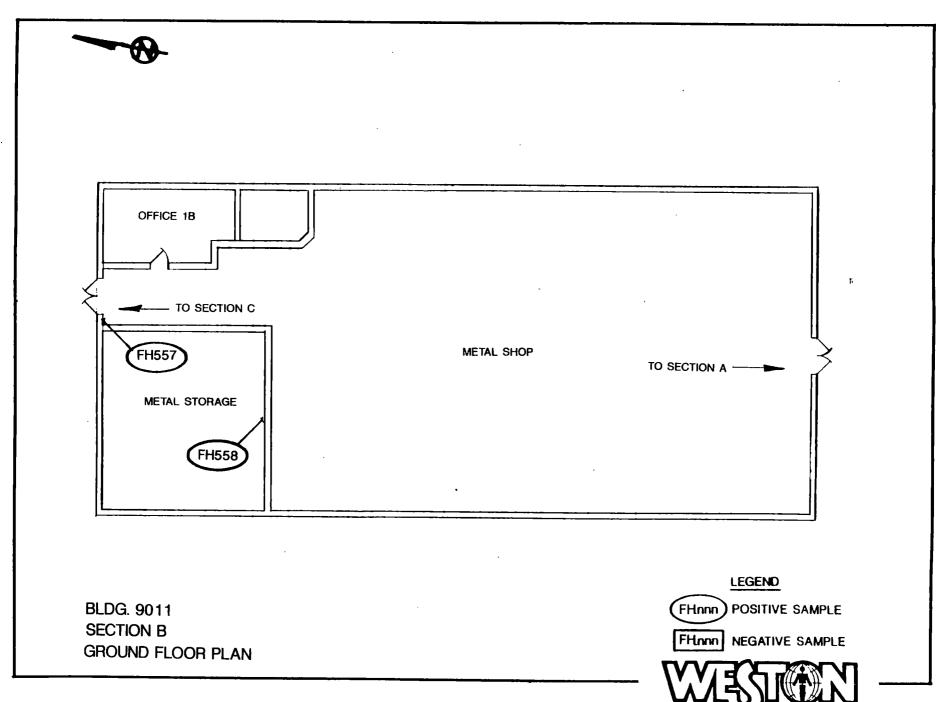
Bldg. 9011D - Attic: < 4" pipe run sample FH544 tested positive, also testing positive and not shown are samples FH546 4 - 8" pipe run; sample FH548 < 4" pipe run; sample FH550 4 - 8" pipe run.

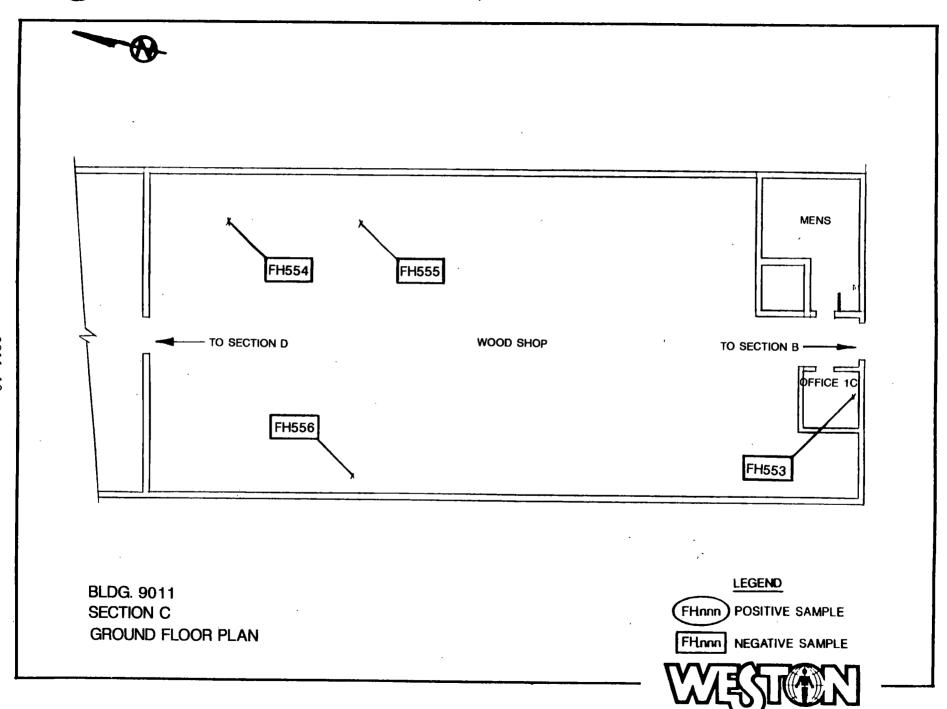


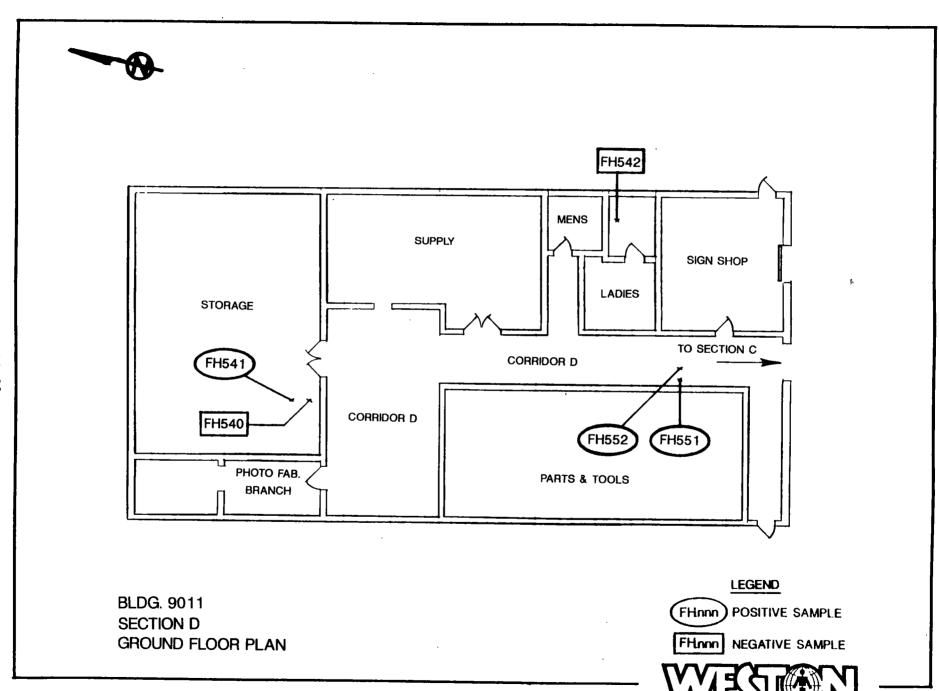
Bldg. 9011D - Corridor D: Sample FH551 12 x 12" tan floor tiles tested positive; sample FH552 (not shown) 9 x 9" red floor tiles also tested positive. Following floor tile samples tested positive (not shown) are: FH557, 12 x 12" tan; FH558, 9 x 9" black, FH559 and FH560 also 9 x 9" black.

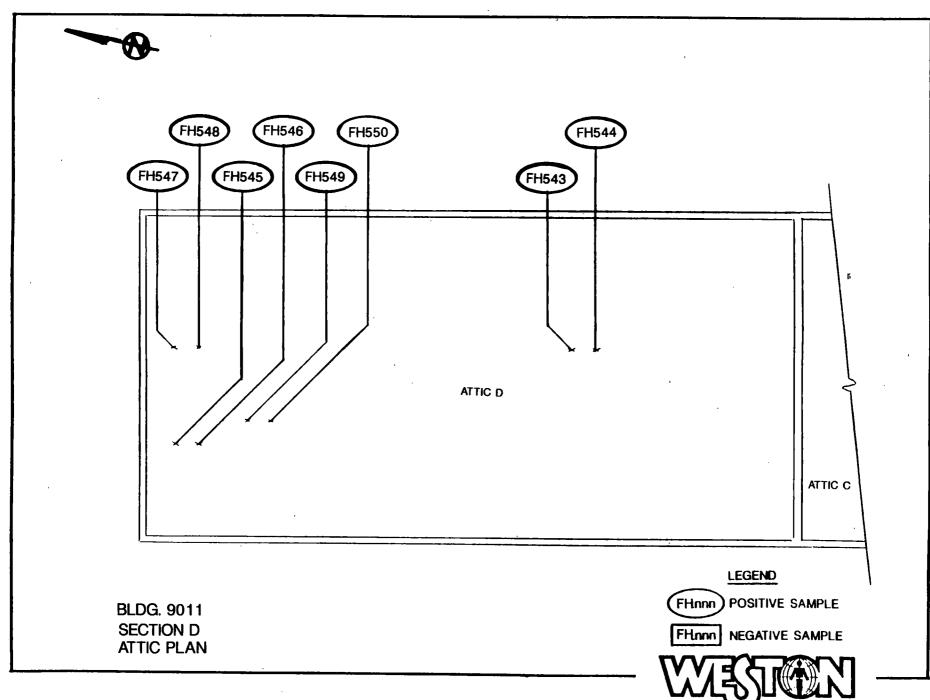












9015 LABORATORY (EW/RSTA)

LABORATORY (EW/RSTA)

9015.1 GENERAL

Building 9015, Unit 27 was surveyed by WESTON technicians on 16 January 1991.

The first three portions of this facility report summarize the results of this inspection. Photographs of some sample locations are provided in Section 9015.4.

Polarized Light Microscopy (PLM) with dispersion staining was used to analyze 6 samples of suspect material collected from the building. Of these samples, one was found to be asbestos-containing material (ACM). Table 9015.1 lists the analytical results for the bulk samples.

9015.2 ACM AND EXPOSURE ASSESSMENT

The location, description, and analytical results for each bulk sample from Building 9015 are presented in Table 9015.1. An area-by-area inventory of ACM is provided in Tables 9015.2 and 9015.3. "Other Asbestos-Containing Materials," listed in Table 9015.3, are materials that do not correspond to the standard caption categories listed in Table 9015.2. A prioritized listing of exposure assessments is presented in Table 9015.4. An itemized area-by-area cost estimate for removal and replacement is provided in Table 9015.5. The method by which removal/replacement costs are calculated is described in the ISSUES COMMON TO ALL BUILDINGS Section of this report. Building floor plans (see attachment) indicate sample locations and building area names as they are listed in Tables 9015.2 and 9015.5.

9015.3 RECOMMENDATIONS/CONCLUSIONS

WESTON recommends:

Asbestos-containing floor tile should be labeled under the O&M Program.

TABLE 9015.1

BULK SAMPLE ANALYSIS RESULTS - BUILDING 9015, LABORATORY(EW/RSTA)

SAMPLE				PERCE	ENT ASB	ESTOS	
NO.	LOCATION	ITEM	DESCRIPTION	СН	AM	OT	LAYERED'
FH566	ROOM 102, BELOW CEILING	FLOOR TILE	TAN,OTH,1X1 FL TL,HORIZONTAL	_	_	_	NO
FH567	ROOM 103, BELOW CEILING	CEILING TILE	WHITE, OTH, 2X4 CL TL, HORIZONTAL	_	-	-	NO
FH568	BAY AREA, BELOW CEILING	ACOUSTICAL WALL TILE	BLUE, OTH, 1X1 WL TL, VERTICAL		_	_	YES
FH569	MENS, BELOW CEILING	ACOUSTICAL WALL TILE	WHITE, OTH, 1X1 WL TL, VERTICAL	-	_	_	YES
FH570	HALL_BELOW CEILING	FLOOR TILE	BROWN, OTH, 9X9 FL TL, HORIZONTAL	7		-	NO
FH571	HALL, BELOW CEILING	CEILING TILE	WHITE, OTH, 2X4 CL TL, HORIZONTAL	-	-	_	NO

 $^{^{\}mathrm{a}}$ Asbestos content presented for layered samples represents the highest concentration layer.

Quadrant Codes	System Codes	Asbestos Types
C = Center	STM = Steam	CH = Chrysotile
N = North	CHW = Chilled Water	AM = Amosite
E = East	HHW = Heating Hot Water	OT = Other
S = South	DOM = Domestic Water	
W = West	OTK = Other	
NE = Northeast	UNK = Unknown	
NW = Northwest		
SE = Southeast		
SU = Southwest		

ASBESTOS-CONTAINING MATERIALS - BUILDING 9015, LABORATORY (EW/RSTA)

	P1	PE FITT	INGS (EA)			PIPE RU	INS (LF)		SPRAY/TROWELED	FLOOR TILE	BOILERS/	AIR HANDLING	
AREA	<u> </u>	4-8"	9-14"	>1411	<4"	4-8"	9-14"	>14"	CEILINGS (MSF)	(MSF)	TANKS (MSF)	EQUIPMENT (MSF)	OTHER
ı ı				<u> </u>				 :		0.02		-	
TALS			-			-		_	-	0.02	-	_	

^{*} Other Material Present In Various Units Of Measure

EA - Each LF - Linear Feet MSF - Thousand Square Feet

Table 9015.3

Other Asbestos-Containing Material - Building 9015, EW/RSTA Type Occupancy: Adults (Public)

Area	Material Type	Quantity (Unit)
No Other	Asbestos-Containing Material Found in th	is Building

EA - Each

LF - Linear Feet

MSF - Thousand Square Feet

TABLE 9015.4 EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 9015, LABORATORY (EW/RSTA)

SAMPLE		MATERIAL	PRIOR. INDEX	PRIORITY INDEX	EX	POSI	JRE	FAC	TORS	AVG. Exp.	%	
NO.	AREA	TYPE	CODE	NUMBER	1	2	3	4	5	HOURS	ASB.	
FH567	Bay Area	CEILING TILE	Α	0	1	2	1	2	10	40.00	0	
FH567	Corridor	CEILING TILE	A	0	1	2	1	2	10	40.00	Ŏ	
FH567	Room 101	CEILING TILE	Α	0	1	2	1	2	10	40.00	Ō	
FH567	Room 102	CEILING TILE	Α	0	1	2	1	2	10	40.00	0	
FH567	Room 103	CEILING TILE	A	0	1	2	1	2	10	40.00	0	
FH568	Bay Area	ACOUSTICAL WALL TILE	Α	0	1	2	1	2	10	40.00	0	
FH568	Ladies	ACOUSTICAL WALL TILE	Α	0	1	2	1	2	10	40.00	Ō	
FH569	Mens	ACOUSTICAL WALL TILE	Α	0	1	2	1	2	10	40.00	Ó	
FH571	Hall	CEILING TILE	Α	0	1	2	1	2	10	40.00	Ō	
FH571	Room 201	CEILING TILE	Α	0	1	2	1	2	10	40.00	Ō	
FH571	Room 202	CEILING TILE	Α	0	1	2	1	2	10	40.00	Ō	
FH571	Room 203	CEILING TILE	Α	0	1	2	1	2	10	40.00	Ō	
FH571	Room 204	CEILING TILE	A	0	1	2	1	2	10	40.00	Ô	
FH571	Room 205	CEILING TILE	A	0	1	2	1	2	10	40.00	Ö	'
FH571	Room 206	CEILING TILE	Ä	Ö	1	2	1	2	10	40.00	Ŏ	

Priority Index Codes

A [=] Long Term Corrective Measure

B [=] Review Management Special Considerations/Remarks

C [=] Army Asbestos Deficiency Abatement Project

Priority Index Numbers Are In Scientific Notation

Exposure Factors

- 1 [=] Material Friability
- 2 [=] Occupant Accessability 3 [=] Material Condition
- 4 [=] Level Of Activity
- 5 [=] Number Of Assigned Occupants

TABLE 9015.5 COST ESTIMATE* - BUILDING 9015, LABORATORY(EW/RSTA)

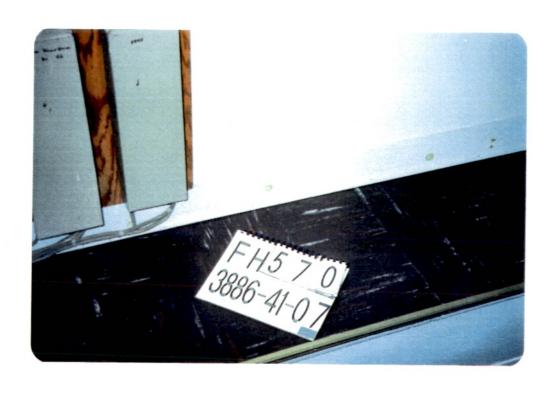
	DESCRIPTION	UNIT COST (\$)	AREA	_ TOTAL
	Pipe Fittings (EA) 4.8" 9-14" >14"	70-30 85-80 147-80 216-00		:
•	Pipe Runs (LF)	26.50 30.50 22.50 60.80	:	:
:	Sprayed/Troweled Ceilings (SF)	9.60	-	-
1	Floor Tile (SF)	5.60	**	**
	Boilers/Tanks (SF)	37.9 0	-	-
•	Air Handling Equipment (SF)	20.00	-	-
	Other		-	-
	SUBTOTAL		**	**
0	Difficulty Allowance		-	-
	SUBTOTAL		**	**
Ē	Decontamination Units Mobilization		3:0 2:0	3:8
	SUBTOTAL		5.1	5.1
C	Contingency a 15.00%		0.8	0.8
	SUBTOTAL		5.9	5.9
D	Design Fee @ 10.00%		0.6	0.6
	SUBTOTAL		6.4	6.4
A	ir Monitoring ۵ 10.00%**'	•	0.6	0.6
	TOTAL		7.1	7.1

^{*}Amounts Are In Thousands Of Dollars

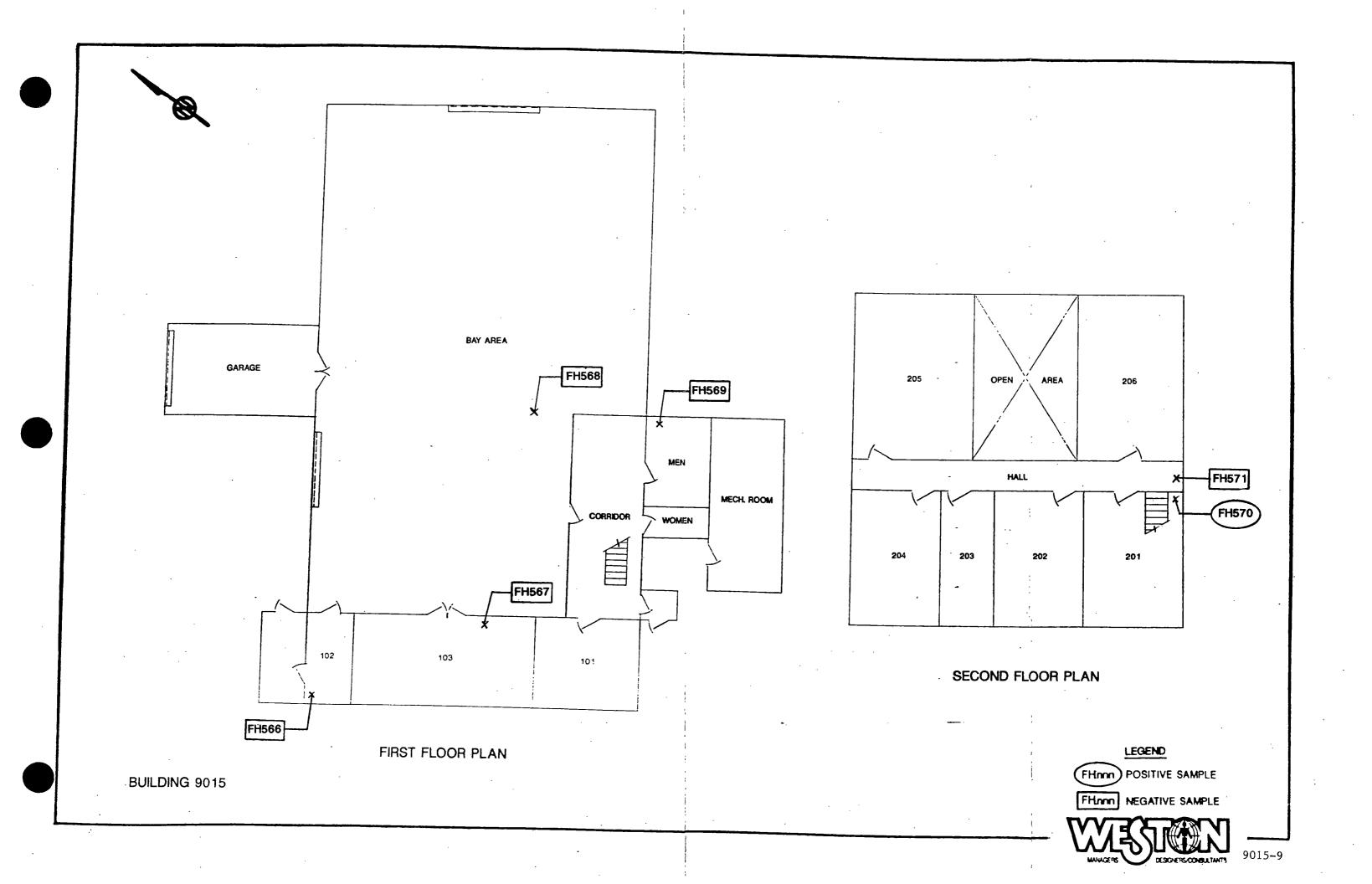
AREA 1: Hall

^{**}Less Than \$100 For The Area; Amount Not Printed But Included In Total(s)
***The Minimum Air Monitoring Fee is \$500.00 Per Building

SECTION 9015.4 PHOTOGRAPHS



Bldg. 9015 - EW RSTA: 9 x 9" brown floor tiles FH570 tested positive.



9019 LABORATORY (RADAR DIV.)

LABORATORY (RADAR DIV.)

9019.1 GENERAL

Building 9019 was surveyed by WESTON technicians on 23 January 1991.

The first three portions of this facility report summarize the results of this inspection.

Polarized Light Microscopy (PLM) with dispersion staining was used to analyze 4 samples of suspect material collected from the building. Of these samples, all 4 were found to be asbestos-containing materials (ACM). Table 9019.1 lists the analytical results for the bulk samples.

9019.2 ACM AND EXPOSURE ASSESSMENT

The location, description, and analytical results for each bulk sample from Building 9019 are presented in Table 9019.1. An area-by-area inventory of ACM is provided in Tables 9019.2 and 9019.3. "Other Asbestos-Containing Materials," listed in Table 9019.3, are materials that do not correspond to the standard caption categories listed in Table 9019.2. A prioritized listing of exposure assessments is presented in Table 9019.4. An itemized area-by-area cost estimate for removal and replacement is provided in Table 9019.5. The method by which removal/replacement costs are calculated is described in the ISSUES COMMON TO ALL BUILDINGS Section of this report. Building floor plans (see attachment) indicate sample locations and building area names as they are listed in Tables 9019.2 and 9019.5.

9019.3 RECOMMENDATIONS/CONCLUSIONS

WESTON recommends:

- Asbestos-containing floor tile and air duct insulation should be labeled under the O&M Program.
- Review management special considerations/remarks.

TABLE 9019.1

BULK SAMPLE ANALYSIS RESULTS - BUILDING 9019, LABORATORY (RADAR)

SAMPLE				PERC	<u>ent</u> asbi	<u>ESTOS</u>	
NO.	LOCATION	ITEM	DESCRIPTION	CH	AM	OT	LAYERED ¹
FH630	FIRST FLOOR, BELOW CEILING	FLOOR TILE	BLUE,OTH,9X9 FL TL,HORIZONTAL	10	-	-	YES
FH631	FIRST FLOOR, BELOW CEILING	FLOOR TILE	BLUE, OTH, 9X9 FL TL, HORIZONTAL	12	_	-	YES
FH632	FIRST FLOOR, BELOW CEILING	AIR HANDLING EQUIPMENT	WHITE, OTH, DUCT INSUL, HORIZONTAL	65	-	-	YES
FH633	FIRST FLOOR, BELOW CEILING	AIR HANDLING EQUIPMENT	WHITE, OTH, DUCT INSUL, HORIZONTAL	75	-	-	NO

^aAsbestos content presented for layered samples represents the highest concentration layer.

Quadrant Codes	System Codes	Asbestos Types
C = Center	STM = Steam	CH = Chrysotile
N = North	CHW = Chilled Water	AM = Amosite
E = East	HHW = Heating Hot Water	OT = Other
S = South	DOM = Domestic Water	
W = West	OTH = Other	
NE = Northeast	UNK = Unknown	
NW = Northwest		
SE = Southeast		
SW = Southwest		

ASBESTOS-CONTAINING MATERIALS - BUILDING 9019, LABORATORY (RADAR)

	P	IPE FITT	INGS (EA))		PIPE RUI	NS (LF)		SPRAY/TROWELED	FLOOR TILE	BOILERS/	AIR HANDLING	
AREA	<4"	4-8"	9-14"	>14"	<4"	4-8"	9-14"	>14"	CEILINGS (MSF)	(MSF)	TANKS (MSF)	EQUIPMENT (MSF)	OTHER
irst Floor		·		_ _ -		-		-		1.94		0.86	
OTALS	-	-	-	-	-	_	_	-	•	1.94	_	0.86	-

Other Material Present In Various Units Of Measure

EA - Each

LF - Linear Feet MSF - Thousand Square Feet

Other Asbestos-Containing Material - Building 9019, Radar Division Type Occupancy: Adults (Public)

Area	Material Type	Quantity (Unit)
No Other	Asbestos-Containing Material Found in the	his Building

EA - Each

LF - Linear Feet

MSF - Thousand Square Feet

TABLE 9019.4 EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 9019, LABORATORY (RADAR)

SAMPLE		MATERIAL	PRIOR. INDEX	PRIORITY INDEX	EX	POS	URE	FAC	CTORS	AVG. EXP.	*
NO.	AREA	TYPE	CODE	NUMBER	1	2	3	4	<u></u>	HOURS	ASB.
FH632	First Floor	AIR HANDLING EQUIPMENT	В	9.200E02	2	2	2	1	2	20.00	65
FH633	First Floor	AIR HANDLING EQUIPMENT	В	9.200E02	2	2	2	1	2	20.00	75

Priority Index Codes

A [=] Long Term Corrective Measure

B [=] Review Management Special Considerations/Remarks

C [=] Army Asbestos Deficiency Abatement Project

Priority Index Numbers Are In Scientific Notation

Exposure Factors
1 [=] Material Friability

2 [=] Occupant Accessability 3 [=] Material Condition

4 [=] Level Of Activity 5 [=] Number Of Assigned Occupants

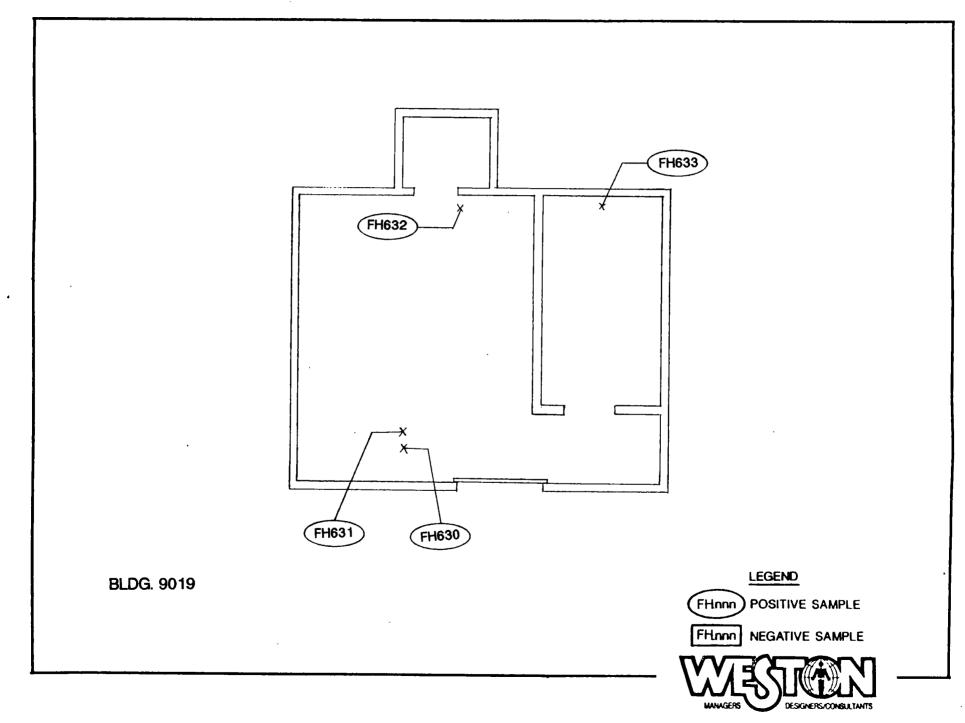
TABLE 9019.5 COST ESTIMATE* - BUILDING 9019, LABORATORY (RADAR)

DESCRIPTION	UNIT COST (\$)	AREA	TOTAL	
Pipe Fittings (EA) 4-8" 9-14" >14"	70.30 85.80 147.00 216.00	-	:	
Pipe Runs (LF) <4" 4-8" 9-14" >14"	26-50 30-50 22-50 60-80	:	:	
Sprayed/Troweled Ceilings (SF)	9.60	-	-	
Floor Tile (SF)	5.60	10.8	10.8	
Boilers/Tanks (SF)	37.90	-	-	
Air Handling Equipment (SF)	20.00	17.2	17.2	
Other		-	-	
SUBTOTAL		28.0	28.0	
Difficulty Allowance		8.6	8.6	
SUBTOTAL		36.6	36.6	
Decontamination Units Mobilization		3 :8	3 :8	
SUBTOTAL		41.6	41.6	
Contingency a 15.00%		6.2	6.2	
SUBTOTAL		47.9	47.9	
Design Fee a 10.00%		4.8	4.8	
SUBTOTAL		52.6	52.6	
Air Monitoring a 10.00%**	*	5.3	5.3	
TOTAL		57.9	57.9	

^{*}Amounts Are In Thousands Of Dollars

AREA 1: First Floor

^{**}Less Than \$100 For The Area; Amount Not Printed But Included In Total(s)
***The Minimum Air Monitoring Fee is \$500.00 Per Building



9023 ADMINISTRATION (ESA)

ADMINISTRATION (ESA)

9023.1 GENERAL

Building 9023 was surveyed by WESTON technicians on 16 January 1991.

The first three portions of this facility report summarize the results of this inspection. Photographs of some sample locations are provided in Section 9023.4.

Polarized Light Microscopy (PLM) with dispersion staining was used to analyze 3 samples of suspect material collected from the building. Of these samples, all 3 were found to be asbestos-containing materials (ACM). Table 9023.1 lists the analytical results for the bulk samples.

9023.2 ACM AND EXPOSURE ASSESSMENT

The location, description, and analytical results for each bulk sample from Building 9023 are presented in Table 9023.1. An area-by-area inventory of ACM is provided in Tables 9023.2 and 9023.3. "Other Asbestos-Containing Materials," listed in Table 9023.3, are materials that do not correspond to the standard caption categories listed in Table 9023.2. A prioritized listing of exposure assessments is presented in Table 9023.4. An itemized area-by-area cost estimate for removal and replacement is provided in Table 9023.5. The method by which removal/replacement costs are calculated is described in the ISSUES COMMON TO ALL BUILDINGS Section of this report. Building floor plans (see attachment) indicate sample locations and building area names as they are listed in Tables 9023.2 and 9023.5.

9023.3 RECOMMENDATIONS/CONCLUSIONS

WESTON recommends:

- The mechanical room, metal shop, and the men's room in Building 9023 qualify for the Army Asbestos Deficiency Abatement Project.
- Asbestos-containing floor tile should be labeled under the O&M Program.

TABLE 9023.1

BULK SAMPLE ANALYSIS RESULTS - BUILDING 9023, ADMINISTRATION(ESA)

SAMPLE				PERCE	NT ASBI	ESTOS	
NO.	LOCATION	ITEM	DESCRIPTION	СН	AM	OT	LAYERED
FH572	WORK METAL SHOP, BELOW CEILING	FLOOR TILE	TAN,OTH,1X1 FL TL,HORIZONTAL	2	_	_	NO
FH573	SECOND FLOOR, BELOW CEILING	FLOOR TILE	TAN,OTH,1X1 FL TL,HORIZONTAL	3	_	_	NO NO
FH574	MECH. ROOM, BELOW CEILING	AIR HANDLING EQUIPMENT	WHITE, OTH, DUCT INSUL, HORIZONTAL	45	-	-	NO

 $^{^{\}mathrm{a}}$ Asbestos content presented for layered samples represents the highest concentration layer.

Quadrant Codes	System Codes	Asbestos Types
C = Center	STM = Steam	CH = Chrysotile
N = North	CHW = Chilled Water	AM = Amosite
E = East	HHW = Heating Hot Water	OT = Other
S = South	DOM = Domestic Water	
W = West	OTH = Other	
NE = Northeast	UNK = Unknown	
NW = Northwest		
SE = Southeast		
SW = Southwest		

TABLE 9023.2 ASBESTOS-CONTAINING MATERIALS - BUILDING 9023, ADMINISTRATION(ESA)

	P1	PE FITT	INGS (EA)			PIPE RU	NS (LF)		SPRAY/TROWELED	FLOOR TILE	BOILERS/	AIR HANDLING	
AREA	<4"	4-8"	9-14"	>14"	<4"	4-8"	9-14"	>14"	CEILINGS (MSF)	(MSF)	TANKS (MSF)	EQUIPMENT (MSF)	OTHE
lech. Room	-	-	-	-	-	_	-	-	-	_	_	0.02	_
lens	-		-	-	-	-	-	-	-	0.11	-	0.01	-
Metal Shop	-	-	-	-	-	-	-	-	-	-	-	1.10	-
econd Floor	-	-	-	-	-	-	-	-	-	0.63	-	•	_
lork Metal Shop		-	<u></u> :							2.00			
OTALS	-	-	_	-	_	_	_	_	_	2.74	-	1.13	_

Other Material Present In Various Units Of Measure

EA - Each

LF - Linear Feet MSF - Thousand Square Feet

Table 9023.3

Other Asbestos-Containing Material - Building 9023, ESA Type Occupancy: Adults (Public)

Area	Material Type	Quantity (Unit)
No Other	Asbestos-Containing Material Found in the	his Building

EA - Each

LF - Linear Feet

MSF - Thousand Square Feet

TABLE 9023.4 EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 9023, ADMINISTRATION(ESA)

SAMPLE NO.	AREA	MATERIAL TYPE	PRIOR. INDEX CODE	PRIORITY INDEX NUMBER	EX	POS 2	URE 3	FAC	CTORS 5	AVG. EXP. HOURS	% ASB.
FH574	Mech. Room	AIR HANDLING EQUIPMENT	c	1.980E03	2	2	1	1		40.00	45
FH574	Mens	AIR HANDLING EQUIPMENT	Č	1.980E03	_	2	•	i	6	40.00	45
FH574	Metal Shop	AIR HANDLING EQUIPMENT	C	1.980E03	2	2	1	1	6	40.00	45

<u>Priority Index Codes</u>
A [=] Long Term Corrective Measure

B [=] Review Management Special Considerations/Remarks C [=] Army Asbestos Deficiency Abatement Project

Priority Index Numbers Are In Scientific Notation

- Exposure Factors

 1 [=] Material Friability
 2 [=] Occupant Accessability
 3 [=] Material Condition
 4 [=] Level Of Activity
 5 [=] Number Of Assigned Occupants

TABLE 9023.5 COST ESTIMATE* - BUILDING 9023, ADMINISTRATION(ESA)

DESCRIPTION	UNIT COST (\$)	AREA 1	AREA	AREA	AREA 4	AREA	TOTAL		
Pipe Fittings (EA)		_		<u>.</u>	-	_	_	-	
4-8" 9-14" >14"	70.30 85.80 147.00 216.00	=	=	=	=	:	-		
Pipe Runs (LF)									
{4:8 9-14 >14	26.50 30.50 42.50 60.80	:	-	-	-	-	-		
\$14 ¹¹	26: 88	Ξ	-	-	:	-	-		
Sprayed/Troweled Ceilings (SF)	9.60	-	-	-	-	-	-		
Floor Tile (SF)	5.60	-	0.6	-	3.5	11.2	15.3		
Boilers/Tanks (SF)	37.90	-	-	-	-	-	-		
Air Handling Equipment (SF)	20.00	0.4	0.2	22.0	-	-	22.6		
Other		-	-	-	-	-	-		
SUBTOTAL		0.4	0.8	22.0	3.5	11.2	38.0		
Difficulty Allowance		0.4	0.5	22.0	-	-	22.9		
SUBTOTAL		0.8	1.3	44.0	3.5	11.2	60.9		
Decontamination Units Mobilization		8:4	8:4	8:4	8:7	8:7	3:5		
SUBTOTAL		1.9	2.4	45.1	4.6	12.3	66.4		
Contingency a 15.00%		0.3	0.4	6.8	0.7	1.8	10.0		
SUBTOTAL		2.2	2.8	51.9	5.3	14.1	76.3		
Design Fee a 10.00%		0.2	0.3	5.2	0.5	1.4	7.6		
SUBTOTAL		2.4	3.1	57.1	5.9	15.6	83.9		
Air Monitoring a 10.00%**	×	1.7	1.7	1.7	1.7	1.7	8.4		
TOTAL		4.1	4.7	58.7	7.5	17.2	92.3		

^{*}Amounts Are In Thousands Of Dollars

AREA 1: Mech. Room AREA 3: Metal Shop AREA 5: Work Metal Shop

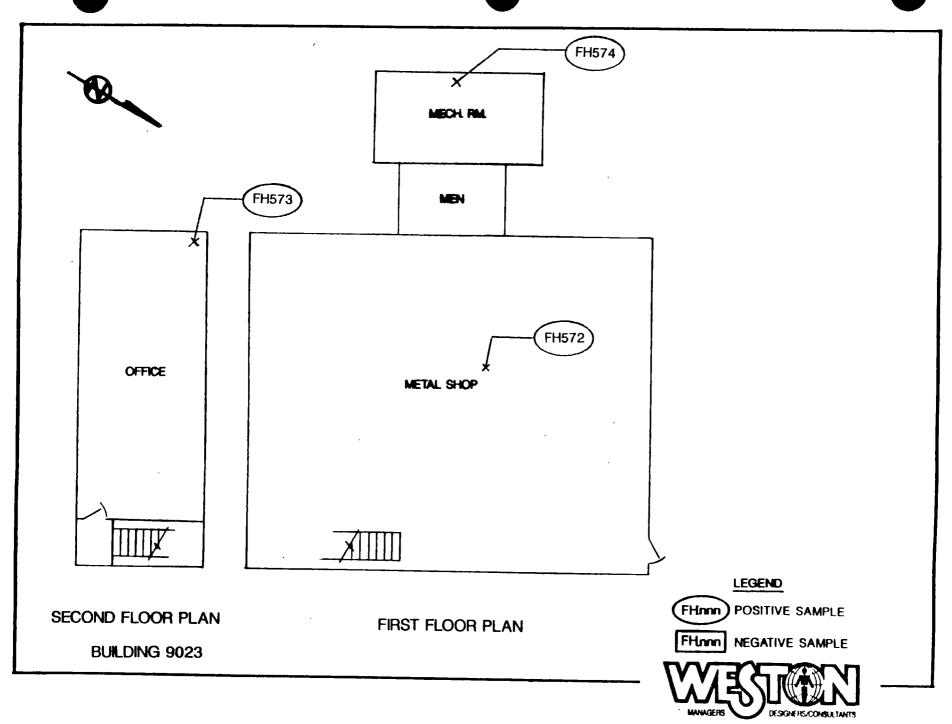
^{**}Less Than \$100 For The Area; Amount Not Printed But Included In Total(s)

***The Minimum Air Monitoring Fee is \$500.00 Per Building

SECTION 9023.4 PHOTOGRAPHS



Bldg. 9023 - Metal Shop: Duct insulation sample FH574 tested positive; also sample FH572, 12 x 12" tan floor tiles in shop area tested positive. Sample FH573, 12 x 12" tan floor tiles upstairs offices (FH572 and FH573 not shown).



9031

FIREHOUSE

1392WG

FIREHOUSE

9031.1 GENERAL

Building 9031 was surveyed by WESTON technicians on 17 January 1991.

The first three portions of this facility report summarize the results of this inspection.

Polarized Light Microscopy (PLM) with dispersion staining was used to analyze 5 samples of suspect material collected from the building. Of these samples, 3 were found to be asbestos-containing materials (ACM). Table 9031.1 lists the analytical results for the bulk samples.

9031.2 ACM AND EXPOSURE ASSESSMENT

The location, description, and analytical results for each bulk sample from Building 9031 are presented in Table 9031.1. An area-by-area inventory of ACM is provided in Tables 9031.2 and 9031.3. "Other Asbestos-Containing Materials," listed in Table 9031.3, are materials that do not correspond to the standard caption categories listed in Table 9031.2. A prioritized listing of exposure assessments is presented in Table 9031.4. An itemized area-by-area cost estimate for removal and replacement is provided in Table 9031.5. The method by which removal/replacement costs are calculated is described in the ISSUES COMMON TO ALL BUILDINGS Section of this report. Building floor plans (see attachment) indicate sample locations and building area names as they are listed in Tables 9031.2 and 9031.5.

9031.3 RECOMMENDATIONS/CONCLUSIONS

WESTON recommends:

• Asbestos-containing floor tile and transite siding should be labeled under the O&M Program.

TABLE 9031.1

BULK SAMPLE ANALYSIS RESULTS - BUILDING 9031, FIREHOUSE

SAMPLE				PERCE	ENT ASBI	ESTOS	
NO.	LOCATION	ITEM	DESCRIPTION	CH	AM	ОТ	LAYERED'
FH582	LIVING QUARTERS, BELOW CEILING	FLOOR TILE	GRAY,OTH,1X1 FL TL,HORIZONTAL	_	_	_	NO
FH583	LIVING QUARTERS, BELOW CEILING	CEILING TILE	WHITE, OTH, 2X2 CL TL, HORIZONTAL			-	NO
FH584	LIVING QUARTERS, BELOW CEILING	EXTERIOR SIDING	GRAY, OTH, TRANSITE, HORIZONTAL	40	-	_	NO
FH585	LIVING QUARTERS, BELOW CEILING	FLOOR TILE	RED,OTH,9X9 FL TL,HORIZONTAL	5	-	_	NO
FH586	LIVING QUARTERS, BELOW CEILING	FLOOR TILE,	GRAY, OTH, 1X1 FL TL, HORIZONTAL	5	_	_	NO

 $^{^{\}mathrm{a}}$ Asbestos content presented for layered samples represents the highest concentration layer.

Quadrant Codes	System Codes	Asbestos Types
C = Center	STM = Steam	CH = Chrysotile
N = North	CHW = Chilled Water	AM = Amosite
E = East	HHW = Heating Hot Water	OT = Other
S = South	DOM = Domestic Water	
W = West	OTK = Other	
NE = Northeast	UNK = Unknown	
NW = Northwest		
SE = Southeast		
SW = Southwest		

ASBESTOS-CONTAINING MATERIALS - BUILDING 9031, FIREHOUSE

	P:	IPE FITT	INGS (EA)			PIPE RU	NS (LF)		SPRAY/TROWELED	FLOOR TILE	BOILERS/	AIR HANDLING	
AREA	<4"	4-8"	9-14"	>14"	<4"	4-8"	9-14"	>14"	CEILINGS (MSF)	(MSF)	TANKS (MSF)	EQUIPMENT (MSF)	OTHER
Living Quarters	<u>-</u>				-			<u></u>		0.70			*
TOTALS	-	-	_	-	-	-	-	-	_	0.70	_	_	*

Other Material Present In Various Units Of Measure

EA - Each LF - Linear Feet MSF - Thousand Square Feet

705T-

Table 9031.3

Other Asbestos-Containing Material - Building 9031, Firehouse Type Occupancy: Adults (Public)

Area	Material Type	Quantity (Unit)
(Outside) Living Quarters	Exterior Siding	0.030 (MSF)

EA - Each

LF - Linear Feet

MSF - Thousand Square Feet

TABLE 9031.4

EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 9031, FIREHOUSE

SAMPLE NO.	AREA	MATERIAL TYPE	PRIOR. INDEX CODE	PRIORITY INDEX NUMBER	<u>EX</u>	<u>POS</u>	URE	FA(CTORS	AVG. EXP. HOURS	% ASB.
FH584	Living Quarters	EXTERIOR SIDING	Α	1.080E-1	1	1	1	2	6	40.00	40
FH583	Living Quarters	CEILING TILE	A	0	1	1	1	2	6	40.00	Ö

Priority Index Codes

A [=] Long Term Corrective Measure

B [=] Review Management Special Considerations/Remarks

C [=] Army Asbestos Deficiency Abatement Project

Priority Index Numbers Are In Scientific Notation

- Exposure Factors
 1 [=] Material Friability
- 2 [=] Occupant Accessability 3 [=] Material Condition

- 4 [=] Level Of Activity
 5 [=] Number Of Assigned Occupants

TABLE 9031.5 COST ESTIMATE* - BUILDING 9031, FIREHOUSE

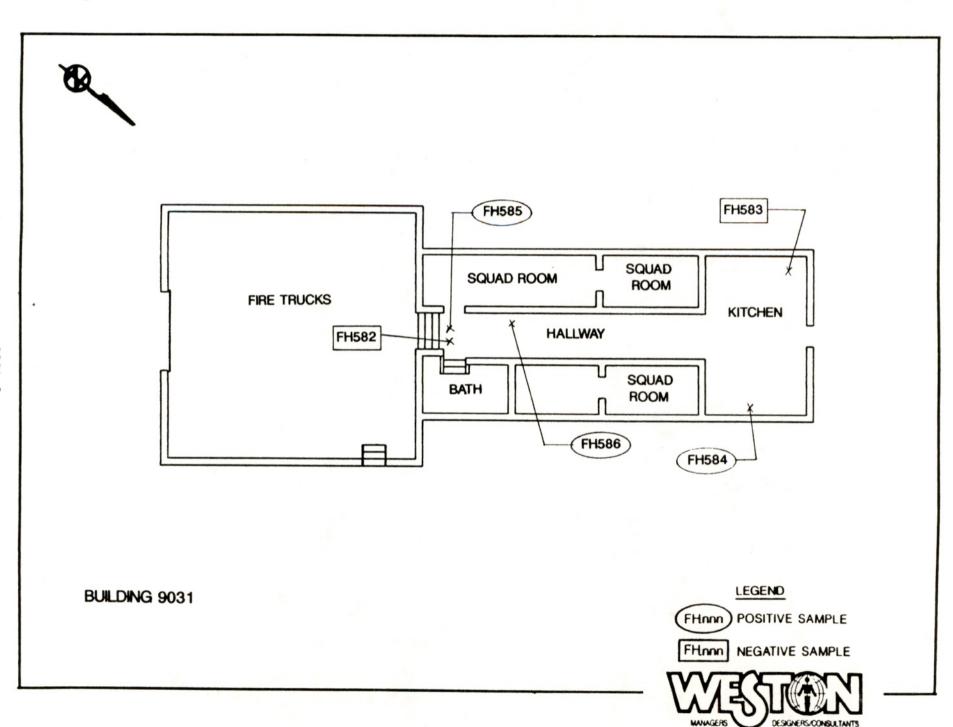
	INIT	ADEA	
DESCRIPTION	UNIT COST (\$)	AREA 1	TOTAL
Pipe Fittings (EA) 4-8" 9-14" >14"	70-30 85-80 147-80 216-00	: :	:
Pipe Runs (LF)	26.50 30.50 60.80	:	:
Sprayed/Troweled Ceilings (SF)	9.60	· •	-
Floor Tile (SF)	5.60	3.9	3.9
Boilers/Tanks (SF)	37.90	-	-
Air Handling Equipment (SF)	20.00	-	-
Other		0.3	0.3
SUBTOTAL		4.3	4.3
Difficulty Allowance		-	-
SUBTOTAL		4.3	4.3
Decontamination Units Mobilization		3:0 2:0	3: 8
SUBTOTAL		9.3	9.3
Contingency a 15.00%		1.4	1.4
SUBTOTAL		10.7	10.7
Design Fee a 10.00%		1.1	1.1
SUBTOTAL		11.7	11.7
Air Monitoring a 10.00%	***	1.2	1.2
TOTAL		12.9	12.9

^{*}Amounts Are In Thousands Of Dollars

AREA 1: Living Quarters

^{**}Less Than \$100 For The Area; Amount Not Printed But Included In Total(s)

***The Minimum Air Monitoring Fee is \$500.00 Per Building



9041 SIGNAL BUILDING

SIGNAL BUILDING

9041.1 GENERAL

Building 9041 was surveyed by WESTON technicians on 18 January 1991.

The first three portions of this facility report summarize the results of this inspection. Photographs of some sample locations are provided in Section 9041.4.

Polarized Light Microscopy (PLM) with dispersion staining was used to analyze 16 samples of suspect material collected from the building. Of these samples, 14 were found to be asbestos-containing materials (ACM). Table 9041.1 lists the analytical results for the bulk samples.

9041.2 ACM AND EXPOSURE ASSESSMENT

The location, description, and analytical results for each bulk sample from Building 9041 are presented in Table 9041.1. An area-by-area inventory of ACM is provided in Tables 9041.2 and 9041.3. "Other Asbestos-Containing Materials," listed in Table 9041.3, are materials that do not correspond to the standard caption categories listed in Table 9041.2. A prioritized listing of exposure assessments is presented in Table 9041.4. An itemized area-by-area cost estimate for removal and replacement is provided in Table 9041.5. The method by which removal/replacement costs are calculated is described in the ISSUES COMMON TO ALL BUILDINGS Section of this report. Building floor plans (see attachment) indicate sample locations and building area names as they are listed in Tables 9041.2 and 9041.5.

9041.3 RECOMMENDATIONS/CONCLUSIONS

WESTON recommends:

 Asbestos-containing floor tile, pipe insulation, and fitting insulation should be labeled under the O&M Program.

TABLE 9041.1

BULK SAMPLE ANALYSIS RESULTS - BUILDING 9041, SIGNAL BUILDING

SAMPLE				PERCE	NT ASB	ESTOS	_
NO.	LOCATION	ITEM	DESCRIPTION	СН	AM	70	LAYERED'
FH609	BASEMENT MECH. AREA, BELOW CEILING	<4" PIPE FITTING	WHITE,STM,<4IN. FIT	45	•	-	NO
FH610	BASEMENT MECH. AREA, BELOW CEILING	<4" PIPE RUN	WHITE, STM, <4IN. RUN	10	•	-	NO
FH611 -	BASEMENT MECH. AREA, BELOW CEILING	4-8" PIPE FITTING	WHITE, STM, <41N. FIT	45	-	-	NO
FH612	BASEMENT MECH. AREA, BELOW CEILING	4-8" PIPE RUN	WHITE, STM, <4IN. RUN	40	-		NO
FH613	BASEMENT, BELOW CEILING	<4" PIPE FITTING	WHITE,STM,<4IN. FIT	45	-	-	NO ·
FH614	BASEMENT, BELOW CEILING	<4" PIPE RUN	WHITE,STM,<4IN. RUN	· 10	-	-	NO
FH615	BASEMENT, BELOW CEILING	4-8" PIPE FITTING	WHITE,STM,<4IN. FIT	40	-	-	NO
FH616	BASEMENT, BELOW CEILING	4-8" PIPE RUN	WHITE,STM,4-8IN. RUN	40	-	-	NO
FH617	BASEMENT, BELOW CEILING	<4" PIPE FITTING	WHITE, STM, <4IN. FIT	30	-	-	NO
FH618	BASEMENT, BELOW CEILING	<4" PIPE RUN	WHITE,STM,<4IN. RUN	10	•	-	NO
FH619	BASEMENT BELOW CEILING	4-8" PIPE FITTING	WHITE,STM,4-8IN. FIT	· 40	•	-	NO
FH620	BASEMENT, BELOW CEILING	4-8" PIPE RUN	WHITE,STM,4-8IN. RUN	40	-	-	NO
FH621	BASEMENT, BELOW CEILING	ACOUSTICAL WALL TILE	WHITE,OTH,1X1 WL TL	•	-	-	YES
FH622	BASEMENT, BELOW CEILING	DUPLICATE SAMPLE	WHITE,OTH,1X1 WL TL	-	-	-	YES
FH623	BASEMENT BELOW CEILING	FLOOR TILE	TAN,OTH,1X1 FL TL	1	•	-	NO
FH624	BASEMENT, BELOW CEILING	FLOOR TILE	TAN,OTH,1X1 FL TL	1	-	-	NO.
FH805	BASEMENT	FLOOR TILE	GREEN, OTH, FL TL	2	-	-	NO
FH806	FIRST FLRRM.10&83	ACOUSTICAL WALL TILE	WHITE, OTH, ACOUS TILE	-	-	-	YES
FH807	FIRST FLRRM.10&83	DUPLICATE SAMPLE	WHITE OTH ACOUS TILE		-	-	YES
FH808	FIRST FLR.	DUPLICATE SAMPLE	WHITE, OTH, ACOUS TILE		-	-	YES

Asbestos Types
CH = Chrysotile
AM = Amosite
OT = Other

⁸Asbestos content presented for layered samples represents the highest concentration layer.

Quadrant Codes	System Codes
C = Center	STM = Steam
N = North .	CHW = Chilled Water
E = East	HHW = Heating Hot Water
S = South	DOM = Domestic Water
W = West	OTH = Other
NE = Northeast	UNK = Unknown
NW = Northwest	
SE = Southeast	
SW = Southwest	•

TABLE 9041.2

ASBESTOS-CONTAINING MATERIALS - BUILDING 9041, SIGNAL BUILDING

	PI	PE FITT	INGS (EA)			PIPE RU	NS (LF)		, SPRAY/TROWELED	FLOOR TILE	BOILERS/	AIR HANDLING	
AREA	<411	4-8"	9-14"	>14"	<4"	4-8"	9-14"	>14"	CEILINGS (MSF)	(MSF)	TANKS (MSF)	EQUIPMENT (MSF)	OTHE
asement	7	20	÷		201.	445	-	-	-	4.00	•	. •	
asement Mech. Area	12	59	. · -	, -	133	. 4	-	· -	. · · •	•	. -	•	-
irst Floor		-	· -	`•	-	-	-	· -	•	0.34		•	-
ipe Trench to 9039				··· <u>-</u>	296	290		<u> </u>	·				
OTALS	19	79	_		630	739		, -		4.34	-	-	<u>-</u>

Other Material Present In Various Units Of Measure

EA - Each LF - Linear Feet MSF - Thousand Square Feet

Table 9041.3

Other Asbestos-Containing Material - Building 9041, Signal Bldg. Type Occupancy: Adults (Public)

Area	Material Type	Quantity (Unit)
No Other	Asbestos-Containing Material Found in t	his Building

EA - Each

LF - Linear Feet

MSF - Thousand Square Feet

TABLE 9041.4 EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 9041, SIGNAL BUILDING

•			PRIOR.	PRIORITY						AVG.	
SAMPLE		MATERIAL	INDEX	INDEX	EXP	OSU	JRE	FAC	TORS	EXP.	×
NO.	AREA	TYPE	CODE	NUMBER	1	2	3	4	5	HOURS	ASB.
FH609	Basement Mech. Area	<4" PIPE FITTING	A	2.800E-1	2	1	2	1	2	2.00	45
FH611	Basement Mech. Area	4-8" PIPE FITTING	A	2.800E-1	2	1	2	1	2	2.00	45
FH612	Basement Mech. Area	4-8" PIPE RUN	Α	2.800E-1	2	1	2	1	2	2.00	40
FH613	Basement	<4" PIPE FITTING	Α	2.800E-1	2	1	2	1	2	2.00	45
FH615	Basement	4-8" PIPE FITTING	A	2.800E-1	2	1	2	1	2	2.00	40
FH616	Basement	4-8" PIPE RUN	A	2.800E-1	2	1	2 .	. 1	2	2.00	40
FH619	Basement	4-8" PIPE FITTING	Ä	2.800E-1	2	1	2	1	2	2.00	40
FH620	Basement	4-8" PIPE RUN	. A	2.800E-1	2	1	2	1	2	2.00	40
FH620	Pipe Trench to 9039	4-8" PIPE RUN	A	2.800E-1	2	1	Ž	1	2	2.00	40
FH610	Basement Mech. Area	<4" PIPE RUN	Ä	1.000E-1	2	1	2	1	2	2,00	10
FH614	Basement	<4" PIPE RUN	Ä	1.000E-1	Ž	1	2	1	2	2.00	10
FH617	Basement	<4" PIPE FITTING	Ä	1.000E-1	2	1	2	1.	2	2.00	30
FH618	Basement	<4" PIPE RUN	Ä	1.000E-1	2	1	2	1	2	2.00	10
FH618	Pipe Trench to 9039	<4" PIPE RUN	Ä	1.000E-1	2	1	2	1	2	2.00	10
FH621	Basement	ACOUSTICAL WALL TILE	Ä	0	5	i	2	i	5	2.00	.0
FH622	First Floor	ACOUSTICAL WALL TILE	, ?	ŏ.	1	,	1	2	15	40.00	ň
. FH806	FIRST FLRRM.10&83	ACOUSTICAL WALL TILE	Â	ŏ	i	2	i	5	15	40.00	Ŏ

Priority Index Codes

A [=] Long Term Corrective Measure

B [=] Review Management Special Considerations/Remarks
C [=] Army Asbestos Deficiency Abatement Project

Priority Index Numbers Are In Scientific Notation

Exposure Factors
1 [=] Material Friability
2 [=] Occupant Accessability
3 [=] Material Condition
4 [=] Level Of Activity

5 [=] Number Of Assigned Occupants

TABLE 9041.5 - BUILDING 9041, SIGNAL BUILDING

DESCRIPTION	UNIT COST_(\$)_	AREA	AREA	AREA	AREA 4	TOTAL		
Pipe Fittings (EA) 54" 9-14" >14"	70.30 85.80 147.00 216.00	9:5 -	0.8 5.1	:	•	1:3 2:8		
Pipe Runs (LF) <4" 4-8" 9-14" >14"	26.50 30.50 42.50 60.80	13:3	3:5 -	:	7.8 2.8 -	25:3		·
Sprayed/Troweled Ceilings (SF)	9.60	•	<u>-</u>	-	-	•	٠.	
Floor Tile (SF)	5.60	22.4	•	1.9	-	24.3		
Boilers/Tanks (SF)	37.90			-	•	-		
Air Handling Equipment (SF)	20.00	•	, . .	_	-	-	-	
Other		-	•	-	-	-		
SUBTOTAL	٠.	43.5	9.6	1.9	16.7	71.7	•	
Difficulty Allowance		44.8	4.8	-	25.0	74.6		
SUBTOTAL		88.3	14.3	. 1.9	41.7	146.3	•	
Decontamination Units Mobilization	•	3.0 0.5	3.0	3:0 6:5	3.0 0.5	¹ 2:0		·
SUBTOTAL		91.8	17.8	5.4	45.2	160.3	-	, .
Contingency a 15.00%		13.8	2.7	0.8	6.8	24.0	•	
SUBTOTAL		105.6	20.5	6.2	52.0	184.3		•
Design Fee @ 10.00%		10.6	2.1	0.6	5.2	18.4		
SUBTOTAL		116.2	22.6	6.8	57.2	202.8		
Air Monitoring a 10.00%***	•	<u>5.1</u>	5.1	5.1	5.1	20.3		
TOTAL		121.2	27.6	11.9	62.3	223.1		·

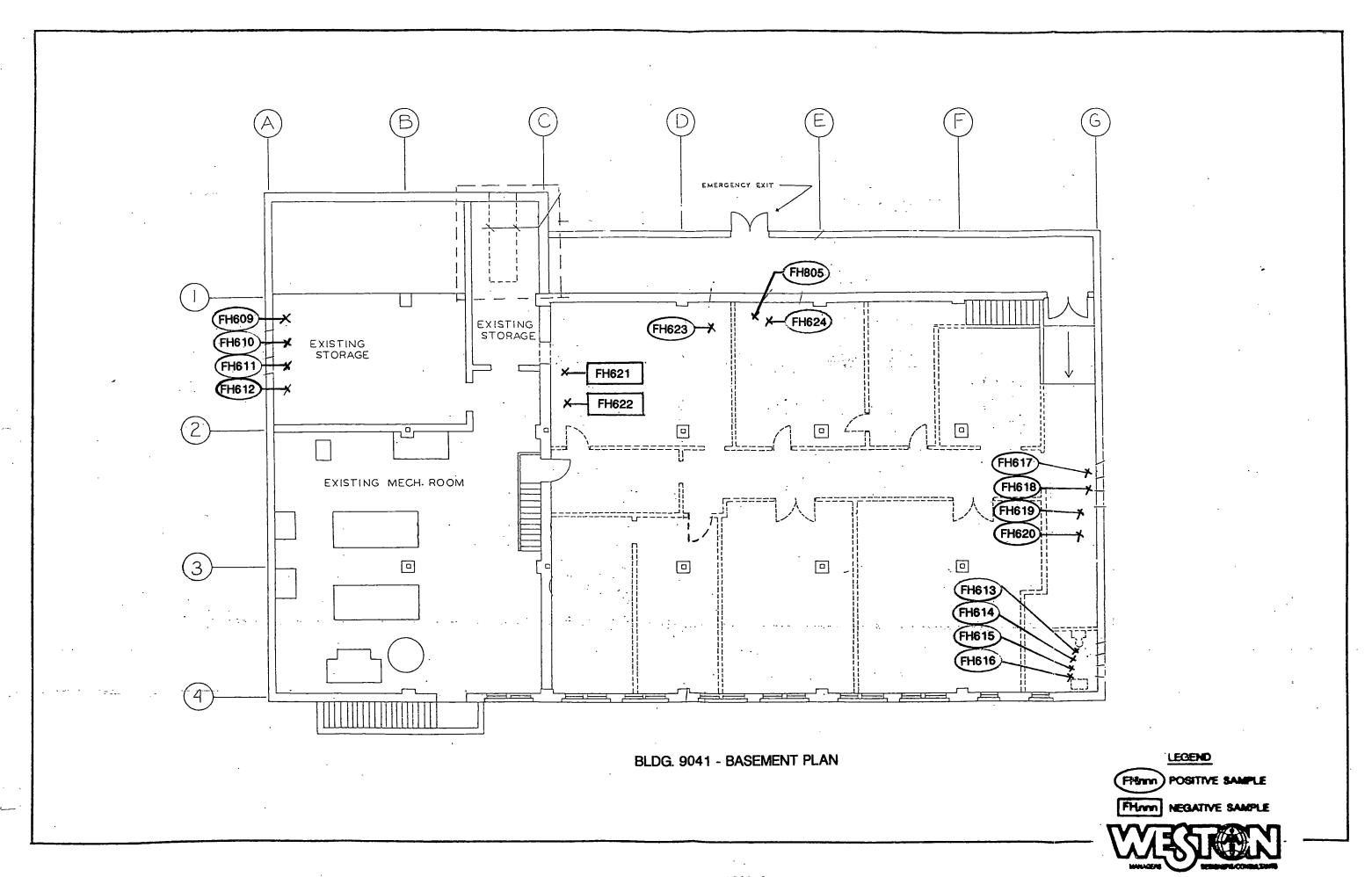
^{*}Amounts Are In Thousands Of Dollars

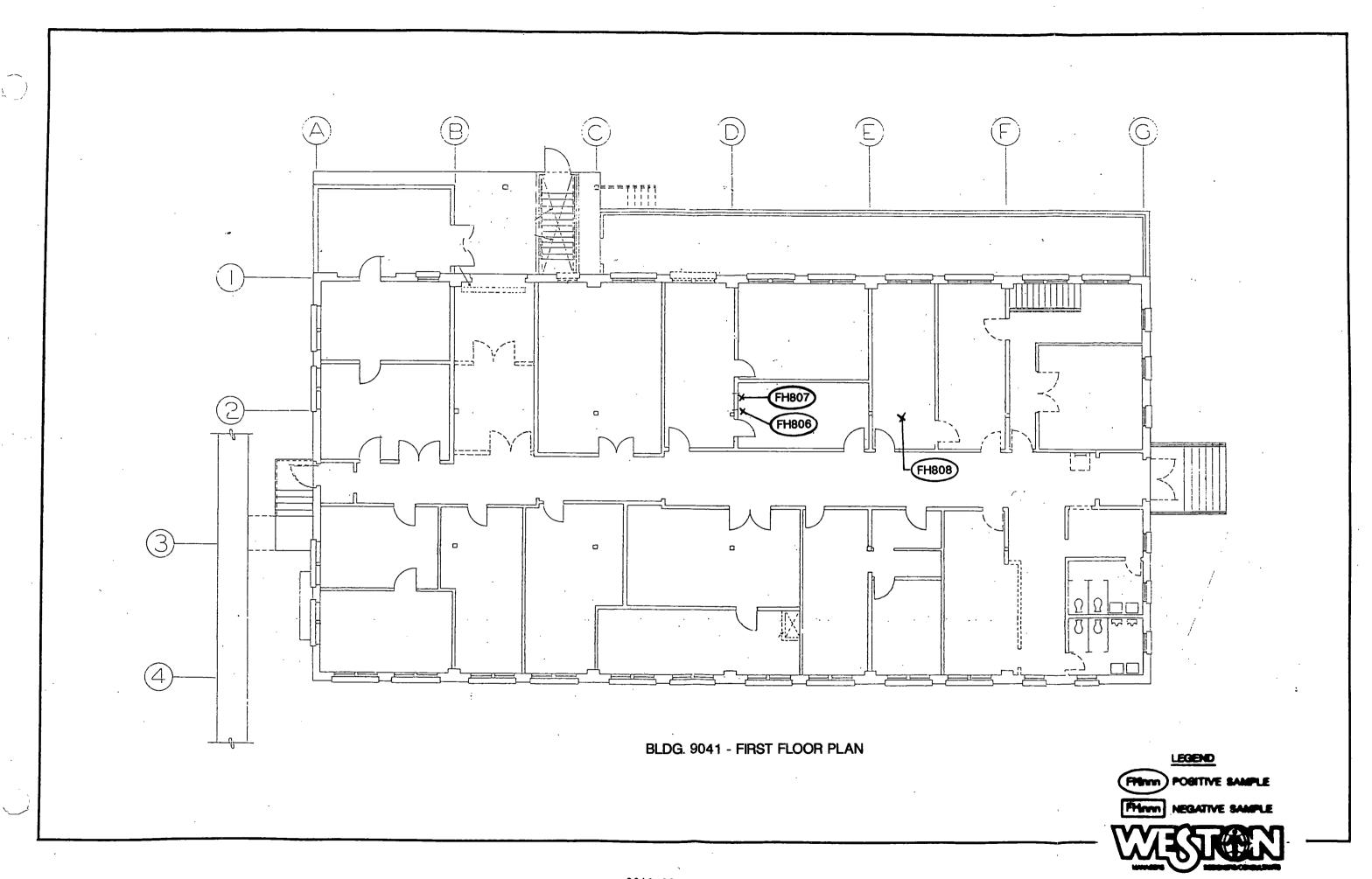
^{**}Less Than \$100 For The Area; Amount Not Printed But Included In Total(s)
***The Minimum Air Monitoring Fee is \$500.00 Per Building

SECTION 9041.4 PHOTOGRAPHS



Bldg. 9041 - Basement: Aircell-type pipe insulation tested positive.





9042 ADMINISTRATION (SIGNAL)

ADMINISTRATION (SIGNAL)

9042.1 GENERAL

Building 9042 was surveyed by WESTON technicians on 18 January 1991.

The first three portions of this facility report summarize the results of this inspection. Photographs of some sample locations are provided in Section 9042.4.

Polarized Light Microscopy (PLM) with dispersion staining was used to analyze 22 samples of suspect material collected from the building. Of these samples, 16 were found to be asbestos-containing materials (ACM). Table 299.1 lists the analytical results for the bulk samples.

9042.2 ACM AND EXPOSURE ASSESSMENT

The location, description, and analytical results for each bulk sample from Building 9042 are presented in Table 9042.1. An area-by-area inventory of ACM is provided in Tables 9042.2 and 9042.3. "Other Asbestos-Containing Materials," listed in Table 9042.3, are materials that do not correspond to the standard caption categories listed in Table 9042.2. A prioritized listing of exposure assessments is presented in Table 9042.4. An itemized area-by-area cost estimate for removal and replacement is provided in Table 9042.5. The method by which removal/replacement costs are calculated is described in the ISSUES COMMON TO ALL BUILDINGS Section of this report. Building floor plans (see attachment) indicate sample locations and building area names as they are listed in Tables 9042.2 and 9042.5.

9042.3 RECOMMENDATIONS/CONCLUSIONS

WESTON recommends:

• Asbestos-containing floor tile, pipe insulation, and fitting insulation should be labeled under the O&M Program.

TABLE 9042.1

BULK SAMPLE ANALYSIS RESULTS - BUILDING 9042, ADMIN.(SIGNAL)

SAMPLE			-	PERCE	NT ASBE	STOS	
NO.	LOCATION	ITEM	DESCRIPTION	CH	AM	OT	LAYERED
FH587	BASEMENT, BELOW CEILING	FLOOR TILE	GRAY,OTH,9X9 FL TL	5	-	-	NO
FH588	BASEMENT, BELOW CEILING	FLOOR TILE	BLACK,OTH,9X9 FL TL	10	-	-	NO
FH589	BASEMENT, BELOW CEILING	ACOUSTICAL WALL TILE	WHITE,OTH,1X1 WL TL	- '	-	-	NO
FH590	BASEMENT, BELOW CEILING	ACOUSTICAL WALL TILE	WHITE,OTH,1X1 WL TL	- 1	-	-	NO
FH591	BASEMENT, BELOW CEILING	<4" PIPE FITTING	WHITE,STM,<4IN. FIT	35	-	-	NO
FH592	BASEMENT, BELOW CEILING	<4" PIPE RUN	WHITE,STM,<4IN. RUN	35 15	-	-	NO
FH593	BASEMENT, BELOW CEILING	4-8" PIPE FITTING	WHITE,STM,4-8IN. FIT	45	-	-	NO
FH594	BASEMENT, BELOW CEILING	4-8" PIPE RUN	WHITE,STM,4-8IN. RUN	30	-	-	NO
FH595	BASEMENT, BELOW CEILING	<4" PIPE FITTING	WHITE,STM,<4IN. FIT	45	-	- 1	ı NO
FH596	BASEMENT, BELOW CEILING	<4" PIPE RUN	WHITE,STM,<4IN. RUN	5	-	-	NO
FH597	BASEMENT, BELOW CEILING	4-8" PIPE FITTING	WHITE, STM, 4-8IN. FIT	45	-	_ :	NO
FH598	BASEMENT, BELOW CEILING	4-8" PIPE RUN	WHITE,STM,4-8IN. RUN	30	-	-	NO
FH599	BASEMENT, BELOW CEILING	<4" PIPE FITTING	WHITE,STM,<4IN. FIT	45	-	-	NO
FH600	BASEMENT, BELOW CEILING	<4" PIPE RUN	WHITE,STM,<4IN. RUN	10	-	- j	NO
FH601	BASEMENT, BELOW CEILING	4-8" PIPE FITTING	WHITE,STM,4-8IN. FIT	45	-	-	NO
FH602	BASEMENT, BELOW CEILING	4-8" PIPE RUN	WHITE,STM,4-8IN. RUN	40	-	- 1	NO
FH603	FIRST FLOOR, BELOW CEILING	FLOOR TILE	GRAY,OTH,9X9 FL TL	2 !	-	- ,	
FH604	FIRST FLOOR, BELOW CEILING	FLOOR TILE	GRAY,OTH,9X9 FL TL	3	-	-	NO
FH605	FIRST FLOOR, BELOW CEILING	FLOOR TILE	BROWN,OTH,1X1 FL TL	- i	-	- ,	
FH606	FIRST FLOOR, BELOW CEILING	· FLOOR TILE	BROWN, OTH, 1X1 FL TL	- 1	-	- '	
FH607	FIRST FLOOR, BELOW CEILING	CEILING TILE	WHITE,OTH,2X4 CL TL	- '	-	-	NO
FH608	FIRST FLOOR, BELOW CEILING	CEILING TILE	WHITE, OTH, 2X4 CL TL	- 1	-	- 1	NO

^aAsbestos content presented for layered samples represents the highest concentration layer.

SW = Southwest

Quadrant Codes	System Codes	Asbestos Types
C = Center	STM = Steam	CH = Chrysotile
N = North	CHW = Chilled Water	AM = Amosite
E = East	HHW = Heating Hot Water	OT = Other
S = South	DOM = Domestic Water	
W = West	OTH = Other	
NE = Northeast	UNK = Unknown	
NW = Northwest		
SE = Southeast		

TABLE 9042.2 ASBESTOS-CONTAINING MATERIALS - BUILDING 9042, ADMIN. (SIGNAL)

		IPE FITT	INGS (EA)	<u>)</u>		PIPE RU	NS (LF)		SPRAY/TROWELED	FLOOR TILE	BOILERS/	AIR HANDLING	
AREA	<4"	4-8"	9-14"	>14"	<4"	4-8"	9-14"	>14"	CEILINGS (MSF)	(MSF)	TANKS (MSF)	EQUIPMENT (MSF)	OTH
asement	6	143	-	-	621	635	•	-	-	3.92	-	, -	-
First Floor	-	-	-	-	-	-	-	-	-	0.27	-	<u> </u>	-
Pipe Tunnel					150	<u>75</u>		<u>-</u>					
OTALS	6	143		-	771	710		-	-	4.19	-	· _	_

^{*} Other Material Present In Various Units Of Measure

EA - Each

LF - Linear Feet MSF - Thousand Square Feet

Other Asbestos-Containing Material - Building 9042, Signal Admin. Type Occupancy: Adults (Public)

Area	Material Type	Quantity (Unit)
No Other A	Asbestos-Containing Material Found in this	s Building

- Each EA

LF - Linear Feet

MSF - Thousand Square Feet

TABLE 9042.4 EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 9042, ADMIN. (SIGNAL)

SAMPLE		MATERIAL	PRIOR. INDEX	PRIORITY INDEX	FX	POS	URF	FAC	TORS	AVG. EXP.	%	
NO.	AREA	ТҮРЕ	CODE	NUMBER		2			5	HOURS	ASB.	
FH593	Basement	4-8" PIPE FITTING	• А	4.050E-1	3	1	2	1	1	1.00	45	·
FH595	Basement	<4" PIPE FITTING	A	4.050E-1	3	1	2	1	1	1.00	45	a a
FH597	Basement	4-8" PIPE FITTING	A	4.050E-1	3	1	2	1	i	1.00	45	
FH599	Basement	<4" PIPE FITTING	A	4.050E-1	3	1	2	1	1	1.00	45	,
FH601	Basement	4-8" PIPE FITTING	A	4.050E-1	3	1	2	1	1	1.00	45	
FH602	Basement	4-8" PIPE RUN	Α	4.050E-1	3	1	2	1	1	1.00	40	
FH602	Pipe Tunnel	4-8" PIPE RUN	Α	4.050E-1	3	1	2	1	1	1.00	40	1
FH591	Basement	<4" PIPE FITTING	A	1.450E-1	3	1	2	1	1	1.00	35	i i
FH592	Basement	<4" PIPE RUN	A	1.450E-1	3	1	2	1	1	1.00	15	
FH594	Basement	4-8" PIPE RUN	A	1.450E-1	3	1	2	1	1	1.00	30	
FH598	Basement	4-8" PIPE RUN	A	1.450E-1	3	1	2	1	1	1.00	30	
FH600	Basement	<4" PIPE RUN	A	1.450E-1	3	1	2	1	1	1.00	10	i
FH600	Pipe Tunnel	<4" PIPE RUN	A	1.450E-1	3	1	2	1	1	1.00	10	
FH596	Basement	<4" PIPE RUN	A	2.500E-2	3	1	2	1	1	1.00	5	1
FH589	Basement	ACOUSTICAL WALL TILE	Ä	0	3	1	2	1	1	1.00	Ō	
FH590	Basement	ACOUSTICAL WALL TILE	Ā	Ō	3	1	2	1.	1.	1.00	Ö	
FH607	First Floor	CEILING TILE	A	ŏ	1	3	1	2	15	40.00	.0	1
FH608	First Floor	CEILING TILE	Ä	Ŏ	i	3	1	2	15	40.00	Õ	

Priority Index Codes

A [=] Long Term Corrective Measure

B [=] Review Management Special Considerations/Remarks

C [=] Army Asbestos Deficiency Abatement Project

Priority Index Numbers Are In Scientific Notation

- Exposure Factors
 1 [=] Material Friability
- 2 [=] Occupant Accessability
- 3 [=] Material Condition
- 4 [=] Level Of Activity
- 5 [=] Number Of Assigned Occupants

TABLE 9042.5 COST ESTIMATE* - BUILDING 9042, ADMIN. (SIGNAL)

DESCRIPTION	UNIT COST (\$)	AREA	AREA	AREA	TOTAL		
pe Fittings (EA) <4" 4-8"	ZQ-3Q	12:3	•	-	12.3		···
3-74" >14"	70-30 85-80 147-00 216-00	-	=	Ë	-		
Pipe Runs (LF)	26.50	16.5	_	4.0	20.4		
4-8" 9-14" >14"	26.50 22.50 60.80	18:5	-	4:0 2:3	39: 4		1
Sprayed/Troweled Ceilings (SF)		-	_	-	-		1
Floor Tile (SF)	9.60 5.60	- 22.0	- 1.5	-	- 23.5		1
Boilers/Tanks (SF)	37.90	-	-	-	-		
Air Handling Equipment (SF)	20.00	•	-	_	-		1
Other		-	•	-	-		
SUBTOTAL		70.5	1.5	6.3	78.3		1
Difficulty Allowance		-	-	•	-	·	
SUBTOTAL		70.5	1.5	6.3	78.3		
Decontamination Units Mobilization		8: 0	2:0 6:7	8:9	2:8		
SUBTOTAL		73.1	4.2	8.9	86.3		
Contingency @ 15.00%		11.0	0.6	1.3	12.9		1
SUBTOTAL		84.1	4.8	10.3	99.2		
esign Fee a 10.00%		8.4	0.5	1.0	9.9		1
SUBTOTAL		92.5	5.3	11.3	109.1		Ì
ir Monitoring a 10.00% *	**	<u>3.6</u>	3.6	3.6	10.9		!
TOTAL		96.2	8.9	14.9	120.0		1

^{*}Amounts Are In Thousands Of Dollars

**Less Than \$100 For The Area; Amount Not Printed But Included In Total(s)

***The Minimum Air Monitoring Fee is \$500.00 Per Building

SECTION 9042.4 PHOTOGRAPHS



Bldg. 9042 - Basement: Sample FH591 < 4" mud fitting tested positive. Samples FH592 < 4" pipe run; sample FH593, 4 - 8" mud fitting; and sample FH594, 4 - 8" pipe run all tested positive.



Bldg. 9042 - Basement: Sample FH595 < 4" mud fitting tested positive.



Bldg. 9042 - Basement: Sample FH596 (not shown) < 4" pipe insulation tested positive; sample FH597, 4 - 8" mud fitting tested positive; sample FH598, 4 - 8" pipe insulation (not shown) also tested positive.



Bldg. 9042 - Basement, Corridor leading to Pipe Tunnel: Sample FH599 < 4" mud fitting tested positive; sample FH600 < 4" pipe insulation also tested positive.

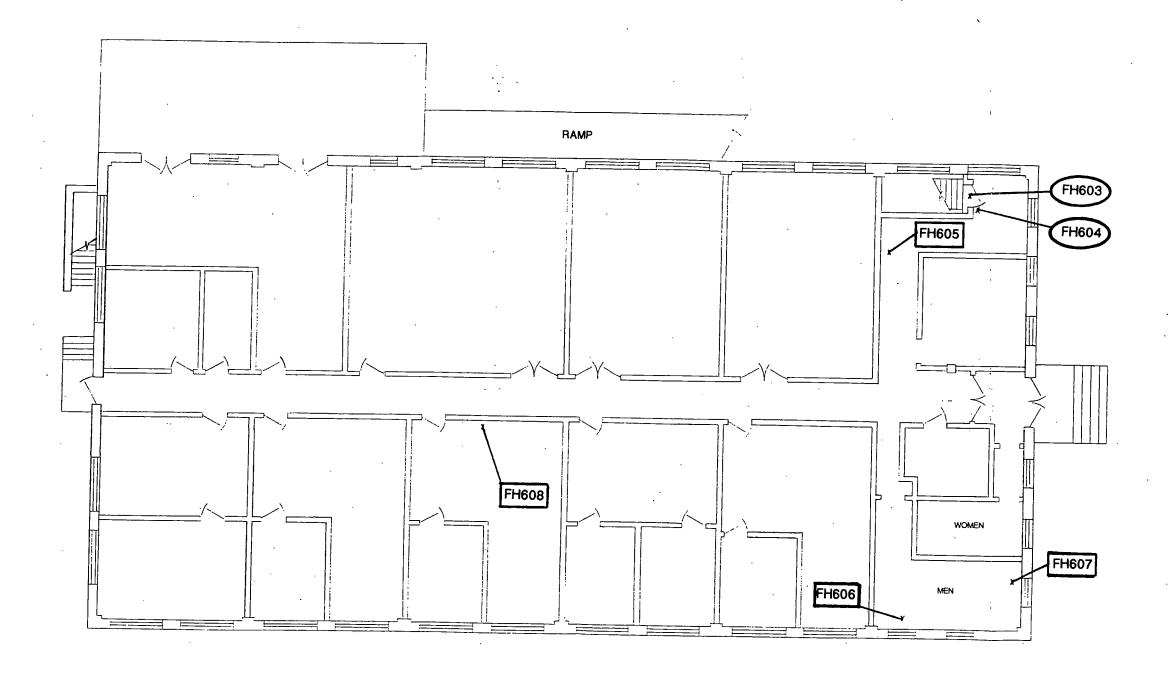


Bldg. 9042 - Basement, Corridor leading to Pipe Tunnel: Sample FH601, 4 - 8" mud fitting tested positive. Sample FH602 (not shown), 4 - 8" pipe run also tested positive.



Bldg. 9042 - First Floor: Sample FH603, 9 \times 9" gray floor tiles tested positive; sample FH604 9 \times 9" gray floor tiles (not shown) also tested positive.





BLDG. 9042 FIRST LOOR PLAN

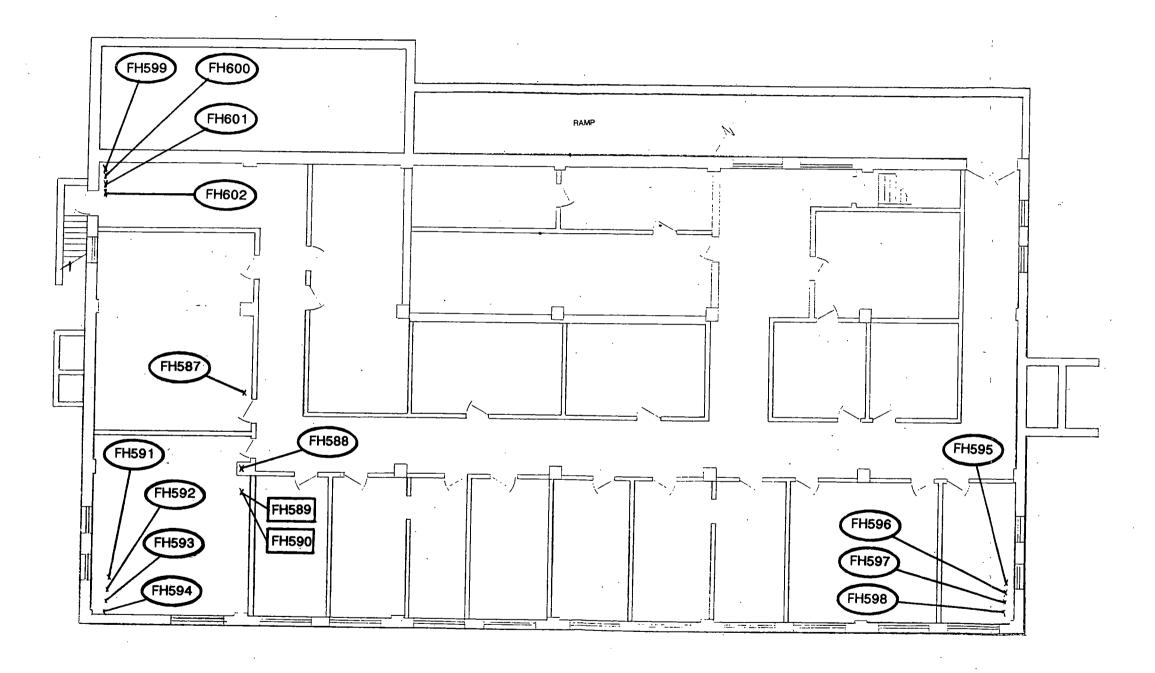
LEGEND

FHnnn POSITIVE SAMPLE









BLDG. 9042 BASEMENT PLAN LEGEND

(FHnnn) POSITIVE SAMPLE



FHORM NEGATIVE SAMPLE



9061

CARPENTRY/METAL SHOP

CARPENTRY/METAL SHOP

9061.1 GENERAL

Building 9061 was surveyed by WESTON technicians on 17 January 1991.

The first three portions of this facility report summarize the results of this inspection. Photographs of some sample locations are provided in Section 9061.4.

Polarized Light Microscopy (PLM) with dispersion staining was used to analyze 5 samples of suspect material collected from the building. Of these samples, all 5 were found to be asbestos-containing materials (ACM). Table 9061.1 lists the analytical results for the bulk samples.

9061.2 ACM AND EXPOSURE ASSESSMENT

The location, description, and analytical results for each bulk sample from Building 9061 are presented in Table 9061.1. An area-by-area inventory of ACM is provided in Tables 9061.2 and 9061.3. "Other Asbestos-Containing Materials," listed in Table 9061.3, are materials that do not correspond to the standard caption categories listed in Table 9061.2. A prioritized listing of exposure assessments is presented in Table 9061.4. An itemized area-by-area cost estimate for removal and replacement is provided in Table 9061.5. The method by which removal/replacement costs are calculated is described in the ISSUES COMMON TO ALL BUILDINGS Section of this report. Building floor plans (see attachment) indicate sample locations and building area names as they are listed in Tables 9061.2 and 9061.5.

9061.3 RECOMMENDATIONS/CONCLUSIONS

WESTON recommends:

- The wood shop in Building 9061 qualifies for the Army Asbestos Deficiency Abatement Project.
- Other asbestos-containing materials should be labeled under the O&M Program.

TABLE 9061.1

BULK SAMPLE ANALYSIS RESULTS - BUILDING 9061, CARPENTRY/METAL SHOP

SAMPLE				PERCE	ENT ASB	ESTOS	
NO.	LOCATION	ITEM	DESCRIPTION	CH	AM	OT	LAYERED ^E
FH575	ATTIC I, BELOW CEILING	TRANSITE PANEL BOARD	GRAY,OTH,TRANSITE,HORIZONTAL	35	_	_	NO
FH576	WOODSHOP, BELOW CEILING	FLOOR TILE	BLACK, OTH, 9X9 FL TL, HORIZONTAL	5	_	_	NO
FK577	WOODSHOP, BELOW CEILING	FLOOR TILE	WHITE, OTH, 9X9 FL TL, HORIZONTAL	5	-	-	NO
FH578	WOODSHOP, BELOW CEILING	AIR HANDLING EQUIPMENT	WHITE, OTH, DUCT INSUL, HORIZONTAL	50	-	-	NO
FH5 79	ATTIC I,BELOW CEILING	DEBRIS	GRAY, OTH, DEBRIS, HORIZONTAL	45	-	_	NO

 $^{^{\}mathrm{a}}$ Asbestos content presented for layered samples represents the highest concentration layer.

SE = Southeast SW = Southwest

Quadrant Codes	System Codes	Asbestos Types
C = Center	STM = Steam	CH = Chrysotile
N = North	CHW = Chilled Water	AM = Amosite
E = East	HHW = Heating Hot Water	OT = Other
S = South	DOM = Domestic Water	J. J
W = West	OTH = Other	
NE = Northeast	UNK = Unknown	
NW = Northwest		

	PIPE FITTINGS (EA)			PIPE RUNS (LF)			SPRAY/TROWELED	FLOOR TILE	BOILERS/	AIR HANDLING			
AREA	<4 "	4-8"	9-14"	>14"	< 4 "	4-8"	9-14"	>14"	CEILINGS (MSF)	(MSF)	TANKS (MSF)	EQUIPMENT (MSF)	OTHE
Attic I	-	_	-	-	-	_	-	-	•		-	-	*
łoodshop			-							0.24		0.03	
OTALS			-			_	-	-	-	0.24	-	0.03	*

^{*} Other Material Present In Various Units Of Measure

EA - Each

LF - Linear Feet MSF - Thousand Square Feet

Table 9061.3

Other Asbestos-Containing Material - Building 9061, Carp/Metal Shop Type Occupancy: Adults (Public)

Area	Material Type	Quantity (Unit)
Attic I	Transite Panel Board	0.048 (MSF)
Attic I	Debris	0.005 (MSF)

EA - Each

LF - Linear Feet

MSF - Thousand Square Feet

TABLE 9061.4 EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 9061, CARPENTRY/METAL SHOP

SAMPLE		MATERIAL	PRIOR. INDEX	PRIORITY INDEX	EXPO	SUR	E FA	CTORS	AVG. EXP.	%	
NO.	AREA	TYPE	CODE	NUMBER	1 2	2 3	4	5	HOURS	ASB.	
FH578	Woodshop	AIR HANDLING EQUIPMENT	С	5.700E03	2 2	2 1	2	3	40.00	50	
FH579	Attic I	DEBRIS	Α	2.175E-4	1 1	2	1	1	1.00	45	
FH575	Attic I	TRANSITE PANEL BOARD	. А	7.750E-5	1 1	2	1	1	1.00	35	

Priority Index Codes
A [=] Long Term Corrective Measure

B [=] Review Management Special Considerations/Remarks C [=] Army Asbestos Deficiency Abatement Project

Priority Index Numbers Are In Scientific Notation

Exposure Factors
1 [=] Material Friability
2 [=] Occupant Accessability
3 [=] Material Condition

4 [=] Level Of Activity

5 [=] Number Of Assigned Occupants

TABLE 9061.5 COST ESTIMATE* - BUILDING 9061, CARPENTRY/METAL SHOP

DESCRIPTION	UNIT COST (\$)	AREA 1	AREA 2	TOTAL	•	
Pipe Fittings (EA)						·
4-8" 9-14" >14"	70.30 85.80 147.00 216.00	:	:	-		
	216.00	-	-	-		
Pipe Runs (LF)	36.58	:	-	-		
4-8" 9-14" >14"	26.50 30.50 42.50 60.80	-	-	:		
prayed/Troweled Ceilings (SF)						
	9.60	•		-		
loor Tile (SF)	5.60	-	1.3	1.3		
oilers/Tanks (SF)	37.90	-	-	-		
ir Handling Equipment (SF)	20.00	-	0.7	0.7		
ther		0.6	-	0.6		
SUBTOTAL		0.6	2.0	2.6		
ifficulty Allowance		-	0.7	0.7		
SUBTOTAL		0.6	2.6	3.3	•	
econtamination Units obilization		3:8	3:8	2:8	·	
SUBTOTAL		4.6	6.6	11.3		
ontingency a 15.00%		0.7	1.0	1.7		
SUBTOTAL		5.3	7.6	13.0		
esign Fee @ 10.00%		0.5	0.8	1.3		
SUBTOTAL		5.9	8.4	14.3		
ir Monitoring a 10.00%	***	0.7	0.7	1.4		
TOTAL		6.6	9.1	15.7		

^{*}Amounts Are In Thousands Of Dollars

AREA 1: Attic I

^{***}Less Than \$100 For The Area; Amount Not Printed But Included In Total(s)
***The Minimum Air Monitoring Fee is \$500.00 Per Building

SECTION 9061.4 PHOTOGRAPHS

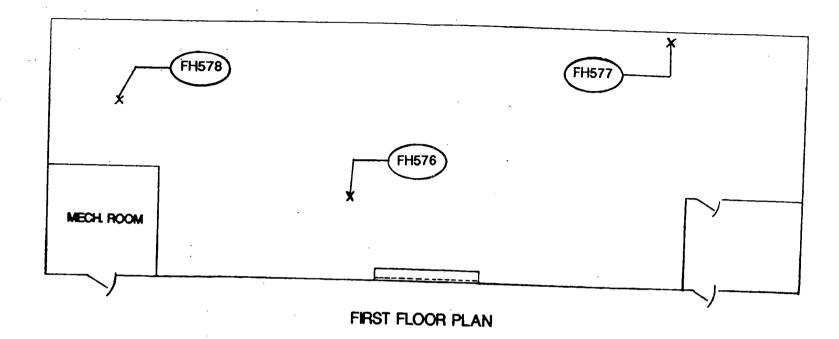


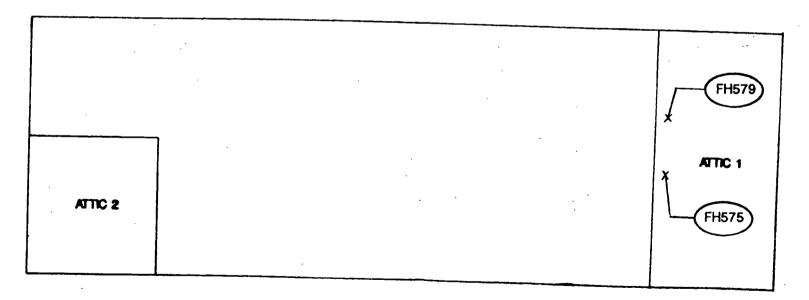
Bldg. 9061 - Carpenter Shop/Metal Shop, Attic: Transite panels sample FH575 tested positive; FH576, 9 x 9" black floor tiles also tested positive; sample FH579 gasket material debris in attic area (not shown) tested positive.



Bldg. 9061 - Carpenter Shop/Metal Shop, Attic: Roll of gasket material sample FH578 tested positive; sample FH577 9 x 9" white floor tile also tested positive (not shown).







SECOND FLOOR PLAN

BUILDING 9061

LEGEND



POSITIVE SAMPLE



NEGATIVE SAMPLE



9090

STOREHOUSE

STOREHOUSE

9090.1 GENERAL

Building 9090 was surveyed by WESTON technicians on 22 January 1991.

The first three portions of this facility report summarize the results of this inspection.

Polarized Light Microscopy (PLM) with dispersion staining was used to analyze 2 samples of suspect material collected from the building. Of these samples, both were found to be asbestos-containing materials (ACM). Table 9090.1 lists the analytical results for the bulk samples.

9090.2 ACM AND EXPOSURE ASSESSMENT

The location, description, and analytical results for each bulk sample from Building 9090 are presented in Table 9090.1. An area-by-area inventory of ACM is provided in Tables 9090.2 and 9090.3. "Other Asbestos-Containing Materials," listed in Table 9090.3, are materials that do not correspond to the standard caption categories listed in Table 9090.2. A prioritized listing of exposure assessments is presented in Table 9090.4. An itemized area-by-area cost estimate for removal and replacement is provided in Table 9090.5. The method by which removal/replacement costs are calculated is described in the ISSUES COMMON TO ALL BUILDINGS Section of this report. Building floor plans (see attachment) indicate sample locations and building area names as they are listed in Tables 9090.2 and 9090.5.

9090.3 RECOMMENDATIONS/CONCLUSIONS

WESTON recommends:

• Asbestos-containing floor tile should be labeled under the O&M Program.

TABLE 9090.1 BULK SAMPLE ANALYSIS RESULTS - BUILDING 9090, STOREHOUSE

SAMPLE				PERCE	NT ASBI	STOS	
NO.	LOCATION	ITEM	DESCRIPTION	СН	AM	OT	LAYERED'
FH628	FIRST FLOOR NORTH, BELOW CEILING	FLOOR TILE	BLUE,OTH,9X9 FL TL,HORIZONTAL	2	_	_	YES
FH629	FIRST FLOOR NORTH, BELOW CEILING	FLOOR TILE	BROWN, OTH, 9X9 FL TL, HORIZONTAL	<u>1</u>	-	-	NO

 $^{^{\}mathbf{a}}$ Asbestos content presented for layered samples represents the highest concentration layer.

SW = Southwest

Quadrant Codes	System Codes '	Asbestos Types
C = Center	STM = Steam	CH = Chrysotile
N = North	CHW = Chilled Water	AM = Amosite
E = East	HKW = Heating Hot Water	OT = Other
S = South	DOM = Domestic Water	
W = West	OTH = Other	
NE = Northeast	UNK = Unknown	
NW = Northwest		
SF = Southeast		

	P1	PE FITT	INGS (EA)				SPRAY/TROWELED	FLOOR TILE	BOILERS/	AIR HANDLING			
AREA	<4"	4-8"	9-14"	>14"	<4"	4-8"	9-14"	>14"	CEILINGS (MSF)	(MSF)	TANKS (MSF)	EQUIPMENT (MSF)	OTHER
First Floor North				<u></u> :					<u> </u>	0.76			
OTALS			-				_	-	-	0.76	_	-	_

Other Material Present In Various Units Of Measure

EA - Each

LF - Linear Feet MSF - Thousand Square Feet

Table 9090.3

Other Asbestos-Containing Material - Building 9090, Storage Type Occupancy: Adults (Public)

Area	Material Type Quantity (Unit)								
No Other	Asbestos-Containing Material Found in th	nis Building							

EA - Each

LF - Linear Feet

MSF - Thousand Square Feet

TABLE 9090.4

EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 9090, STOREHOUSE

		-	PRIOR.	PRIORITY		AVG.	
SAMPLE	•	MATERIAL	INDEX	INDEX	EXPOSURE FACTORS	EXP.	%
NO.	AREA	TYPE	CODE	NUMBER	1 2 3 4 5	HOURS	ASB.

Only Non-Friable Material Was Detected In This Building Exposure Assessments Are Not Available

Priority Index Codes

A [=] Long Term Corrective Measure

B [=] Review Management Special Considerations/Remarks

C [=] Army Asbestos Deficiency Abatement Project

Priority Index Numbers Are In Scientific Notation

Exposure Factors
1 [=] Material Friability

2 [=] Occupant Accessability

3 [=] Material Condition

4 [=] Level Of Activity

5 [=] Number Of Assigned Occupants

TABLE 9090.5 COST ESTIMATE* - BUILDING 9090, STOREHOUSE

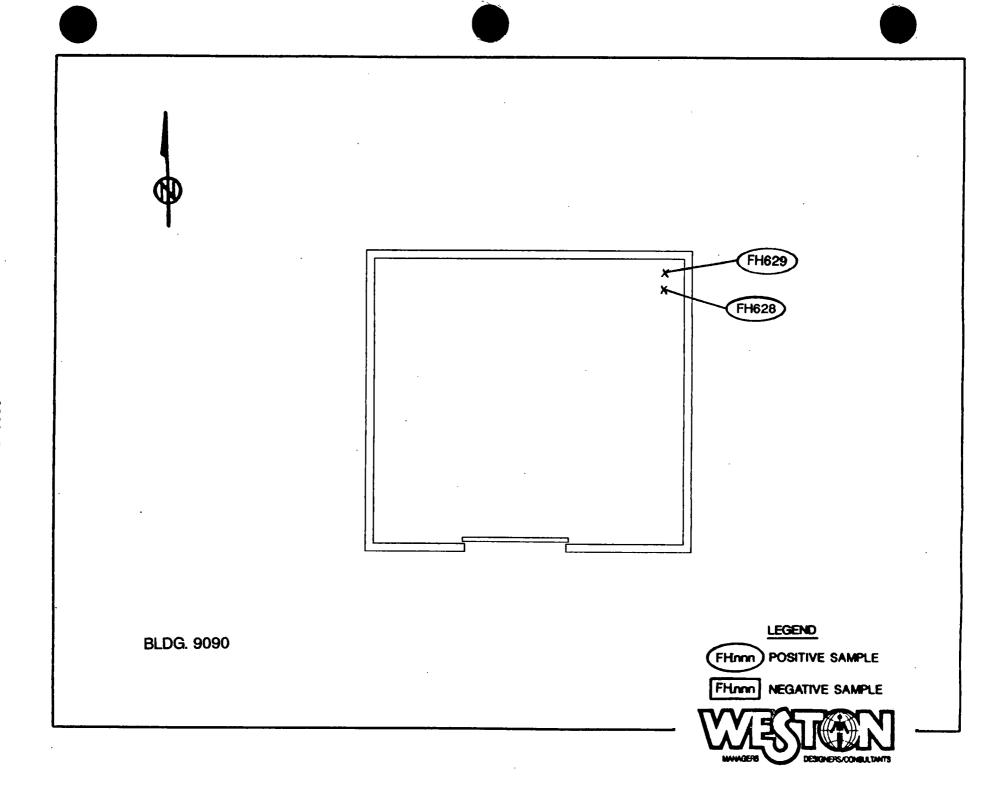
DESCRIPTION	UNIT COST (\$)	AREA	TOTAL			
Pipe Fittings (EA) 4-8" 9-14" >14"	70.30 85.80 147.00 216.00	-			,	
Pipe Runs (LF) 4-8" 9-14" >14"	26.50 30.50 22.50 60.80	- - - -	- - -			
Sprayed/Troweled Ceilings (SF)	9.60	_	-			
Floor Tile (SF)	5.60	4.3	4.3			
Boilers/Tanks (SF)	37.90	-	-			
Air Handling Equipment (SF)	20.00	-	-			
Other		-	-			
SUBTOTAL		4.3	4.3			
Difficulty Allowance		-	-			
SUBTOTAL		4.3	4.3			
Decontamination Units Mobilization		3:0 2:0	3: 8			
SUBTOTAL		9.3	9.3			
Contingency a 15.00%		1.4	1.4			
SUBTOTAL		10.6	10.6			
Design Fee @ 10.00%		1.1	1.1			
SUBTOTAL		11.7	11.7			
Air Monitoring a 10.00%***	r	1.2	1.2			
TOTAL		12.9	12.9			

^{*}Amounts Are In Thousands Of Dollars

AREA 1: First floor North

^{**}Less Than \$100 For The Area; Amount Not Printed But Included In Total(s)

***The Minimum Air Monitoring Fee is \$500.00 Per Building



9307 STOREHOUSE

STOREHOUSE

9307.1 GENERAL

Building 9307 was surveyed by WESTON technicians on 22 January 1991.

The first three portions of this facility report summarize the results of this inspection.

Polarized Light Microscopy (PLM) with dispersion staining was used to analyze 3 samples of suspect material collected from the building. Of these samples, all 3 were found to be asbestos-containing materials (ACM). Table 9307.1 lists the analytical results for the bulk samples.

9307.2 ACM AND EXPOSURE ASSESSMENT

The location, description, and analytical results for each bulk sample from Building 9307 are presented in Table 9307.1. An area-by-area inventory of ACM is provided in Tables 9307.2 and 9307.3. "Other Asbestos-Containing Materials," listed in Table 9307.3, are materials that do not correspond to the standard caption categories listed in Table 9307.2. A prioritized listing of exposure assessments is presented in Table 9307.4. An itemized area-by-area cost estimate for removal and replacement is provided in Table 9307.5. The method by which removal/replacement costs are calculated is described in the ISSUES COMMON TO ALL BUILDINGS Section of this report. Building floor plans (see attachment) indicate sample locations and building area names as they are listed in Tables 9307.2 and 9307.5.

9307.3 RECOMMENDATIONS/CONCLUSIONS

WESTON recommends:

• Asbestos-containing floor tile should be labeled under the O&M Program.

TABLE 9307.1

BULK SAMPLE ANALYSIS RESULTS - BUILDING 9307, RECORD STORAGE

SAMPLE				PERCE	ENT ASB	ESTOS	
NO.	LOCATION	ITEM	DESCRIPTION	CH	AM	OT	LAYERED
FH625	FIRST FLORO SOUTH, BELOW CEILING	FLOOR TILE	DROUGH OTH OVO EL TI HORIZONTAL	7			WE -
FH626		· · · - 	BROWN, OTH, 9X9 FL TL, HORIZONTAL	3	-	-	YES
	FIRST FLOOR NORTH, BELOW CEILING	FLOOR TILE	BROWN,OTH,9X9 FL TL,HORIZONTAL	10	-	-	YES
FH627	FIRST FLOOR NORTH, BELOW CEILING	FLOOR TILE	TAN,OTH,9X9 FL TL,HORIZONTAL	5	-	-	YES

 $^{^{\}mathbf{a}}$ Asbestos content presented for layered samples represents the highest concentration layer.

Quadrant Codes	System Codes	Asbestos Types
C = Center	STM = Steam	CH = Chrysotile
N = North	CHW = Chilled Water	AM = Amosite
E = East	HHW = Heating Hot Water	OT = Other
S = South	DOM = Domestic Water	·
W = West	OTH = Other	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
NE = Northeast	UNK = Unknown	19. 19.
NW = Northwest		N. Carlotte
SE = Southeast		
SW = Southwest		,

TABLE 9307.2 ASBESTOS-CONTAINING MATERIALS - BUILDING 9307, RECORD STORAGE

		PIPE FITTINGS (EA)			PIPE RUNS (LF)			SPRAY/TROWELED	FLOOR TILE	BOILERS/	AIR HANDLING		
AREA	<4"	4-8"	9-14"	>14"	<4"	4-8"	9-14"	>14"	CEILINGS (MSF)	(MSF)	TANKS (MSF)	EQUIPMENT (MSF)	OTHE
irst Floor North	-	-	-	-	-	-	-	-	-	1.54	-	_	_
irst Floro South		<u>-</u>		<u> </u>				:		1.52	<u> </u>		
OTALS					_	_	-	-	-	3.06	-	-	_

Other Material Present In Various Units Of Measure

EA - Each LF - Linear Feet

MSF - Thousand Square Feet

930/-5

Other Asbestos-Containing Material - Building 9307, Record Storage Type Occupancy: Adults (Public)

Area	Material Type	Quantity (Unit)
No Other A	Asbestos-Containing Material Found in th	is Building

EA - Each

LF - Linear Feet

MSF - Thousand Square Feet

TABLE 9307.4

EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 9307, RECORD STORAGE

		PRIOR.	PRIORITY		AVG.		
SAMPLE	MATERIAL	INDEX	INDEX	EXPOSURE FACTORS	EXP.	%	
NO. AREA	TYPE	CODE	NUMBER	1 2 3 4 5	HOURS	ASB.	

Only Non-Friable Material Was Detected In This Building Exposure Assessments Are Not Available

Priority Index Codes

A [=] Long Term Corrective Measure

B [=] Review Management Special Considerations/Remarks

C [=] Army Asbestos Deficiency Abatement Project

Priority Index Numbers Are In Scientific Notation

Exposure Factors

1 [=] Material Friability

2 [=] Occupant Accessability

3 [=] Material Condition

4 [=] Level Of Activity

5 [=] Number Of Assigned Occupants





TABLE 9307.5

COST ESTIMATE* - BUILDING 9307, RECORD STORAGE

DESCRIPTION	COST (\$)	AREA	AREA	TOTAL	
Pipe Fittings (EA)				TOTAL	
4-8"	.85:38 .85:88	<u> </u>	:	:	
3-8" 3-14" >14"	70-30 147-88 216-88	:		:	
Pipe Runs (LF)					
4-8"	\$8: ≩8	:	:	:	
4-8" 9-14" >14"	36-50 30-50 30-80	:	:	:	
Sprayed/Troweled Ceilings (SF)					
	9.60				
Floor Tile (SF)	5.60	8.6	8.5	17.1	
Boilers/Tanks (SF)	37.90	-	-	-	
Air Handling Equipment (SF)	20.00			-	
Other		-		-	
SUBTOTAL		8.6	8.5	17.1	
Difficulty Allowance		4.3	4.3	8.6	
SUBTOTAL		12.9	12.8	25.7	
Decontamination Units Mobilization		1:8	1:8	3:8	
SUBTOTAL		15.4	15.3	30.7	
Contingency a 15.00%		2.3	2.3	4.6	
SUBTOTAL		17.8	17.6	35.3	
Design Fee @ 10.00%		1.8	1.8	3.5	
SUBTOTAL		19.5	19.3	38.8	
Air Monitoring @ 10.00%***		1.9	1.9	3.9	
TOTAL		21.5	21.3	42.7	

^{*}Amounts Are In Thousands Of Dollars

AREA 1: First Floor North

^{**}Less Than \$100 For The Area; Amount Not Printed But Included In Total(s)

^{***}The Minimum Air Monitoring Fee is \$500.00 Per Building