#### Phase IV

### **U.S. Army - Fort Monmouth**

Volume 2A - Building Reports for a Comprehensive Asbestos Survey in Various Buildings at Fort Monmouth, New Jersey

Contract Number DACA51-91-D-0028

May 1993

Prepared for:

U.S. ARMY - FORT MONMOUTH Directorate of Engineering and Housing Fort Monmouth, New Jersey 07703 Prepared by:



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# BUILDING REPORTS FOR A COMPREHENSIVE ASBESTOS SURVEY IN VARIOUS BUILDINGS AT FORT MONMOUTH, NEW JERSEY

CONTRACT NO. DACA51-91-D-0028

**VOLUME 2A** 

PHASE IV

May 1993

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#### INTRODUCTION

#### **INTRODUCTION**

#### 1.1 GENERAL

This document represents Volume 2A for the Phase IV Asbestos Survey conducted at the U.S. Army installation at Fort Monmouth, New Jersey. Work was performed under Contract No. DACA61-91-R-0039 administered by the Directorate of Engineering and Housing (DEH) - Fort Monmouth.

This volume presents the individual building reports for each of the buildings inspected under the above-listed contract. Where applicable, each building report includes a discussion of the findings and recommendations, a sample location floor plan, sample photographs, and the following tabulated data:

- Table 1 Bulk Sample Analysis Results
- Table 2 Quantification of Asbestos-Containing Materials
- Table 3 Other Asbestos-Containing Materials
- Table 4 Exposure Assessments (Priority Order)
- Table 5 Cost Estimate

A complete discussion of terminology, survey and exposure assessment methodologies, costestimating approach, and general operations and maintenance recommendations is provided in the accompanying Phase IV Report Guide Document. The Phase IV Report Guide Document also contains a complete prioritized exposure assessment list covering all buildings inspected under the Phase IV Asbestos Survey, as well as other important management summaries.

#### 1.2 LIMITATIONS OF THE SURVEY REPORTS

Asbestos surveys in all buildings were conducted by experienced EPA/AHERA-certified Asbestos Building Inspectors in accordance with EPA guidelines and generally accepted professional practices. These surveys were limited strictly to asbestos-containing materials (ACM). No review of other hazardous materials or potential problems was conducted.

The building reports describe only the conditions of the ACM at the time the surveys were conducted. The condition of ACM may change gradually or suddenly, depending on maintenance, accident, or deterioration of building components.

While it is believed that all ACM has been identified and quantified with acceptable accuracy, unanticipated or hidden conditions could possible be uncovered during renovation, repair, or demolition activities. Any new suspect materials uncovered during these activities should be handled as ACM until proper sampling and analysis can be conducted.

#### **STORAGE**

#### 110.1 GENERAL

Building 110 was surveyed by WESTON's inspection team on 25 August 1992.

No suspect asbestos-containing material (ACM) was found in the building.

#### 110.2 CONCLUSION

Based on the inspection survey and other information made available to WESTON, we conclude that accessible areas of Building 110 do not contain ACM.

#### **BOX CRATE SHOP**

#### 142.1 GENERAL

Building 142 was surveyed by WESTON's inspection team on 8 August 1992.

The first three portions of this facility report summarize the results of this inspection. A photograph of a pipe insulation sample location is provided in Subsection 142.4.

Polarized Light Microscopy (PLM) with dispersion staining was used to analyze two samples of suspect material collected from the building. Of these samples, two were found to be asbestos-containing material (ACM). Table 142.1 lists the analytical results for the bulk samples.

#### 142.2 ACM AND EXPOSURE ASSESSMENT

The location, description, and analytical results for each bulk sample from Building 142 are presented in Table 142.1. An area-by-area inventory of ACM is provided in Tables 142.2 and 142.3. "Other Asbestos-Containing Materials," listed in Table 142.3, are materials that do not correspond to the standard caption categories listed in Table 142.2. A prioritized listing of exposure assessments is presented in Table 142.4. The method by which the exposure assessment priority index values are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.5 of this report. An itemized area-by-area cost estimate for removal and replacement is provided in Table 142.5. The method by which removal/replacement costs are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.4 of this report. Building floor plans (see attachment) indicate sample locations and building area names as they are listed in Tables 142.2 and 142.5.

#### 142.3 RECOMMENDATIONS/CONCLUSIONS

- Asbestos-containing pipe insulation and floor tile are present in the building.
- The pipe insulation located in the warehouse area of Building 142 qualifies for the Army Asbestos Deficiency Abatement Project (AADAP).
- Asbestos-containing floor tile should be labeled under the O&M Program.

TABLE 142.1

BULK SAMPLE ANALYSIS RESULTS - BUILDING 142, BOX CRATE SHOP

SAMPLE				PERCE	NT ASB	ESTOS	
NO.	LOCATION	ITEM	DESCRIPTION	CH	AM	ОТ	LAYERED
FK774 WARE	HOUSE-W. WALL	<4" PIPE RUN	GRAY,UNK,<4" PIPE	40	-	_	YES
FK775 OFFI		FLOOR TILE	BROWN, UNK, 9X9 FLR TL	7	-	-	YES

<sup>&</sup>lt;sup>a</sup>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	•	
SF = Southeast		

TABLE 142.2 ASBESTOS-CONTAINING MATERIALS - BUILDING 142, BOX CRATE SHOP

	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)	OTHE
OFFICE 1	-	_	-	-	-	_	-	-	-	0.20	-	-	-
FFICE 2	-	-	-	-	-	-	-	-	-	0.20	-	-	-
STORAGE	-	-	-	-	-	-	-	-	-	0.20	-	-	-
AREHOUSE-ABOVE CEIL	12	-	-	-	330	-	-	-	-	-	-	-	-
AREHOUSE-E. WALL	-	-	-	-	9	-	-	-	-	-	-	-	-
AREHOUSE-N. WALL	-	-	-	-	3	-	-	-	-	-	-	-	-
VAREHOUSE-W. WALL					6	<u> </u>		<del>-</del>			-		
TOTALS	12	-	-	-	348	_	-	-	-	0.60	<u>.</u> .		-

<sup>\*</sup> Other Material Present In Various Units Of Measure

EA - Each LF - Linear Feet

MSF - Thousand Square Feet

**Table 142.3** 

#### Other Asbestos-Containing Material - Building 142, Box Crate Shop 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

**TABLE 142.4** EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 142, BOX CRATE SHOP

SAMPL	· •	MATERIAL	PRIOR. INDEX	PRIORITY INDEX	EXI	POS	URE	FAC	TORS	AVG. EXP.	×	
NO.	AREA	TYPE	CODE	NUMBER	1	2	3	4	5	HOURS	ASB.	
FK774	WAREHOUSE-E. WALL	<4" PIPE RUN	С	3.000E04	2	3	2	2	2	40.00	40	
FK774	WAREHOUSE-N. WALL	<4" PIPE RUN	C	3.000E04	2	3	2	2	2	40.00	40	
FK774	WAREHOUSE-W. WALL	<4" PIPE RUN	С	3.000E04	2	3	2	2	2	40.00	40	
FK772		<4" PIPE FITTING	Α	0	2	1	2	1	0	0.00	30	
FK774	•	<4" PIPE RUN	Α	0	2	1	2	1	0	0.00	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 142.5** COST ESTIMATE\* - BUILDING 142, BOX CRATE SHOP

DESCRIPTION	UNIT COST (\$)	AREA	AREA	AREA	AREA	AREA	AREA	AREA	TOTAL	
Pipe Fittings (EA)  4-8" 9-14" >14"	70:30 85:80 147:80 216:00	:	:	:	0.8 -	; :	:	:	0.8	
Pipe Runs (LF) 4-8" 9-14" >14"	26-50 30-50 50-80	- - -	<u>.</u>	<u>:</u>	8.7 -	0.2 -	**	0.2 -	9.2 -	
Sprayed/Troweled Ceilings (SF)	9.60	_	-	-	-	-	_	-	-	
Floor Tile (SF)	5.60	1.1	1.1	1.1	-	-	-	-	3.4	
Boilers/Tanks (SF)	37.90	-	-	-	-	-	-	-		
Air Handling Equipment (SF)	20.00	-	<b>-</b>	-	-	-	-	-	-	
Other		-	•	-	-	-	•	-	-	
SUBTOTAL		1.1	1.1	1.1	9.6	0.2	**	0.2	13.4	
Difficulty Allowance		-	-	7	33.6	-		-	33.6	
SUBTOTAL		1.1	1.1	1.1	43.1	0.2	**	0.2	47.0	
Decontamination Units Mobilization		8: <u>4</u>	8: <u>4</u>	8: <del>6</del>	8: <del>4</del>	8: <del>6</del>	8:3	8:3	<b>4:</b> 8	
SUBTOTAL		2.0	2.0	2.0	44.1	1.2	1.0	1.1	53.5	
Contingency a 15.00%		0.3	0.3	0.3	6.6	0.2	0.2	0.2	8.0	
SUBTOTAL		2.4	2.4	2.4	50.7	1.3	1.2	1.3	61.5	
Design Fee a 10.00%	,	0.2	0.2	0.2	5.1	0.1	0.1	0.1	6.2	
SUBTOTAL		2.6	2.6	2.6	55.8	1.5	1.3	1.4	67.7	
Air Monitoring @ 10.00%	***	1.0	1.0	1.0	1.0	1.0	1.0	1.0	6.8	
TOTAL		3.6_	3.6	3.6	<u> 56.7</u>	2.4	2.2	2.3	74.4	

<sup>\*</sup>Amounts Are In Thousands Of Dollars

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

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

142.4

**PHOTOGRAPH** 



Bldg. 142 Warehouse: (Sample FK774) <4" Pipe Run Insulation Tested Positive

MECH. ROOM WAREHOUSE OFFICE 1 OFFICE 2 STORAGE LATRINE NORTH BLDG. 142

NOT TO SCALE

FKNND POSITIVE SAMPLE
FKNNN NEGATIVE SAMPLE

DESIGNERS/CONSULTANTS

142-9

## 157 AMMO. BUILDING

#### 157.1 GENERAL

Building 157 was surveyed by WESTON's inspection team on 12 August 1992.

No suspect asbestos-containing material (ACM) was found in the building.

#### 157.2 CONCLUSION

Based on the inspection survey and other information made available to WESTON, we conclude that accessible areas of Building 157 do not contain ACM.

MAINTENANCE SHOP

#### MAINTENANCE SHOP

#### 161.1 GENERAL

Building 161 was surveyed by WESTON's inspection team on 30 September 1992.

The first three portions of this facility report summarize the results of this inspection. A photograph of a transite panel sample location is provided in Subsection 161.4.

Polarized Light Microscopy (PLM) with dispersion staining was used to analyze nine samples of suspect material collected from the building. Of these samples, five were found to be asbestos-containing material (ACM). Table 161.1 lists the analytical results for the bulk samples.

#### 161.2 ACM AND EXPOSURE ASSESSMENT

The location, description, and analytical results for each bulk sample from Building 161 are presented in Table 161.1. An area-by-area inventory of ACM is provided in Tables 161.2 and 161.3. "Other Asbestos-Containing Materials," listed in Table 161.3, are materials that do not correspond to the standard caption categories listed in Table 161.2. A prioritized listing of exposure assessments is presented in Table 161.4. The method by which the exposure assessment priority index values are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.5 of this report. An itemized area-by-area cost estimate for removal and replacement is provided in Table 161.5. The method by which removal/replacement costs are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.4 of this report. Building floor plans (see attachment) indicate sample locations and building area names as they are listed in Tables 161.2 and 161.5.

#### 161.3 RECOMMENDATIONS/CONCLUSIONS

- Per the Directorate of Engineering and Housing (DEH), Building 161 is scheduled for demolition.
- The ACMs present in Building 161 are:
  - Floor tile
  - Linoleum flooring
  - Transite panel
  - Exhaust flue insulation
- The ACMs listed above shall be removed under the Army Asbestos Deficiency Abatement Project (AADAP) prior to demolition of Building 161; however, in accordance to the latest revisions of the National Emission Standard for Hazardous Air Pollutants (NESHAPs, 40 CFR Part 61, Subpart M, 20 November 1990), the floor tile and linoleum flooring can be left in place during demolition provided they are in good condition and will not become friable during demolition.

TABLE 161.1

BULK SAMPLE ANALYSIS RESULTS - BUILDING 161, MAINTENANCE SHOP

SAMPLE		<del></del>		PERC	<u>ESTOS</u>		
NO.	LOCATION	ITEM	DESCRIPTION	CH	AM	OT	LAYERED
HF516	STORAGE 2	FLOOR TILE	GREEN, OTH, FLOOR TILE	5	-	-	NO
HF517	STORAGE 1	FLOOR TILE	GRAY, OTH, FLOOR TILE	7	-	-	NO
HF518	STORAGE 3	OTHER MATERIAL	BROWN,OTH,LINOLEUM	1	-	-	YES
HF519	GARAGE	CEILING BOARD	WHITE, OTH, CEIL BOARD	-	-	-	YES
HF520	GARAGE-EXHAUST	TRANSITE PANEL BOARD	GRAY, OTH, TRANS PNL	50	-	-	NO
HF521	GARAGE	OTHER MATERIAL	BROWN,OTH,FIRE BLNK	-	-	-	NO
HF522	ROOF	OTHER MATERIAL	BLACK,OTH,ROOF SHING	-		-	NO
HF523	MECHANICAL ROOM	OTHER MATERIAL	GRAY,OTH,EXH INSUL	45	-	-	NO
HF524	MECHANICAL ROOM	EXPANSION JOINT(S)	GRAY,OTH,EXPAN CLOT	-	•	-	NO

 $<sup>^{\</sup>mathbf{a}}$  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 161.2 ASBESTOS-CONTAINING MATERIALS - BUILDING 161, MAINTENANCE SHOP

	PI	PE FITT	INGS (EA)			PIPE RU	VŠ (LF)		SPRAY/TROWELED	FLOOR TILE	BOILERS/	AIR HANDLING	
AREA	<4"	4-8"	9-14"	>14"	<4 <sup>11</sup>	4-8"	9-14"	>14"	CEILINGS (MSF)	(MSF)	TANKS (MSF)	EQUIPMENT (MSF)	OTHE
GARAGE-EXHAUST	-			-	_	_	-	-	•	-	-	-	*
ARAGE-UPPER LEVEL	-	-	-	- '	_	-	-	-	-	-	-	•	*
MECHANICAL ROOM	-	-	-	-	-	-	-	_	-	-	-	-	*
STORAGE 1	-	-	-	-	-	-	-	-	-	0.08	-	-	-
STORAGE 2	-	-	-	-	-	-	-	-	-	0.36	-	-	•
STORAGE 3		<del></del>	<del></del>	<del>-</del>			<del>-</del>	<u> </u>	<del></del>	0.05			*
TOTALS	_	_	_		_	_	_	_	-	0.49	•	-	*

Other Material Present In Various Units Of Measure

EA - Each

LF - Linear Feet MSF - Thousand Square Feet

Table 161.3

Other Asbestos-Containing Material - Building 161, Maintenance Shop
Type Occupancy: Adults (Public)

Area	Material Type	Quantity (Unit)
Garage Exhaust	Transite Panel	0.010 (MSF)
Garage Upper Level	Transite Panel	0.025 (MSF)
Mechanical Room	Exhaust Insulation	0.010 (MSF)
Storage 3	Linoleum	0.070 (MSF)

EA - Each

LF - Linear Feet

MSF - Thousand Square Feet

TABLE 161.4 EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 161, MAINTENANCE SHOP

SAMPLE	<del>-</del>	MATERIAL	PRIOR. INDEX	PRIORITY INDEX	EXI	POSI	JRE	FAC	TORS_	AVG. Exp.	%
NO.	AREA	TYPE	CODE	NUMBER	1	2	3_	4	5	HOURS	ASB.
HF520	GARAGE-EXHAUST	TRANSITE PANEL BOARD	В	1.840E02	2	2	2	1	1	8.00	50
HF520	GARAGE-UPPER LEVEL	TRANSITE PANEL BOARD	В	1.840E02	2	2	2	1	1	8.00	50
HF523	MECHANICAL ROOM	INSULATION BOARD	В	1.840E02	2	2	2	1	1	8.00	45
HF518	STORAGE 3	INSULATION BOARD	Α	1.160E01	2	2	2	1	1	8.00	1
HF519	GARAGE	CEILING BOARD	A	0	2	2	2	1	1	8.00	0
HF524	MECHANICAL ROOM	EXPANSION JOINTS	A	0	2	2	2	1	1	8.00	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 161.5 COST ESTIMATE\* - BUILDING 161, MAINTENANCE SHOP

	INTT	ADEA	ADEA	AREĄ	AREĄ	AREA	ADFA	
DESCRIPTION	COST (\$)	AREA	AREA 2	AKE 3	AREA 4		AREA	TOTAL
Pipe Fittings (EA)	70.30	_	_	_	-		•	-
4 8" 9- 14" >14"	70.30 85.80 147.00 216.00	:	:	-	. :	:	:	-
·	216.00	-	-	•	-	•	-	•
Pipe Runs (LF)	26.50	-	-	-	-	-	-	-
} <sup>7</sup> 8" 9-14" >14"	26.50 30.50 60.80	Ξ.	:	-	-	:	-	-
	60.80	-	•	-	-	-	•	-
Sprayed/Troweled Ceilings (SF)	9.60	-	-	-	-	-	-	•
Floor Tile (SF)	5.60	-	-	-	0.4	2.0	0.3	2.7
Boilers/Tanks (SF)	37.90	-	•	-	-	-	-	-
Air Handling Equipment (SF)	20.00	-	-	-	-	-	-	-
Other		0.1	0.3	**	-	-	0.3	0.7
SUBTOTAL		0.1	0.3	**	0.4	2.0	0.6	3.5
Difficulty Allowance		0.1	-	-	-	-	•	0.1
SUBTOTAL		0.2	0.3	** .	0.4	2.0	0.6	3.6
Decontamination Units Mobilization		8: <b>5</b>	8: <del>3</del>	8:3	8:5	8:5	8:3	<b>3:</b> 8
SUBTOTAL		1.1	1.1	0.9	1.3	2.8	1.4	8.6
Contingency @ 15.00%		0.2	0.2	0.1	0.2	0.4	0.2	1.3
SUBTOTAL		1.2	1.3	1.0	1.5	3.3	1.6	9.9
Design Fee a 10.00%	• •	0.1	0.1	0.1	0.1	0.3	0.2	1.0
SUBTOTAL		1.3	1.4	1.1	1.6	3.6	1.8	10.8
Air Monitoring a 10.00%	***	0.2	0.2	0.2	0.2	0.2	0.2	<u> </u>
TOTAL		1.5	1.6	1.3	1.8	3.8	2.0	11.9

<sup>\*</sup>Amounts Are In Thousands Of Dollars

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

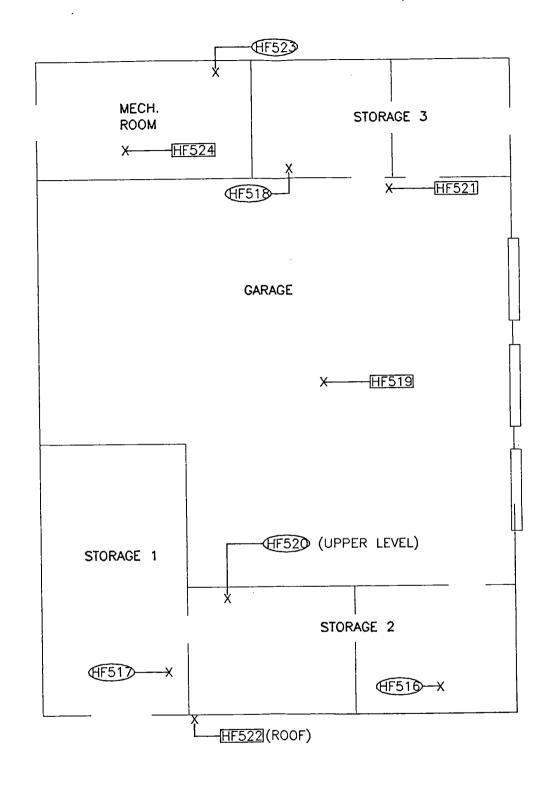
\*\*\*\*The Minimum Air Monitoring Fee is \$500.00 Per Building

161.4

PHOTOGRAPH -



Bldg. 161 Garage: (Same HF520) Transite Panels Tested Positive



BLDG. 161

NOT TO SCALE





#### MAINTENANCE SHOP

### 165.1 GENERAL

Building 165 was surveyed by WESTON's inspection team on 12 August 1992.

The first three portions of this facility report summarize the results of this inspection. Photographs of floor tile and transite panel sample locations are provided in Subsection 165.4.

Polarized Light Microscopy (PLM) with dispersion staining was used to analyze eight samples of suspect material collected from the building. Of these samples, three were found to be asbestos-containing material (ACM). Table 165.1 lists the analytical results for the bulk samples.

### 165.2 ACM AND EXPOSURE ASSESSMENT

The location, description, and analytical results for each bulk sample from Building 165 are presented in Table 165.1. An area-by-area inventory of ACM is provided in Tables 165.2 and 165.3. "Other Asbestos-Containing Materials," listed in Table 165.3, are materials that do not correspond to the standard caption categories listed in Table 165.2. A prioritized listing of exposure assessments is presented in Table 165.4. The method by which the exposure assessment priority index values are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.5 of this report. An itemized area-by-area cost estimate for removal and replacement is provided in Table 165.5. The method by which removal/replacement costs are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.4 of this report. Building floor plans (see attachment) indicate sample locations and building area names as they are listed in Tables 165.2 and 165.5.

## 165.3 RECOMMENDATIONS/CONCLUSIONS

- Floor tile and transite panel in Building 165 were found to be ACM.
- Asbestos-containing floor tile and transite panel should be labeled under the O&M Program.

TABLE 165.1

BULK SAMPLE ANALYSIS RESULTS - BUILDING 165, MAINTENANCE SHOP

SAMPLE				PERC	ENT ASBI	EST <u>os</u>	
NO.	LOCATION	ITEM	DESCRIPTION	СН	AM	OT	LAYERED
FK759	OFFICE	FLOOR TILE	TAN,OTH,FLOOR TILE	3	-	-	NO
FK760	OFFICE	CEILING TILE	WHITE, OTH, AC CEIL TL	-	-	-	NO
FK761	STORAGE ROOM 1	FLOOR TILE	RED,OTH,FLOOR TILE	2	-	-	NO
FK762	CLOSET	OTHER MATERIAL	WHITE, OTH, INSULATION	-	-	-	NO
FK763	CLOSET	OTHER MATERIAL	WHITE, OTH, GASKETS	-	-	-	NO
FK764	CLOSET	OTHER MATERIAL	GRAY,OTH,GASK/INSUL	-	-	-	NO
FK765	STORAGE ROOM 6	FLOOR TILE	GREEN, OTH, LINL. FLOOR	-	-	-	YES
FK766	MECHANICAL ROOM	TRANSITE PANEL BOARD	BROWN, OTH, TRAN PANEL	20	-	-	YES

<sup>&</sup>lt;sup>a</sup>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		
CLI - Couthwest		

TABLE 165.2 ASBESTOS-CONTAINING MATERIALS - BUILDING 165, MAINTENANCE SHOP

P		PE FITT	INGS (EA)		PIPE RUNS (LF)			SPRAY/TROWELED	FLOOR TILE	BOILERS/	AIR HANDLING		
AREA	<411	4-8 <sup>11</sup>	9-14"	>14"	<4"	4-8"	9-14"	>14"	CEILINGS (MSF)	(MSF)	TANKS (MSF)	EQUIPMENT (MSF)	OTI
ECHANICAL ROOM	-	_	-	_	· -	_	-	-	-	-	-	-	,
FICE	-	-	-	-	-	-	-	-	-	0.12	-	•	
ORAGE ROOM 1	:							<del></del>		0.18			_
TALS	-	-	_	_	-	-	_	-	-	0.30	-	-	

 $<sup>^{\</sup>star}$  Other Material Present In Various Units Of Measure

EA - Each

LF - Linear Feet MSF - Thousand Square Feet

## **Table 165.3**

# Other Asbestos-Containing Material - Building 165, Maintenance Shop Type Occupancy: Adults (Public)

Area	Material Type	Quantity (Unit)
Mechanical Room	Transite Panel	0.750 (MSF)

EA - Each

LF - Linear Feet

MSF - Thousand Square Feet

TABLE 165.4 EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 165, MAINTENANCE SHOP

SAMPLE		MATERIAL	PRIOR. INDEX	PRIORITY INDEX	EX	POSI	URE	FAC	CTORS_	AVG. EXP.	ж
NO.	AREA	TYPE	CODE	NUMBER	1	2	3	4	5	HOURS	ASB.
FK766	MECHANICAL ROOM	TRANSITE PANEL BOARD	А	2.400E01	2	2	1	1	4	2.00	20
FK760	OFFICE	CEILING TILE	A	0	2	2	1	1	4	2.00	0
FK762	CLOSET	GASKET	A	0	2	2	1	1	4	2.00	0
FK763	CLOSET	GASKET	A	0	2	2	1	1	4	2.00	0
FK764	CLOSET	GASKET	A	0	2	2	1	1	4	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 165.5

COST ESTIMATE\* - BUILDING 165, MAINTENANCE SHOP

DECORATE TON	UNIT COST (\$)	AREĄ	AREĄ	AREĄ	TOTAL
DESCRIPTION	COSI (\$)	1			IUIAL
Pipe Fittings (EA) 4-8"	70.30 85.80 147.00 216.00	=	:	:	Ξ
2-8" 9-14" >14"	218:00	-	-	:	Ξ
Pipe Runs (LF)	26 50	_	_	_	-
2-8" 9-14" >14"	26.50 30.50 42.50 60.80	:	-	:	-
	29:88	-	-	-	-
Sprayed/Troweled Ceilings (SF)	9.60	-	-	-	-
Floor Tile (SF)	5.60	-	0.7	1.0	1.7
Boilers/Tanks (SF)	37.90	- ·	-	-	-
Air Handling Equipment (SF)	20.00	-	-	-	-
Other		8.3	· -	-	8.3
SUBTOTAL		8.3	0.7	1.0	9.9
Difficulty Allowance		4.1	-	-	4.1
SUBTOTAL		12.4	0.7	1.0	14.1
Decontamination Units Mobilization		<b>∂:</b> 9	<b>1:9</b>	1: <del>9</del>	3:0
SUBTOTAL		14.0	2.3	2.7	19.1
Contingency a 15.00%		2.1	0.4	0.4	2.9
SUBTOTAL		16.1	2.7	3.1	21.9
Design Fee a 10.00%	1	1.6	0.3	0.3	2.2
SUBTOTAL		17.8	3.0	3.4	24.1
Air Monitoring @ 10.00%	,*** '	0.8	0.8	0.8	2.4
TOTAL		18.6	3.8	4.2	26.5

<sup>\*</sup>Amounts Are In Thousands Of Dollars

AREA 1: MECHANICAL ROOM AREA 3: STORAGE ROOM 1

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

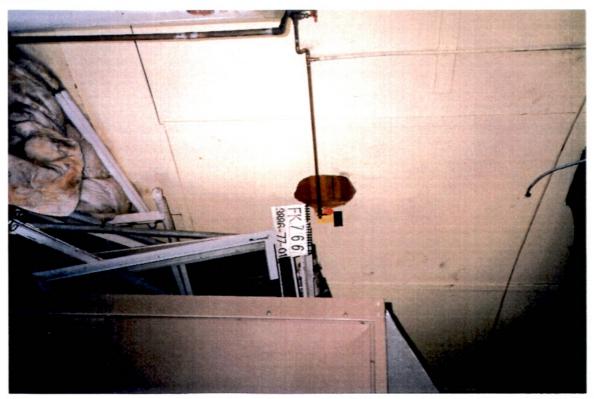
<sup>\*\*\*</sup> The Minimum Air Monitoring Fee is \$500.00 Per Building

165.4

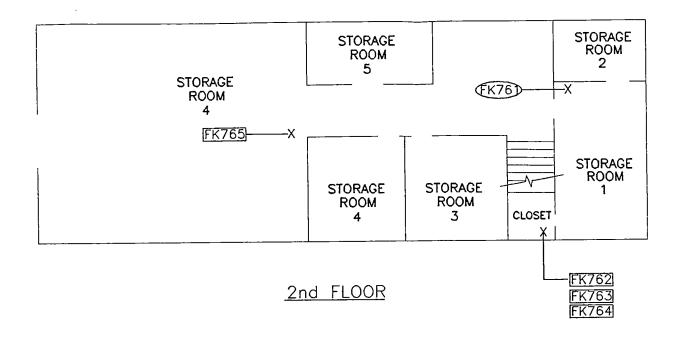
**PHOTOGRAPHS** 

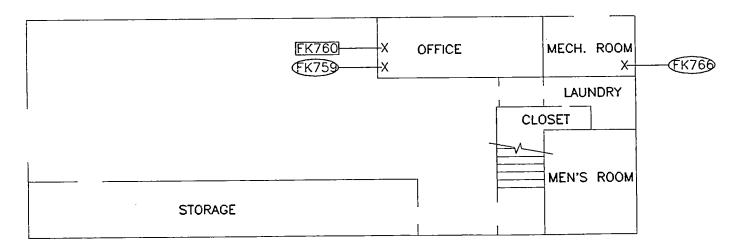


Bldg. 165 Office: (Sample FK759) 12" x 12" Tan Floor Tile Tested Positive



Bldg. 165 Mech. Room: (Sample FK766) Transite Wall and Ceiling Panels Tested Positive





1st FLOOR

BLDG. 165
NOT TO SCALE





ವರಣಗಳ ವರ್ಷಗಳ ಮಾರ್ಚಿಕ ಮುಂದಿ ಕರ್ಮಕ್ಕೆ ಅಂದರ್ಭಕ್ಕೆ ಅಂದರ್ಭಕ್ಕೆ ಈ ಮುಂದಿ ಮುಂದಿ

166

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### **REPAIR SHOP**

### 166.1 GENERAL

Building 166 was surveyed by WESTON's inspection team on 12 August 1992.

Polarized Light Microscopy (PLM) with dispersion staining was used to analyze six samples of suspect material collected from the building. Of these samples, all six were found to be nonasbestos-containing material (non-ACM).

The location, description, and analytical results for each of the bulk samples from Building 166 are presented in Table 166.1.

### 161.2 CONCLUSION

Based on the survey and the laboratory results of the samples collected in Building 166, WESTON concludes that accessible areas of Building 166 do not contain ACM.

TABLE 166.1

BULK SAMPLE ANALYSIS RESULTS - BUILDING 166, REPAIR SHOP

SAMPLE				PERC	<u>ent asbi</u>	<u>ESTOS</u>	
NO.	LOCATION	ITEM	DESCRIPTION	СН	AM	OT	LAYERED
FK753	CONFERENCE ROOM	CEILING BOARD	WHITE,OTH,CEIL BOARD	-	-	-	NO
FK754	LADIES ROOM	FLOOR TILE	TAN,OTH,FLOOR TILE	-	-	-	NO
FK755	SECRETARY	FLOOR TILE	BROWN,OTH,FLOOR TILE	-	-	-	YES
FK756	ATTIC	EXPANSION JOINT(S)	BLUE, OTH, EXP CLOTH	-	-	-	YES
FK757	ATTIC	4-8" PIPE FITTING	WHITE,UNK,FIT INSUL	-	-	-	YES
FK758	MECHANICAL ROOM	9-14" PIPE RUN	WHITE, OTH, BREECH. INS	-	-	-	YES

<sup>&</sup>lt;sup>a</sup>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 166.2

### ASBESTOS-CONTAINING MATERIALS - BUILDING 166, REPAIR SHOP

	PIPE FITTINGS (EA)	PIPE RUNS (LF)	SPRAY/TROWELED FLOOR TILE	BOILERS/ AIR HANDLING
AREA	<4" 4-8" 9-14" <b>&gt;</b> 1	ıı <4" 4-8" 9-14" >14"	CEILINGS (MSF) (MSF)	TANKS (MSF) EQUIPMENT (MSF) OTHER

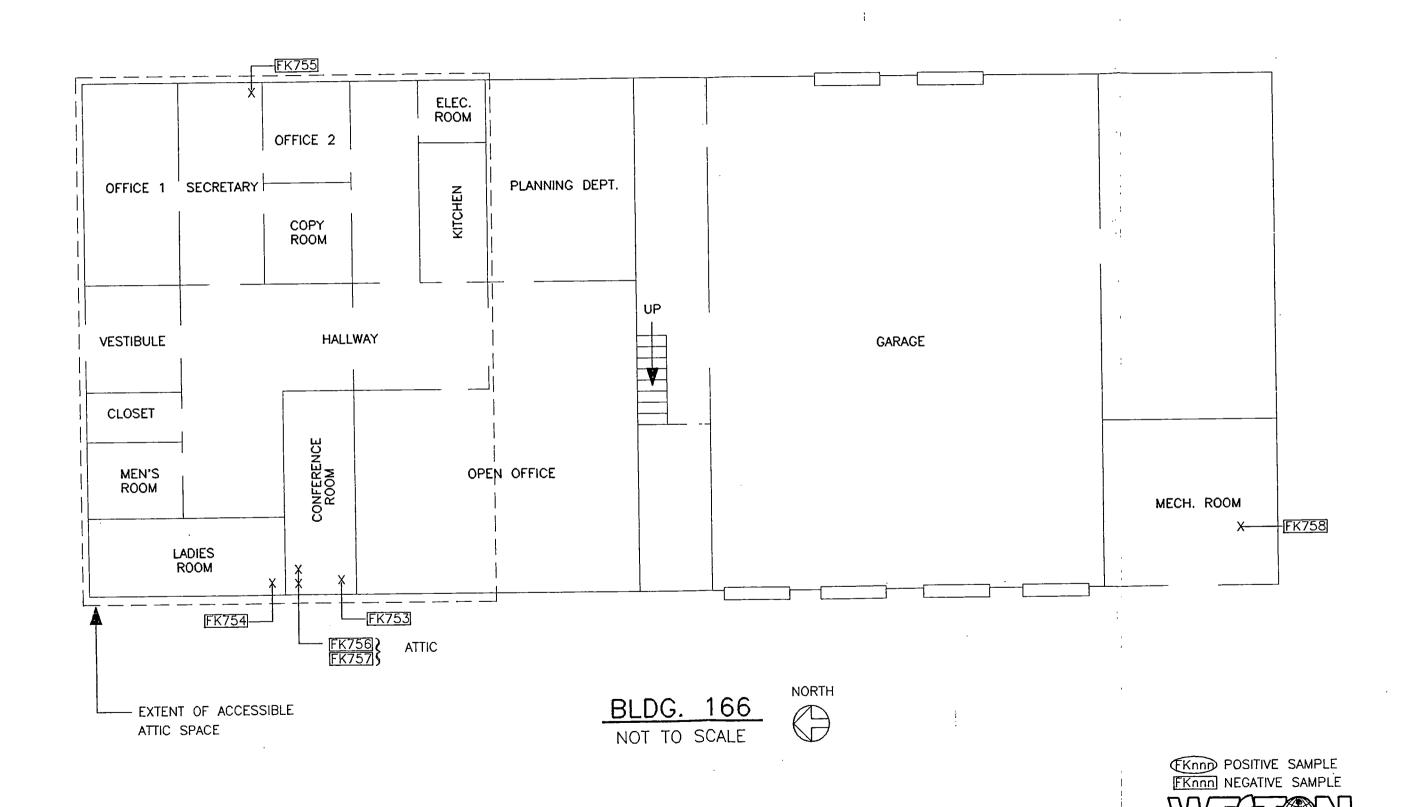
No Asbestos Containing Material Detected In This Building

EA - Each

LF - Linear Feet

MSF - Thousand Square Feet

<sup>\*</sup> Other Material Present In Various Units Of Measure



00.3

166-4

#### **STORAGE**

#### 170.1 GENERAL

Building 170 was surveyed by WESTON's inspection team on 25 August 1992.

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

Assumed asbestos-containing transite panels were found in Building 170. This material was not sampled; instead it was referenced to a similar transite panel found in Building 171, which was tested to be ACM.

### 170.2 ACM AND EXPOSURE ASSESSMENT

An area-by-area inventory of ACM is provided in Tables 170.2 and 170.3. "Other Asbestos-Containing Materials," listed in Table 170.3, are materials that do not correspond to the standard caption categories listed in Table 170.2. A prioritized listing of exposure assessments is presented in Table 170.4. The method by which the exposure assessment priority index values are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.5 of this report. An itemized area-by-area cost estimate for removal and replacement is provided in Table 170.5. The method by which removal/replacement costs are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.4 of this report.

## 170.3 RECOMMENDATIONS/CONCLUSIONS

- Transite panel was the material in Building 170 found to be ACM.
- The storage area in Building 170 qualifies for the Army Asbestos Deficiency Abatement Project (AADAP).

TABLE 170.1

### BULK SAMPLE ANALYSIS RESULTS - BUILDING 170, STORAGE

	<del> </del>	<del></del>		
SAMPLE				PERCENT ASBESTOS
NO	LOCATION	ITEM	DESCRIPTION	CH AM OT LAYERED

Suspect material noted in this building was correlated with material sampled from adjacent buildings. Those materials that tested positive (i.e. that contains asbestos) are reflected in the schematic floor plans of this discussion and are included in the cost estimates (labor and material expenses) shown in the following tables.

SE = Southeast
SW = Southwest

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

<sup>&</sup>lt;sup>a</sup>Asbestos content presented for layered samples represents the highest concentration layer.

## ASBESTOS-CONTAINING MATERIALS - BUILDING 170, STORAGE

-	Р	IPE FITT	INGS (EA)	)		PIPE RUNS (LF)			SPRAY/TROWELED	FLOOR TILE	BOILERS/ AIR HANDLING			
AREA	<411	4-8"	9-14"	>14"	<4 <sup>11</sup>	4-8"	9-14"	>14"	CEILINGS (MSF)	(MSF)	TANKS (MSF)	EQUIPMENT (MSF)	OTHER	
STORAGE					<del></del>	<del>-</del>		<del>-</del>					*	
TOTALS	<del>-</del> _	-	-	-	<del>.</del>			-	-		<del>-</del>	<u>-</u>	*	

Other Material Present In Various Units Of Measure

EA - Each

LF - Linear Feet MSF - Thousand Square Feet

**Table 170.3** 

# Other Asbestos-Containing Material - Building 170, Storage Type Occupancy: Adults (Public)

Area	Material Type	Quantity (Unit)
Storage	Transite Panel	0.160 (MSF)

EA - Each

LF - Linear Feet

MSF - Thousand Square Feet

## EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 170, STORAGE

SAMPLE NO.	AREA	MATERIAL TYPE	PRIOR. INDEX CODE	PRIORITY INDEX NUMBER	EXPOSURE FACTORS 1 2 3 4 5	AVG. EXP. HOURS	% ASB.	·
FK897	STORAGE	TRANSITE PANEL BOARD	С	1.700E05	3 3 2 3 2	20.00	35	

<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 170.5 COST ESTIMATE\* - BUILDING 170, STORAGE

DECCRIPTION	UNIT COST (\$)	AREĄ	TOTAL
DESCRIPTION  Ding Fittings (FA)			TOTAL
Pipe Fittings (EA)	ZQ-30	=	:
4-8" 9-14" >14"	70.30 85.80 147.00 216.00	-	:
Pipe Runs (LF)			•
4-8"	26:50 30:50	-	:
478" 9-14" >14"	26.50 30.50 22.50 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		1.8	1.8
SUBTOTAL		1.8	1.8
Difficulty Allowance		-	-
SUBTOTAL		1.8	1.8
Decontamination Units Mobilization		<b>3</b> :8	<b>3:</b> 8
SUBTOTAL		6.8	6.8
Contingency a 15.00%		1.0	1.0
SUBTOTAL	•	7.8	7.8
Design Fee a 10.00%		0.8	0.8
SUBTOTAL	•	8.6	8.6
Air Monitoring a 10.00%	***	0.9	0.9
TOTAL	•	9.4	9.4

<sup>\*</sup>Amounts Are In Thousands Of Dollars

AREA 1: STORAGE

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

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

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#### **STORAGE**

#### 171.1 GENERAL

Building 171 was surveyed by WESTON's inspection team on 25 August 1992.

The first three portions of this facility report summarize the results of this inspection. A photograph of the transite panel sample location is provided in Subsection 171.4.

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 171.1 lists the analytical results for the bulk sample.

#### 171.2 ACM AND EXPOSURE ASSESSMENT

The location, description, and analytical results for the bulk sample from Building 171 are presented in Table 171.1. An area-by-area inventory of ACM is provided in Tables 171.2 and 171.3. "Other Asbestos-Containing Materials," listed in Table 171.3, are materials that do not correspond to the standard caption categories listed in Table 171.2. A prioritized listing of exposure assessments is presented in Table 171.4. The method by which the exposure assessment priority index values are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.5 of this report. An itemized area-by-area cost estimate for removal and replacement is provided in Table 171.5. The method by which removal/replacement costs are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.4 of this report. Building floor plans (see attachment) indicate sample locations and building area names as they are listed in Tables 171.2 and 171.5.

## 171.3 RECOMMENDATIONS/CONCLUSIONS

- Transite panel was the material in Building 171 found to be ACM.
- The storage area in Building 171 qualifies for the Army Asbestos Deficiency Abatement Project (AADAP).

TABLE 171.1

## BULK SAMPLE ANALYSIS RESULTS - BUILDING 171, STORAGE

SAMPLE				PERCE	NT ASB	<u>ESTOS</u>	•
NO.	LOCATION	ITEM	DESCRIPTION	CH	AM	ОТ	LAYERED a
FK897 STORAG	SE	TRANSITE PANEL BOARD	GRAY,OTH,TRANS PANL	35	-	-	YES

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

Quadrant Codes	System Codes	<u>Asbestos Types</u>
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		я

	PI	PE FITT	NGS (EA)			PIPE RU	NS (LF)		SPRAY/TROWELED	FLOOR TILE	BOILERS/	AIR HANDLING	
AREA	<4 <sup>11</sup>	4-8"	9-14"	>14"	<4"	4-8"	9-14"	>14"	CEILINGS (MSF)	(MSF)	TANKS (MSF)	EQUIPMENT (MSF)	OTHER
STORAGE		<del>-</del>		<u>-</u>			<u></u>		<del>-</del>				
TOTALS	<b>-</b>		-	-	-				-	-	-	<u> </u>	*

<sup>\*</sup> Other Material Present In Various Units Of Measure

EA - Each

LF - Linear Feet MSF - Thousand Square Feet

**Table 171.3** 

# Other Asbestos-Containing Material - Building 171, Storage Type Occupancy: Adults (Public)

Area	Material Type	Quantity (Unit)
Storage	Transite Panel	0.160 (MSF)

EA - Each

LF - Linear Feet

MSF - Thousand Square Feet

TABLE 171.4 EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 171, STORAGE

SAMPLE NO.	AREA	MATERIAL TYPE	PRIOR. INDEX CODE	PRIORITY INDEX NUMBER	EXPO	SURI	E FA	CTORS 5	AVG. EXP. HOURS	% ASB.	
FK897 FK897	STORAGE STORAGE	TRANSITE PANEL BOARD TRANSITE PANEL BOARD	C	1.700E05 1.700E05	3 3 3 3	2	3 3	2 2	20.00 20.00	35 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 171.5

COST ESTIMATE\* - BUILDING 171, STORAGE

	UNIT COST (\$)	AREĄ	
DESCRIPTION	COST (\$)	1	TOTAL
Pipe Fittings (EA)	<b>72-3</b> 2	-	:
Pipe Fittings (EA)  4-8" 9-14" >14"	70.30 85.80 147.00 216.00	•	=
Pipe Runs (LF)			
4-8"	26.50 30.50 42.50 60.80	=	=
4-8" 9-14" >14"	<b>26:8</b> 8	Ξ	-
Sprayed/Troweled Ceilings (SF)	9.60	-	
Floor Tile (SF)	5.60	-	_
Boilers/Tanks (SF)	37.90	-	-
Air Handling Equipment (SF)	20.00	-	-
Other		1.8	1.8
SUBTOTAL		1.8	1.8
Difficulty Allowance		-	-
SUBTOTAL		1.8	1.8
Decontamination Units Mobilization		3:0 2:0	<b>3</b> :8
SUBTOTAL		6.8	6.8
Contingency a 15.00%		1.0	1.0
SUBTOTAL		7.8	7.8
Design Fee a 10.00%	1	0.8	0.8
SUBTOTAL		8.6	8.6
Air Monitoring a 10.00%	**	0.9	0.9
TOTAL		9.4	9.4

<sup>\*</sup>Amounts Are In Thousands Of Dollars

AREA 1: STORAGE

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

<sup>\*\*\*</sup>The Minimum Air Monitoring Fee is \$500.00 Per Building

# 171.4

# **PHOTOGRAPH**



Bldg. 171 Storage: (Sample FK897) Transite Panel Tested Positive

NORTH BLDG. 171
NOT TO SCALE FKnnn POSITIVE SAMPLE 171-9

):46 am

1/02/9 FILE: 7

## **FAMILY HOUSING**

## 202.1 GENERAL

Building 202 (Units A and B) was surveyed by WESTON's inspection team on 18 September 1992.

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 four samples of suspect material collected from the building. Of these samples, two were found to be asbestos-containing materials (ACM). Table 202.1 lists the analytical results for the bulk samples.

## 202,2 ACM AND EXPOSURE ASSESSMENT

The location, description, and analytical results for each bulk sample from Building 202 (Units A & B) are presented in Table 202.1. An area-by-area inventory of ACM is provided in Tables 202.2 and 202.3. "Other Asbestos-Containing Materials," listed in Table 202.3, are materials that do not correspond to the standard caption categories listed in Table 202.2. A prioritized listing of exposure assessments is presented in Table 202.4. The method by which the exposure assessments priority index values are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.5 of this report. An itemized area-by-area cost estimate for removal and replacement is provided in Table 202.5. The method by which removal/replacement costs are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.4 of this report. Building floor plans (see attachment) indicate sample locations and building area names as they are listed in Tables 202.2 and 202.5.

# 202.3 RECOMMENDATIONS/CONCLUSIONS

- Floor tile was the only material in Building 202 identified as ACM.
- Asbestos-containing floor tile present in Building 202 should be labeled under the O&M Program.

TABLE 202.1

BULK SAMPLE ANALYSIS RESULTS - BUILDING 202, FAMILY HOUSING

SAMPLE				PERCE	NT ASB	<u>ESTOS</u>	
NO.	LOCATION	ITEM	DESCRIPTION	СН	AM	_ 0T	LAYERED
FK945	3RD FL BATHRM UNIT A	FLOOR TILE	GRAY,OTH,FLOOR TILE	-	-	-	NO
FK946	1STFL PORCH UNIT A	FLOOR TILE	BROWN,OTH,FLOOR TILE	1	-	-	YES
FK947	1ST FL KITCH UNIT A	FLOOR TILE	GRAY, OTH, FLOOR TILE	-	-	-	YES
FK948	1ST FL KITCH UNIT B	FLOOR TILE	TAN,OTH,FLOOR TILE	3	-	-	NO

 $<sup>^{\</sup>mathbf{a}}$ 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	HKW = 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 202.2 ASBESTOS-CONTAINING MATERIALS - BUILDING 202, FAMILY HOUSING

	PI	PE FITT	INGS (EA)			PIPE RUI	NS (LF)		SPRAY/TROWELED	FLOOR TILE	BOILERS/	AIR HANDLING	
AREA	<4"	4-8"	9-14"	>14"	<4 <sup>11</sup>	4-8#	9-14"	>14"	CEILINGS (MSF)	(MSF)	TANKS (MSF)	EQUIPMENT (MSF)	HTO
ST FL BATHRM UNIT B	-	_	_	-	-	_	-	-	-	0.04	-	-	-
ST FL KITCH UNIT B	-	-	-	-	-	-	-	-	-	0.09	-	-	-
STFL PORCH UNIT A	-	-	-	-	-	-	-	-	-	0.08	-	-	-
STFL S.PORCH UNIT B	<del>-</del>			<u> </u>	<u> </u>	<del></del>			-	0.06			
DTALS	-	-	_	-	_	_	_	_	-	0.27	-	-	-

Other Material Present In Various Units Of Measure

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

## **Table 202.3**

# Other Asbestos-Containing Material - Building 202, Family Housing 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 202.4

## EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 202, FAMILY HOUSING

			PRIOR.	PRIORITY		AVG.		
SAMPLE		MATERIAL	INDEX	INDEX	EXPOSURE FACTORS	EXP.	*	
NO.	AREA	TYPE	CODE	NUMBER	1 2 3 4 5	HOURS	ASB.	
MU <sub>1</sub>	ANGA							

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

Exposure Factors

1 [=] Material Friability

2 [=] Occupant Accessability

3 [=] Material Condition

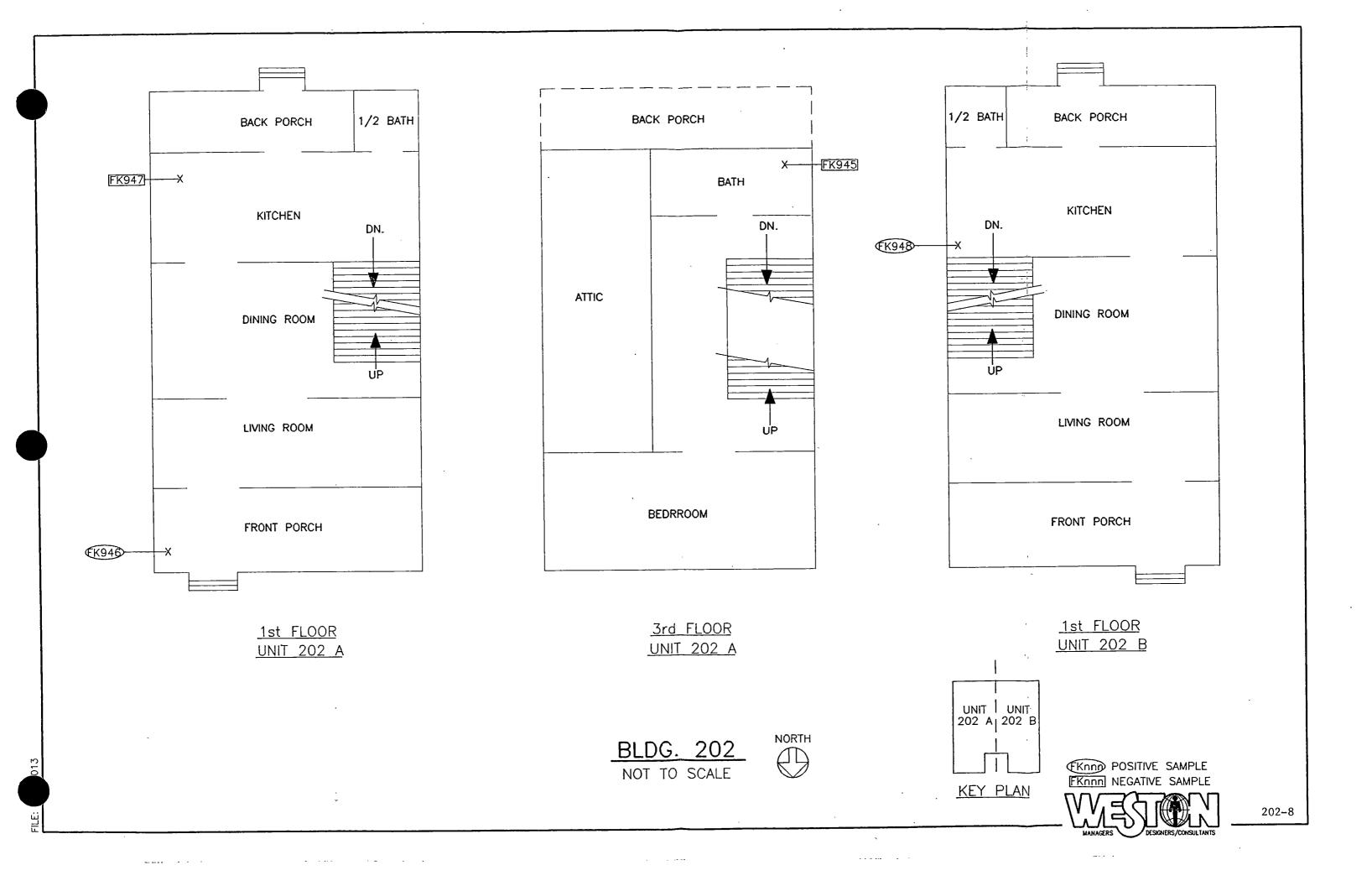
4 [=] Level Of Activity
5 [=] Number Of Assigned Occupants

**TABLE 202.5** COST ESTIMATE\* - BUILDING 202, FAMILY HOUSING

	UNIT	AREĄ	AREĄ	AREĄ	AREĄ	
DESCRIPTION	COST (\$)			3	4	TOTAL
Pipe Fittings (EA) 4-8" 9-14" >14"	79.30	:	:	:	Ξ	:
9-74" >14"	70.30 15.80 147.00 216.00	-	:	:	=	-
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	0.5	0.4	0.3	1.5
Boilers/Tanks (SF)	37.90	-	-	-	-	-
Air Handling Equipment (SF)	20.00	-	-	-	-	-
Other	•	<b>-</b>	-	-	•	-
SUBTOTAL		0.2	0.5	0.4	0.3	1.5
Difficulty Allowance		-	-	-	•	<u>-</u>
SUBTOTAL		0.2	0.5	0.4	0.3	1.5
Decontamination Units Mobilization		1.5	<b>1:</b> 5	<b>1:</b> 5	8:₹	<b>2:8</b>
SUBTOTAL		2.2	2.5	2.4	2.3	9.5
Contingency a 15.00%		0.3	0.4	0.4	0.4	1.4
SUBTOTAL		2.5	2.9	2.8	2.7	10.9
Design Fee @ 10.00%	1	0.3	0.3	0.3	. 0.3	1.1
SUBTOTAL	***	2.8	3.2	3.1	3.0	12.0
Air Monitoring a 10.00%	<b>ξ</b>	0.3	0.3	0.3	0.3	1.2
TOTAL		3.1	3.5	3.4	3.3	13.2

<sup>\*</sup>Amounts Are In Thousands Of Dollars

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



## COMMUNICATION EQUIPMENT FACILITY

#### 210.1 GENERAL

Building 210 was surveyed by WESTON's inspection team on 13 August 1992.

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 two samples of suspect material collected from the building. Of these samples, one was found to be asbestos-containing material (ACM). Table 210.1 lists the analytical results for the bulk samples.

## 210.2 ACM AND EXPOSURE ASSESSMENT

The location, description, and analytical results for each bulk sample from Building 210 are presented in Table 210.1. An area-by-area inventory of ACM is provided in Tables 210.2 and 210.3. "Other Asbestos-Containing Materials," listed in Table 210.3, are materials that do not correspond to the standard caption categories listed in Table 210.2. A prioritized listing of exposure assessments is presented in Table 210.4. The method by which the exposure assessments priority index values are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.5 of this report. An itemized area-by-area cost estimate for removal and replacement is provided in Table 210.5. The method by which removal/replacement costs are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.4 of this report. Building floor plans (see attachment) indicate sample locations and building area names as they are listed in Tables 210.2 and 210.5.

# 210.3 RECOMMENDATIONS/CONCLUSIONS

- Floor tile was the only material in Building 210 identified as ACM.
- Asbestos-containing floor tile present in Building 210 should be labeled under the O&M Program.

TABLE 210.1

BULK SAMPLE ANALYSIS RESULTS - BUILDING 210, COMM. EQUIP.FACILIY

SAMPLE				PERCE	NT ASBI	STOS	
NO.	LOCATION	ITEM	DESCRIPTION	СН	AM	OT	LAYERED
FK788	COMPUTER/FILES	CEILING TILE	WHITE,OTH,CEIL. BRD	-	-	_	YES
FK789	COMPUTER/FILES-RAMP	FLOOR TILE	TAN,OTH,12X12 F.T.	5	-	-	NO

 $<sup>^{\</sup>mathbf{a}}$ 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 = Keating Hot Water	OT = Other
S = South	DOM = Domestic Water	
W = West	OTH = Other	
NE = Northeast	UNK = Unknown	
NW = Northwest		
SE = Southeast	•	

	PI	PE FITT	INGS (EA)			PIPE RU	NS (LF)		SPRAY/TROWELED	FLOOR TILE	BOILERS/	AIR HANDLING	
AREA	<4"	4-8"	9-14"	>14 <sup>11</sup>	<4"	4-8"	9-14"	>14"	CEILINGS (MSF)	(MSF)	TANKS (MSF)	EQUIPMENT (MSF)	OTH
COMPUTER/FILES-RAMP	_	-	-	-		-	-	-	-	0.16	-	-	-
ADIES' ROOM	-	-	-	-	-	-	-	-	-	0.07	-	-	-
MEN'S ROOM	<del></del>	<del></del>		<del></del>	<del>·</del>	<u> </u>	:	<del></del>	<del></del>	0.17			
TOTALS	-	-	•	-	-	-	-	-	<u>-</u>	0.40			-

Other Material Present In Various Units Of Measure

EA - Each

LF - Linear Feet MSF - Thousand Square Feet

**Table 210.3** 

# Other Asbestos-Containing Material - Building 210, Comm. Equip. Facility 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 210.4 EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 210, COMM. EQUIP.FACILIY

SAMPLE		MATERIAL	PRIOR. INDEX	PRIORITY INDEX	EXP	SURE	E FAC	CTORS	AVG. Exp.	x
NO.	AREA	TYPE	CODE	NUMBER	1 7	2 3	4	5	HOURS	ASB.
FK788	COMPUTER/FILES	CEILING TILE	Α	0	3 '	ı 1	1	12	8.00	0
FK788	OFFICE AREA 1	CEILING TILE	Ä	Ö	3 '	1 1	1	12	8.00	0
FK788	OFFICE AREA 2	CEILING TILE	Ä	0	3 '	1 1	1	12	8.00	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

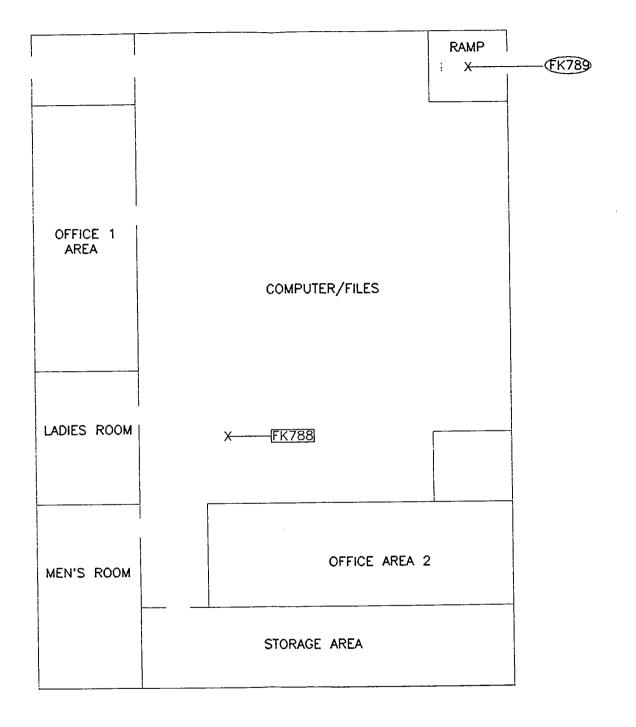
**TABLE 210.5** COST ESTIMATE\* - BUILDING 210, COMM. EQUIP.FACILIY

DESCRIPTION	UNIT COST (\$)	AREA	AREA 2	AREA	TOTAL
Pipe Fittings (EA) 4-8"	70.30 85.80 147.80 216.00	:	:	-	:
4-8" 9-14" >14"	216:88	=	=	:	:
Pipe Runs (LF)	26-50	•	-	•	-
3 <sup>7</sup> 8" 9-74" >14"	26.50 30.50 42.50 60.80	:	=	=	-
Sprayed/Troweled Ceilings (SF)	9.60	-	÷	-	-
Floor Tile (SF)	5.60	0.9	0.4	0.9	2.2
Boilers/Tanks (SF)	37.90	-	-	-	-
Air Handling Equipment (SF)	20.00	-	-	-	•
Other		-	-	-	-
SUBTOTAL		0.9	0.4	0.9	2.2
Difficulty Allowance		-	-	- '	-
SUBTOTAL		0.9	0.4	0.9	2.2
Decontamination Units Mobilization		<b>∂:</b> 9	<b>∂:</b> 9	<b>3:</b> 9	3:8
SUBTOTAL		2.6	2.1	2.6	7.2
Contingency a 15.00%		0.4	0.3	0.4	1.1
SUBTOTAL		2.9	2.4	3.0	8.3
Design Fee a 10.00%		0.3	0.2	0.3	0.8
SUBTOTAL		3.2	2.6	3.3	9.1
Air Monitoring a 10.00%	***	0.3	0.3	0.3	0.9
TOTAL		3.5	2.9	3.6	10.0

<sup>\*</sup>Amounts Are In Thousands Of Dollars

AREA 1: COMPUTER/FILES-RAMP AREA 3: MEN'S ROOM

<sup>\*\*\*</sup>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. 210

NOT TO SCALE





#### **MUSEUM**

#### **275.1 GENERAL**

Building 275 was surveyed by WESTON's inspection team on 11 August 1992.

The first three portions of this facility report summarize the results of this inspection. Photographs of pipe run and fitting sample locations are provided in Subsection 275.4.

Polarized Light Microscopy (PLM) with dispersion staining was used to analyze 13 samples of suspect material collected from the building. Of these samples, 10 were found to be asbestos-containing materials (ACM). Table 275.1 lists the analytical results for the bulk samples.

## 275.2 ACM AND EXPOSURE ASSESSMENT

The location, description, and analytical results for each bulk sample from Building 275 are presented in Table 275.1. An area-by-area inventory of ACM is provided in Tables 275.2 and 275.3. "Other Asbestos-Containing Materials," listed in Table 275.3, are materials that do not correspond to the standard caption categories listed in Table 275.2. A prioritized listing of exposure assessments is presented in Table 275.4. The method by which the exposure assessments priority index values are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.5 of this report. An itemized area-by-area cost estimate for removal and replacement is provided in Table 275.5. The method by which removal/replacement costs are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.4 of this report. Building floor plans (see attachment) indicate sample locations and building area names as they are listed in Tables 275.2 and 275.5.

## 275.3 RECOMMENDATIONS/CONCLUSIONS

- The ACMs present in Building 275 are:
  - Floor tile
  - Pipe insulation
  - Transite panel
  - Wall tile
- The ACMs listed above should be labeled under the O&M Program.

TABLE 275.1

BULK SAMPLE ANALYSIS RESULTS - BUILDING 275, MUSEUM

SAMPLE			DESCRIPTION	PERCE CH	<u>ent asbi</u> Am	0T	LAYERED
NO.	LOCATION	ITEM	DESCRIPTION		- Alt		LATERED
FK740	MECHANICAL ROOM 2	9-14" PIPE RUN	WHITE, OTH, FLUE INSUL	-	-	-	YES
FK741	ATTIC	4-8" PIPE FITTING	GREEN,UNK,FIT INSUL	50	-	-	NO
FK742	ATTIC	4-8" PIPE RUN	GREEN, UNK, RUN INSUL	65	-	-	NO
FK743	ATTIC	4-8" PIPE FITTING	GREEN,UNK,FIT INSUL	50	-	-	NO
FK744	ATTIC	4-8" PIPE RUN	GREEN, UNK, RUN INSUL	50	-	-	YES
FK745	ENTIRE 2ND FLOOR	FLOOR TILE	GREEN, OTH, FLOOR TILE	5	-	-	NO
FK745	LOBBY	TRANSITE PANEL BOARD	GRAY, OTH, TRANS PANL	25	-	-	NO
	·	FLOOR TILE	TAN,OTH,FLOOR TILE	-	-	-	YES
FK747	MEN'S BATHROOM	CEILING BOARD	WHITE, OTH, CEIL BOARD	-	-	-	YES
FK748	DISPLAY AREA	ACOUSTICAL WALL TILE	GRAY OTH WALL TILE	30	-	-	YES
FK749	WEST WALL	FLOOR TILE	TAN,OTH,FLOOR TILE	5	-	-	NO
FK750	ENTIRE 1ST FLOOR		GREEN,OTH,9X9 FLR TL	5		-	NO
FK751	EXIT 1	FLOOR TILE		10		-	NO
FK752	CRAWLSPACE	FLOOR TILE	GRAY,OTH,FLOOR TILE	10			NO

<sup>&</sup>lt;sup>a</sup>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		
CE - Couthoost		

**TABLE 275.2** ASBESTOS-CONTAINING MATERIALS - BUILDING 275, MUSEUM

	PI	PE FITT	INGS (EA)			PIPE RU	NS (LF)		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
TIC	_	11	-		-	171	-	-	-	-	-	-	-
AWLSPACE	-	'-	-	-			-	-	-	0.60	•	-	-
ST WALL	-	-	•	-		-	-	-	-	-	-	-	*
ITIRE 1ST FLOOR	_	_	-	-	•	-	-	-	-	3.60	-	-	-
TIRE 2ND FLOOR	-	-	-	-	-	-	-	-	-	0.60	• '	-	-
IT 1	-	-	_	-	-	-	-	-	-	0.28	-	-	-
BBY	-	-	-	-	-	-	-	-	-	-	-	-	*
CHANICAL ROOM 2	-	1	-	-	-	2	-	-	-	-	-	-	-
FICE 200	-	-	-	-	-	6	-	-	-	-	-	-	-
ST WALL			<del></del>					<del>_</del> ·					*
TALS	_	12	_	-	-	179	-	-		5.08		<u> </u>	*

Other Material Present In Various Units Of Measure

EA - Each

LF - Linear Feet MSF - Thousand Square Feet

Table 275.3

Other Asbestos-Containing Material - Building 275, Museum
Type Occupancy: Adults (Public)

Area	Material Type	Quantity (Unit)
East Wall	Acoustical Wall Tile	1.420 (MSF)
East Wall	Transite Panel	0.960 (MSF)
West Wall	Acoustical Wall Tile	1.420 (MSF)
West Wall	Transite Panel	0.960 (MSF)
Lobby	Transite Panel	0.600 (MSF)

EA - Each

LF - Linear Feet

MSF - Thousand Square Feet

TABLE 275.4 EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 275, MUSEUM

SAMPLE	<del></del>	MATERIAL	PRIOR. INDEX	PRIORITY INDEX	EXPO	SURE	FAC	TORS	AVG. EXP.	*	
NO.	AREA	TYPE	CODE	NUMBER	1 2		4	5	HOURS_	ASB.	
FK746	EAST WALL	TRANSITE PANEL BOARD	В	3.450E02	2 2	1	2	20	1.00	25	
FK746	WEST WALL	TRANSITE PANEL BOARD	В	3.450E02	2 2	1	2	20	1.00	25	
FK749	EAST WALL	ACOUSTICAL WALL TILE	В	3.450E02	2 2	1	2	20	1.00	30	
FK749	WEST WALL	ACOUSTICAL WALL TILE	В	3.450E02	2 2	1	2	20	1.00	30	
FK741	ATTIC	4-8" PIPE FITTING	В	1.325E02	3 2	2	1	1	1.00	50	
FK742	ATTIC	4-8" PIPE RUN	В	1.325E02	3 2	2	1	1	1.00	65	
FK742	OFFICE 200	4-8" PIPE RUN	В	1.325E02	3 2	2	1	1	1.00	65	
FK743	ATTIC	4-8" PIPE FITTING	В	1.325E02	3 2	2	1	1	1.00	50	
FK744	ATTIC	4-8" PIPE RUN	В	1.325E02	3 2	2	1	1	1.00	50	
FK746	LOBBY	TRANSITE PANEL BOARD	A ·	4.750E01	3 2	2	1	1	1.00	25	
FK741	MECHANICAL ROOM 2	4-8" PIPE FITTING	A	1.392E01	3 1	1	1	12	8.00	50	
FK742	MECHANICAL ROOM 2	4-8" PIPE RUN	Α	1.392E01	3 1	1	1	12	8.00	65	
FK740	MECHANICAL ROOM 2	9-14" PIPE RUN	A	0	3 1	. 1	1	12	8.00	0	
FK748	DISPLAY AREA	CEILING BOARD	Α	0	2 1	1	1	20	1.00	0	
FK748	STORAGE ROOM	CEILING BOARD	A	0	1 1	1	1	12	2.00	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 275.5** COST ESTIMATE\* - BUILDING 275, MUSEUM

DESCRIPTION	UNIT COST (\$)	AREA	AREA	AREA 3	AREA	AREA	AREA	AREA	AREA	AREA	AREA 10	TOTAL
Pipe Fittings (EA) 4-8" 9-14" >14"	70:30 85:80 147:00 216:00	0.9	:	:	:	:	:	:	**	:	:	1.0
Pipe Runs (LF) 4-8" 9-14" >14"	26.50 30.50 42.50 60.80	5.2	:	:	:	:	:	:	** :	0.2	:	5.5 -
Sprayed/Troweled Ceilings (SF)	9.60	-	-	-	-	-	-	•	-	-	-	-
Floor Tile (SF)	5.60	-	3.4	<b>-</b> .	20.2	3.4	1.6	•	-	-	-	28.4
Boilers/Tanks (SF)	37.90	-	-	-	-	-	-	•	-	-	-	-
Air Handling Equipment (SF)	20.00	-	-	-	-	-	-		-	-	-	-
Other		•	-	26.2	-	-	-	6.6	-	-	26.2	59.0
SUBTOTAL		6.2	3.4	26.2	20.2	3.4	1.6	6.6	0.1	0.2	26.2	93.9
Difficulty Allowance		9.2	-	-	-	-	-	-	0.5	•	-	9.8
SUBTOTAL		15.4	3.4	26.2	20.2	3.4	. 1.6	6.6	0.7	0.2	26.2	103.6
Decontamination Units Mobilization		8:2	8:2	8:2	8:2	8:8	8:2	8:2	8:3	8:3	8:2	<b>3:8</b>
SUBTOTAL		16.5	4.5	27.3	21.3	4.5	2.7	7.7	1.8	1.3	27.3	114.6
Contingency a 15.00%		2.5	0.7	4.1	3.2	0.7	0.4	1.2	0.3	0.2	4.1	17.2
SUBTOTAL		19.0	5.1	31.4	24.4	5.1	3.1	8.9	2.0	1.5	31.4	131.8
Design Fee @ 10.00%	•	1.9	0.5	3.1	2.4	0.5	.0.3	0.9	0.2	0.1	3.1	13.2
SUBTOTAL		20.9	5.6	34.5	26.9	5.6	3.4	9.7	2.2	1.6	34.5	145.0
Air Monitoring a 10.00%	***	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	14.5
TOTAL		22.3	7.1	36.0	28.3	7.1	4.8	11.2	3.7	3.1_	36.0	159.5

<sup>\*</sup>Amounts Are In Thousands Of Dollars





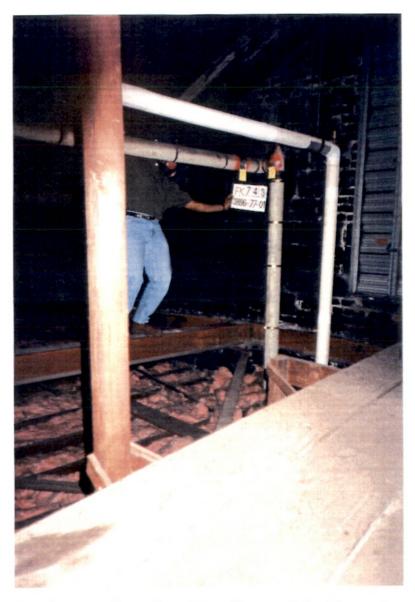
<sup>\*\*\*</sup>Less Than \$100 For The Area; Amount Not Printed But Included In Total(s)
\*\*\*\*The Minimum Air Monitoring Fee is \$500.00 Per Building

# 275.4

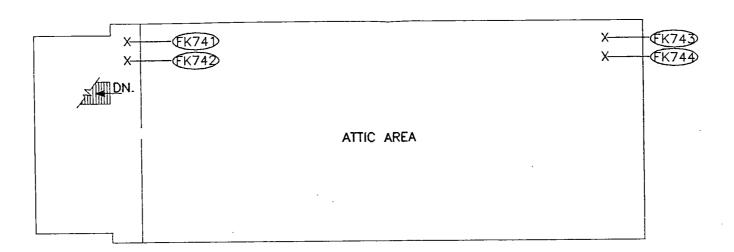
# **PHOTOGRAPHS**



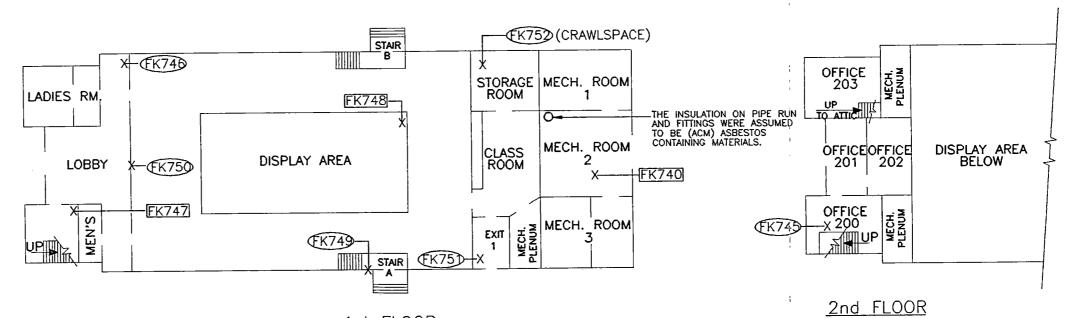
Bldg. 275 Attic: (Sample FK741) 4"-8" Pipe Run and Fitting Insulation Tested Positive



Bldg. 275 Attic: (Sample FK743) 4"-8" Pipe Run and Fitting Insulation Tested Positive



# ATTIC AREA



1st FLOOR

BLDG. 275 NOT TO SCALE





#### **ADMINISTRATION**

#### **276.1 GENERAL**

Building 276 was surveyed by WESTON's inspection team on 12 August 1992.

The first three portions of this facility report summarize the results of this inspection. Photographs of pipe run, fitting, and tank insulation sample locations are provided in Subsection 276.4.

Polarized Light Microscopy (PLM) with dispersion staining was used to analyze nine samples of suspect material collected from the building. Of these samples, eight were found to be asbestos-containing materials (ACM). Table 276.1 lists the analytical results for the bulk samples.

#### 276.2 ACM AND EXPOSURE ASSESSMENT

The location, description, and analytical results for each bulk sample from Building 276 are presented in Table 276.1. An area-by-area inventory of ACM is provided in Tables 276.2 and 276.3. "Other Asbestos-Containing Materials," listed in Table 276.3, are materials that do not correspond to the standard caption categories listed in Table 276.2. A prioritized listing of exposure assessments is presented in Table 276.4. The method by which the exposure assessments priority index values are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.5 of this report. An itemized area-by-area cost estimate for removal and replacement is provided in Table 276.5. The method by which removal/replacement costs are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.4 of this report. Building floor plans (see attachment) indicate sample locations and building area names as they are listed in Tables 276.2 and 276.5.

# 276.3 RECOMMENDATIONS/CONCLUSIONS

- The ACMs present in Building 276 are:
  - Transite panel

  - Pipe insulation
    Floor tile/linoleum
  - Tank insulation
- The ACMs listed above should be labeled under the O&M Program.

TABLE 276.1

BULK SAMPLE ANALYSIS RESULTS - BUILDING 276, ADMINISTRATION

SAMPLE				PERC	ENT_ASB	<u>estos</u>	
NO.	LOCATION	ITEM	DESCRIPTION	СН	AM	OT	LAYERED
FK767	MECHANICAL ROOM	<4" PIPE FITTING	GRAY,UNK,FITTING	10	25	-	NO
FK768	MECHANICAL ROOM	<4" PIPE RUN	GRAY, UNK, INSULATION	10	20	15	YES
	MECHANICAL ROOM	4-8" PIPE FITTING	GRAY,UNK,FITTING	25	15	-	NO
FK770	MECHANICAL ROOM	4-8" PIPE RUN	GRAY,OTH,4-8" PIPE	25	10	-	NO
FK771	MECHANICAL ROOM	BOILERS/TANKS	GRAY, OTH, TANK INSUL	25	-	-	NO
FK772	CRAWLSPACE	<4" PIPE FITTING	GRAY,UNK,<4" FITT.	30	-	-	NO
	CRAWLSPACE	<4" PIPE RUN	GRAY,UNK,<4" PIPE	25	-	-	YES
FK786	BREAKROOM	OTHER MATERIAL	BROWN,OTH,LINOLEUM	3	-	-	YES
	OFFICE AREA	CEILING BOARD	WHITE, OTH, CEIL. BRD	-	-	-	YES

 $<sup>^{\</sup>mathrm{a}}$ 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		

	PI	PE FITT	INGS (EA)	l		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
BREAKROOM	-	-	_	-	-	_	_	-	-	-	-	-	*
CRAWLSPACE	8	10	-	-	60	250	-	-	-	-	-	-	-
MECHANICAL ROOM	4	3		<u> </u>	45	30		<del>-</del>			0.05		<u></u>
TOTALS	12	13	_	_	105	280			-	-	0.05	•	*

<sup>\*</sup> Other Material Present In Various Units Of Measure

EA - Each

LF - Linear Feet MSF - Thousand Square Feet

## **Table 276.3**

# Other Asbestos-Containing Material - Building 276, Administration Type Occupancy: Adults (Public)

Area	Material Type	Quantity (Unit)
Break Room	Linoleum	0.290 (MSF)

EA - Each

LF - Linear Feet

MSF - Thousand Square Feet

TABLE 276.4 EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 276, ADMINISTRATION

SAMPLE		MATERIAL	PRIOR. INDEX	PRIORITY INDEX	EX	POS	URE	FAC	TORS	AVG. Exp.	*
NO.	AREA	TYPE	CODE	NUMBER	1_	2	3	4	5	HOURS	ASB.
FK768	MECHANICAL ROOM	<4" PIPE RUN	В	1.325E02	3	2	2	1	1	1.00	45
FK769	CRAWLSPACE	4-8" PIPE FITTING	В	1.325E02	3	2	2	1	1	1.00	40
FK769	MECHANICAL ROOM	4-8" PIPE FITTING	В	1.325E02	3	2	2	1	1	1.00	40
FK767	MECHANICAL ROOM	<4" PIPE FITTING	A	4.750E01	3	2	2	1	1	1.00	35
FK770	CRAWLSPACE	4-8" PIPE RUN	Α	4.750E01	3	2	2	1	1	1.00	35
FK770	MECHANICAL ROOM	4-8" PIPE RUN	Α	4.750E01	3	2	2	1	1	1.00	<b>3</b> 5
FK771	MECHANICAL ROOM	BOILERS/TANKS	A	4.750E01	3	2	2	1	1	1.00	25
FK772	CRAWLSPACE	<4" PIPE FITTING	A	4.750E01	3	2	2	1	1	1.00	30
FK773	CRAWLSPACE	<4" PIPE RUN	A	4.750E01	3	2	2	1	1	1.00	25
FK786	BREAKROOM	INSULATION BOARD	A	6.500E-1	2	1	1	1	10	40.00	3
FK787	OFFICE AREA	CEILING BOARD	A	0	2	1	1	1	10	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 276.5 COST ESTIMATE\* - BUILDING 276, ADMINISTRATION

A	UNIT COST (\$)	AREĄ	AREA	AREĄ	TOTAL
DESCRIPTION	COST (\$)	1		<u> </u>	TOTAL
Pipe Fittings (EA)	<b>70-30</b>	:	8:6	0: <u>3</u>	<b>9:</b> 8
4 <sup>-</sup> 8" 9-14" >14"	70.30 85.80 127.00 216.00	=	-	= = =	-
Pipe Runs (LF)	26 50	_	1.6	1.2	2.8
}-8" 9-14" >14"	26.50 30.50 42.50 60.80	-	<u>1</u> :8	9:3	2.8 8.5
	60:80	-	-	-	-
Sprayed/Troweled Ceilings (SF)	9.60	-	-	-	-
Floor Tile (SF)	5.60	-	-	-	•
Boilers/Tanks (SF)	37.90	-	-	1.9	1.9
Air Handling Equipment (SF)	20.00	-	-	-	-
Other		1.2	-	-	1.2
SUBTOTAL		1.2	10.6	4.5	16.4
Difficulty Allowance		-	31.9	0.9	32.9
SUBTOTAL		1.2	42.5	5.5	49.3
Decontamination Units Mobilization		<b>∂:</b> ₹	<b>∂:</b> ₹	<b>∂:</b> ₹	2:5
SUBTOTAL		3.4	44.7	7.7	55.8
Contingency a 15.00%		0.5	6.7	1.1	8.4
SUBTOTAL		3.9	51.4	8.8	64.1
Design Fee @ 10.00%		0.4	. 5.1	0.9	6.4
SUBTOTAL		4.3	56.6	9.7	70.5
Air Monitoring a 10.00%	***	2.4	2.4	2.4	7.1
TOTAL		6.6	58.9	12.0	77.6

AREA 1: BREAKROOM AREA 3: MECHANICAL ROOM

<sup>\*</sup>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

276.4

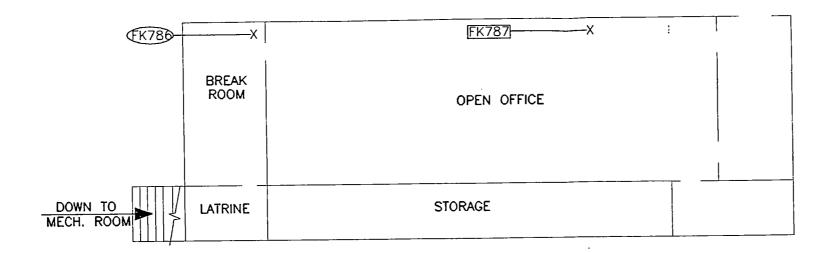
**PHOTOGRAPHS** 



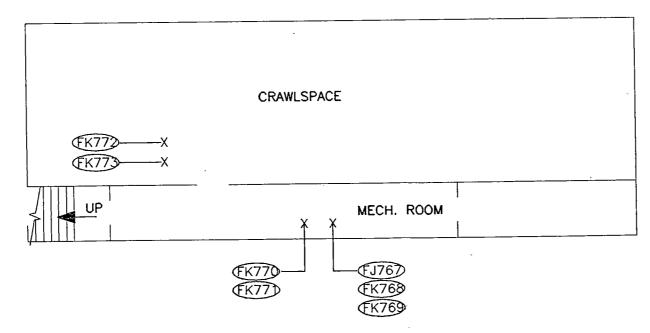
Bldg. 276 Mech. Room: (Sample(s) FK767, 768, 769, and 770) <4" and 4"-8" Pipe Runs and Fittings Insulation Tested Positive



Bldg. 276 Mech. Room: (Sample FK771) Tank Insulation Tested Positive



1st FLOOR



MECHANICAL ROOM/CRAWLSPACE

BLDG. 276

NOT TO SCALE

NORTH



#### **ADMINISTRATION**

#### 277.1 GENERAL

Building 277 was surveyed by WESTON's inspection team on 26 August 1992.

The first three portions of this facility report summarize the results of this inspection. Photographs of pipe run, fitting, and breeching insulation sample locations are provided in Subsection 277.4.

Polarized Light Microscopy (PLM) with dispersion staining was used to analyze eight samples of suspect material collected from the building. All eight samples were found to be asbestos-containing materials (ACM). Table 277.1 lists the analytical results for the bulk samples.

#### 277.2 ACM AND EXPOSURE ASSESSMENT

The location, description, and analytical results for each bulk sample from Building 277 are presented in Table 277.1. An area-by-area inventory of ACM is provided in Tables 277.2 and 277.3. "Other Asbestos-Containing Materials," listed in Table 277.3, are materials that do not correspond to the standard caption categories listed in Table 277.2. A prioritized listing of exposure assessments is presented in Table 277.4. The method by which the exposure assessments priority index values are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.5 of this report. An itemized area-by-area cost estimate for removal and replacement is provided in Table 277.5. The method by which removal/replacement costs are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.4 of this report. Building floor plans (see attachment) indicate sample locations and building area names as they are listed in Tables 277.2 and 277.5.

# 277.3 RECOMMENDATIONS/CONCLUSIONS

- The ACMs present in Building 277 are:
  - Pipe insulation
  - Floor tile
  - Breeching
- The ACMs listed above should be labeled under the O&M Program.

TABLE 277.1

BULK SAMPLE ANALYSIS RESULTS - BUILDING 277, ADMINISTRATION

SAMPLE				PERC			
NO.	LOCATION	ITEM	DESCRIPTION	CH.	AM	OT	LAYERED'
FK908	BOILER RM-MATL STORG	<4" PIPE FITTING	WHITE,UNK,PIPE FITT.	21	-	-	YES
FK909	BOILER RM-MATL STORG	<4" PIPE RUN	WHITE, UNK, PIPE INSUL	<b>3</b> 0	-	-	YES
FK910	BOILER ROOM	OTHER MATERIAL	WHITE, OTH, BREECHING	2	-	-	YES
FK911	SMALL ARMS REPAIR	<4" PIPE RUN	GRAY, UNK, PIPE INSUL	40	-	-	YES
FK912	HALLWAY 3	FLOOR TILE	BROWN,OTH,FLOOR TILE	7	-	-	YES
FK913	HALLWAY 4	FLOOR TILE	TAN,OTH,FLOOR TILE	1	-	-	YES
FK914	ROOM 6	FLOOR TILE	GREEN, OTH, FLOOR TILE	7	-	-	YES
FK915	WOMENS' ROOM	FLOOR TILE	GRAY, OTH, FLOOR TILE	5	-	-	YES
FK917	2ND FLOOR ENTIRE	CEILING BOARD	WHITE, OTH, CEIL. BRD.	-	-	-	YES

 $<sup>^{\</sup>mathrm{a}}$ 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		
SF = Southeast		

TABLE 277.2 ASBESTOS-CONTAINING MATERIALS - BUILDING 277, ADMINISTRATION

	PI	PE FITT	INGS (EA)			PIPE RU	NS (LF)		SPRAY/TROWELED		BOILERS/	AIR HANDLING	
AREA	<4"	4-8"	9-14"	>14"	<4"	4-8"	9-14"	>14"	CEILINGS (MSF)	(MSF)	TANKS (MSF)	EQUIPMENT (MSF)	OTHE
2ND FLOOR ENTIRE	-	-	_	-	-	-	-	-	-	4.08	-	-	-
AC ROOM 2ND FLOOR	10	-	-	-	25	-	-	-	-	-	-	-	-
BOILER RM-MATL STORG	13	-	-	-	50	-	-	-	-	-	-	-	-
BOILER ROOM	-	-	-	-	2	-	-	-	•	-	-	<b>-</b> .	*
HALLWAY 1	-	-	-	-	7	-	-	-	-	-	-	-	-
HALLWAY 2	-	-	-	-	5	-	-	-	-	-	-	-	-
HALLWAY 3	-	-	-	-	_	-	-	-	-	0.28	-	•	-
HALLWAY 4	-	-	-	-	-	-	-	-	-	1.00	-	-	-
MEN'S ROOM	-	-	-	-	-	-	-	-	-	0.06	-	•	-
ROOM 1	-	-	-	-	20	-	-	-	-	-	-	-	-
ROOM 6	_	-	-	-	-	-	-	-	•	0.45	-	-	-
ROOM 7	4	_	-	-	15	_	-	-	-	0.57	-	-	-
ROOM 8	-	-	-	_	-	_	-	-	•	0.48	-	-	-
ROOMS 1 & 2	-	-	-	-	-	-	-	-	-	0.56	-	-	-
ROOMS 3,4,5	_	-	-	_	-	_	-	-	•	1.10	-	-	-
SECURED STORAGE	· <u>-</u>	-	-	-	10	-	_	-	-	-	-	-	-
SMALL ARMS REPAIR	17	_	_	-	52		-	_	-	-	-	-	-
STORAGE ROOM	'6	_	_	_	70	_	_	-	-	-	_	-	-
WOMENS' ROOM	-	-	_	_		_		_		0.22	-	-	-
NOMENS' ROOM								<del></del>				<del></del>	
TOTALS	53	_	_	_	256	_	_	_	•	8.79	_	-	*

Other Material Present In Various Units Of Measure

EA - Each

LF - Linear Feet MSF - Thousand Square Feet

### **Table 277.3**

# Other Asbestos-Containing Material - Building 277, Administration Type Occupancy: Adults (Public)

Area	Material Type	Quantity (Unit)
Boiler Room	Breeching Insulation	25 (LF)

EA - Each

LF - Linear Feet

MSF - Thousand Square Feet

**TABLE 277.4** EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 277, ADMINISTRATION

SAMPLE		MATERIAL	PRIOR. INDEX	PRIORITY INDEX	EXI	ost	JRE	FAC	TORS	AVG. EXP.	*
NO.	AREA	TYPE	CODE	NUMBER	1_	2	3	4	5	HOURS	ASB.
FK911	SMALL ARMS REPAIR	<4" PIPE RUN	С	1.700E05	3	3	1	3	1	40.00	40
FK908	SMALL ARMS REPAIR	<4" PIPE FITTING	Č	6.200E04	3	3	1	3	1	40.00	21
FK908	SMALL ARMS REPAIR	<4" PIPE FITTING	C	6.200E04	3	3	1	3	1	40.00	21
FK909	SMALL ARMS REPAIR	<4" PIPE RUN	C	6.200E04	3	3	1	3	1	40.00	<b>3</b> 0
FK911	AC ROOM 2ND FLOOR	<4" PIPE RUN	· C	1.060E03	2	2	2	2	1	8.00	40
FK908	AC ROOM 2ND FLOOR	<4" PIPE FITTING	В	3.800E02	2	2	2	2	1	8.00	21
FK908	BOILER RM-MATL STORG	<4" PIPE FITTING	В	3.800E02	2	2	2	2	1	8.00	- 21
FK908	STORAGE ROOM	<4" PIPE FITTING	В	3.800E02	2	2	2	2	1	8.00	21
FK909	BOILER RM-MATL STORG	<4" PIPE RUN	В	3.800E02	2	2	2	2	1	8.00	30
FK909	BOILER ROOM	<4" PIPE RUN	В	3.800E02	2	2	2	2	1	8.00	30
FK909	HALLWAY 1	<4" PIPE RUN	В	3.800E02	2	2	2	2	1	8.00	30
FK909	HALLWAY 2	<4" PIPE RUN	В	3.800E02	2	2	2	2	1	8.00	30
FK909	SECURED STORAGE	<4" PIPE RUN	В	3.800E02	2	2	2	2	1	8.00	30
FK909	STORAGE ROOM	<4" PIPE RUN	В	3.800E02	2	2	2	2	1	8.00	30
FK910	BOILER ROOM	GASKET	A	6.600E01	2	2	2	2	1	8.00	2
FK911	ROOM 1	<4" PIPE RUN	A	6.720E00	2	1	2	1	12	8.00	40
FK908	ROOM 7	<4" PIPE FITTING	A	2.400E00	2	1	2	1	12	8.00	21
FK909	ROOM 7	<4" PIPE RUN	A	2.400E00	2	1	2	1	12	8.00	30
FK917	2ND FLOOR ENTIRE	CEILING BOARD	A	0	1	1	1	2	1	8.00	0
FK917	HALLWAY 3	CEILING BOARD	A	0	1	1	1	2	1	8.00	0
FK917	HALLWAY 5	CEILING BOARD	Α	0	1	1	1	2	1	8.00	0
FK917	ROOM 7	CEILING BOARD	A	0	1	1	1	2	1	8.00	0
FK917	ROOM 8	CEILING BOARD	A	0	1	1	1	2	1	8.00	0
FK917	ROOMS 1 & 2	CEILING BOARD	A	0	1	1	1	2	1	8.00	0
FK917	ROOMS 3,4,5	CEILING BOARD	A	0	1	1	1	2	, 1	8.00	0
FK917	WOMENS' ROOM	CEILING BOARD	Α	0	1	1	1	2	1	8.00	0
FK917	WOMENS' ROOM	CEILING BOARD	Α	0	1	1.	. 1	2	1	8.00	0

Priority Index Codes

A [=] Long Term Corrective Measure

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

B [=] Review Management Special Considerations/Remarks

C [=] Army Asbestos Deficiency Abatement Project

**TABLE 277.5** COST ESTIMATE\* - BUILDING 277, ADMINISTRATION

DESCRIPTION	UNIT COST (\$)	AREA	AREA	AREA 3	AREA 4	AREA	AREA	AREA	AREA	AREĄ	AREA 10	AREA 11
Pipe Fittings (EA)  44"  9-14"  >14"	70.30 85.80 147.80 216.00	:	0.7	0.9 -	:	:	:	=	· :	- - -	:	:
Pipe Runs (LF) 4-8" 9-14" >14"	26.50 30.50 60.80	:	0.7 -	1.3	** - - -	0.2	0.1 -	:	:	:	0.5	:
Sprayed/Troweled Ceilings (SF)	9.60	-	-	-	-	-	-	-	-	-	-	-
Floor Tile (SF)	5.60	22.8	-	-	-	-	-	1.5	5.6	0.3	-	2.5
Boilers/Tanks (SF)	37.90	-	-	-	-	-	-	-	-	•	-	-
Air Handling Equipment (SF)	20.00	-	_	-	-	-	-	-	-	-	-	-
Other		-	-	-	2.5	-	-	-	-	-	-	-
SUBTOTAL		22.8	1.4	2.2	2.6	0.2	0.1	1.5	5.6	0.3	0.5	2.5
Difficulty Allowance		11.4	0.7	-	0.2	• •	-	0.8	1.4	-	1.3	1.2
SUBTOTAL		34.3	2.0	2.2	2.7	0.2	0.1	2.3	7.0	0.3	1.9	3.7
Decontamination Units Mobilization		8:5	8:5	8:5	8:5	8:5	8:5	8:5	8:5	8:5	8:5	8:1
SUBTOTAL		34.9	2.6	2.8	3.3	0.8	0.7	2.9	7.6	0.9	2.4	4.3
Contingency a 15.00%		5.2	0.4	0.4	0.5	0.1	0.1	0.4	1.1	0.1	0.4	0.6
SUBTOTAL		40.1	3.0	3.2	3.8	0.9	0.8	3.3	8.7	1.1	2.8	5.0
Design Fee @ 10.00%		4.0	0.3	0.3	0.4	**	**	0.3	0.9	0.1	0.3	0.5
SUBTOTAL		44.1	3.3	3.6	4.2	1.0	0.9	3.7	9.6	1.2	3.1	5.5
Air Monitoring a 10.00%	***	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
TOTAL		44.7	4.0	4.2	4.8	1.6	1.5	4.3	10.2	1.8	3.7	6.1

<sup>\*</sup>Amounts Are In Thousands Of Dollars





<sup>\*\*</sup>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 277.5 (continued)

COST ESTIMATE\* - BUILDING 277, ADMINISTRATION

DESCRIPTION	UNIT COST (\$)	ARĘĄ	AREA	AREA 14	AREA 15	AREA 16	AREA	AREA 18	AREA	TOTAL	
Pipe Fittings (EA)  448"  9-14"  >14"	70.30 85.80 147.80 216.00	0.3 -	-	-	:	:	1.2	0.6	:	3.7 -	
Pipe Runs (LF)	26.50 30.50 60.80	0.4	-	:	:	0.3	1.4 -	1.9	: :	6.8 - -	
Sprayed/Troweled Ceilings (SF)	9.60	-	-	-	-	-	-	-	-	•	
Floor Tile (SF)	5.60	3.2	2.7	3.1	6.2	-	-	-	1.2	49.2	
Boilers/Tanks (SF)	37.90	-	-	-	-	-	•	-	-	-	
Air Handling Equipment (SF)	20.00	-	-	_	-	-	_	. <b>-</b>	-	-	
Other		-	-	-	-	-	-	-	-	2.5	
SUBTOTAL		3.9	2.7	3.1	6.2	0.3	2.6	2.5	1.2	62.2	
Difficulty Allowance		0.3	1.4	1.6	3.1	-	-	-	-	23.4	
SUBTOTAL		4.2	4.1	4.7	9.2	0.3	2.6	2.5	1.2	85.6	
Decontamination Units Mobilization		8:5	8:5	8:5	8:5	8:5	8:5	8:5	8:5	<b>2:8</b>	
SUBTOTAL		4.8	4.6	5.2	9.8	0.8	3.2	3.1	1.8	96.6	
Contingency a 15.00%		0.7	0.7	0.8	1.5	0.1	0.5	0.5	0.3	14.5	
SUBTOTAL		5.5	5.3	6.0	11.3	1.0	3.6	3.5	2.1	111.1	
Design Fee @ 10.00%		0.6	0.5	0.6	1.1	**	0.4	0.4	0.2	11.1	
SUBTOTAL		6.1	5.9	6.6	12.4	1.1	4.0	3.9	2.3	122.2	
Air Monitoring a 10.00%	***	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	12.2	
TOTAL		6.7	6.5	7.3	13.1	1.7	4.6	4.5	2.9	134.4	

<sup>\*</sup>Amounts Are In Thousands Of Dollars

<sup>\*\*\*</sup>The Minimum Air Monitoring Fee is \$500.00 Per Building





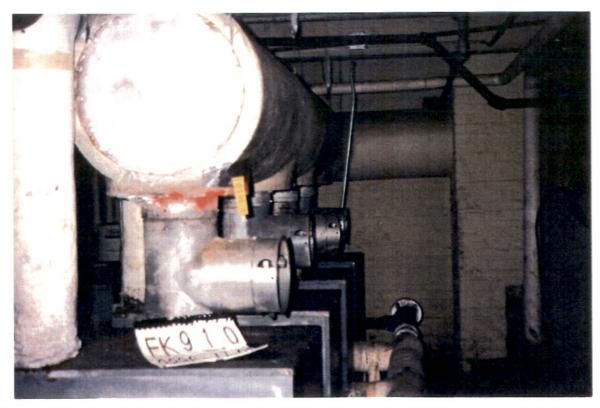
<sup>\*\*</sup>Less Than \$100 For The Area; Amount Not Printed But Included In Total(s)

277.4

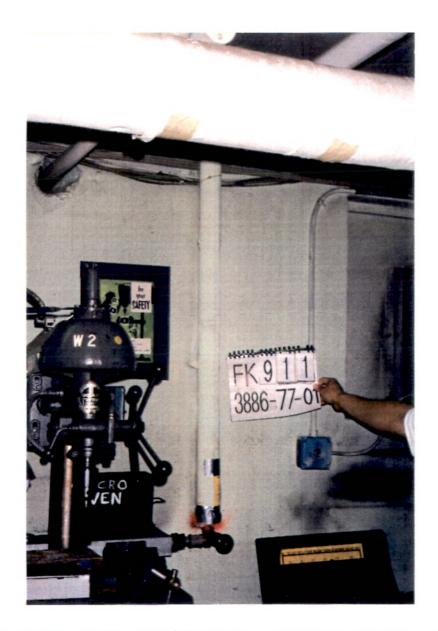
**PHOTOGRAPHS** 



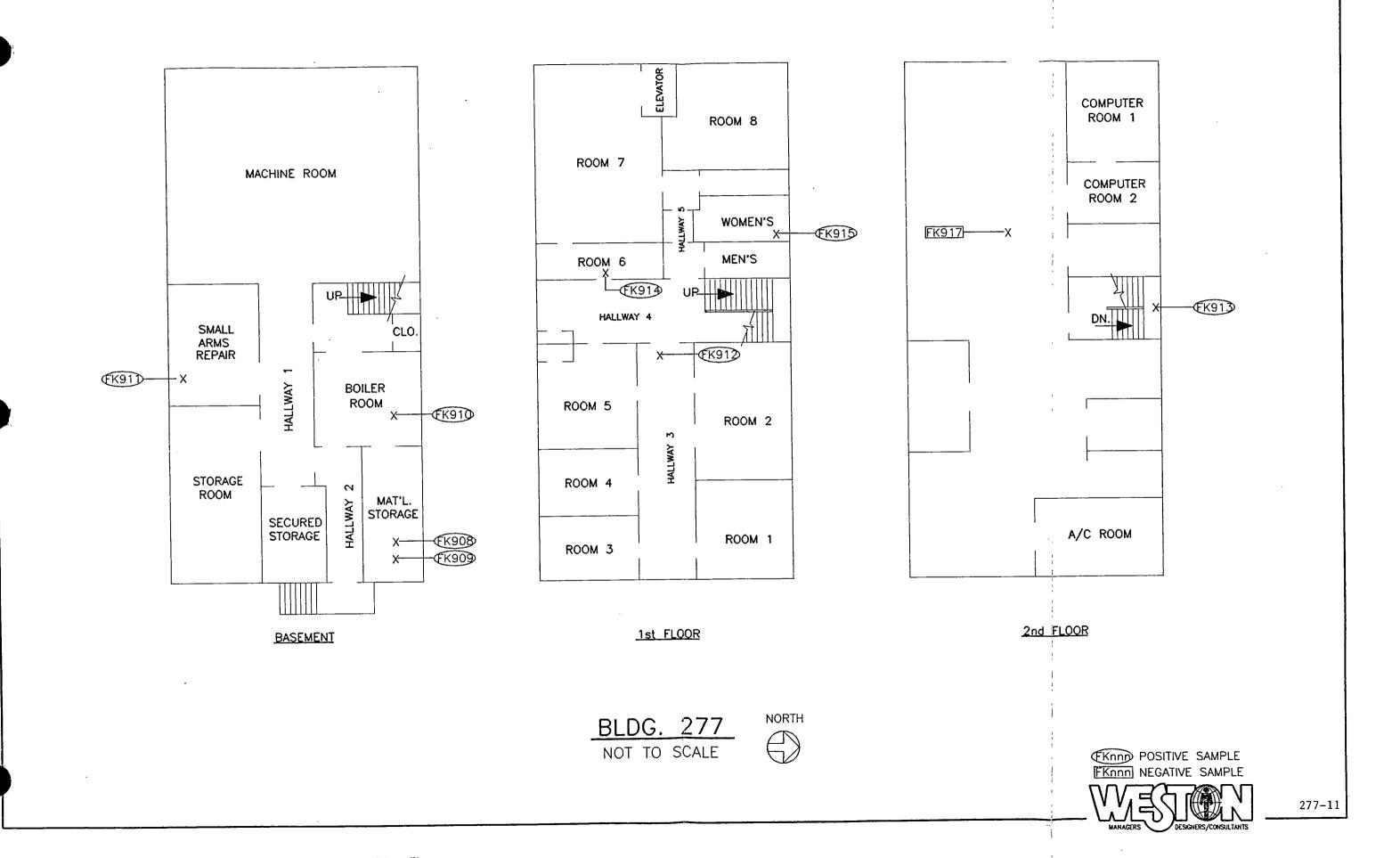
Bldg. 277 Boiler Room, Material Storage: (Sample(s) FK908 and 909) <4" Pipe Run and Fitting Insulation Tested Positive



Bldg. 277 Boiler Room: (Sample FK910) Boiler(s) Breeching Insulation Tested Positive



Bldg. 277 Small Arms Repair Shop: (Sample FK911) <4" Pipe Run Insulation Tested Positive



#### **SUPPLY**

#### 289.1 GENERAL

Building 289 was surveyed by WESTON's inspection team on 13 August 1992.

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 three samples of suspect material collected from the building. Of these samples, one was found to be asbestos-containing material (ACM). Table 289.1 lists the analytical results for the bulk samples.

#### 289.2 ACM AND EXPOSURE ASSESSMENT

The location, description, and analytical results for each bulk sample from Building 289 are presented in Table 289.1. An area-by-area inventory of ACM is provided in Tables 289.2 and 289.3. "Other Asbestos-Containing Materials," listed in Table 289.3, are materials that do not correspond to the standard caption categories listed in Table 289.2. A prioritized listing of exposure assessments is presented in Table 289.4. The method by which the exposure assessments priority index values are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.5 of this report. An itemized area-by-area cost estimate for removal and replacement is provided in Table 289.5. The method by which removal/replacement costs are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.4 of this report. Building floor plans (see attachment) indicate sample locations and building area names as they are listed in Tables 289.2 and 289.5.

# 289.3 RECOMMENDATIONS/CONCLUSIONS

- Floor tile was the only material in Building 289 found to be ACM.
- Asbestos-containing floor tile present in Building 289 should be labeled under the O&M Program.

TABLE 289.1

BULK SAMPLE ANALYSIS RESULTS - BUILDING 289, SUPPLY BUILDING

SAMPLE				<u>PERCI</u>	ENT A <u>sb</u> i	<u>ESTOS</u>	
NO.	LOCATION	ITEM	DESCRIPTION	СН	AM	OT	LAYERED
FK783	ASSEMBLY AREA	CEILING BOARD	WHITE, OTH, CEIL. BRD.	-		-	YES
FK784	ASSEMBLY AREA	FLOOR TILE	TAN,OTH,12X12 F.T.	-	. <b>-</b>	-	YES
FK785	STORAGE ROOM 1	FLOOR TILE	GREÉN,OTH,12X12 F.T.	1	-	-	, NO

 $<sup>^{\</sup>mathbf{a}}$ 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 289, SUPPLY BUILDING

	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)	OTHE
ORAGE ROOM 1				<del>-</del>			<u></u>	<del>-</del>	<u> </u>	0.08		<u> </u>	
TALS	_	_		_	-	-	_	-	-	0.08	-	-	-

Other Material Present In Various Units Of Measure

EA - Each

LF - Linear Feet MSF - Thousand Square Feet

## **Table 288.3**

# Other Asbestos-Containing Material - Building 288, Supply Building 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

TABLE 289.4 EXPOSURE ASSESSMENTS (PRIORITY ORDER) -BUILDING 289, SUPPLY BUILDING

SAMPLE		MATERIAL	PRIOR. INDEX	PRIORITY INDEX	EXPOS	URE	FAC	TORS	AVG. EXP.	%
NO.	AREA	TYPE	CODE	NUMBER	1 2	3_	4	5	HOURS	ASB.
FK783	ASSEMBLY AREA	CEILING BOARD	Α	0	2 1	1	2	5	40.00	0
FK783	COUNTER/LOBBY	CEILING BOARD	A	Ō	2 1	1	2	5	40.00	0
FK783	OFFICE AREA	CEILING BOARD	Α	0	2 1	1	2	5	40.00	0
FK783	STORAGE ROOM 1	CEILING BOARD	A	0	2 1	1	2	5	40.00	0
FK783	VAULT ROOM	CEILING BOARD	A	0	2 1	1	2	5	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 289.5 COST ESTIMATE\* - BUILDING 289, SUPPLY BUILDING

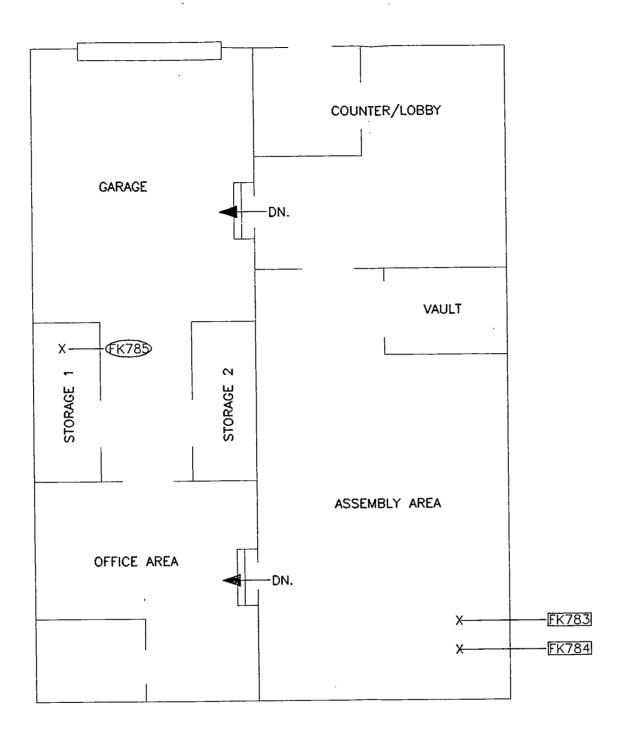
	UNIT	AREĄ	
DESCRIPTION	UNIT COST (\$)	77	TOTAL
Pipe Fittings (EA)	70.30	•	-
4-8" 9-14" >14"	70.30 85.80 147.00 216.00	-	<u>:</u>
	210.00	-	-
Pipe Runs (LF)	26-50	_	:
4-8" 9-14" >14"	26.50 30.50 60.80	:	-
Sprayed/Troweled Ceilings (SF)	9.60	-	-
Floor Tile (SF)	5.60	0.4	0.4
Boilers/Tanks (SF)	37.90	-	-
Air Handling Equipment (SF)	20.00	-	-
Other		-	-
SUBTOTAL		0.4	0.4
Difficulty Allowance		-	-
SUBTOTAL		0.4	0.4
Decontamination Units Mobilization		<b>3:8</b>	<b>3:</b> 8
SUBTOTAL		5.4	5.4
Contingency a 15.00%		0.8	0.8
SUBTOTAL		6.3	6.3
Design Fee a 10.00%	•	0.6	0.6
SUBTOTAL		6.9	6.9
Air Monitoring a 10.00%	***	<u> </u>	0.7
TOTAL		7.6	7.6

AREA 1: STORAGE ROOM 1

<sup>\*</sup>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. 289 NOT TO SCALE





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#### **BATTERY TESTING**

#### 293.1 GENERAL

Building 293 was surveyed by WESTON's inspection team on 25 August 1992.

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 293.1 lists the analytical result for the bulk sample.

Several laboratory tables with assumed asbestos-containing tabletops were also found in Building 293 (in good condition). These lab tabletops were not sampled; instead they were referenced to a similar lab table found in Building 9040, which was tested to be ACM.

#### 293,2 ACM AND EXPOSURE ASSESSMENT

The location, description, and analytical results for each bulk sample from Building 293 are presented in Table 293.1. An area-by-area inventory of ACM is provided in Tables 293.2 and 293.3. "Other Asbestos-Containing Materials," listed in Table 293.3, are materials that do not correspond to the standard caption categories listed in Table 293.2. A prioritized listing of exposure assessments is presented in Table 293.4. The method by which the exposure assessments priority index values are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.5 of this report. An itemized area-by-area cost estimate for removal and replacement is provided in Table 293.5. The method by which removal/replacement costs are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.4 of this report. Building floor plans (see attachment) indicate sample locations and building area names as they are listed in Tables 293.2 and 293.5.

# 293.3 RECOMMENDATIONS/CONCLUSIONS

- Floor tile and laboratory tabletops were the materials in Building 293 found to be ACM.
- The ACMs listed above should be labeled under the O&M Program.

TABLE 293.1

### BULK SAMPLE ANALYSIS RESULTS - BUILDING 293, BATTERY TESTING

SAMPLE				PERCE	NT ASB	STOS	
NO.	LOCATION	ITEM	DESCRIPTION	СН	MA	ОТ	LAYERED
FK898	TESTING AREA	FLOOR TILE	TAN,OTH,FLOOR TILE	7	-	-	YES

<sup>&</sup>lt;sup>a</sup>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		
SE = Southeast		

TABLE 293.2 ASBESTOS-CONTAINING MATERIALS - BUILDING 293, BATTERY TESTING

	PI	PE FITT	INGS (EA)	)		PIPE RU	NS (LF)		SPRAY/TROWELED	FLOOR TILE	BOILERS/	AIR HANDLING	
AREA	<4 <sup>11</sup>	4-8"	9-14"	>14"	<4"	4-8"	9-14"	>14 <sup>11</sup>	CEILINGS (MSF)	(MSF)	TANKS (MSF)	EQUIPMENT (MSF)	170
FICE 1	-	_	_	_	_	_	-	-	-	0.44	-	-	
FICE 2			-	_	-	-	-	-	-	0.80	•	-	,
DRAGE ROOM	_	-	-	-	-	-	-	-	-	0.13	-	-	
STING AREA		<u>-</u>		<u> </u>			<u></u> :			2.98	<del></del>	<del></del>	
TALS	_	_	_	_	_	-	_		-	4.35	-	•	

<sup>\*</sup> Other Material Present In Various Units Of Measure

EA - Each

LF - Linear Feet MSF - Thousand Square Feet

**Table 293.3** 

# Other Asbestos-Containing Material - Building 293, Battery Testing Type Occupancy: Adults (Public)

. Area	Material Type	Quantity (Unit)
Office 2	Lab Tabletop	0.120 (MSF)
Testing Area	Lab Tabletop	0.050 (MSF)

EA - Each

LF - Linear Feet

MSF - Thousand Square Feet

**TABLE 293.4** EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 293, BATTERY TESTING

SAMPLE NO. AREA	MATERIAL TYPE	PRIOR. INDEX CODE	PRIORITY INDEX NUMBER	EXPC	SUR 2 3	E FA	CTORS 5	AVG. EXP. HOURS	% ASB
FK723 OFFICE 2 FK723 TESTING AREA	INSULATION BOARD	A A	4.200E00 4.200E00	1 2	? 1	2 2	5	16.00 16.00	10 10

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

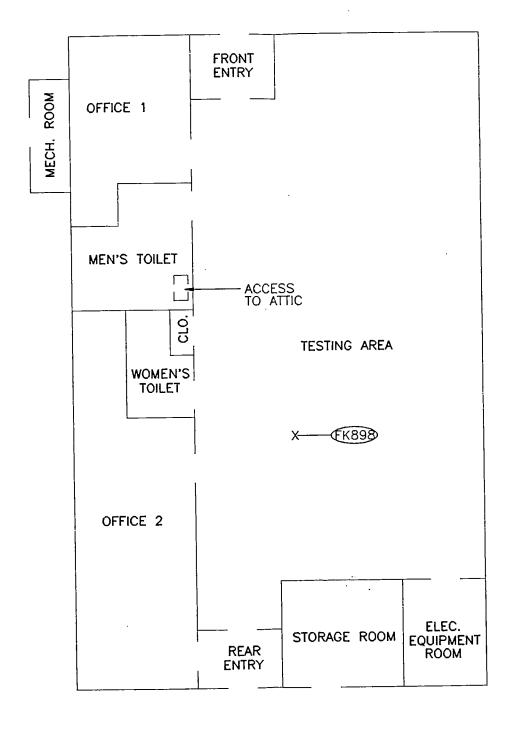
**TABLE 293.5** COST ESTIMATE\* - BUILDING 293, BATTERY TESTING

DESCRIPTION	UNIT COST (\$)	AREA	AREA	AREA 3	AREA	_TOTAL
Pipe Fittings (EA)		<u> </u>	<u> </u>			
}=8" 9-14" >14"	70.30 85.80 147.00 216.00	:	=	:	=	=
Pipe Runs (LF)						
4-8"	26.50 30.50 60.80	:	-	-	-	-
4-8" 9-14" >14"	<b>26:38</b>	:	-	=	-	-
Sprayed/Troweled Ceilings (SF)	9.60	-	-	-	-	-
Floor Tile (SF)	5.60	2.5	4.5	0.7	16.7	24.4
Boilers/Tanks (SF)	37.90	-	-	•	-	-
Air Handling Equipment (SF)	20.00	-	-	-	-	-
Other		-	0.5	-	0.2	0.7
SUBTOTAL		2.5	5.0	0.7	16.9	25.1
Difficulty Allowance		-	-	-	-	-
SUBTOTAL		2.5	5.0	0.7	16.9	25.1
Decontamination Units Mobilization		8: <b>8</b>	0.8 0.5	8: <b>8</b>	8:8	<b>3</b> :8
SUBTOTAL		3.7	6.2	2.0	18.1	30.1
Contingency @ 15.00%		0.6	0.9	0.3	2.7	4.5
SUBTOTAL		4.3	7.2	2.2	20.9	34.6
Design Fee a 10.00%		0.4	0.7	0.2	2.1	3.5
SUBTOTAL	***	4.7	7.9	2.5	23.0	38.0
Air Monitoring a 10.00%	,	1.0	1.0	1.0	1.0	3.8
TOTAL		5.7	8.8	3.4	23.9	41.8

<sup>\*</sup>Amounts Are In Thousands Of Dollars

AREA 1: OFFICE 1 AREA 3: STORAGE ROOM

<sup>\*\*\*</sup>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. 293
NOT TO SCALE





#### **STOREHOUSE**

## **294.1 GENERAL**

Building 294 was surveyed by WESTON's inspection team on 13 August 1992.

The first three portions of this facility report summarize the results of this inspection. Photographs of pipe run and fitting insulation sample locations are provided in Subsection 294.4.

Polarized Light Microscopy (PLM) with dispersion staining was used to analyze five samples of suspect material collected from the building. Of these samples, four were found to be asbestos-containing materials (ACM). Table 294.1 lists the analytical results for the bulk samples.

## 294.2 ACM AND EXPOSURE ASSESSMENT

The location, description, and analytical results for each bulk sample from Building 294 are presented in Table 294.1. An area-by-area inventory of ACM is provided in Tables 294.2 and 294.3. "Other Asbestos-Containing Materials," listed in Table 294.3, are materials that do not correspond to the standard caption categories listed in Table 294.2. A prioritized listing of exposure assessments is presented in Table 294.4. The method by which the exposure assessments priority index values are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.5 of this report. An itemized area-by-area cost estimate for removal and replacement is provided in Table 294.5. The method by which removal/replacement costs are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.4 of this report. Building floor plans (see attachment) indicate sample locations and building area names as they are listed in Tables 294.2 and 294.5.

# 294.3 RECOMMENDATIONS/CONCLUSIONS

- The ACMs present in Building 294 are:
  - Pipe insulation
  - Floor tile
- The following areas in Building 294 qualify for the Army Asbestos Deficiency Abatement Project (AADAP):
  - Garages 1 & 2
  - NBC Office
  - NBC Room 1
  - Storage
- Asbestos-containing floor tile should be labeled under the O&M Program.

TABLE 294.1

BULK SAMPLE ANALYSIS RESULTS - BUILDING 294, STOREHOUSE

SAMPLE				PERCI	<u>ent asbi</u>	<u>estos</u>	
NO.	LOCATION	ITEM	DESCRIPTION	CH	AM	OT	LAYERED'
FK790	GARAGE 1	<4" PIPE FITTING	GRAY,UNK,<4" FITT.	25		-	NO
	GARAGE 1	<4" PIPE RUN	GRAY,OTH,<4" PIPE.	35	-	-	YES
	NBC ROOM 1	FLOOR TILE	GRAY, OTH, 9X9 FLR TL	10	-	-	NO
	LATRINE	FLOOR TILE	BROWN, UNK, FLOOR TILE	1	-	-	YES
	CARPENTER SHOP	CEILING TILE	WHITE,OTH,CEIL PANLS	•	-	-	YES

 $<sup>^{\</sup>mathrm{a}}$ 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 294.2

ASBESTOS-CONTAINING MATERIALS - BUILDING 294, STOREHOUSE

	PI	PE 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)	OTHE
CARPENTER SHOP	-		-	-	_	-	-	-	-	1.20	-	-	-
ARAGE 1	11	-	-	-	75	-	-	-	-	-	-	~ •	-
ARAGE 2	4	-	-	-	15	-	-	-	•	-	-	-	-
ATRINE	-	-	-	-	-	-	-	-	-	0.10	-	-	-
BC OFFICE	5	-	-	-	100	-	-	-	-	0.10	-	-	-
IBC ROOM 1	3	-	-	-	32	-	-	-	-	0.48	-	-	-
TORAGE	<u>15</u>				70								
OTALS	38		-	-	292	_	-	-	-	1,88	. <b>-</b>		-

Other Material Present In Various Units Of Measure

EA - Each

LF - Linear Feet

MSF - Thousand Square Feet

# **Table 294.3**

# Other Asbestos-Containing Material - Building 294, Storehouse 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 294.4 EXPOSURE ASSESSMENTS (PRIORITY ORDER) -BUILDING 294, STOREHOUSE

SAMPLE NO.	AREA	MATERIAL TYPE	PRIOR. INDEX CODE	PRIORITY INDEX NUMBER	<u>EX</u>	POS 2	URE 3	FAC	TORS 5	AVG. EXP. HOURS	% ASB.	
FK790	GARAGE 1	<4" PIPE FITTING	С	1.550E05	3	2	2	3	10	10.00	25	
FK790	GARAGE 2	<4" PIPE FITTING	č	1.550E05		2	Ž	-	10	10.00	25	
FK790	NBC OFFICE	<4" PIPE FITTING	č	1.550E05	3	2	2	3	10	10.00	25	
FK790	NBC ROOM 1	<4" PIPE FITTING	Č	1.550E05	3	2	2	3	10	10.00	25	
FK790	STORAGE	<4" PIPE FITTING	С	1.550E05	3	2	2	3	10	10.00	25	
FK791	GARAGE 1	<4" PIPE RUN	C	1.550E05	3	2	2	3	10	10.00	<b>3</b> 5	
FK791	GARAGE 2	<4" PIPE RUN	С	1.550E05	3	2	2	3	10	10.00	35	
FK791	NBC OFFICE	<4" PIPE RUN	С	1.550E05	3	2	2	3	10	10.00	35	
FK791	NBC ROOM 1	<4" PIPE RUN	C	1.550E05	3	2	2	3	10	10.00	35	
FK791	STORAGE	<4" PIPE RUN	C	1.550E05	3	2	2	3	10	10.00	35	
FK794	CARPENTER SHOP	CEILING TILE	Α	0	2	2	1	1	10	20.00	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 294.5 COST ESTIMATE\* - BUILDING 294, STOREHOUSE

DESCRIPTION	UNIT COST (\$)	AREĄ	AREĄ	AREĄ	AREA	AREĄ	AREA	AREA	TOTAL
Pipe Fittings (EA)					<del>7</del>				
4-8"	70.30 85.80 147.80 216.00		0.8	0.3	:	0.4	0.2	1.1	2.7
4-8" 9-14" >14"	248:88	:	=	:	:	:	-	:	-
Pipe Runs (LF)	24 50	_	2.0	0.4	_	2.7	0.8	1.9	7.7
248" 9-74" >14"	26.50 30.50 42.50 60.80	-	-	-	-				<u> </u>
>14 <sup>ti</sup> "	26:88	=	-	-	•	-	-	•	-
Sprayed/Troweled Ceilings (SF)	9.60	-	-	-	-	-	-	-	-
Floor Tile (SF)	5.60	6.7	-	-	0.6	0.6	2.7	-	10.5
Boilers/Tanks (SF)	37.90	-	-	-	-	-	•	-	-
Air Handling Equipment (SF)	20.00	-	-	-	-	-	-	-	-
Other		-	-	-	-	-	-	-	-
SUBTOTAL		6.7	2.8	0.7	0.6	3.6	3.7	2.9	20.9
Difficulty Allowance		-	1.4	-	-		0.5	-	1.9
SUBTOTAL		6.7	4.1	0.7	0.6	3.6	4.3	2.9	22.8
Decontamination Units Mobilization	•	8: <u>6</u>	8: <b>6</b>	8: <del>\$</del>	8:3	8:3	8: <b>6</b>	8.6 8.3	2:8
SUBTOTAL		7.6	5.1	1.6	1.5	4.5	5.2	3.8	29.3
Contingency a 15.00%		1.1	0.8	0.2	0.2	0.7	0.8	0.6	4.4
SUBTOTAL		8.8	5.8	1.8	1.7	5.2	6.0	4.4	33.7
Design Fee @ 10.00%	,	0.9	0.6	0.2	0.2	0.5	0.6	0.4	3.4
SUBTOTAL	•	9.7	6.4	2.0	1.9	5.7	6.6	4.9	37.1
Air Monitoring a 10.00%	***	0.5	0.5	0.5	0.5	0.5	0.5	0.5	3.7
TOTAL		10.2	6.9	2.6	2.4	6.2	7.1	5.4	40.8

<sup>\*</sup>Amounts Are In Thousands Of Dollars

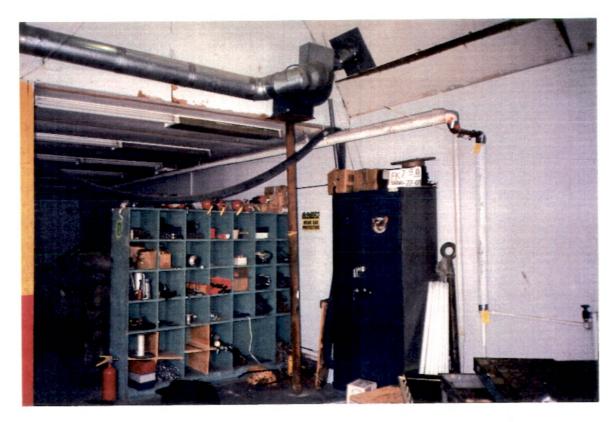
\*\*\*Less Than \$100 For The Area; Amount Not Printed But Included In Total(s)

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

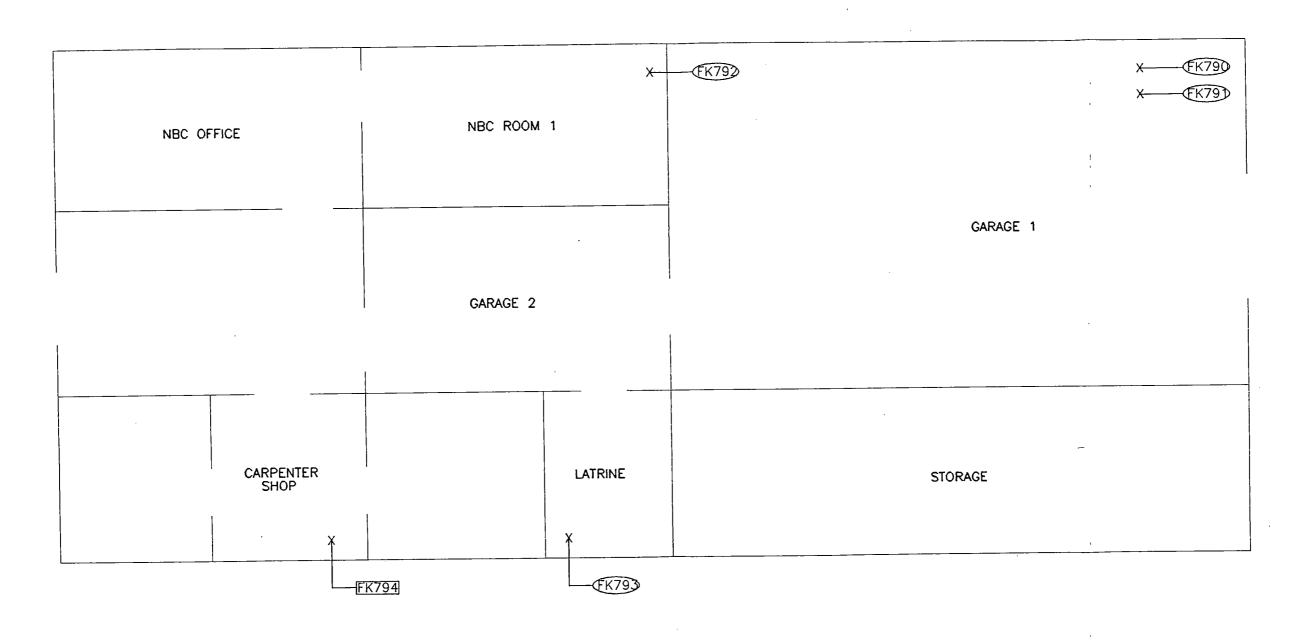


294.4

PHOTOGRAPH



Bldg. 294 Garage 1: (Sample(s) FK790 and 791) <4" Pipe Run and Fitting Insulation Tested Positive



BLDG. 294
NOT TO SCALE





## **ADMINISTRATION**

#### **295.1 GENERAL**

Building 295 was surveyed by WESTON's inspection team on 13 August 1992.

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 seven samples of suspect material collected from the building. Of these samples, two were found to be asbestos-containing materials (ACM). Table 295.1 lists the analytical results for the bulk samples.

## 295.2 ACM AND EXPOSURE ASSESSMENT

The location, description, and analytical results for each bulk sample from Building 295 are presented in Table 295.1. An area-by-area inventory of ACM is provided in Tables 295.2 and 295.3. "Other Asbestos-Containing Materials," listed in Table 295.3, are materials that do not correspond to the standard caption categories listed in Table 295.2. A prioritized listing of exposure assessments is presented in Table 295.4. The method by which the exposure assessments priority index values are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.5 of this report. An itemized area-by-area cost estimate for removal and replacement is provided in Table 295.5. The method by which removal/replacement costs are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.4 of this report. Building floor plans (see attachment) indicate sample locations and building area names as they are listed in Tables 295.2 and 295.5.

# 295.3 RECOMMENDATIONS/CONCLUSIONS

- Floor tile was the material in Building 295 found to be ACM.
- Asbestos-containing floor tile should be labeled under the O&M program.

TABLE 295.1

BULK SAMPLE ANALYSIS RESULTS - BUILDING 295, ADMINISTRATION

SAMPLE				PERCE	<u>nt asbi</u>	<u>estos</u>	
NO.	LOCATION	ITEM	DESCRIPTION	CH	MA	OT	LAYERED
FK776	ROOM 4	FLOOR TILE	BROWN,OTH,9X9 FLR TL	10		-	NO
	HALLWAY	FLOOR TILE	GRAY,OTH,12X12 F.T.	-	-	-	YES
	ROOM 2	FLOOR TILE	BROWN,OTH,9X9 FLR TL	10	-	-	YES
	MECH. ROOM	4-8" PIPE FITTING	GRAY,OTH,4-8" FITT.	-	-	-	NO
	MECH. ROOM	9-14" PIPE FITTING	WHITE,OTH,9-14" FITT	-	-	-	YES
	FIRST FLR ENTIRE	CEILING TILE	WHITE,OTH,CEIL. BRD.	-	-	-	YES
FK782	ATTIC	EXPANSION JOINT(S)	GRAY, OTH, EXP. CLOTH	-	-	-	NO

<sup>&</sup>lt;sup>a</sup>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 295.2 ASBESTOS-CONTAINING MATERIALS - BUILDING 295, ADMINISTRATION

	PI	PE FITT	INGS (EA)			PIPE RU	VS (LF)		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
ом 1	-	-		-	-	-	-	-	-	2.28	-	-	-
M 2	-	-	-	-	-	-	-	-	-	0.95	-	-	-
м 3	_	-	-	-	-	-	-	-	•	1.82	-	-	-
M 4	-	-	-	-	-	-	-	-	-	0.24	-	-	-
M 5	-	-	-	-	-	-	-	-	-	0.72	•	•	-
M 6	:	<u>-</u>		<del>-</del>			<u> </u>			1.00		-	
ALS	_		_	_	-	_	_	_	-	7.01	-	-	:

Other Material Present In Various Units Of Measure

EA - Each

LF - Linear Feet MSF - Thousand Square Feet

# **Table 295.3**

# Other Asbestos-Containing Material - Building 295, Administration 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 295.4** EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 295, ADMINISTRATION

SAMPLE		MATERIAL	PRIOR. INDEX	PRIORITY INDEX	EX	POS	URE	FAC	CTORS	AVG. EXP.	×	
NO.	AREA	TYPE	CODE	NUMBER	1	2	3	4		HOURS	ASB.	
FK779	MECH. ROOM	4-8" PIPE FITTING	A	0	3	3	1	1	1	1.00	0	
FK780	MECH. ROOM	9-14" PIPE FITTING	Ä	Ō	3	3	1	1	1	1.00	0	
FK781	FIRST FLR ENTIRE	CEILING TILE	Α	0	3	1	1	1	50	40.00	0	
FK782	ATTIC	EXPANSION JOINTS	A	0	1	2	1	2	5	16.00	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

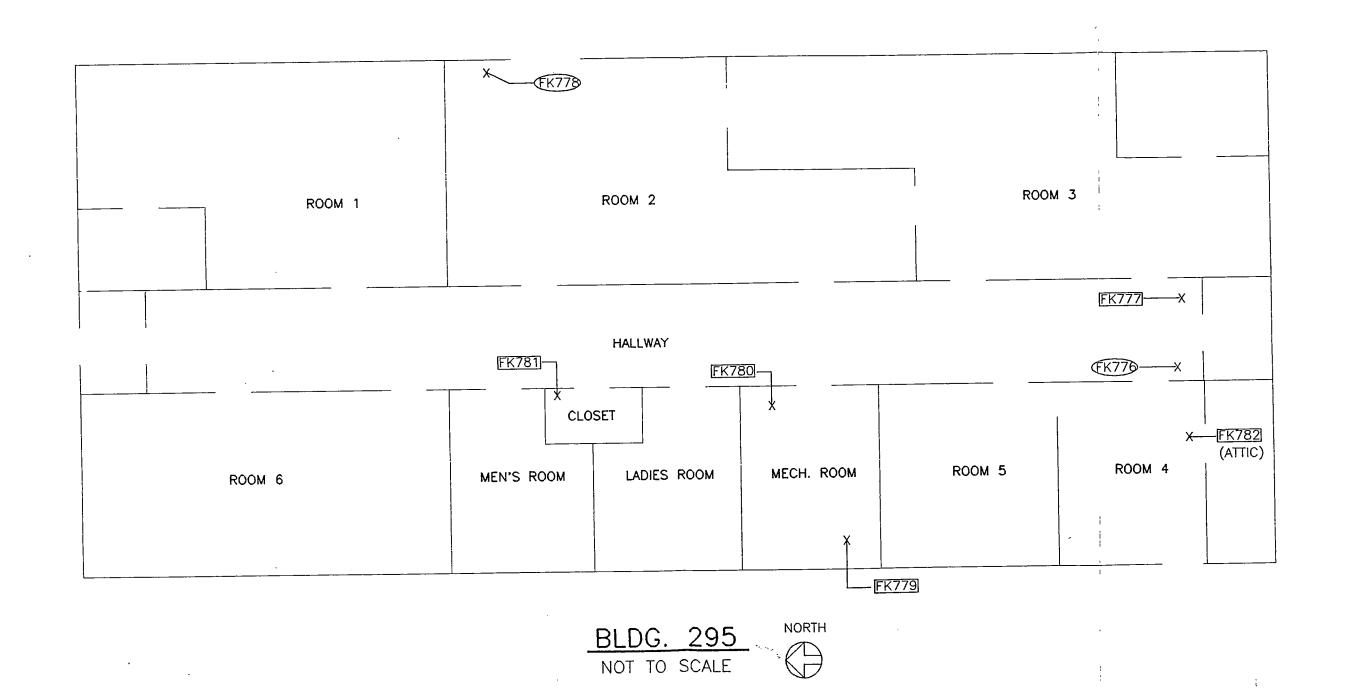
**TABLE 295.5** COST ESTIMATE\* - BUILDING 295, ADMINISTRATION

DESCRIPTION	UNIT COST (\$)	AREĄ	AREA	AREĄ	AREA	AREĄ	AREA	TOTAL
Pipe Fittings (EA)		<u> </u>	<del>-</del>				<del>-</del>	101112
44" 4-8" 514"	70.30 85.80 147.00 216.00	:	:	:	:	:	=	:
	276:00	-	-	-	-	-	-	-
Pipe Runs (LF)	26.50	-	-	-	-		-	-
4-8" 9-14" >14"	26.50 30.50 42.50 60.80	-	-	:	-	-	-	:
	60.80	-	-	-	-	-	•	
Sprayed/Troweled Ceilings (SF)	9.60	•	-	-	-	-	-	-
Floor Tile (SF)	5.60	12.8	5.3	10.2	1.3	4.0	5.6	39.3
Boilers/Tanks (SF)	37.90	•	-	-	-	-	-	-
Air Handling Equipment (SF)	20.00	-	-	-	-	-	-	-
Other		-	-	-	-	-	•	-
SUBTOTAL		12.8	5.3	10.2	1.3	4.0	5.6	39.3
Difficulty Allowance		-	•	-	•	-	-	-
SUBTOTAL		12.8	5.3	10.2	1.3	4.0	5.6	39.3
Decontamination Units Mobilization		8:5	8:5	8:3	8:3	8:3	8:3	<b>3:8</b>
SUBTOTAL		13.6	6.2	11.0	2.2	4.9	6.4	44.3
Contingency a 15.00%		2.0	0.9	1.7	0.3	0.7	1.0	6.6
SUBTOTAL		15.6	7.1	12.7	2.5	5.6	7.4	50.9
Design Fee a 10.00%		1.6	0.7	1.3	0.3	0.6	0.7	5.1
SUBTOTAL		17.2	7.8	13.9	2.8	6.2	8.1	56.0
Air Monitoring a 10.00%	***	0.9	0.9	0.9	0.9	0.9	0.9	<u>5.6</u>
TOTAL		18.1	8.7	14.9	3.7	7.1	9.1	61.6

<sup>\*</sup>Amounts Are In Thousands Of Dollars

AREA 1: ROOM 1 AREA 3: ROOM 3 AREA 5: ROOM 5

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



POSITIVE SAMPLE

FKNNN NEGATIVE SAMPLE

MANAGERS DESIGNERS/CONSULTANTS

--

# SAFETY/FIRST AID

# 412.1 GENERAL

Building 412 was surveyed by WESTON's inspection team on 17 August 1992.

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 five samples of suspect material collected from the building. Of these samples, three were found to be asbestos-containing material (ACM). Table 412.1 lists the analytical results for the bulk samples.

#### 412.2 ACM AND EXPOSURE ASSESSMENT

The location, description, and analytical results for each bulk sample from Building 412 are presented in Table 412.1. An area-by-area inventory of ACM is provided in Tables 412.2 and 412.3. "Other Asbestos-Containing Materials," listed in Table 412.3, are materials that do not correspond to the standard caption categories listed in Table 412.2. A prioritized listing of exposure assessments is presented in Table 412.4. The method by which the exposure assessment priority index values are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.5 of this report. An itemized area-by-area cost estimate for removal and replacement is provided in Table 412.5. The method by which removal/replacement costs are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.4 of this report. Building floor plans (see attachment) indicate sample locations and building area names as they are listed in Tables 412.2 and 412.5.

# 412.3 RECOMMENDATIONS/CONCLUSIONS

- The ACMs present in Building 412 are:
  - Floor tile
  - Transite panel
- The ACMs listed above should be labeled under the O&M Program.

TABLE 412.1

BULK SAMPLE ANALYSIS RESULTS - BUILDING 412, SAFETY/FIRST AID

SAMPLE				PERCE			
NO.	LOCATION	ITEM	DESCRIPTION	СН	AM	OT	LAYERED'
FK809	STORAGE AREA- ENTIRE	FLOOR TILE	BROWN,OTH,FLOOR TILE	5	-	-	NO
FK810	STORAGE AREA- ENTIRE	OTHER MATERIAL	WHITE,OTH,GYPSUM BRD	-	-	-	YES
FK811	STORAGE AREA- ENTIRE	DUPLICATE SAMPLE	BROWN, OTH, FLOOR TILE	6	-	-	NO
FK812	EXTERIOR WALLS	TRANSITE PANEL BOARD	GRAY, OTH, TRANS PANL	30	-	-	NO
FK813	MECH. ROOM	OTHER MATERIAL	GRAY, OTH, GASKET	-	-	-	NO

 $<sup>^{\</sup>mathrm{a}}$ 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 412.2 ASBESTOS-CONTAINING MATERIALS - BUILDING 412, SAFETY/FIRST AID

	PI	PIPE FITTINGS (EA)				PIPE RUNS (LF)			SPRAY/TROWELED	FLOOR TILE	BOILERS/	AIR HANDLING	
AREA	<4 <sup>11</sup>	4-8"	9-14"	>14"	<4"	4-8"	9-14"	>14"	CEILINGS (MSF)	(MSF)	TANKS (MSF)	EQUIPMENT (MSF)	OTHER
EXTERIOR WALLS	_	_	-	_	-	-	_	_	-	-	-	-	*
STORAGE AREA- ENTIRE		<del>-</del>			:	<u> </u>		<del>-</del>	. <del></del>	1.15			
TOTALS	_	_		-	_	_	_	-	-	1.15	-	-	*

 $<sup>^{\</sup>star}$  Other Material Present In Various Units Of Measure

EA - Each

LF - Linear Feet MSF - Thousand Square Feet

**Table 412.3** 

# Other Asbestos-Containing Material - Building 412, Safety/First Aid Type Occupancy: Adults (Public)

Area	Material Type	Quantity (Unit)
Exterior Walls	Transite Panel	0.260 (MSF)

EA - Each

LF - Linear Feet

MSF - Thousand Square Feet

TABLE 412.4 EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 412, SAFETY/FIRST AID

SAMPLE		MATERIAL	PRIOR. INDEX	PRIORITY INDEX	EX	POS	URE	FAC	CTORS	AVG. Exp.	%	
NO.	AREA	TYPE	CODE	NUMBER	1	2	3	4	5	HOURS	ASB.	
FK812	EXTERIOR WALLS	TRANSITE PANEL BOARD	A	4.200E00	1	2	1	2	5	16.00	30	
FK810	STORAGE AREA- ENTIRE	PLASTER CEILINGS & WALLS	Ä	0	1	2	1	2	5	16.00	0	
FK813	MECH. ROOM	GASKET	Α	0	1	2	1	2	5	16.00	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

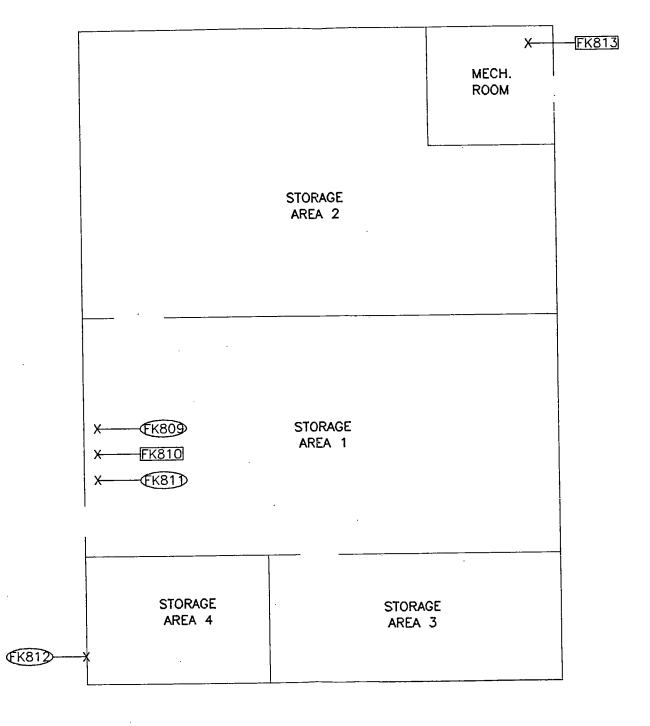
**TABLE 412.5** COST ESTIMATE\* - BUILDING 412, SAFETY/FIRST AID

	UNIT COST (\$)	AREĄ	AREA	T0741
DESCRIPTION	COST (\$)	1	2	TOTAL
Pipe Fittings (EA) 4-8"	70.30 85.80 127.00 216.00	-	:	=
2-8" 9-14" >14"	216:88	Ξ	=	-
Pipe Runs (LF)	26 50	_	-	_
4 <sup>-</sup> 8" 9-14" >14"	26.50 30.50 42.50 60.80	-		=
	60.80	-	-	-
Sprayed/Troweled Ceilings (SF)	9.60	-	-	-
Floor Tile (SF)	5.60	-	6.4	6.4
Boilers/Tanks (SF)	37.90	-	-	-
Air Handling Equipment (SF)	20.00	-	-	-
Other		2.9	•	2.9
SUBTOTAL		2.9	6.4	9.3
Difficulty Allowance		-	-	-
SUBTOTAL		2.9	6.4	9.3
Decontamination Units Mobilization		1:8	1:8	<b>3:</b> 8
SUBTOTAL		5.4	8.9	14.3
Contingency a 15.00%		0.8	1.3	2.1
SUBTOTAL		6.2	10.3	16.4
Design Fee @ 10.00%		0.6	1.0	1.6
SUBTOTAL		6.8	11.3	18.1
Air Monitoring a 10.00%	X***	0.9	0.9	1.8
TOTAL		7.7	12.2	19.9

<sup>\*</sup>Amounts Are In Thousands Of Dollars

AREA 1: EXTERIOR WALLS

<sup>\*\*\*</sup>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. 412

NOT TO SCALE





## **ADMINISTRATION**

## 434.1 GENERAL

Building 434 was surveyed by WESTON's inspection team on 17 August 1992.

The first three portions of this facility report summarize the results of this inspection. A photograph of pipe run and fitting insulation sample location is provided in Section 434.4.

Polarized Light Microscopy (PLM) with dispersion staining was used to analyze five samples of suspect material collected from the building. Of these samples, three were found to be asbestos-containing material (ACM). Table 434.1 lists the analytical results for the bulk samples.

# 434.2 ACM AND EXPOSURE ASSESSMENT

The location, description, and analytical results for each bulk sample from Building 434 are presented in Table 434.1. An area-by-area inventory of ACM is provided in Tables 434.2 and 434.3. "Other Asbestos-Containing Materials," listed in Table 434.3, are materials that do not correspond to the standard caption categories listed in Table 434.2. A prioritized listing of exposure assessments is presented in Table 434.4. The method by which the exposure assessment priority index values are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.5 of this report. An itemized area-by-area cost estimate for removal and replacement is provided in Table 434.5. The method by which removal/replacement costs are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.4 of this report. Building floor plans (see attachment) indicate sample locations and building area names as they are listed in Tables 434.2 and 434.5.

# 434.3 RECOMMENDATIONS/CONCLUSIONS

- The ACMs present in Building 434 are:
  - Floor tile
  - Pipe insulation
- The open office area in Building 434 qualifies for the Army Asbestos Deficiency Abatement Project (AADAP).
- Asbestos-containing floor tile should be labeled under O&M Program.

TABLE 434.1

BULK SAMPLE ANALYSIS RESULTS - BUILDING 434, ADMINISTRATION

SAMPLE								
NO.	LOCATION	ITEM	DESCRIPTION	CH	MA	OT	LAYERED'	
FK814 O	FFICE 1	CEILING BOARD	WHITE,OTH,CEIL BOARD	-	-	-	YES	
	EN'S ROOM	FLOOR TILE	GRAY, OTH, FLOOR TILE	5	-	-	NO	
	PEN OFFICE	<4" PIPE FITTING	WHITE, UNK, PIPE FITTG	40	-	-	NO	
	PEN OFFICE	<4" PIPE RUN	GRAY,UNK,PIPE INSUL	3	-	-	YES	
	ECH. ROOM	OTHER MATERIAL	WHITE, OTH, BREECH	-	-	-	NO	

<sup>&</sup>lt;sup>a</sup>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		
CU - Couthwest		

TABLE 434.2 ASBESTOS-CONTAINING MATERIALS - BUILDING 434, ADMINISTRATION

	PI	PE 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
CORRIDOR	_	_	-	_	-	_	-	-	-	0.08	-	-	-
MEN'S ROOM	_	_		-	_	-	-	-	-	0.04	-	-	-
OFFICE 2	-	-	-	-	-	-	-	-	-	0.60	-	-	-
OPEN OFFICE	1	-	-	-	25	-	-	-	-	1.80	-	-	-
STORAGE	<u>:</u>	-	-	-	-	-	-	-	-	0.10	-	-	-
SUPPLY 1	-	-	-	-	_	_	-	-	-	0.10	-	-	-
SUPPLY 2	_	-	_	-	-	-	-	-	-	0.12	-	-	-
WOMEN'S ROOM				<del>.</del>				<del>-</del>		0.04			
TOTALS	1	_	-	-	25	-	_	-	_•	2.88_	_	-	

<sup>\*</sup> Other Material Present In Various Units Of Measure

EA - Each

LF - Linear Feet MSF - Thousand Square Feet

**Table 434.3** 

# Other Asbestos-Containing Material - Building 434, Administration 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

**TABLE 434.4** EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 434, ADMINISTRATION

SAMPLE		MATERIAL	PRIOR. INDEX	PRIORITY INDEX	EXF	osu	RE	FAC	TORS	AVG. EXP.	%
NO.	AREA	TYPE	CODE	NUMBER	1_	2	3	4	5	HOURS	ASB.
FK816	OPEN OFFICE	<4" PIPE FITTING	c	6.360E04	3	2	2	1	12	40.00	40
FK817	OPEN OFFICE	<4" PIPE RUN	Č	3.960E03	3	2	2	1	12	40.00	3
FK814	OFFICE 1	CEILING BOARD	Ā	0	2	2	1	1	4	40.00	0
FK814	OFFICE 2	CEILING BOARD	A	0	2	2	1	1	4	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 434.5** COST ESTIMATE\* - BUILDING 434, ADMINISTRATION

DESCRIPTION	UNIT COST (\$)	ARE <b>A</b>	AREA	AREĄ	AREA	AREA	AREA	AREA	AREA	TOTAL
Pipe Fittings (EA)			<u> </u>							
4-8"	70.30 85.80	:	:	-	**	-	-	-	:	** -
4-8" 9-14" >14"	70.30 85.80 147.00 216.00	:	-	:	-	=	-	:	:	-
Pipe Runs (LF)				_	0.7		_	_	_	0.7
4-8"	<b>₹8:</b> ₹8	=	-	-	0.7	-	•	-	•	-
4-8" 9-14" >14"	26.50 30.50 42.50 60.80	=	=	-	-	-	:	-	-	•
Sprayed/Troweled Ceilings (SF)	9.60	-	-	-	-	-	-	-	-	-
Floor Tile (SF)	5.60	0.4	0.2	3.4	10.1	0.6	0.5	0.7	0.2	16.1
Boilers/Tanks (SF)	37.90	-	-	-	-	-	-	-	-	-
Air Handling Equipment (SF)	20.00	-	-	-	-	-	-	-	-	-
Other		-	-	•	-	-	-	-	-	-
SUBTOTAL		0.4	0.2	3.4	10.8	0.6	0.5	0.7	0.2	16.8
Difficulty Allowance		-	-	-	-	-	-	0.3	-	0.3
SUBTOTAL		0.4	0.2	3.4	10.8	0.6	0.5	1.0	0.2	17.2
Decontamination Units Mobilization		8:4	8:4	8:4	8:4	8:3	8:4	8:3	8:3	<b>3:</b> 8
SUBTOTAL		1.1	0.8	4.0	11.4	1.2	1.2	1.6	0.8	22.2
Contingency a 15.00%		0.2	0.1	0.6	1.7	0.2	0.2	0.2	0.1	3.3
SUBTOTAL		1.2	1.0	4.6	13.2	1.4	1.3	1.9	1.0	25.5
Design Fee a 10.00%		0.1	**	0.5	1.3	0.1	0.1	0.2	**	2.6
SUBTOTAL		1.4	1.1	5.0	14.5	1.5	1.5	2.1	1.1	28.1
Air Monitoring @ 10.00%	<b>***</b>	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	2.8
TOTAL		1.7	1.4	5.4	14.8	1.8_	1.8	2.4	1.4_	30.9

<sup>\*</sup>Amounts Are In Thousands Of Dollars



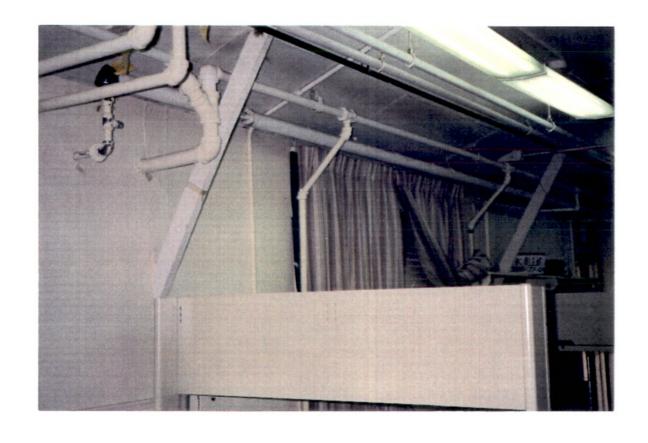


<sup>\*\*\*</sup>Less Than \$100 For The Area; Amount Not Printed But Included In Total(s)

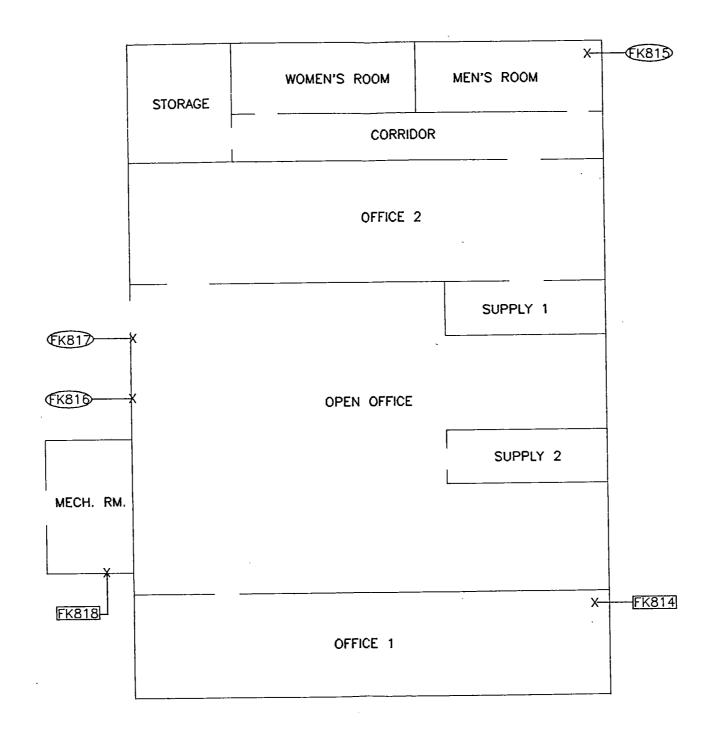
\*\*\*\*The Minimum Air Monitoring Fee is \$500.00 Per Building

434.4

**PHOTOGRAPH** 



Bldg. 434 Open office Area: (Sample(s) FK816 and 817) <4" Pipe Run and Fitting Insulation Tested Positive



BLDG. 434

NOT TO SCALE





434-9

## MAINTENANCE SHOP

#### 443.1 GENERAL

Building 443 was surveyed by WESTON's inspection team on 10 August 1992.

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 eight samples of suspect material collected from the building. Of these samples, one was found to be asbestos-containing material (ACM). Table 443.1 lists the analytical results for the bulk samples.

# 443.2 ACM AND EXPOSURE ASSESSMENT

The location, description, and analytical results for each bulk sample from Building 443 are presented in Table 443.1. An area-by-area inventory of ACM is provided in Tables 443.2 and 443.3. "Other Asbestos-Containing Materials," listed in Table 443.3, are materials that do not correspond to the standard caption categories listed in Table 443.2. A prioritized listing of exposure assessments is presented in Table 443.4. The method by which the exposure assessment priority index values are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.5 of this report. An itemized area-by-area cost estimate for removal and replacement is provided in Table 443.5. The method by which removal/replacement costs are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.4 of this report. Building floor plans (see attachment) indicate sample locations and building area names as they are listed in Tables 443.2 and 443.5.

# 443.3 RECOMMENDATIONS/CONCLUSIONS

- Per the Directorate of Engineering and Housing (DEH), Building 443 is scheduled for demolition.
- Transite panel was the only material in Building 443 found to be ACM.
- The asbestos-containing transite panel(s) present in Building 443 will be removed under the Army Asbestos Deficiency Abatement Project (AADAP) prior to demolition of the building.

TABLE 443.1

BULK SAMPLE ANALYSIS RESULTS - BUILDING 443, MAINTENANCE SHOP

SAMPLE				PERCI	ENT ASBI	ESTOS	
NO.	LOCATION	ITEM	DESCRIPTION	СН	AM	OT	LAYERED
FK704	ROOF	OTHER MATERIAL	BLACK,OTH,ROOF SHING, VERTICAL	-	•	-	NO
FK705	LOWER WALL	EXTERIOR SIDING	GRAY, OTH, TRANSIT SK, VERTICAL	30	-	-	NO
FK714	OFFICE 1	FLOOR TILE	TAN,OTH,FLOOR TILE	-	-	-	NO
FK715	STORAGE ROOM-1ST FLR	OTHER MATERIAL	BROWN, OTH, LIN. FLOOR	-	-	-	YES
FK716	STORAGE ROOM-1ST FLR	OTHER MATERIAL	GRAY, OTH, GYP BOARD	-	· -	-	YES
FK717	STORAGE ROOM-2ND FLR	OTHER MATERIAL	BROWN, OTH, GYP BOARD	-	-	-	YES
FK718	OFFICE 3	ACOUSTICAL WALL TILE	WHITE,OTH,ACOUST TIL	-	-	-	YES
FK719	MECHANICAL ROOM	EXPANSION JOINT(S)	TAN,OTH,EXP CLOTH	-	-	-	NO

<sup>&</sup>lt;sup>a</sup>Asbestos content presented for layered samples represents the highest concentration layer.

Asbestos Types
CH = Chrysotile
AM = Amosite
OT = Other
(

# ASBESTOS-CONTAINING MATERIALS - BUILDING 443, MAINTENANCE SHOP

	Pi	PE FITT	INGS (EA)			PIPE RU	NS (LF)		SPRAY/TROWELED	FLOOR TILE	BOILERS/	AIR HANDLING	
AREA	<4"	4-8"	9-14"	>14"	<4 <sup>11</sup>	4-8"	9-14"	>14"	CEILINGS (MSF)	(MSF)	TANKS (MSF)	EQUIPMENT (MSF)	OTHER
EXTERIOR LOWER WALL													*
TOTALS		•	<u> </u>	-			<u>.</u>	-	<u> </u>		•		*

Other Material Present In Various Units Of Measure

EA - Each

LF - Linear Feet MSF - Thousand Square Feet

**Table 443.3** 

# Other Asbestos-Containing Material - Building 443, Maintenance Shop Type Occupancy: Adults (Public)

Area	Material Type	Quantity (Unit)
Exterior Lower Wall	Transite Panel	0.015 (MSF)

EA - Each

LF - Linear Feet

MSF - Thousand Square Feet

**TABLE 443.4** EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 443, MAINTENANCE SHOP

SAMPLE No.	AREA	MATERIAL Type	PRIOR. INDEX CODE	PRIORITY INDEX NUMBER	<u>EX</u>	<u>POS</u>	URE 3	FAC	CTORS _	AVG. EXP. Hours	% ASB.	
FK705	EXTERIOR LOWER WALL	EXTERIOR SIDING	R	3.450E02		2	1	2	10	2.00	30	
FK705 FK715	LADIES' ROOM	INSULATION BOARD	A	0.450202	2	2	1	2	10	2.00	ő	
FK715	STORAGE ROOM-1ST FLR	INSULATION BOARD	Ä	Ō	2	2	1	2	10	2.00	Ō	
FK716	MECHANICAL RM- WALLS	INSULATION BOARD	Ä	Ö	2	2	1	2	10	2.00	Ó	
FK716	MECHANICAL RM-CEILNG	INSULATION BOARD	Α	0	2	2	1	2	10	2.00	0	
FK716	STORAGE ROOM-1ST FLR	INSULATION BOARD	Α	0	2	2	1	2	10	2.00	0	
FK716	STORAGE ROOM-1ST FLR	INSULATION BOARD	Α	0	2	2	1	2	10	2.00	0	
FK717	OFFICE 3	INSULATION BOARD	A	0	1	1	1	1	0	0.00	0	
FK717	STORAGE ROOM-2ND FLR	INSULATION BOARD	A	0	2	2	1	2	10	2.00	0	
FK718	OFFICE 3	ACOUSTICAL WALL TILE	A	. 0	1	1	1	1	0	0.00	0	
FK719	MECHANICAL ROOM	EXPANSION JOINTS	Α	0	1	1	1	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

**TABLE 443.5** COST ESTIMATE\* - BUILDING 443, MAINTENANCE SHOP

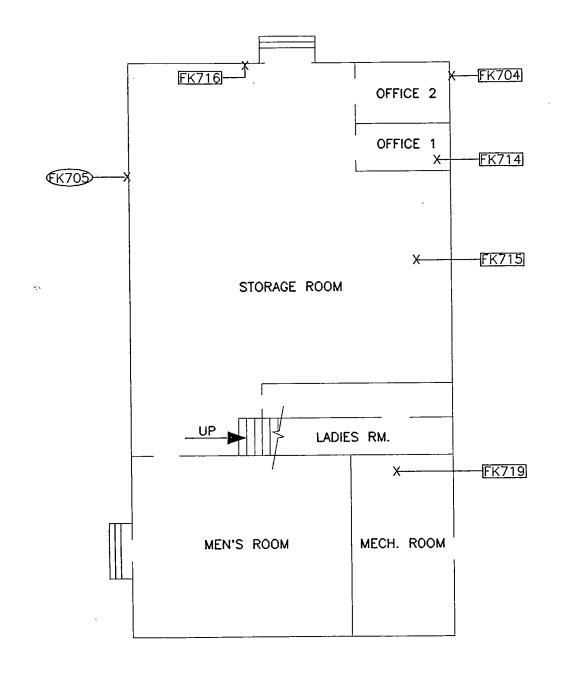
DESCRIPTION	UNIT COST (\$)	AREA 1	TOTAL
Pipe Fittings (EA)  4-8" 9-14" >14"	70-30 55-80 27-80 216-00	:	:
Pipe Runs (LF) 4-8" 9-14" >14"	26.50 30.50 60.80	:	:
Sprayed/Troweled Ceilings (SF)	9.60	-	-
Floor Tile (SF)	5.60	-	-
Boilers/Tanks (SF)	37.90	-	-
Air Handling Equipment (SF)	20.00	-	-
Other		0.2	0.2
SUBTOTAL		0.2	0.2
Difficulty Allowance		-	•
SUBTOTAL		0.2	0.2
Decontamination Units Mobilization		<b>3:8</b>	<b>3</b> :8
SUBTOTAL		5.2	5.2
Contingency a 15.00%		0.8	0.8
SUBTOTAL		5.9	5.9
Design Fee @ 10.00%	•	0.6	0.6
SUBTOTAL		6.5	6.5
Air Monitoring a 10.00%*	THE T	0.7	0.7
TOTAL		7.2	7.2

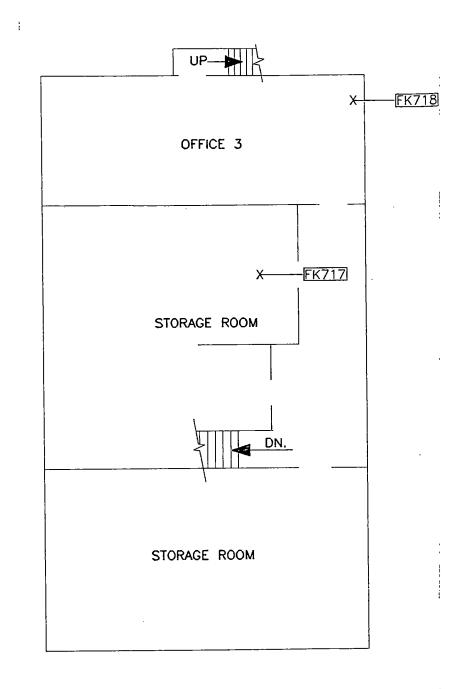
AREA 1: EXTERIOR LOWER WALL

<sup>\*</sup>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





1st FLOOR

2nd FLOOR

BLDG. 443





## **STORAGE**

## **458.1 GENERAL**

Building 458 was surveyed by WESTON's inspection team on 10 August 1992.

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 nine samples of suspect material collected from the building. Of these samples, one was found to be asbestos-containing material (ACM). Table 458.1 lists the analytical results for the bulk samples.

#### 458.2 ACM AND EXPOSURE ASSESSMENT

The location, description, and analytical results for each bulk sample from Building 458 are presented in Table 458.1. An area-by-area inventory of ACM is provided in Tables 458.2 and 458.3. "Other Asbestos-Containing Materials," listed in Table 458.3, are materials that do not correspond to the standard caption categories listed in Table 458.2. A prioritized listing of exposure assessments is presented in Table 458.4. The method by which the exposure assessment priority index values are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.5 of this report. An itemized area-by-area cost estimate for removal and replacement is provided in Table 458.5. The method by which removal/replacement costs are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.4 of this report. Building floor plans (see attachment) indicate sample locations and building area names as they are listed in Tables 458.2 and 458.5.

# 458.3 RECOMMENDATIONS/CONCLUSIONS

- Per the Directorate of Engineering and Housing (DEH), Building 458 is scheduled for demolition.
- Expansion cloth was the only material in Building 458 found to be ACM.
- The asbestos-containing expansion cloth(s) present in Building 458 will be removed under the Army Asbestos Deficiency Abatement Project (AADAP) prior to demolition of the building.

TABLE 458.1

BULK SAMPLE ANALYSIS RESULTS - BUILDING 458, STORAGE

SAMPLE				PERC	ENT ASB	ESTOS	
NO.	LOCATION	ITEM	DESCRIPTION	СН	AM	OT	LAYERED
FK703	ROOF	OTHER MATERIAL	BLACK,OTH,ROOF SHING,HORIZONTAL	•	-	-	NO
FK706	STORAGE ROOM	FLOOR TILE	BROWN, OTH, LIN FLOOR, VERTICAL	-	•	-	YES
FK707	STORAGE RM-SIDE WALL	OTHER MATERIAL	GRAY,OTH,GYP BOARD,VERTICAL	-	-	-	YES
FK708	STORAGE RM-SIDE WALL	OTHER MATERIAL	GRAY, OTH, GYP BOARD	-	-	-	YES
FK709	STORAGE ROOM-2ND FLR	OTHER MATERIAL	BROWN,OTH,LIN FLOOR	-	-	-	YES
FK710	STORGE-2NDFLR-CEILNG	OTHER MATERIAL	GRAY,OTH,GYP BOARD	-	-	-	YES
FK711	MECHANICAL ROOM	EXPANSION JOINT(S)	GRAY.OTH, EXPAN GASK	30	-	-	NO
FK712	MECHANICAL ROOM	OTHER MATERIAL	GRAY,OTH,BOILER INS	-	-	-	NO
FK713	MECHANICAL ROOM	OTHER MATERIAL	GRAY, OTH, GYP BOARD	-	-	-	NO

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

SW = Southwest

Quadrant Codes	<u>System Codes</u>	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		
SF = Southeast		

# ASBESTOS-CONTAINING MATERIALS - BUILDING 458, STORAGE

	PÍ	PE FITT	INGS (EA)			PIPE RU	NS (LF)		SPRAY/TROWELED	D 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)	OTHER
ECHANICAL ROOM	<del>-</del>	<u> </u>		<u> </u>								<del></del>	*
DTALS	-	_	-	-	-	-	_	-	-	_	-	-	*

<sup>\*</sup> Other Material Present In Various Units Of Measure

EA - Each

LF - Linear Feet MSF - Thousand Square Feet

**Table 458.3** 

# Other Asbestos-Containing Material - Building 458, Storage Type Occupancy: Adults (Public)

Area	Material Type	Quantity (Unit)
Mechanical Room	Expansion Cloth	2.0 (EA)

EA - Each

LF - Linear Feet

MSF - Thousand Square Feet

TABLE 458.4 EXPOSURE ASSESSMENTS (PRIORITY ORDER) -BUILDING 458, STORAGE

SAMPLE NO.	AREA	MATERIAL TYPE	PRIOR. INDEX CODE	PRIORITY INDEX NUMBER	<u>EX</u>	POSI 2	URE 3	FA0	TORS 5	AVG. EXP. Hours	% ASB.	
FK707	END WALLS	PLASTER CEILINGS & WALLS	A	0	1	2	2	1	0	0.00	0	
FK707	STORAGE RM-SIDE WALL	PLASTER CEILINGS & WALLS	Ä	Ō	1	2	2	1	0	0.00	0	
FK708	CEILING	PLASTER CEILINGS & WALLS	A	0	1	2	2	1	0	0.00	0	
FK708	STORAGE RM-SIDE WALL	PLASTER CEILINGS & WALLS	Α	0	1	2	2	1	0	0.00	0	
FK708	STORGE-2NDFLR-WALLS	PLASTER CEILINGS & WALLS	Α	0	1	2	2	1	0	0.00	0	
FK709	STORAGE ROOM-2ND FLR	INSULATION BOARD	Α	0	1	2	2	1	0	0.00	0	
FK710	STORGE-2NDFLR-CEILNG	PLASTER CEILINGS & WALLS	A	0	1	2	2	1	0	0.00	0	
FK711	MECHANICAL ROOM	EXPANSION JOINTS	Α	0	2	3	1	2	0	0.00	30	
FK712	MECHANICAL ROOM	INSULATION BOARD	Α	0	2	3	1	2	0	0.00	0	
FK713	MECHANICAL ROOM	INSULATION BOARD	Α	0	3	1	2	1	1	1.00	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

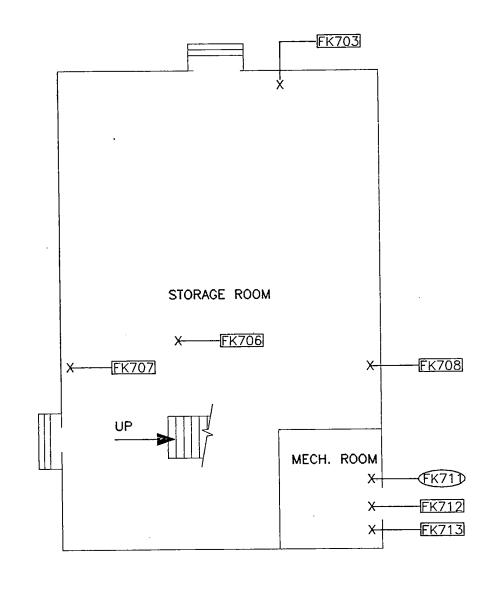
**TABLE 458.5** COST ESTIMATE\* - BUILDING 458, STORAGE

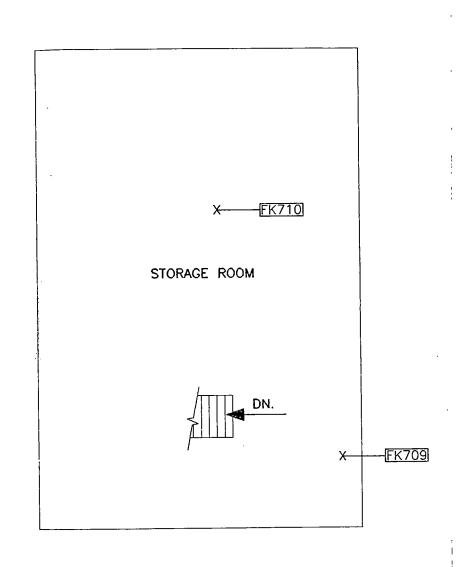
	UNIT	AREĄ	
DESCRIPTION	UNIT COST (\$)	<u>^~~7</u>	TOTAL
Pipe Fittings (EA) 40 4-80 4-80	70-30 85-80 147-00 216-00	:	:
4-78" 9-14" >14"	<b>2</b> 16:88	=	:
Pipe Runs (LF)	24 E0	_	_
3-8" 3-8"	26.50 30.50 60.80	-	:
4-8" 9-14" >14"	26:38	Ξ	:
Sprayed/Troweled Ceilings (SF)	9.60	_	_
Floor Tile (SF)	5.60	-	
Boilers/Tanks (SF)	37.90	-	-
	31.90	_	_
Air Handling Equipment (SF)	20.00	-	-
Other		0.6	0.6
SUBTOTAL		0.6	0.6
Difficulty Allowance		-	-
SUBTOTAL		0.6	0.6
Decontamination Units Mobilization		2:5	1:5
SUBTOTAL		4.1	4.1
Contingency a 15.00%		0.6	0.6
SUBTOTAL		4.7	4.7
Design Fee @ 10.00%		0.5	0.5
SUBTOTAL	•	5.2	5.2
Air Monitoring a 10.00%	**	0.5	0.5
TOTAL TOTAL		5.7	5.7

<sup>\*</sup>Amounts Are In Thousands Of Dollars

AREA 1: MECHANICAL ROOM

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





1st FLOOR

2nd FLOOR

BLDG. 458
NOT TO SCALE





#### **SUPPLY**

## 480.1 GENERAL

Building 480 was surveyed by WESTON's inspection team on 14 August 1992.

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 four samples of suspect material collected from the building. Of these samples, three were found to be asbestos-containing material (ACM). Table 480.1 lists the analytical results for the bulk samples.

## 480.2 ACM AND EXPOSURE ASSESSMENT

The location, description, and analytical results for each bulk sample from Building 480 are presented in Table 480.1. An area-by-area inventory of ACM is provided in Tables 480.2 and 480.3. "Other Asbestos-Containing Materials," listed in Table 480.3, are materials that do not correspond to the standard caption categories listed in Table 480.2. A prioritized listing of exposure assessments is presented in Table 480.4. The method by which the exposure assessment priority index values are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.5 of this report. An itemized area-by-area cost estimate for removal and replacement is provided in Table 480.5. The method by which removal/replacement costs are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.4 of this report. Building floor plans (see attachment) indicate sample locations and building area names as they are listed in Tables 480.2 and 480.5.

# 480.3 RECOMMENDATIONS/CONCLUSIONS

- The ACMs present in Building 480 are:
  - Floor tile
  - Transite panel
- The ACMs listed above should be labeled under the O&M Program.

TABLE 480.1

BULK SAMPLE ANALYSIS RESULTS - BUILDING 480, SUPPLY

SAMPLE				PERC	STOS	•	
NO.	LOCATION	ITEM	DESCRIPTION	СН	AM	OT	LAYERED
FK795	WAREHOUSE	CEILING BOARD	GRAY,OTH,GYPSUM BRD	-	•	-	YES
FK796	WAREHOUSE	FLOOR TILE	GREEN, OTH, FLOOR TILE	2	-	-	YES
FK797	WAREHOUSE	FLOOR TILE	GRAY, OTH, FLOOR TILE	2	-	-	YES
FK798	OFFICE 1- SOUTH WALL	TRANSITE PANEL BOARD	GREEN,OTH,TRANS PANL	35	-	-	YES

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

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

**TABLE 480.2** ASBESTOS-CONTAINING MATERIALS - BUILDING 480, SUPPLY

<del></del>	ΡI	PE FITT	NGS (EA)			PIPE RU	NS (LF)		SPRAY/TROWELED	FLOOR TILE	BOILERS/	AIR HANDLING	
AREA	<4"	4-8"	9-14"	>14"	<4 <sup>11</sup>	4-8"	9-14"	>14"	CEILINGS (MSF)	(MSF)	TANKS (MSF)	EQUIPMENT (MSF)	OTHE
ATHRM-OUTSIDE WALL	-	-	-	-	-	-	-	-	•	•	-	-	*
ANITOR'S CLOSET	-	-	-	-	-	-	-	-	•	-	-	-	*
ADIES ROOM	-	-	-	-	-	-	-	-	•	-	-	-	*
AIN-OFFN&E WALLS	-	-	-	-	-	•	-	-	-	-	•	-	*
AIN-OFFOUTSDEWALL	-	-	-	-	-	-	-	-	-	-	-	-	*
EN'S ROOM	-	-	-	-	-	-	-	-		-	-	-	*
FFICE 1- SOUTH WALL	-	-	-	-	-	-	-	-	-	-	-	-	*
FICE 1-OUTSDE WALL	-	-	-	-	-	-	-	-	•	-	•	•	*
AREHOUSE	<del>-</del>		<u> </u>		<u> </u>	<del></del>	<del>-</del>	<del>-</del>		10.20			
DTALS	_	-	-	-	-	-	_		-	10.20	•	<u> </u>	*

<sup>\*</sup> Other Material Present In Various Units Of Measure

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

# Table 480.3 Other Asbestos-Containing Material - Building 480, Supply Type Occupancy: Adults (Public)

Area	Material Type	Quantity (Unit)
Bathroom-Outside Wall	Transite Panel	0.090 (MSF)
Janitor's Closet	Transite Panel	0.020 (MSF)
Ladies' Room	Transite Panel	0.065 (MSF)
Main Office-N&E Walls	Transite Panel	0.220 (MSF)
Main Office-Outside Walls	Transite Panel	0.220 (MSF)
Men's Room	Transite Panel	0.080 (MSF)
Office 1-S. Wall	Transite Panel	0.080 (MSF)
Office 1-Outside Walls	Transite Panel	0.080 (MSF)

EA - Each

LF - Linear Feet

MSF - Thousand Square Feet

**TABLE 480.4** EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 480, SUPPLY

SAMPLE		MATERIAL	PRIOR. INDEX	PRIORITY INDEX	EX	POS	URE	FAC	TORS	AVG. Exp.	*
NO.	AREA	TYPE	CODE	NUMBER	1	2	3	4	5	HOURS	ASB.
FK798	BATHRM-OUTSIDE WALL	TRANSITE PANEL BOARD	Α	4.800E01	2	1	1	3	4	40.00	35
FK798	JANITOR'S CLOSET	TRANSITE PANEL BOARD	Ā	4.800E01	2	1	1	3	4	40.00	<b>3</b> 5
FK798	LADIES ROOM	TRANSITE PANEL BOARD	A	4.800E01	2	1	1	3	4	40.00	35
FK798	MAIN-OFFN&E WALLS	TRANSITE PANEL BOARD	A	4.800E01	2	1	1	3	4	40.00	<b>3</b> 5
FK798	MAIN-OFFOUTSDEWALL	TRANSITE PANEL BOARD	' A	4.800E01	2	1	1	3	4	40.00	<b>3</b> 5
FK798	MEN'S ROOM	TRANSITE PANEL BOARD	A	4.800E01	2	1	1	3	4	40.00	35
FK798	OFFICE 1- SOUTH WALL	TRANSITE PANEL BOARD	A	4.800E01	2	1	1	3	4	40.00	35
FK798	OFFICE 1-OUTSDE WALL	TRANSITE PANEL BOARD	Ä	4.800E01	2	1	1	3	4	40.00	35
FK795	WAREHOUSE	CEILING BOARD	Ä	0	2	1	1	3	4	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 480.5

COST ESTIMATE\* - BUILDING 480, SUPPLY

DESCRIPTION	UNIT COST (\$)	AREA	AREA	AREA	AREA	AREA	AREA	AREA	AREA 8	ARE	TOTAL
Pipe Fittings (EA)	-	•	-	-		-	•	•	-	•	<u>-</u>
4-8" 9-14" >14"	70.30 85.80 147.00 216.00	=	=	Ξ	Ξ.	:	=	:	Ξ	Ë	:
Pipe Runs (LF)	26 50	_	_	_	_	-	•	_	-	-	-
}-8" 9-74" >14"	26.50 30.50 42.50 60.80	: :	:	<u>-</u> ,	:	:	:	:	:	:	:
Sprayed/Troweled Ceilings (SF)	9.60	-	•	-	-	-	-	-	-	-	-
Floor Tile (SF)	5.60	-	•	-	-	-	-	-	-	57.1	57.1
Boilers/Tanks (SF)	37.90	-	-	-	-	-	-	-	-	-	-
Air Handling Equipment (SF)	20.00	-	-	-	-	-	-	-	-	-	-
Other		1.0	0.2	0.7	2.4	2.4	0.9	0.9	0.9	-	9.4
SUBTOTAL		1.0	0.2	0.7	2.4	2.4	0.9	0.9	0.9	57.1	66.5
Difficulty Allowance		-	-	-	-	-	•	-	-	-	-
SUBTOTAL	-	1.0	0.2	0.7	2.4	2.4	0.9	0.9	0.9	57.1	66.5
Decontamination Units Mobilization		8:3	8:3	8:3	8:3	8:3	8:3	8:3	8:3	8:3	<b>3:</b> 8
SUBTOTAL		1.5	0.8	1.3	3.0	3.0	1.4	1.4	1.4	57.7	71.5
Contingency a 15.00%		0.2	0.1	0.2	0.4	0.4	0.2	0.2	0.2	8.7	10.7
SUBTOTAL		1.8	0.9	1.5	3.4	3.4	1.7	1.7	, <b>1.7</b>	66.3	82.3
Design Fee a 10.00%		0.2	**	0.1	0.3	0.3	0.2	0.2	0.2	6.6	8.2
SUBTOTAL		2.0	1.0	1.6	3.8	3.8	1.8	1.8	1.8	73.0	90.5
Air Monitoring a 10.00%	***	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	9.0
TOTAL		3.0	2.0	2.6	4.8	4.8	2.8	2.8	2.8_	74.0	99.5

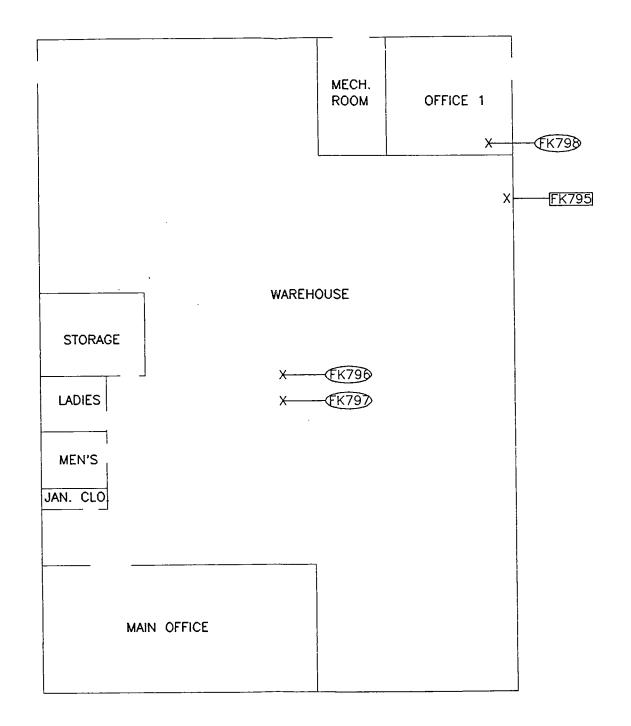
<sup>\*</sup>Amounts Are In Thousands Of Dollars

<sup>\*\*\*</sup>The Minimum Air Monitoring Fee is \$500.00 Per Building





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



BLDG. 480 NOT TO SCALE





## MAKE-IT-HAPPEN CENTER

## 481.1 GENERAL

Building 481 was surveyed by WESTON's inspection team on 14 August 1992.

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 three samples of suspect material collected from the building. Of these samples, one was found to be asbestos-containing material (ACM). Table 481.1 lists the analytical results for the bulk samples.

# 481.2 ACM AND EXPOSURE ASSESSMENT

The location, description, and analytical results for each bulk sample from Building 481 are presented in Table 481.1. An area-by-area inventory of ACM is provided in Tables 481.2 and 481.3. "Other Asbestos-Containing Materials," listed in Table 481.3, are materials that do not correspond to the standard caption categories listed in Table 481.2. A prioritized listing of exposure assessments is presented in Table 481.4. The method by which the exposure assessment priority index values are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.5 of this report. An itemized area-by-area cost estimate for removal and replacement is provided in Table 481.5. The method by which removal/replacement costs are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.4 of this report. Building floor plans (see attachment) indicate sample locations and building area names as they are listed in Tables 481.2 and 481.5.

# 481.3 RECOMMENDATIONS/CONCLUSIONS

- Floor tile was the material in Building 481 found to be ACM.
- Asbestos-containing floor tile should be labeled under the O&M Program.

TABLE 481.1

BULK SAMPLE ANALYSIS RESULTS - BUILDING 481, MAKE-IT-HAPPEN

SAMPLE				PERCE	NT ASB	STOS	
NO.	LOCATION	ITEM	DESCRIPTION	СН	AM	OT	_LAYERED <sup>e</sup>
FK799	WAREHOUSE- NORTH	FLOOR: TILE	GREEN,OTH,FLOOR TILE	7	-	-	NO
FK800	STORAGE 1	FLOOR TILE	TAN,OTH,FLOOR TILE	-	-	-	YES
FK801	STORAGE 2	FLOOR TILE	TAN,OTH,FLOOR TILE	-	-	-	YES

<sup>&</sup>lt;sup>a</sup>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	NGS (EA)		· -	PIPE RU	NS (LF)		SPRAY/TROWELED	FLOOR TILE	BOILERS/	AIR HANDLING	
AREA	<4 <sup>11</sup>	4-8"	9-14"	>14"	<4"	4-8"	9-14"	>14"	CEILINGS (MSF)	(MSF)	TANKS (MSF)	EQUIPMENT (MSF)	OTHER
WAREHOUSE- NORTH		<u> </u>				<del>-</del>				0.10			
TOTALS									<u> </u>	0.10	-	<u> </u>	

\* Other Material Present In Various Units Of Measure

EA - Each

LF - Linear Feet

MSF - Thousand Square Feet

**Table 481.3** 

# Other Asbestos-Containing Material - Building 481, Make-It-Happen 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 481.4

### EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 481, MAKE-IT-HAPPEN

		<del></del>	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 481.5** COST ESTIMATE\* - BUILDING 481, MAKE-IT-HAPPEN

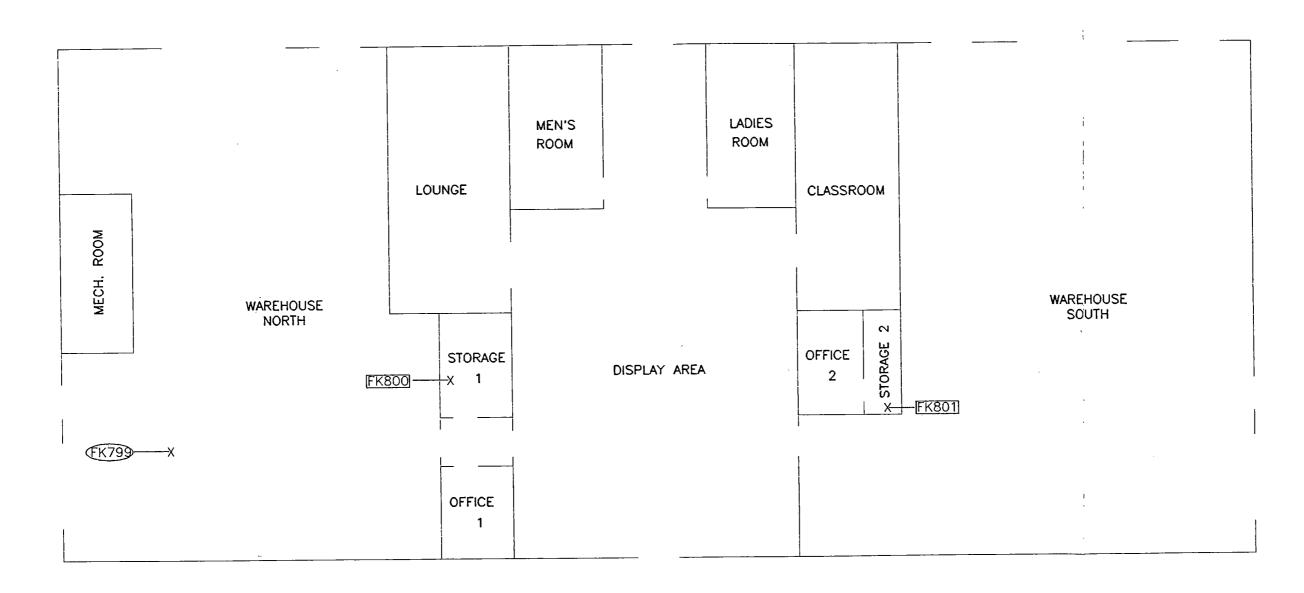
DESCRIPTION	UNIT COST (\$)	AREĄ	TOTAL
Pipe Fittings (EA)			-
4-8" 9-14" >14"	70.30 157.80 216.00	=	=
Pipe Runs (LF)		-	-
4-8" 9-14" >14"	26-50 30-50 42-50 60-80	=	=
Sprayed/Troweled Ceilings (SF)			
Floor Tile (SF)	9.60 5.60	0.6	0.6
Boilers/Tanks (SF)	37.90	•	•
Air Handling Equipment (SF)	20.00	-	-
Other		-	-
SUBTOTAL		0.6	0.6
Difficulty Allowance		-	- 0.4
SUBTOTAL  Decontemination Units		0.6	0.6
Decontamination Units Mobilization		2.0	2.0
SUBTOTAL		2.6 0.4	2.6 0.4
Contingency @ 15.00% SUBTOTAL		2.9	2.9
Design Fee a 10.00%	•	0.3	0.3
SUBTOTAL	***	3.2	3.2
Air Monitoring @ 10.00%		<u>0.5</u> 3.7	0.5 3.7

<sup>\*</sup>Amounts Are In Thousands Of Dollars

AREA 1: WAREHOUSE- NORTH

<sup>\*\*\*</sup>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. 481
NOT TO SCALE

NORTH





### **ELECTRICAL/WORK CONTROL SHOP**

### **483.1 GENERAL**

Building 483 was surveyed by WESTON's inspection team on 17 August 1992.

The first three portions of this facility report summarize the results of this inspection. A photograph of pipe run and fitting insulation sample location is provided in Section 483.4.

Polarized Light Microscopy (PLM) with dispersion staining was used to analyze 7 samples of suspect material collected from the building. Of these samples, 6 were found to be asbestos-containing material (ACM). Table 483.1 lists the analytical results for the bulk samples.

#### 483.2 ACM AND EXPOSURE ASSESSMENT

The location, description, and analytical results for each bulk sample from Building 483 are presented in Table 483.1. An area-by-area inventory of ACM is provided in Tables 483.2 and 483.3. "Other Asbestos-Containing Materials," listed in Table 483.3, are materials that do not correspond to the standard caption categories listed in Table 483.2. A prioritized listing of exposure assessments is presented in Table 483.4. The method by which the exposure assessment priority index values are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.5 of this report. An itemized area-by-area cost estimate for removal and replacement is provided in Table 483.5. The method by which removal/replacement costs are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.4 of this report. Building floor plans (see attachment) indicate sample locations and building area names as they are listed in Tables 483.2 and 483.5.

## 483.3 RECOMMENDATIONS/CONCLUSIONS

- The ACMs present in Building 483 are:
  - Pipe insulation
  - Floor tile
  - Transite panel
- The following areas in Building 483 qualify for the Army Asbestos Deficiency Abatement Project (AADAP):
  - Equipment room
  - Garage
  - Janitor's closet
  - Storage 1
  - Latrine
  - Office 1
- Asbestos-containing floor tile and transite panel should be labeled under the O&M Program.

TABLE 483.1

BULK SAMPLE ANALYSIS RESULTS - BUILDING 483, ELECTRICAL SHOP

SAMPLE				PERCE	ENT ASB	STOS	
NO.	LOCATION	ITEM	DESCRIPTION	CH	AM	OT	LAYERED
FK802	OFFICE 1	FLOOR TILE	BROWN,OTH,FLOOR TILE	8	-	-	NO
FK803	OFFICE 1	<4" PIPE FITTING	WHITE,UNK,<4" FITT.	60	-	-	YES
FK804	OFFICE 1	<4" PIPE RUN	WHITE,UNK,<4" PIPE	25	25	-	NO
FK805	STORAGE 1	`<4" PIPE RUN	GRAY, UNK, PIPE INSUL	20	-	-	YES
FK806	LATRINE	FLOOR TILE	BLACK,OTH,FLOOR TILE	8	-	-	NO
FK807	EXTERIOR WALLS	TRANSITE PANEL BOARD	GRAY,OTH,TRANS SIDG	25	-	-	NO
FK808	MECHANICAL ROOM 1	9-14" PIPE RUN	WHITE, UNK, PIPE INSUL	-	-	-	YES

 $<sup>^{\</sup>mathbf{a}}$ 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	
W = West	OTH = Other	
NE = Northeast	UNK = Unknown	
NW = Northwest		

TABLE 483.2 ASBESTOS-CONTAINING MATERIALS - BUILDING 483, ELECTRICAL SHOP

	PI	PE FITT	INGS (EA)		PIPE RUNS (LF)				SPRAY/TROWELED	FLOOR TILE		AIR HANDLING	
AREA	<4 <sup>11</sup>	4-8"	9-14"	>14"	<4 <sup>11</sup>	4-8"	9-14"	>14"	CEILINGS (MSF)	(MSF)	TANKS (MSF)	EQUIPMENT (MSF)	OTHER
EQUIPMENT ROOM	8	_	-	-	155	-	-	-	-	-	-	-	-
EXTERIOR WALLS	-	-	-	-	-	-	-	-	-	-	-	-	*
GARAGE	17	-	-	-	210	-	-	-	-	-	•	-	-
JANITORIAL CLOSET	2	-	-	-	25	-	-	-	-	-	-	-	-
LATRINE	2	_	-	-	10	-	-	-	-	0.15	-	-	-
OFFICE 1	Ž	-	-	-	. 15	-	-	-	•	0.77	-	-	-
STORAGE 1	25	-	-	-	195	-	-	-	-	-	-	-	-
STORAGE 4		<u> </u>		<del>-</del>	25						<del></del> ,	-	<u>.</u>
TOTALS	56	-	_	_	635	-	-	-	` <u>-</u>	0.92			*

<sup>\*</sup> Other Material Present In Various Units Of Measure

EA - Each

LF - Linear Feet
MSF - Thousand Square Feet

**Table 483.3** 

# Other Asbestos-Containing Material - Building 483, Electrical Shop Type Occupancy: Adults (Public)

. Area	Material Type	Quantity (Unit)
Exterior Walls	Transite Panel	5.500 (MSF)

EA - Each

LF - Linear Feet

MSF - Thousand Square Feet

**TABLE 483.4** EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 483, ELECTRICAL SHOP

			PRIOR.	PRIORITY						AVG.		
SAMPLE		MATERIAL	INDEX	INDEX					TORS	EXP.	*	
NO.	AREA	TYPE	CODE	NUMBER	1	2	3	4	5	HOURS	ASB.	
FK803	EQUIPMENT ROOM	<4" PIPE FITTING	c	1.880E06	3	3	2	3	4	40.00	60	
FK803	GARAGE	<4" PIPE FITTING	č	1.880E06	3		2		4	40.00	60	
FK803	GARAGE	<4" PIPE FITTING	ŗ	1.880E06	3	3	2	3	4	40.00	60	
FK804	EQUIPMENT ROOM	<4" PIPE RUN	Č	1.880E06	3	3	2	3	Ä	40.00	50	
FK804	GARAGE	<4" PIPE RUN	Č	1.880E06	3	3	2	3	į.	40.00	50	
FK804	GARAGE	<4" PIPE RUN	ř	1.880E06	3	3	2	3	À	40.00	50	
FK805	GARAGE	<4" PIPE RUN	Č	6.800E05	3	3	2	3	į.	40.00	20	
FK803	JANITORIAL CLOSET	<4" PIPE FITTING	Č	1.660E05	3	3	2	2	ż	40.00	60	
FK803	STORAGE 1	<4" PIPE FITTING	Č	1.660E05	3	3.	2	2	- 2	40.00	60	
FK804	JANITORIAL CLOSET	<4" PIPE RUN	Č	1.660E05	3	ž	2	2	2	40.00	50	
FK804	LATRINE	<4" PIPE RUN	· C	1.660E05	3	3	2	2	5	40.00	50	
FK804 FK804	STORAGE 1	<4" PIPE RUN	Č	1.660E05	รี	ヹ	2	2	5	40.00	50	
FK804	STORAGE 1	<4" PIPE RUN	Č	1.660E05	٠ ۲	3	2	2	5	40.00	50	
	EQUIPMENT ROOM	<4" PIPE RUN <4" PIPE FITTING	C	1.200E05	ž	2	2	2	4	40.00	60	
FK803		<4" PIPE PITTING	C	1.200E05	3	2	2	2	7	40.00	50	
FK804	EQUIPMENT ROOM	<4" PIPE RUN	Č	6.000E04	3	3	2	2	2	40.00	20	
FK805	STORAGE 1		C	4.400E04	7	2	1	2	7	40.00	60	
FK803	OFFICE 1	<4" PIPE FITTING		4.400E04 4.400E04	7	2	+	2	4	40.00	60	
FK803	STORAGE 1	<4" PIPE FITTING	C		3	2	1	2	7		50	
FK804	OFFICE 1	<4" PIPE RUN		4.400E04	3	2	1	4	4	40.00		
FK803	LATRINE	<4" PIPE FITTING	R	7.600E02	3	2	1	1	4	4.00	60 50	
FK804	STORAGE 4	<4" PIPE RUN	A	3.240E00	3	1	2	1	7	8.00	50 25	
FK807	EXTERIOR WALLS	TRANSITE PANEL BOARD	Ą	1.160E00	5	1	2	1	1	8.00	25	
FK808	MECHANICAL ROOM 1	9-14" PIPE RUN	A	0	3	2	1	3	1	8.00	0	

Priority Index Codes
A [=] Long Term Corrective Measure

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

B [=] Review Management Special Considerations/Remarks

C [=] Army Asbestos Deficiency Abatement Project

**TABLE 483.5** COST ESTIMATE\* - BUILDING 483, ELECTRICAL SHOP

DESCRIPTION	UNIT COST (\$)	AREA 1	AREA	AREA	AREA	AREA	AREA	ARE	AREA	TOTAL
Pipe Fittings (EA) 4-8" 9-14" >14"	70.30 85.80 185.80 216.00	0.6		1.2	0.1	0.1	0.1	1.8	:	3.9
>14" Pipe Runs (LF) 4-8" 9-14" >14"	26.50 30.50 42.50 60.80	4.1 -	:	5.6	0.7	0.3	0.4	5.2 <sup>-</sup>	0.7	16.8
Sprayed/Troweled Ceilings (SF)	9.60	-	-	-	-		- 	•	-	-
Floor Tile (SF) Boilers/Tanks (SF)	5.60 37.90	-	-	-	-	0.8	4.3 -	-	-	5.2 -
Air Handling Equipment (SF) Other	20.00	-	- 60.5	-	-	-	-	-		- 60.5
SUBTOTAL		4.7 7.0	60.5 121.0	6.8 10.1	0.8 1.2	1.2 0.6	4.9 0.8	6.9 10.4	0.7 1.0	86.4 152.1
Difficulty Allowance SUBTOTAL		11.7	181.5	16.9	2.0	1.9	5.7	17.3	1.7	238.6
Decontamination Units Mobilization SUBTOTAL		0.6 0.3 12.5	0.6 0.3 182.3	0: <u>6</u> 0:3 17.7	0: <u>6</u> 0:3 2.8	0.6 0.3 2.7	8: <u>6</u> 6.5	8: <u>6</u> 18.1	0: <u>6</u> 2.5	4:5 2:5 245.1
Contingency a 15.00% SUBTOTAL		1.9 14.4	27.3 209.7	2.7 20.4	0.4 3.2	0.4 3.1	1.0 7.4	2.7 20.8	0.4 2.8	36.8 281.8
Design Fee @ 10.00% - SUBTOTAL	•	1.4 15.8	21.0 230.6	2.0 22.4	0.3 3.6	0.3 3.4	0.7 8.2	2.1 22.9	0.3 3.1	28.2 310.0
Air Monitoring @ 10.00% TOTAL	***	3.9 19.7	3.9 234.5	3.9 26.3	3.9 7.4	<u>3.9</u> 7.2	<u>3.9</u> 12.1	3.9 26.8	<u>3.9</u> 7.0	31.0 341.0

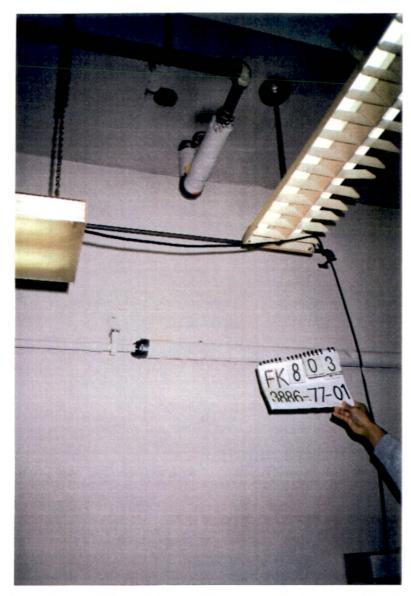
<sup>\*</sup>Amounts Are In Thousands Of Dollars

AREA 2: EXTERIOR WALLS AREA 4: JANITORIAL CLOSET AREA 8: OFFICE AREA 8: STORAGE 4

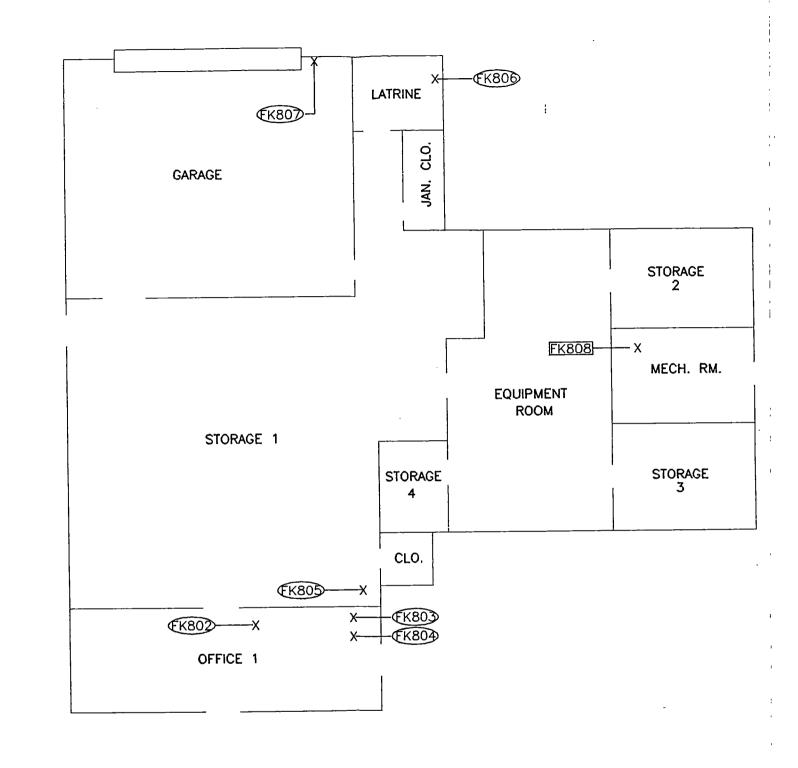
<sup>\*\*\*</sup>Less Than \$100 For The Area; Amount Not Printed But Included In Total(s)
\*\*\*\*The Minimum Air Monitoring Fee is \$500.00 Per Building

483.4

**PHOTOGRAPH** 



Bldg. 483 Office 1: (Sample(s) FK803 and 804) <4" Pipe Run and Fitting Insulation Tested Positive



BLDG. 483
NOT TO SCALE





#### PLUMBING MAINTENANCE

### 485.1 GENERAL

Building 485 was surveyed by WESTON's inspection team on 18 August 1992.

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 eight samples of suspect material collected from the building. Of these samples, three were found to be asbestos-containing material (ACM). Table 485.1 lists the analytical results for the bulk samples.

#### 485.2 ACM AND EXPOSURE ASSESSMENT

The location, description, and analytical results for each bulk sample from Building 485 are presented in Table 485.1. An area-by-area inventory of ACM is provided in Tables 485.2 and 485.3. "Other Asbestos-Containing Materials," listed in Table 485.3, are materials that do not correspond to the standard caption categories listed in Table 485.2. A prioritized listing of exposure assessments is presented in Table 485.4. The method by which the exposure assessment priority index values are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.5 of this report. An itemized area-by-area cost estimate for removal and replacement is provided in Table 485.5. The method by which removal/replacement costs are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.4 of this report. Building floor plans (see attachment) indicate sample locations and building area names as they are listed in Tables 485.2 and 485.5.

# 485.3 RECOMMENDATIONS/CONCLUSIONS

- The ACMs present in Building 485 are:
  - Floor tile
  - Transite panel
- The ACMs listed above should be labeled under the O&M Program.

TABLE 485.1

BULK SAMPLE ANALYSIS RESULTS - BUILDING 485, PLUMBING MAINTENANCE

SAMPLE	<u> </u>			PERC	ENT ASB	ESTOS	
NO.	LOCATION	ITEM	DESCRIPTION	СН	AM	OT	LAYERED
FK819	MECHANICAL ROOM	OTHER MATERIAL	WHITE,OTH,GASKET	•	-	-	NO
FK820	PARTS STORAGE AREA	FLOOR TILE	GREEN, OTH, FLOOR TILE	5	-	-	NO
FK821	BATHROOM 2	CEILING BOARD	WHITE, OTH, CEIL BOARD	-	-	-	YES
FK822	CORRIDOR	FLOOR TILE	TAN,OTH,FLOOR TILE	1	-	-	NO
FK823	OFFICE 1	FLOOR TILE	GRAY,OTH,FLOOR TILE	-	-	-	NO
FK824	BATHROOM 2	FLOOR TILE	GRAY,OTH,FLOOR TILE	-	-	-	NO
FK825	OFFICE 1	FLOOR TILE	RED,OTH,FLOOR TILE	-	-	-	NO
FK826	STORAGE 1	TRANSITE PANEL BOARD	GRAY, OTH, TRANS PANL	25	-	-	NO

<sup>&</sup>lt;sup>a</sup>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 485.2 ASBESTOS-CONTAINING MATERIALS - BUILDING 485, PLUMBING MAINTENANCE

	Pi	PE FITT	INGS (EA)			PIPE RUI	NS (LF)		SPRAY/TROWELED	FLOOR TILE	BOILERS/	AIR HANDLING	
AREA	<4 <sup>11</sup>	4-8"	9-14"	>14"	<4"	4-8"	9-14"	>14"	CEILINGS (MSF)	(MSF)	TANKS (MSF)	EQUIPMENT (MSF)	OTHE
CORRIDOR		-	-	-		_	-	-	•	0.17	-	-	-
OFFICE 1	-	-	-	-	-	-	_	_	-	0.14	-	-	-
OFFICE 2	_	-	-	-	-	-	-	-		0.07	-	•	-
PARTS STORAGE AREA	-	-	-	-	_	-	•	-	-	0.70	-	-	-
STORAGE 1	-			<del>-</del>						<u> </u>		-	*
TOTALS	_	_	_	_	_	-	_	_	-	1.09	-	-	*

Other Material Present In Various Units Of Measure

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

**Table 485.3** 

## Other Asbestos-Containing Material - Building 485, Plumbing Maintenance Type Occupancy: Adults (Public)

Area	Material Type	Quantity (Unit)
Storage 1	Transite Panel	0.600 (MSF)

EA - Each

LF - Linear Feet

MSF - Thousand Square Feet

TABLE 485.4 EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 485, PLUMBING MAINTENANCE

SAMPLE		MATERIAL	PRIOR. INDEX	PRIORITY INDEX	EX	POS	URE	FAC	TORS	AVG. Exp.	*	
 NO.	AREA	TYPE	CODE	NUMBER	1	2	3	4	5	HOURS	ASB.	
FK826	STORAGE 1	TRANSITE PANEL BOARD	• А	1.480E00	2	1	1	1	4	40.00	25	
FK819	MECHANICAL ROOM	GASKET	A	. 0	1	3	1	2	1	8.00	0	
FK821	BATHROOM 2	CEILING BOARD	A	0	2	1	1	1	4	40.00	0	
FK821	OFFICE 1	CEILING BOARD	Ā	0	2	1	1	1	4	40.00	0	
FK821	OFFICE 2	CEILING BOARD	Ä	0	2	1	1	1	4	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

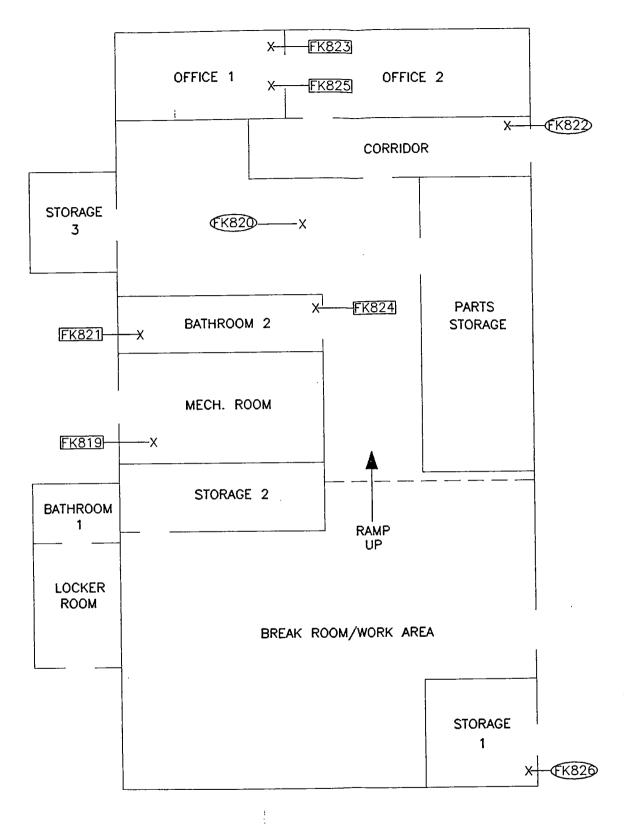
**TABLE 485.5** COST ESTIMATE\* - BUILDING 485, PLUMBING MAINTENANCE

DESCRIPTION	UNIT COST (\$)	AREA	AREA	AREĄ	AREA	AREA	TOTAL		
Pipe Fittings (EA)			<del></del>		•	<del>-</del>		 	
4-8"	70.30 85.80	:	-	=	:	:	=		
478" 9714" 2144"	147.00 216.00	:	:	:	=	:	=		
Pipe Runs (LF)	26 50	-		-	_	_	-		
478" 9-14" >14"	26.50 30.50 42.50 60.80	=	-	-	:	:	-		
<b>₹14</b> 11	29:92	-	•	-	•	-	-		
Sprayed/Troweled Ceilings (SF)	9.60		_	-	-	•	-		
Floor Tile (SF)	5.60	0.9	0.8	0.4	3.9	-	6.1		
Boilers/Tanks (SF)	37.90	-	-	-	-	-	-		
Air Handling Equipment (SF)	20.00	• •	-	-	_	-	-		
Other		-	-	-	-	6.6	6.6		
SUBTOTAL		0.9	0.8	0.4	3.9	6.6	12.7		
Difficulty Allowance		0.5	-	-	-	-	0.5		•
SUBTOTAL		1.4	0.8	0.4	3.9	6.6	13.1		
Decontamination Units Mobilization		8:4	8:4	8:4	8:4	8:4	<b>3:8</b>		
SUBTOTAL		2.4	1.8	1.4	4.9	7.6	18.1		
Contingency @ 15.00%		0.4	0.3	0.2	0.7	1.1	2.7		
SUBTOTAL		2.8	2.1	1.6	5.7	8.7	20.9		
Design Fee a 10.00%		0.3	0.2	0.2	0.6	0.9	2.1		
SUBTOTAL		3.1	2.3	1.8	6.2	9.6	23.0		
Air Monitoring & 10.00%	,** <b>*</b>	0.5	0.5	0.5	0.5	0.5	2.3		
TOTAL		3.5	2.7	2.2	6.7	10.1	25.3		

<sup>\*</sup>Amounts Are In Thousands Of Dollars

<sup>\*\*\*</sup>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. 485
NOT TO SCALE





#### **STORAGE**

#### 497.1 GENERAL

Building 497 was surveyed by WESTON's inspection team on 18 August 1992.

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 497.1 lists the analytical results for the bulk samples.

### 497.2 ACM AND EXPOSURE ASSESSMENT

The location, description, and analytical results for the bulk sample from Building 497 are presented in Table 497.1. An area-by-area inventory of ACM is provided in Tables 497.2 and 497.3. "Other Asbestos-Containing Materials," listed in Table 497.3, are materials that do not correspond to the standard caption categories listed in Table 497.2. A prioritized listing of exposure assessments is presented in Table 497.4. The method by which the exposure assessment priority index values are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.5 of this report. An itemized area-by-area cost estimate for removal and replacement is provided in Table 497.5. The method by which removal/replacement costs are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.4 of this report. Building floor plans (see attachment) indicate sample locations and building area names as they are listed in Tables 497.2 and 497.5.

## 497.3 RECOMMENDATIONS/CONCLUSIONS

- Floor tile was the material in Building 497 found to be ACM.
- Asbestos-containing floor tile should be labeled under the O&M Program.

TABLE 497.1

BULK SAMPLE ANALYSIS RESULTS - BUILDING 497, STORAGE

SAMPLE			:	PERCE	NT ASB	ESTOS	_
NO.	LOCATION	ITEM	DESCRIPTION	CH	MA	OT	LAYERED
FK829	STORAGE AREA	FLOOR TILE	GREEN, OTH, FLOOR TILE	4	-	-	NO

 $<sup>{}^{\</sup>mathbf{a}}$ 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 = Öther	
NE = Northeast	UNK = Unknown	
NW = Northwest		
SE = Southeast		
SW = Southwest		

## ASBESTOS-CONTAINING MATERIALS - BUILDING 497, STORAGE

	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
TORAGE AREA	<del>.</del>	<del>-</del>		<u> </u>			<u></u>	<del>-</del>	<del></del>	3.00	·	<u> </u>	
TALS	_	_	_	_	_	_	-		-	3.00	-	<u> </u>	

<sup>\*</sup> Other Material Present In Various Units Of Measure

EA - Each

LF - Linear Feet MSF - Thousand Square Feet

## **Table 497.3**

# Other Asbestos-Containing Material - Building 497, 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 497.4

### EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 497, STORAGE

		<u> </u>	•				
 •			PRIOR.	PRIORITY		AVG.	
MPLE	•	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 497.5** COST ESTIMATE\* - BUILDING 497, STORAGE

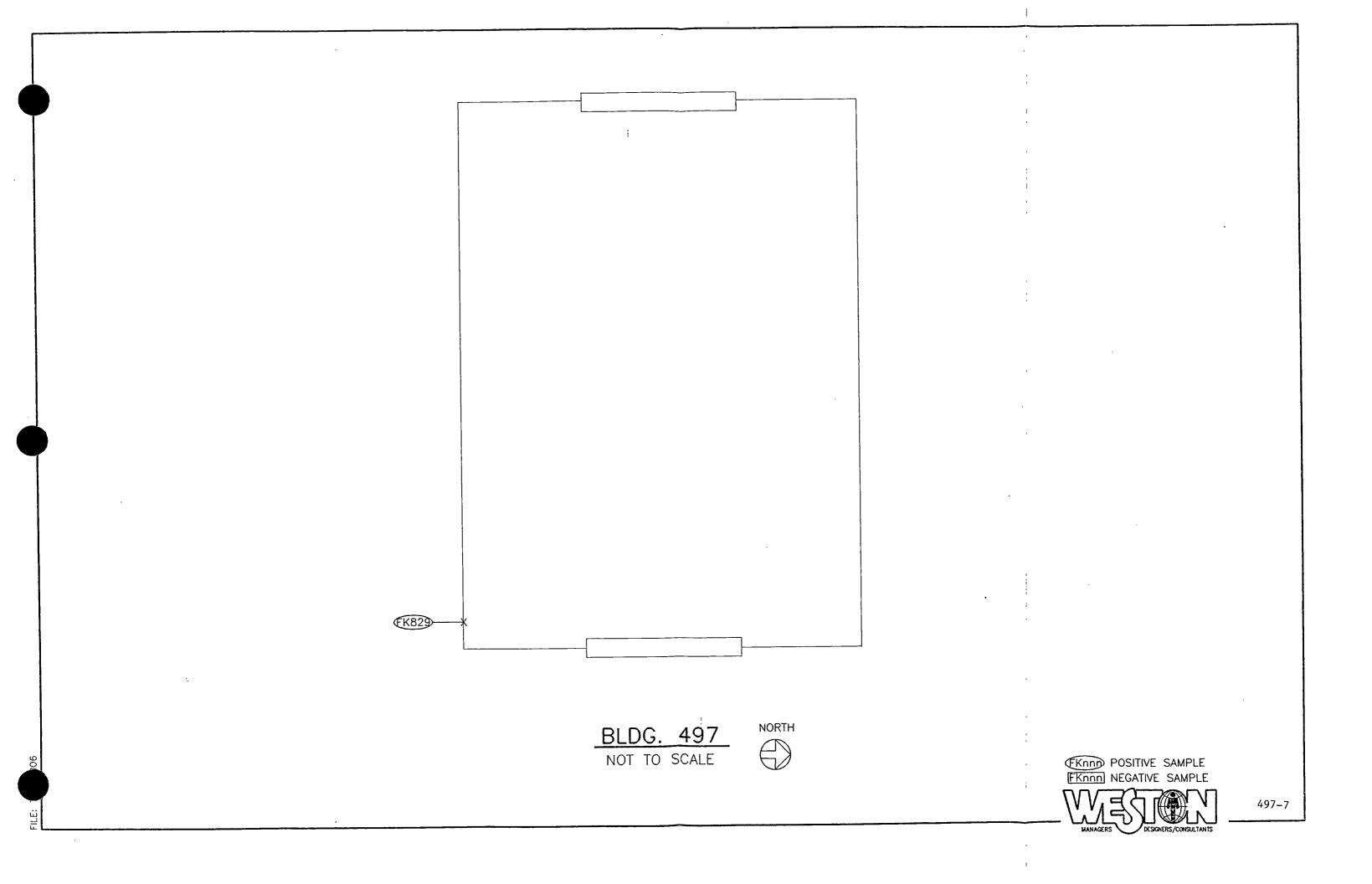
	UNIT COST (\$)	AREĄ	
DESCRIPTION	COST (\$)	1	TOTAL
Pipe Fittings (EA)	70.30	<u>-</u>	-
4-8" 9-14" >14"	70.30 85.80 147.00 216.00	-	=
Pipe Runs (LF)			
4-8"	26.50 30.50 60.80	Ξ	
4-8" 9-14" >14"	<b>26:38</b>	Ξ	=
Sprayed/Troweled Ceilings (SF)	9.60	<del>-</del>	-
Floor Tile (SF)	5.60	16.8	16.8
Boilers/Tanks (SF)	37.90	-	-
Air Handling Equipment (SF)	20.00	_	
Other	20.00	-	-
SUBTOTAL		16.8	16.8
Difficulty Allowance		-	-
SUBTOTAL		16.8	16.8
Decontamination Units Mobilization		3:8	<b>3:8</b>
SUBTOTAL		21.8	21.8
Contingency a 15.00%		3.3	3.3
SUBTOTAL		25.1 2.5	25.1
Design Fee @ 10.00% SUBTOTAL	•	2.5 27.6	2.5 27.6
Air Monitoring a 10.00%	**	<u> 27.8</u>	2.8
TOTAL		30.3	30.3

<sup>\*</sup>Amounts Are In Thousands Of Dollars

AREA 1: STORAGE AREA

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

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



#### **STORAGE**

### **498.1 GENERAL**

Building 498 was surveyed by WESTON's inspection team on 18 August 1992.

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 498.1 lists the analytical results for the bulk samples.

#### 498.2 ACM AND EXPOSURE ASSESSMENT

The location, description, and analytical results for the bulk sample from Building 498 are presented in Table 498.1. An area-by-area inventory of ACM is provided in Tables 498.2 and 498.3. "Other Asbestos-Containing Materials," listed in Table 498.3, are materials that do not correspond to the standard caption categories listed in Table 498.2. A prioritized listing of exposure assessments is presented in Table 498.4. The method by which the exposure assessment priority index values are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.5 of this report. An itemized area-by-area cost estimate for removal and replacement is provided in Table 498.5. The method by which removal/replacement costs are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.4 of this report. Building floor plans (see attachment) indicate sample locations and building area names as they are listed in Tables 498.2 and 498.5.

### 498.3 RECOMMENDATIONS/CONCLUSIONS

- Floor tile was the material in Building 498 found to be ACM.
- Asbestos-containing floor tile should be labeled under the O&M Program.

TABLE 498.1

BULK SAMPLE ANALYSIS RESULTS - BUILDING 498, STORAGE

SAMPLE				PERCE	NT ASB	ESTOS	
NO.	LOCATION	ITEM	DESCRIPTION	СН	AM.	OT	LAYERED
FK830 STORAG	<b>E</b> .	FLOOR TILE	BLACK,OTH,FLOOR TILE	5	-	•	NO

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

Quadrant Codes	System Codes	Asbestos Ty
C = Center	STM = Steam	CH = Chryso
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 498, STORAGE

	PI	PE 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
STORAGE		<del></del>	<del>-</del>		<del>-</del>	<u>-</u>			<del>-</del>	0.70		<u> </u>	
TOTALS	-	_	_	-	-	-	-	-	•	0.70		<b>-</b>	

 $<sup>^{\</sup>star}$  Other Material Present In Various Units Of Measure

EA - Each

LF - Linear Feet
MSF - Thousand Square Feet

### **Table 498.3**

## Other Asbestos-Containing Material - Building 498, Storage 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

TABLE 498.4

### EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 498, STORAGE

					_		
		PRIOR.	PRIORITY	-	AVG.		
SAMPLE	MATERIAL	INDEX	INDEX	EXPOSURE FACTORS	EXP.	×	
NOAREA	TYPE	CODE	NUMBER	1 2 3 4 5	HOURS	ASB	

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

<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

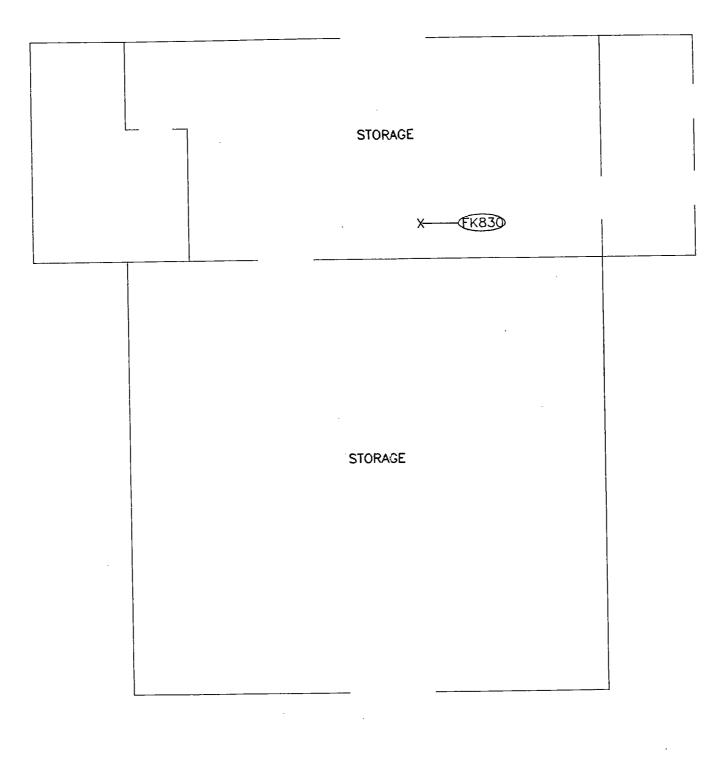
**TABLE 498.5** COST ESTIMATE\* - BUILDING 498, STORAGE

DESCRIPTION	UNIT COST_(\$)	AREA	TOTAL
Pipe Fittings (EA) 4-8" 9-14" >14"	70.30 85.80 27.00 216.00	:	i i
Pipe Runs (LF) 4-8" 9-14" >14"	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		-	-
SUBTOTAL		3.9	3.9
Difficulty Allowance		-	-
SUBTOTAL		3.9	3.9
Decontamination Units Mobilization		<b>3:</b> 8	<b>3:8</b>
SUBTOTAL		8.9	8.9
Contingency a 15.00%		1.3	1.3
SUBTOTAL		10.3	10.3
Design Fee a 10.00%	1	1.0	1.0
SUBTOTAL	***	11.3	11.3
Air Monitoring a 10.00%	***	<u> </u>	1.1
TOTAL		12.4	12.4

<sup>\*</sup>Amounts Are In Thousands Of Dollars

AREA 1: STORAGE

<sup>\*\*\*</sup>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. 498

NOT TO SCALE





#### COURTHOUSE

### 499.1 GENERAL

Building 499 was surveyed by WESTON's inspection team on 18 August 1992.

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 two samples of suspect material collected from the building. Of these samples, one was found to be asbestos-containing material (ACM). able 499.1 lists the analytical results for the bulk samples.

### 499.2 ACM AND EXPOSURE ASSESSMENT

The location, description, and analytical results for each bulk sample from Building 499 are presented in Table 499.1. An area-by-area inventory of ACM is provided in Tables 499.2 and 499.3. "Other Asbestos-Containing Materials," listed in Table 499.3, are materials that do not correspond to the standard caption categories listed in Table 499.2. A prioritized listing of exposure assessments is presented in Table 499.4. The method by which the exposure assessment priority index values are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.5 of this report. An itemized area-by-area cost estimate for removal and replacement is provided in Table 499.5. The method by which removal/replacement costs are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.4 of this report. Building floor plans (see attachment) indicate sample locations and building area names as they are listed in Tables 499.2 and 499.5.

## 499.3 RECOMMENDATIONS/CONCLUSIONS

- Floor tile was the material in Building 499 found to be ACM.
- Asbestos-containing floor tile present in Building 499 should be labeled under the O&M Program.

TABLE 499.1

BULK SAMPLE ANALYSIS RESULTS - BUILDING 499, COURT HOUSE

SAMPLE				PERCE	NT ASBI	ESTOS	
NO.	LOCATION	ITEM	DESCRIPTION	СН	AM	OT	LAYERED
FK827 B/	ATHROOM 2	FLOOR TILE	TAN,OTH,FLOOR TILE	5	-	-	NO
FK828 C	ONFER. ROOM 2	CEILING BOARD	WHITE,OTH,CEIL BOARD	~	-	-	NO

 $<sup>^{\</sup>mathbf{a}}$  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		
SF = Southeast		

TABLE 499.2 ASBESTOS-CONTAINING MATERIALS - BUILDING 499, COURT HOUSE

	PI	PÉ 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
BATHROOM 1	-	_	_	-	-	_	-	-	-	0.03	-	•	-
BATHROOM 2	_	-	_	-	-	-	-	-		0.03	-	•	-
CLOSET	-	-	-	-	-	-	-	-	-	0.01	-	-	-
CONFER. ROOM 2	-	-	-	-	-	-	_	-	-	0.19	-	•	-
JUDGE'S BENCH	_	-	-	-	-	-	-	-	-	0.06	-	-	-
LADIES' ROOM	_	_	-	-	-	-	-	-	-	0.05	•	•	-
LOBBY	-	-	-	_	-	-	-	-	-	0.17	-	-	-
MEN'S ROOM		<del>-</del>		<del>.</del>			:	<del>_</del> :		0.05			
TOTALS	-	_	_	-	_	-	_	_	-	0.57	-	<u></u>	

 $<sup>^{</sup>f *}$  Other Material Present In Various Units Of Measure

EA - Each

LF - Linear Feet MSF - Thousand Square Feet

**Table 499.3** 

# Other Asbestos-Containing Material - Building 499, Courthouse 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 499.4** EXPOSURE ASSESSMENTS (PRIORITY ORDER) -BUILDING 499, COURT HOUSE

SAMPLE		MATERIAL	PRIOR. INDEX	PRIORITY INDEX	EXPOSURE FACTORS	AVG. EXP.	*
NO.	AREA	TYPE	CODE	NUMBER	1 2 3 4 5	HOURS	ASB.
FK828	CONFER. ROOM 1	CEILING BOARD	A	0	2 2 1 1	0 40.00	0
FK828	CONFER. ROOM 2	CEILING BOARD	Ä	Ō	2 2 1 1	0 40.00	0
FK828	LOBBY	CEILING BOARD	Α	0	2 2 1 1	0 40.00	0
FK828	TRIAL AREA/PUBLIC ST	CEILING BOARD	Α	0	2 2 1 1 4	0 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 499.5** COST ESTIMATE\* - BUILDING 499, COURT HOUSE

	UNIT COST (\$)	AREĄ	AREA	AREĄ	AREĄ	AREĄ	AREA	AREA	AREA	
DESCRIPTION	COST (\$)	1	2	3	4	5	6	7	8	TOTAL
Pipe Fittings (EA)	70.30	•	-	<b>.</b> .	-	-	-	-	-	-
3-8" 9-14" >14"	70.30 85.80 147.00 216.00	-	:	:	-	-	=	-	:	:
,	216.00	-	-	-	-	-	•	•	-	-
Pipe Runs (LF)	26.50	-	-	-	-	-	-	-	-	, =
4 <sup>-</sup> 8" 9-14" >14"	26.50 30.50 22.50 60.80	:	-	:	-	-	-	-	-	-
	60.80	-		-	-	-	-	-	-	•
Sprayed/Troweled Ceilings (SF)	9.60	-	-	-	-	-	-	-	-	-
Floor Tile (SF)	5.60	0.1	0.1	**	1.1	0.3	0.3	0.9	0.3	3.2
Boilers/Tanks (SF)	37.90	-	•	-	-	-	•	-	-	-
Air Handling Equipment (SF)	20.00	-	-	_	•	•	-	-	-	-
Other	20000	-	-	-	_	_	-	•	-	-
SUBTOTAL		0.1	0.1	**	1.1	0.3	0.3	0.9	0.3	3.2
Difficulty Allowance		-	-	-	-	-	-	-	-	-
SUBTOTAL		0.1	0.1	**	1.1	0.3	0.3	0.9	0.3	3.2
Decontamination Units Mobilization		8:4	8:4	8:4	8:\$	8:4	8:4	8:4	8:4	<b>3</b> :8
SUBTOTAL		0.8	0.8	0.7	1.7	1.0	0.9	1.5	0.9	8.2
Contingency a 15.00%		0.1	0.1	0.1	0.3	0.1	0.1	0.2	0.1	1.2
SUBTOTAL		0.9	0.9	0.8	1.9	1.1	1.0	1.8	1.0	9.4
Design Fee @ 10.00%		**	**	**	0.2	0.1	0.1	0.2	0.1	0.9
SUBTOTAL	,	1.0	1.0	0.9	2.1	1.2	1.1	2.0	1.1	10.3
Air Monitoring @ 10.00%	,** <b>*</b>	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1.0
TOTAL	-	1.1	1.1	1.0	2.3	1.3	1.2	2.1	1.2	11.4

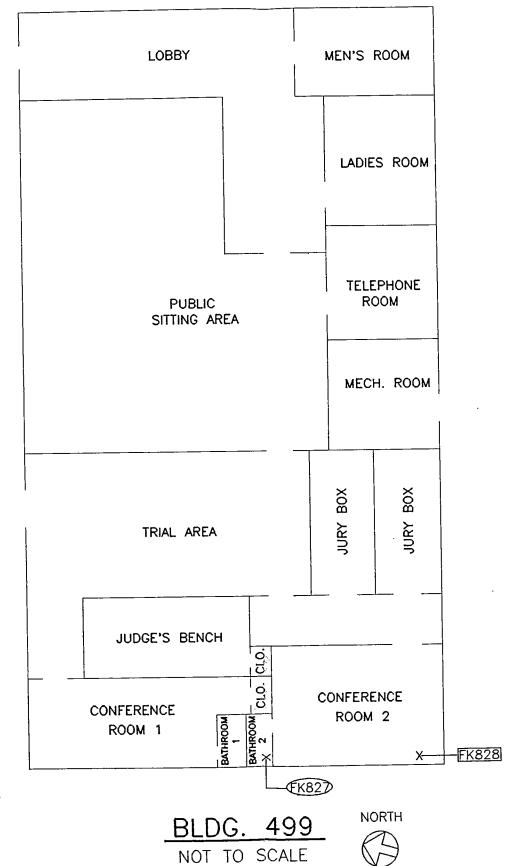
<sup>\*</sup>Amounts Are In Thousands Of Dollars

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

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









#### **ADMINISTRATION**

### 545.1 GENERAL

Building 545 was surveyed by WESTON's inspection team on 18 August 1992.

The first three portions of this facility report summarize the results of this inspection. A photograph of transite panel sample location is provided in Subsection 545.4.

Polarized Light Microscopy (PLM) with dispersion staining was used to analyze five samples of suspect material collected from the building. Of these samples, one was found to be asbestos-containing material (ACM). Table 545.1 lists the analytical results for the bulk samples.

### 545.2 ACM AND EXPOSURE ASSESSMENT

The location, description, and analytical results for each bulk sample from Building 545 are presented in Table 545.1. An area-by-area inventory of ACM is provided in Tables 545.2 and 545.3. "Other Asbestos-Containing Materials," listed in Table 545.3, are materials that do not correspond to the standard caption categories listed in Table 545.2. A prioritized listing of exposure assessments is presented in Table 545.4. The method by which the exposure assessment priority index values are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.5 of this report. An itemized area-by-area cost estimate for removal and replacement is provided in Table 545.5. The method by which removal/replacement costs are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.4 of this report. Building floor plans (see attachment) indicate sample locations and building area names as they are listed in Tables 545.2 and 545.5.

# 545.3 RECOMMENDATIONS/CONCLUSIONS

- Transite panel was the material in Building 545 found to be ACM.
- Asbestos-containing transite panel present in Building 545 should be labeled under the O&M Program.

SAMPLE				PERCI	<u>ent asbi</u>	<u>estos</u>	
NO.	LOCATION	ITEM	DESCRIPTION	СН	AM	OT	LAYERED
FK831	MECHANICAL ROOM	TRANSITE PANEL BOARD	GRAY, OTH, TRANS PANL	40	-	-	NO
FK832	MECHANICAL ROOM	OTHER MATERIAL	GRAY, OTH, MUD ON FUR	-	-	-	YES
FK833	1ST FLR HALLWAY	FLOOR TILE	TAN, OTH, FLOOR TILE	-	-	-	YES
FK834	ROOM 115	CEILING BOARD	WHITE, OTH, CEIL BOARD	-	-	-	YES
FK835	ROOM 207	FLOOR TILE	TAN,OTH,FLOOR TILE	-	-	-	YES

<sup>&</sup>lt;sup>a</sup>Asbestos content presented for layered samples represents the highest concentration layer.

Quadrant Codes	System Codes	Asbestos Types
C = Cénter	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 <sup>11</sup>	4-8"	9-14"	>14"	<4"	4-8"	9-14"_	>14"	CEILINGS (MSF)	(MSF)	TANKS (MSF)	EQUIPMENT (MSF)	OTHER
EXTERIOR WALL SKIRT	_	_	-	-	-	_	-	-	-	-	-	-	*
MECHANICAL ROOM		<del>-</del>	<del>_</del>	<del></del>				<del>-</del>					
TOTALS	_	_	-	_	-	_	-		-	-	-	-	*

Other Material Present In Various Units Of Measure

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

**Table 545.3** 

## Other Asbestos-Containing Material - Building 545, Administration Type Occupancy: Adults (Public)

Area	Material Type	Quantity (Unit)
Exterior Wall Skirt	Transite Panel	0.640 (MSF)
Mechanical Room	Transite Panel	0.040 (MSF)

EA - Each

LF - Linear Feet

MSF - Thousand Square Feet

TABLE 545.4 EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 545, ADMINISTRATION

SAMPLE		MATERIAL	PRIOR. INDEX	PRIORITY INDEX	EX	POS	URE	_FA(	TORS	AVG. EXP.	%
NO.	AREA	TYPE	CODE	NUMBER .	1	2	3	4	5	HOURS	ASB.
FK831	EXTERIOR WALL SKIRT	TRANSITE PANEL BOARD	В	1.160E02	2	1	1	2	20	40.00	40
FK831	MECHANICAL ROOM	TRANSITE PANEL BOARD	A	6.600E01	2	2	1	1	1	8.00	40
FK832	MECHANICAL ROOM	GASKET	. A	0	1	2	1	1	1	8.00	0
FK834	ALL 1ST FLR OFFICES	CEILING BOARD	A	0	2.	1	1	2	20	40.00	0
FK834	ALL 2ND FLR OFFICES	CEILING BOARD	A	. 0	2	1	1	2	20	40.00	0
FK834	ROOM 115	CEILING BOARD	A	Ó	2	1	1	2	20	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 545.5** COST ESTIMATE\* - BUILDING 545, ADMINISTRATION

			4854	1051	
_	DESCRIPTION	UNIT COST (\$)	AREA	AREA	TOTAL
	Pipe Fittings (EA)	7g.30	-	-	:
	4 <sup></sup> 8" 9-14" >14"	70.30 185.80 147.80 216.00	:	=	=
	Pipe Runs (LF)	26 50	_	_	_
	3-8" 9-14" >14"	26.50 30.50 42.50 60.80	-	-	-
		30:80	-	-	-
	Sprayed/Troweled Ceilings (SF)	9.60	-	•	-
	Floor Tile (SF)	5.60	-	-	-
	Boilers/Tanks (SF)	37.90	<b>-</b> .	-	-
	Air Handling Equipment (SF)	20.00	-	-	-
	Other		7.0	0.4	7.5
	SUBTOTAL		7.0	0.4	7.5
	Difficulty Allowance		- '	-	-
	SUBTOTAL		7.0	0.4	7.5
	Decontamination Units Mobilization		1:5	1:₹	<b>3</b> :8
	SUBTOTAL		9.5	2.9	12.5
	Contingency a 15.00%		1.4	0.4	1.9
	SUBTOTAL		11.0	3.4	14.4
	Design Fee @ 10.00%	•	1.1	0.3	1.4
	SUBTOTAL,		12.1	3.7	15.8
	Air Monitoring a 10.00%		0.8	0.8	1.6
_	TOTAL		12.9	4.5	17.4

<sup>\*</sup>Amounts Are In Thousands Of Dollars

AREA 1: EXTERIOR WALL SKIRT

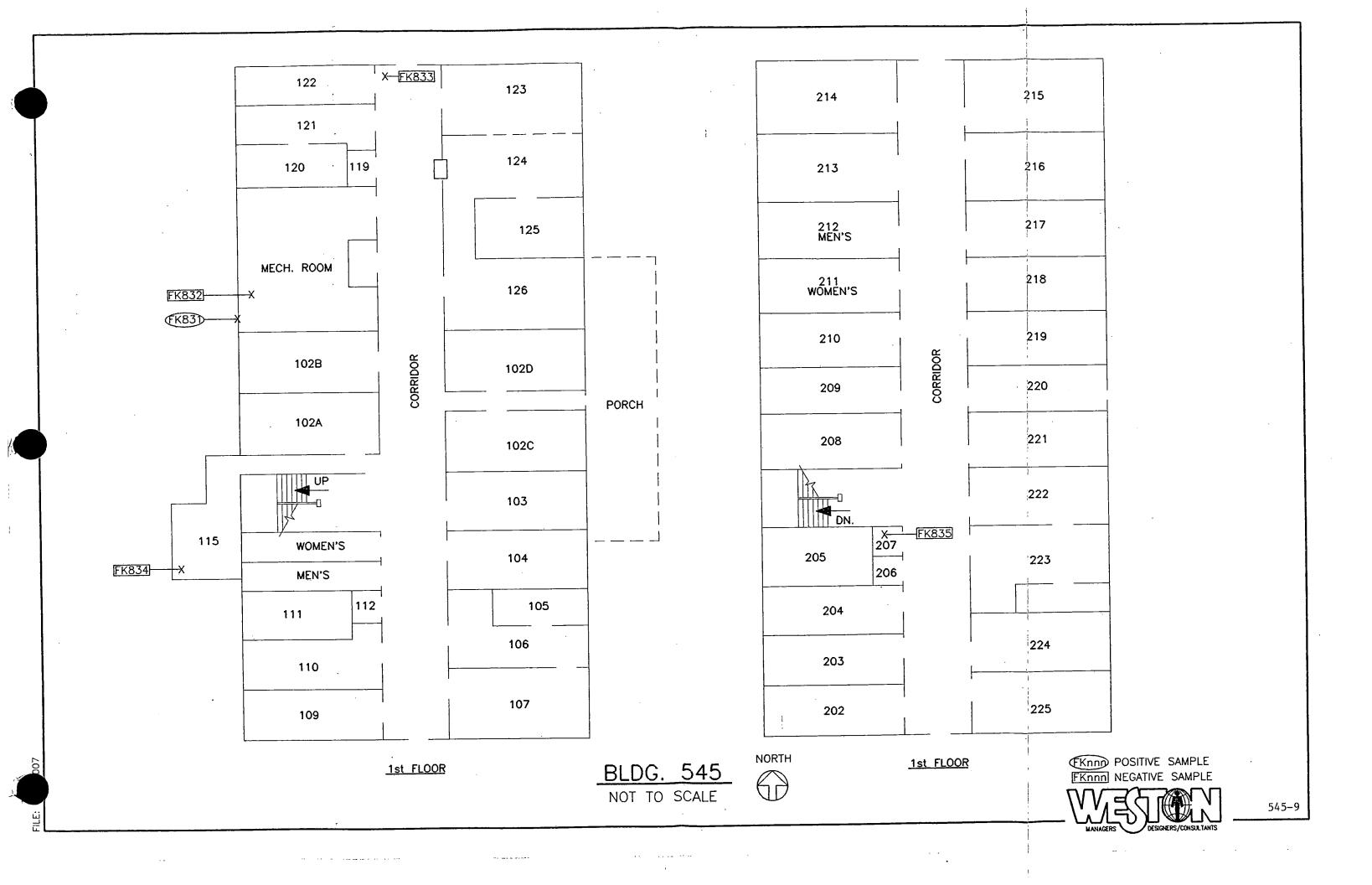
<sup>\*\*\*</sup>Less Than \$100 For The Area; Amount Not Printed But Included In Total(s)
\*\*\*\*The Minimum Air Monitoring Fee is \$500.00 Per Building

545.4

**PHOTOGRAPH** 



Bldg. 545 Mech. Room: (Sample FK831) Transite Panel Tested Positive



### **ADMINISTRATION**

### 550.1 GENERAL

Building 550 was surveyed by WESTON's inspection team on 19 August 1992.

Polarized Light Microscopy (PLM) with dispersion staining was used to analyze six samples of suspect material collected from the building. Of these samples, all six were found to be nonasbestos-containing materials (non-ACM).

The location, description, and analytical results for each of the bulk sample from Building 550 are presented in Table 550.1.

### 550.2 CONCLUSION

Based on the survey and the laboratory results of the samples collected in Building 550, WESTON concludes that accessible areas of Building 550 do not contain ACM.

TABLE 550.1

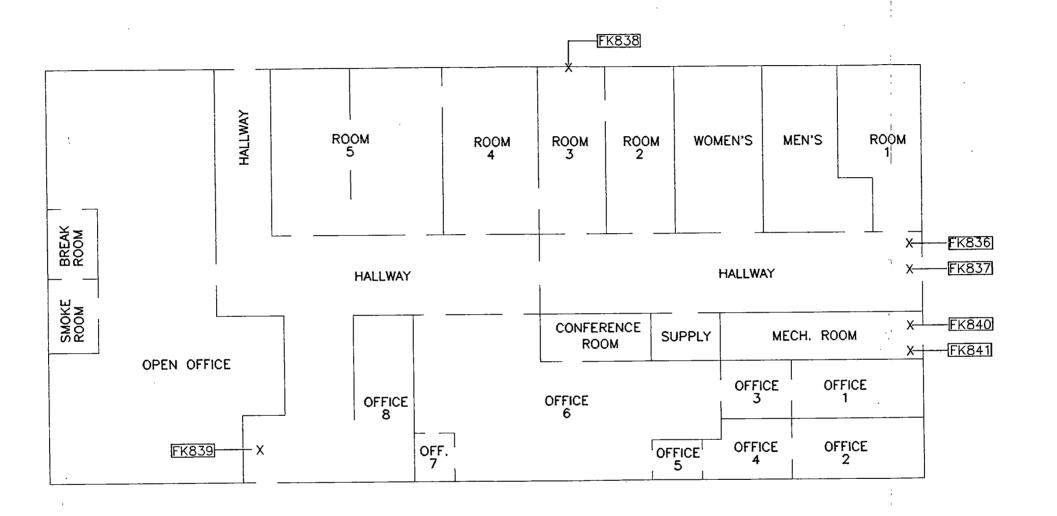
BULK SAMPLE ANALYSIS RESULTS - BUILDING 550, ADMIN.- COMPACT

SAMPLE				PERCI	<u>ent asbi</u>	ESTOS	
NO.	LOCATION	ITEM	DESCRIPTION	CH	AM	OT	LAYERED
FK836	HALLWAY	FLOOR TILE	BROWN,OTH,FLOOR TILE	-	-	-	YES
FK837	HALLWAY	CEILING BOARD	WHITE, OTH, CEIL BOARD	-	-	-	YES
FK838	ROOM 3	ACOUSTICAL WALL TILE	TAN,OTH,ACOUST WAL	-	-	-	YES
FK839	HALLWAY	FLOOR TILE	BROWN, OTH, FLOOR TILE	-	-	-	YES
FK840	MECHANICAL ROOM	OTHER MATERIAL	WHITE,OTH, FURN INSUL	-	-	-	NO
FK841	MECHANICAL ROOM	OTHER MATERIAL	WHITE, OTH, FURN GASKT	-	-	-	NO

 $<sup>^{\</sup>mathrm{a}}$ 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		



BLDG. 550
NOT TO SCALE





### THRIFT SHOP

#### 563.1 GENERAL

Building 563 was surveyed by WESTON's inspection team on 21 August 1992.

The first three portions of this facility report summarize the results of this inspection. A photograph of breeching insulation sample location is provided in Subsection 563.4.

Polarized Light Microscopy (PLM) with dispersion staining was used to analyze 12 samples of suspect material collected from the building. Of these samples, three were found to be asbestos-containing materials (ACM). Table 563.1 lists the analytical results for the bulk samples.

### 563.2 ACM AND EXPOSURE ASSESSMENT

The location, description, and analytical results for each bulk sample from Building 563 are presented in Table 563.1. An area-by-area inventory of ACM is provided in Tables 563.2 and 563.3. "Other Asbestos-Containing Materials," listed in Table 563.3, are materials that do not correspond to the standard caption categories listed in Table 563.2. A prioritized listing of exposure assessments is presented in Table 563.4. The method by which the exposure assessment priority index values are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.5 of this report. An itemized area-by-area cost estimate for removal and replacement is provided in Table 563.5. The method by which removal/replacement costs are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.4 of this report. Building floor plans (see attachment) indicate sample locations and building area names as they are listed in Tables 563.2 and 563.5.

# 563.3 RECOMMENDATIONS/CONCLUSIONS

- The ACMs present in Building 563 are:
  - Breeching insulation
  - Floor tile
- The ACMs listed above should be labeled under the O&M Program.

TABLE 563.1

BULK SAMPLE ANALYSIS RESULTS - BUILDING 563, THRIFT SHOP

SAMPLE				PERCE	NT ASBE	STOS	_
NO.	LOCATION	ITEM	DESCRIPTION	СН	AM	OT	LAYERED <sup>8</sup>
FK874	STOCK ROOM 2	<4" PIPE FITTING	WHITE, UNK, FIT. INSUL.	-	-	-	YES
FK875	STOCK ROOM 2	4-8" PIPE FITTING	WHITE, UNK, FIT. INSUL.	-	-	-	YES
FK876	STOCK ROOM 2	CEILING BOARD	WHITE,OTH,CEIL PANEL	-	-	-	YES
FK877	' STOCK ROOM 2	FLOOR TILE	GREEN, OTH, FLOOR TILE	5	-	-	NO
FK878	STOCK ROOM 2	FLOOR TILE	GRAY,OTH,FLOOR TILE	10	-	-	NO
FK879	SALES DEPARTMENT	FLOOR TILE	TAN,OTH,FLOOR TILE	-	-	-	NO
FK880	SALES DEPARTMENT	CEILING BOARD	WHITE, OTH, CEIL PANEL	-	-	-	NO
FK881	OFFICE 1	CEILING BOARD	WHITE, OTH, CEIL PANEL	•	-	-	NO
FK882	OFFICE 2	<4" PIPE RUN	GRAY, UNK, PIPE INSUL	-	-	-	YES
FK883	DRESSING ROOM	FLOOR TILE	GRAY, OTH, FLOOR TILE	-	-	-	NO
FK884	CRAWLSPACE NORTH	<4" PIPE FITTING	WHITE,UNK,PIPE FITT.	-	-	-	YES
FK885	BOILER ROOM	OTHER MATERIAL	WHITE, OTH, BREECH	15	-	-	NO

<sup>&</sup>lt;sup>a</sup>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 563, THRIFT SHOP

	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)	OTHE
SOILER ROOM	_	_	_	_	-	_	-	_	•	-	-	-	*
STOCK ROOM 2				<u> </u>			<del>-</del>			0.18			
TOTALS	-	_	-	_	_	_	-	-	-	0.18	-	-	*

Other Material Present In Various Units Of Measure

EA - Each

LF - Linear Feet MSF - Thousand Square Feet

### **Table 563.3**

# Other Asbestos-Containing Material - Building 563, Thrift Shop Type Occupancy: Adults (Public)

Area	Material Type	Quantity (Unit)
Boiler Room	Breeching Insulation	12 (LF)

EA - Each ·

LF - Linear Feet

MSF - Thousand Square Feet

TABLE 563.4 EXPOSURE ASSESSMENTS (PRIORITY ORDER) -BUILDING 563, THRIFT SHOP

SAMPL	E	MATERIAL	PRIOR. INDEX	PRIORITY INDEX	EXPO	SUR	E FA	CTORS	AVG. Exp.	ж	
NO.	AREA	ТҮРЕ	CODE	NUMBER	1 2	3	4	5	HOURS	ASB.	
FK885	BOILER ROOM	INSULATION BOARD	В	1.325E02	2 3	2	2	1	1.00	15	
FK874		<4" PIPE FITTING	Α	. 0	3 3	1	2	2	8.00	0	
FK874	STOCK ROOM 2	<4" PIPE FITTING	Α	0	3 3	1	. 2	2	8.00	0	
FK875	BOILER ROOM	4-8" PIPE FITTING	Α	0	2 3	2	2	1	1.00	0	
FK875	STOCK ROOM 1	4-8" PIPE FITTING	Α	0	3 3	1	2	2	8.00	0	
FK875	STOCK ROOM 2	4-8" PIPE FITTING	A	0	3 3	1	2	2	8.00	0	
FK876	LOBBY	CEILING BOARD	A	0	2 1	1	2	30	20.00	0	
FK876	STOCK ROOM 2	CEILING BOARD	Α	0	2 1	1	2	30	20.00	0	
FK880	SALES DEPARTMENT	CEILING BOARD	A	0	2 1	1	2	<b>3</b> 0	20.00	0	
FK881		CEILING BOARD	Α	0	2 1	1	2	30	20.00	0	
FK882	OFFICE 2	<4" PIPE RUN	A	0	1 1	. 2	1	1	1.00	0	
FK882	OFFICE 2-ABOVE CEILG	<4º PIPE RUN	A	0	1 1	2	1	1	1.00	0	
FK884	BOILER ROOM	<4" PIPE FITTING	A	0	2 3	2	2	1	1.00	0	
FK884	CRAWLSPACE NORTH	<4" PIPE FITTING	Α	0	3 1	1	1	1	1.00	0	
FK884		<4" PIPE FITTING	A	0	3 1	1	1	1	1.00	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 563.5

COST ESTIMATE\* - BUILDING 563, THRIFT SHOP

	IINTT	AREĄ	AREA	
DESCRIPTION	UNIT COST (\$)	<u> </u>	~~ <u>-2</u>	TOTAL
Pipe Fittings (EA) 4-8" 9-14" >14"	70.30 85.80 127.00 216.00	•	:	:
Pipe Runs (LF) 4-8" 9-14" >14"	26.50 30.50 60.80	:	:	• • •
Sprayed/Troweled Ceilings (SF)	9.60	-	-	-
Floor Tile (SF)	5.60	<b>-</b>	1.0	1.0
Boilers/Tanks (SF)	37.90	-	-	-
Air Handling Equipment (SF)	20.00	-	-	<u>:</u>
Other		50.4	-	50.4
SUBTOTAL		50.4	1.0	51.4
Difficulty Allowance		•	-	-
SUBTOTAL		50.4	1.0	51.4
Decontamination Units Mobilization		<b>3:8</b>	<b>3:8</b>	<b>2:8</b>
SUBTOTAL		54.4	5.0	59.4
Contingency @ 15.00%		8.2	0.8	8.9
SUBTOTAL		62.6	5.8	68.3
Design Fee @ 10.00%	1	6.3	0.6	6.8
SUBTOTAL	***	68.8	6.3	75.2
Air Monitoring a 10.00%	,	<u>3.8</u>	3.8	7.5
TOTAL	·	72.6	10.1	82.7

<sup>\*</sup>Amounts Are In Thousands Of Dollars

AREA 1: BOILER ROOM

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

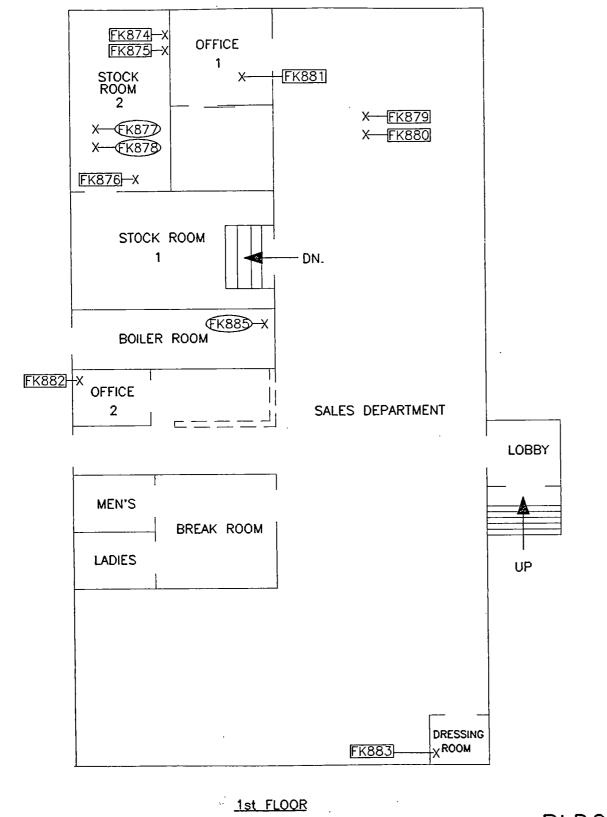
<sup>\*\*\*</sup>The Minimum Air Monitoring Fee is \$500.00 Per Building

563.4

**PHOTOGRAPH** 



Bldg. 563 Boiler Room: (Sample FK885) Breeching Insulation (9"-14" Dia.) Tested Positive



NORTH SOUTH FK884-X

BLDG. 563

NOT TO SCALE



CRAWLSPACE



## LIQUOR STORE

## 565.1 GENERAL

Building 565 was surveyed by WESTON's inspection team on 25 August 1992.

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 non-asbestoscontaining material (non-ACM).

The location, description, and analytical results for the bulk sample from Building 565 are presented in Table 565.1.

### 565.2 CONCLUSION

Based on the survey and the laboratory results of the sample collected in Building 565, WESTON concludes that accessible areas of Building 565 do not contain ACM.

# TABLE 565.1

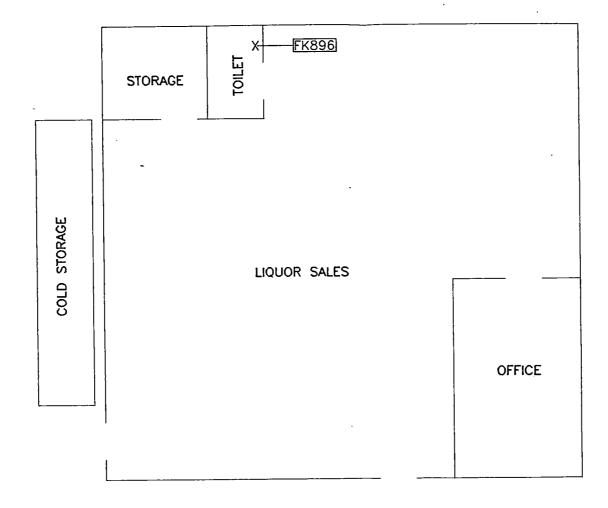
## BULK SAMPLE ANALYSIS RESULTS - BUILDING 565, LIQUOR STORE

SAMPLE NO.	LOCATION	ITEM	DESCRIPTION	PERCE CH	NT ASBE	STOS	LAYERED
NU.	LOCATION	IICM	DESCRIPTION	UII	7.01	<u> </u>	LATERED
FK896 TO	DILET	FLOOR TILE	TAN,OTH,FLOOR TILE	-	-	-	NO
		PLOOR TILE	TAN,OTH, PLOOR TILE				

Asbestos Types
CH = Chrysotile
AM = Amosite
OT = Other

<sup>&</sup>lt;sup>8</sup>Asbestos 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	
SU = Southwest	



BLDG. 565
NOT TO SCALE





#### WAREHOUSE

### 686.1 GENERAL

Building 686 was surveyed by WESTON's inspection team on 10 August 1992.

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 three samples of suspect material collected from the building. Of these samples, two were found to be asbestos-containing materials (ACM). Table 686.1 lists the analytical results for the bulk samples.

#### 686.2 ACM AND EXPOSURE ASSESSMENT

The location, description, and analytical results for each bulk sample from Building 686 are presented in Table 686.1. An area-by-area inventory of ACM is provided in Tables 686.2 and 686.3. "Other Asbestos-Containing Materials," listed in Table 686.3, are materials that do not correspond to the standard caption categories listed in Table 686.2. A prioritized listing of exposure assessments is presented in Table 686.4. The method by which the exposure assessment priority index values are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.5 of this report. An itemized area-by-area cost estimate for removal and replacement is provided in Table 686.5. The method by which removal/replacement costs are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.4 of this report. Building floor plans (see attachment) indicate sample locations and building area names as they are listed in Tables 686.2 and 686.5.

# 686.3 RECOMMENDATIONS/CONCLUSIONS

• Per the Directorate of Engineering and Housing (DEH), Building 686 is scheduled for demolition.

- Floor tile was the material in Building 686 found to be ACM.
- The asbestos-containing floor tile will be removed under the Army Asbestos Deficiency Abatement Project (AADAP) prior to demolition of Building 686; however, in accordance with the latest revisions of the National Emission Standard for Hazardous Air Pollutants (NESHAPs, 40 CFR Part 61, Subpart M, 20 November 1990), the floor tile can be left in place during demolition, provided it is in good condition and will not become friable during demolition.

TABLE 686.1

BULK SAMPLE ANALYSIS RESULTS - BUILDING 686, WAREHOUSE

SAMPLE	<del> </del>			PERCE	NT ASBI	<u>ESTOS</u>	•
NO.	LOCATION	ITEM	DESCRIPTION	<u>CH</u>	AM	OT	LAYERED
FK720	RESTROOM- MEN	FLOOR TILE	TAN,OTH,FLOOR TILE	2	-	-	NO
FK721	STOREROOM 2	FLOOR TILE	TAN,OTH,FLOOR TILE	1	-	-	NO
FK722	MAIN SUPPLY ROOM	OTHER MATERIAL	GRAY, OTH, GYPS BOARD	-	-	-	YEŞ

<sup>&</sup>lt;sup>a</sup>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	4	
SE = Southeast		
SW = Southwest	·	

TABLE 686.2
ASBESTOS-CONTAINING MATERIALS - BUILDING 686, WAREHOUSE

	PI	PE FITT	INGS (EA)			PIPE RUI	NS (LF)		SPRAY/TROWELED		BOILERS/	AIR HANDLING	
AREA	<4 <sup>11</sup>	4-8"	9-14"	>14"	<4"	4-8"	9-14"	>14"	CEILINGS (MSF)	(MSF)	TANKS (MSF)	EQUIPMENT (MSF)	OTHE
AIN SUPPLY ROOM	-		-	-		-	-	-	-	2.18	-	-	-
FFICE	-	_	-	-	- '	-	` <b>-</b>	-	-	0.35	-	•	-
EAR SUPPLY ROOM	-	-	-	•	-	-	-	-	•	0.90	-	-	-
ESTROOM- MEN	-	-	-	_	-	-	-	-	-	0.10	•	-	-
ESTROOM- WOMEN	-	-	-	_	-	-	-	-	-	0.10	-	-	-
TOREROOM 1	-	-	_	_	-	-	-	-	-	0.35	-	-	-
TOREROOM 2	-	-	-	-	-	-	-	-	-	0.24	-	-	-
TOREROOM 3	<del>.</del>		<del>-</del>	<u> </u>	<del>.</del>	<del>-</del>	<u></u> :	<del></del>		0.24			
DTALS	_	_	_	_	-			_	-	4.46	-	-	-

<sup>\*</sup> Other Material Present In Various Units Of Measure

EA - Each

LF - Linear Feet

MSF - Thousand Square Feet

## **Table 686.3**

# Other Asbestos-Containing Material - Building 686, 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

TABLE 686.4 EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 686, WAREHOUSE

SAMPLE		MATER	PRIOR. IAL INDEX	PRIORITY INDEX	_ EX	(POS	URE	FA	CTORS	AVG. EXP.	x
NO.	AREA	TYPE	CODE	NUMBER	1	2	_ 3	4	5	HOURS	ASB.
FK722	ENTIRE BLDG-CEILING	INSULATION BOARD	A	0	1	1	1	1	2	40.00	0
FK722	MAIN SUPPLY ROOM	INSULATION BOARD	A	0	1	1	1	2	4	40.00	0
FK722	MECH. ROOM- CEILING	INSULATION BOARD	Α	0	1	1	1	1	2	40.00	0
FK722	MECH. ROOM- WALLS	INSULATION BOARD	Ā	0	1	1	1	1	2	40.00	Ò
FK722	REAR SUPPLY ROOM	INSULATION BOARD	Ä	Ŏ	1	1	1	1	2	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

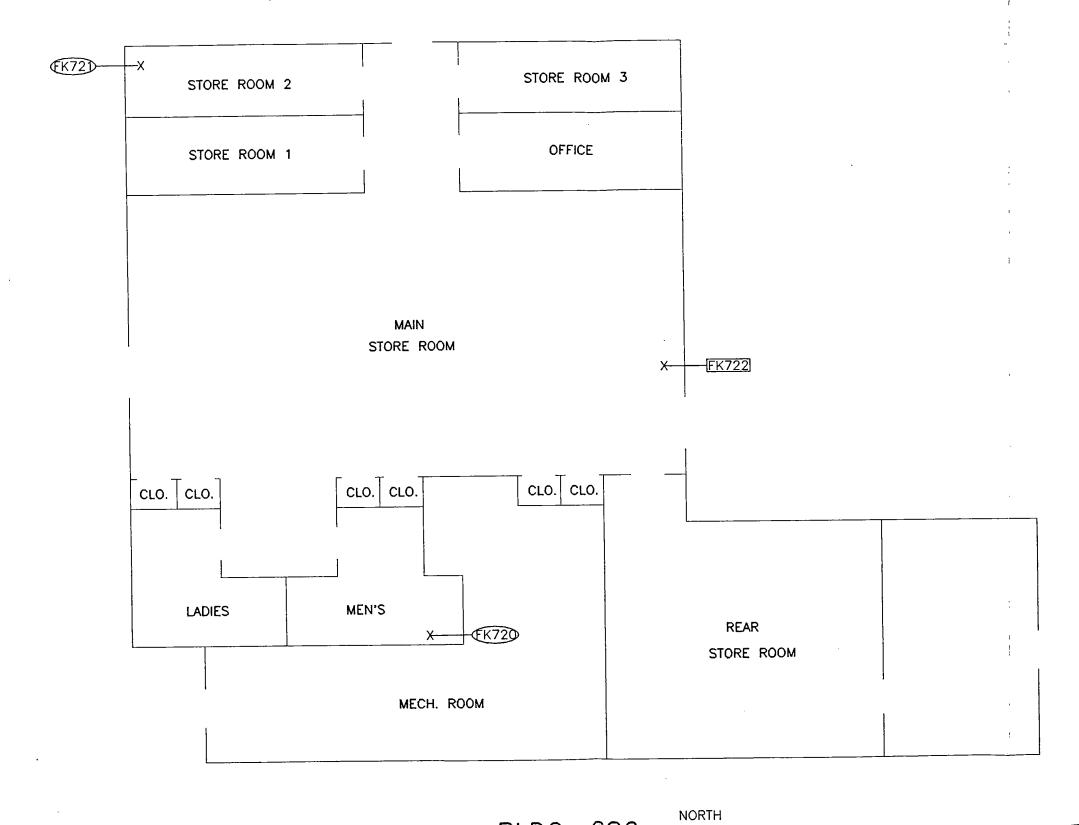
**TABLE 686.5** COST ESTIMATE\* - BUILDING 686, WAREHOUSE

	IINTT	AREĄ	AREĄ	AREĄ	AREĄ	AREA	AREA	AREA	ARFA		
DESCRIPTION	UNIT COST (\$)	78-7	AKE 2	ANE 3	ANL 2	^^-B	<u> </u>	77	AREA 8	TOTAL	_
Pipe Fittings (EA) 2-8" 9-14" >14"	70.30 157.80 216.00	:	Ė	:	:	:	:	:	•	:	
Pipe Runs (LF) 24" 9-14" >14"	26.50 30.50 60.80	- - - -	:	:	:	:	:	:	- - -	:	
Sprayed/Troweled Ceilings (SF)	9.60	-	-	_	-	-	-	-	-	-	
Floor Tile (SF)	5.60	12.2	2.0	5.0	0.6	0.6	2.0	1.3	1.3	25.0	
Boilers/Tanks (SF)	37.90	-	-	-	-	-	-	-	-	-	
Air Handling Equipment (SF)	20.00	-	-	-	-	-	-	-	-	-	
Other		-	-	-	•	-	-	-	-	-	
SUBTOTAL		12.2	2.0	5.0	0.6	0.6	2.0	1.3	1.3	25.0	
Difficulty Allowance		-	-	-	-	-	-	-	-	-	
SUBTOTAL		12.2	2.0	5.0	0.6	0.6	2.0	1.3	1.3	25.0	
Decontamination Units Mobilization		8: <del>4</del>	8: <del>4</del>	8:4	8:4	8:4	8:4	8:4	8:4	<b>3</b> :8	
SUBTOTAL		12.8	2.6	5.7	1.2	1.2	2.6	2.0	2.0	30.0	
Contingency a 15.00%		1.9	0.4	0.8	0.2	0.2	0.4	0.3	0.3	4.5	
SUBTOTAL		14.8	3.0	6.5	1.4	1.4	3.0	2.3	2.3	34.5	
Design Fee a 10.00%	•	1.5·	0.3	0.7	0.1	0.1	0.3	0.2	0.2	3.4	
SUBTOTAL		16.2	3.3	7.2	1.5	1.5	3.3	2.5	2.5	37.9	
Air Monitoring a 10.00%	**	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	<u>3.8</u>	
TOTAL		16.7	3.7	7.6	2.0	2.0	3.7	3.0	3.0	41.7	

<sup>\*</sup>Amounts Are In Thousands Of Dollars



<sup>\*\*\*</sup>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. 686

NOT TO SCALE





#### **ADMINISTRATION**

#### 695.1 GENERAL

Building 695 was surveyed by WESTON's inspection team on 19 August 1992.

The first three portions of this facility report summarize the results of this inspection. A photograph of a pipe insulation sample location is provided in Subsection 695.4.

Polarized Light Microscopy (PLM) with dispersion staining was used to analyze five samples of suspect material collected from the building. Of these samples, two were found to be asbestos-containing materials (ACM). Table 695.1 lists the analytical results for the bulk samples.

### 695.2 ACM AND EXPOSURE ASSESSMENT

The location, description, and analytical results for each bulk sample from Building 695 are presented in Table 695.1. An area-by-area inventory of ACM is provided in Tables 695.2 and 695.3. "Other Asbestos-Containing Materials," listed in Table 695.3, are materials that do not correspond to the standard caption categories listed in Table 695.2. A prioritized listing of exposure assessments is presented in Table 695.4. The method by which the exposure assessment priority index values are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.5 of this report. An itemized area-by-area cost estimate for removal and replacement is provided in Table 695.5. The method by which removal/replacement costs are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.4 of this report. Building floor plans (see attachment) indicate sample locations and building area names as they are listed in Tables 695.2 and 695.5.

# 695.3 RECOMMENDATIONS/CONCLUSIONS

- Floor tile was the material in Building 695 found to be ACM.
- Asbestos-containing floor tile present in Building 695 should be labeled under the O&M Program.

TABLE 695.1

BULK SAMPLE ANALYSIS RESULTS - BUILDING 695, ADMINISTRATION

SAMPLE							_	
NO.	LOCATION	ITEM	DESCRIPTION	CH	AM	OT	LAYERED	
FK843	OFFICE 1	ACOUSTICAL WALL TILE	TAN,OTH,ACOUST TIL	-	-	-	NO	
FK844	MECH. ROOM 2	4-8" PIPE FITTING	WHITE, UNK, PIPE FITT.	-	-	-	NO	
FK845	MECH. ROOM 2	FLOOR TILE	GREEN, OTH, FLOOR TILE	5	-	-	NO	
FK846	MECH. ROOM 2	FLOOR TILE	GRAY, OTH, FLOOR TILE	10	-	-	NO	
FK847	MECH. ROOM 1	OTHER MATERIAL	WHITE,UNK,PIPE INSUL	-	-	-	YES	

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

SW = Southwest

Quadr	ant 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
<b>S</b> =	South	DOM = Domestic Water	
₩ =	West	OTH = Other	
NE =	Northeast	UNK = Unknown	
NW =	Northwest		
SE =	Southeast		

<del></del>	P1	PE FITT	INGS (EA)			PIPE RU	NS (LF)		SPRAY/TROWELED	FLOOR TILE	BOILERS/	AIR HANDLING	
AREA	<4 <sup>11</sup>	4-8"	9-14"	>14"	<4 <sup>11</sup>	4-8"	9-14"	>14"	CEILINGS (MSF)	(MSF)	TANKS (MSF)	EQUIPMENT (MSF)	OTHE
NTIRE 1ST FLOOR	_	-	-	-	-	_	-	-	-	5.34	-	-	-
ECH. ROOM 2		<del>-</del>		<u>-</u> `	:					0.40			
OTALS	-	-	_	-	-	-	-	_	•	5.74	-		-

Other Material Present In Various Units Of Measure

EA - Each

LF - Linear Feet MSF - Thousand Square Feet

# **Table 695.3**

# Other Asbestos-Containing Material - Building 695, Administration 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 695.4 EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 695, ADMINISTRATION

SAMPLE		MATERIAL	PRIOR. INDEX	PRIORITY INDEX	EXP	OSUR	E FA	CTORS	AVG. Exp.	×
NO.	AREA	TYPE	CODE	NUMBER	1	2 3	4	5	HOURS	ASB.
FK837	ENTIRE 1ST FLOOR	CEILING BOARD	A	0	2	2 1	2	4	40.00	0
FK843	OFFICE 1	ACOUSTICAL WALL TILE	Ä	Ŏ	2	2 1	2	10	40.00	0
FK844	MECH. ROOM 2	4-8" PIPE FITTING	A	0	3	2 1	1	1	8.00	0
FK847	MECH. ROOM 1	INSULATION BOARD	A	0	3	2 1	1	1	8.00	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 695.5** COST ESTIMATE\* - BUILDING 695, ADMINISTRATION

DESCRIPTION	UNIT COST (\$)	AREA	AREA	TOTAL
Pipe Fittings (EA)				
248" 9-14" >14"	70.30 85.80 147.00 216.00	:	=	:
	216.00	-	-	-
Pipe Runs (LF)	<b>26-</b> 50	•	<u>.</u>	-
4-8" 9-14" >14"	26.50 30.50 42.50 60.80	=	:	:
Sprayed/Troweled Ceilings (SF)				
	9.60	<u>.</u>	•	
Floor Tile (SF)	5.60	29.9	2.2	32.1
Boilers/Tanks (SF)	37.90			-
Air Handling Equipment (SF)	20.00	-	-	-
Other		-	-	-
SUBTOTAL		29.9	2.2	32.1
Difficulty Allowance		-	-	-
SUBTOTAL		29.9	2.2	32.1
Decontamination Units Mobilization		1:8	1:5	<b>3:8</b>
SUBTOTAL		32.4	4.7	37.1
Contingency a 15.00%		4.9	0.7	5.6
SUBTOTAL		37.3	5.5	42.7
		3.7	0.5	4.3
Design Fee a 10.00%	•	41.0		47.0
SUBTOTAL	**		6.0	
Air Monitoring @ 10.00%		2.3	2.3	4.7
TOTAL		43.3	8.3	51.7

<sup>\*</sup>Amounts Are In Thousands Of Dollars

AREA 1: ENTIRE 1ST FLOOR

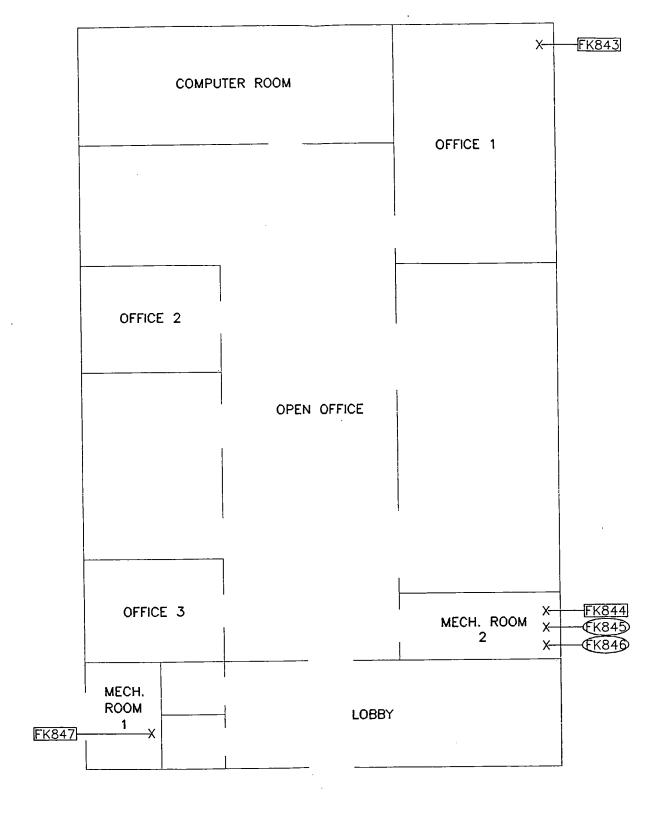
<sup>\*\*</sup>Less Than \$100 For The Area; Amount Not Printed But Included In Total(s)
\*\*\*The Minimum Air Monitoring Fee is \$500.00 Per Building

695.4

# **PHOTOGRAPH**



Bldg. 695 Mech. Room: (Sample(s) FK845 and 846) 9"  $\times$  9" Green and Gray Floor Tiles Tested Positive



BLDG. 695
NOT TO SCALE





#### SERVICE STATION

#### 699.1 GENERAL

Building 699 was surveyed by WESTON's inspection team on 19 August 1992.

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 699.1 lists the analytical results for the bulk sample.

### 699.2 ACM AND EXPOSURE ASSESSMENT

The location, description, and analytical results for each bulk sample from Building 699 are presented in Table 699.1. An area-by-area inventory of ACM is provided in Tables 699.2 and 699.3. "Other Asbestos-Containing Materials," listed in Table 699.3, are materials that do not correspond to the standard caption categories listed in Table 699.2. A prioritized listing of exposure assessments is presented in Table 699.4. The method by which the exposure assessment priority index values are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.5 of this report. An itemized area-by-area cost estimate for removal and replacement is provided in Table 699.5. The method by which removal/replacement costs are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.4 of this report. Building floor plans (see attachment) indicate sample locations and building area names as they are listed in Tables 699.2 and 699.5.

## 699.3 RECOMMENDATIONS/CONCLUSIONS

- Floor tile was the material in Building 699 found to be ACM.
- Asbestos-containing floor tile present in Building 699 should be labeled under the O&M Program.

TABLE 699.1

BULK SAMPLE ANALYSIS RESULTS - BUILDING 699, SERVICE STATION

SAMPLE				PERCE	NT ASB	STOS	_
NO.	LOCATION	ITEM	DESCRIPTION	CH	AM	ОТ	LAYERED
FK842	RETAIL STORE	FLOOR TILE	TAN,OTH,FLOOR TILE	2	-	-	NO

 $<sup>^{\</sup>mathbf{a}}$  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		

	PI	PE FITT	INGS (EA)			PIPE RU	NS (LF)		SPRAY/TROWELED	FLOOR TILE	BOILERS/	AIR HANDLING	
AREA	<4 <sup>11</sup>	4-8"	9-14"	>14"	<4"	4-8"	9-1411	>1411	CEILINGS (MSF)	(MSF)	TANKS (MSF)	EQUIPMENT (MSF)	OTHE
TAIL STORE				<u> </u>	<u></u>					0.66		<u> </u>	
TALS	_	_	_	_	-	_	_	-	-	0.66	_	-	-

Other Material Present In Various Units Of Measure

EA - Each

LF - Linear Feet MSF - Thousand Square Feet

# **Table 699.3**

# Other Asbestos-Containing Material - Building 699, Service Station Type Occupancy: Adults (Public)

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

EA - Each

LF - Linear Feet

MSF - Thousand Square Feet

### TABLE 699.4

## EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 699, SERVICE STATION

			DOLOR	DRIODITY		AVC	
			PRIOR.	PRIORITY		AVG.	
SAMPLE		MATERIAL	INDEX	INDEX	EXPOSURE FACTORS	EXP.	%
					4 2 7 7 5	HOURE	
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 699.5** COST ESTIMATE\* - BUILDING 699, SERVICE STATION

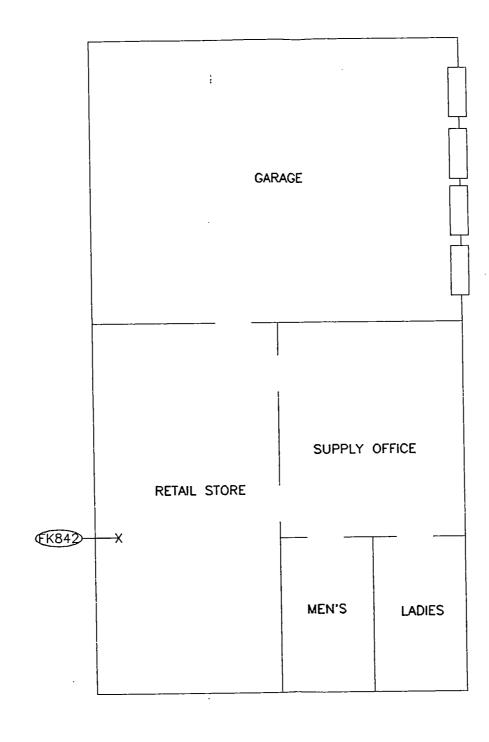
	111177	ADEA	
DESCRIPTION	UNIT COST (\$)	AREA	TOTAL
Pipe Fittings (EA)	70-30	<u>:</u>	:
3-8" 9-144" >144"	70.30 85.80 147.00 216.00	=	=
Pipe Runs (LF)	26.50	-	-
4 <sup>-</sup> 8" 9-14" >14"	26.50 30.50 42.50 60.80	=	-
Sprayed/Troweled Ceilings (SF)	9.60	-	_
Floor Tile (SF)	5.60	3.7	3.7
Boilers/Tanks (SF)	37.90	•	-
Air Handling Equipment (SF)	20.00	-	-
Other		-	-
SUBTOTAL		3.7	3.7
Difficulty Allowance		-	-
SUBTOTAL		3.7	3.7
Decontamination Units Mobilization		<b>3</b> :8	<b>3</b> :8
SUBTOTAL		8.7	8.7
Contingency a 15.00%		1.3	1.3
SUBTOTAL		10.0	10.0
Design Fee @ 10.00%	,	1.0	1.0
SUBTOTAL		11.0	11.0
Air Monitoring a 10.00%		<u> </u>	1.1
TOTAL		12.1	12.1

<sup>\*</sup>Amounts Are In Thousands Of Dollars

AREA 1: RETAIL STORE

<sup>\*\*\*</sup>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. 699

NOT TO SCALE





#### **RED CROSS**

#### 701.1 GENERAL

Building 701 was surveyed by WESTON's inspection team on 19 August 1992.

The first three portions of this facility report summarize the results of this inspection. A photograph of transite panel sample location is provided in Subsection 701.4.

Polarized Light Microscopy (PLM) with dispersion staining was used to analyze five samples of suspect material collected from the building. Of these samples, four were found to be asbestos-containing materials (ACM). Table 701.1 lists the analytical results for the bulk samples.

#### 701.2 ACM AND EXPOSURE ASSESSMENT

The location, description, and analytical results for each bulk sample from Building 701 are presented in Table 701.1. An area-by-area inventory of ACM is provided in Tables 701.2 and 701.3. "Other Asbestos-Containing Materials," listed in Table 701.3, are materials that do not correspond to the standard caption categories listed in Table 701.2. A prioritized listing of exposure assessments is presented in Table 701.4. The method by which the exposure assessment priority index values are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.5 of this report. An itemized area-by-area cost estimate for removal and replacement is provided in Table 701.5. The method by which removal/replacement costs are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.4 of this report. Building floor plans (see attachment) indicate sample locations and building area names as they are listed in Tables 701.2 and 701.5.

# 701.3 RECOMMENDATIONS/CONCLUSIONS

- The ACMs present in Building 701 are:
  - Floor tile
  - Transite panel
  - Boiler gasket
- The ACMs listed above should be labeled under the O&M Program.

TABLE 701.1

BULK SAMPLE ANALYSIS RESULTS - BUILDING 701, RED CROSS

SAMPLE				<u>PERCI</u>			
NO	LOCATION	ITEM	DESCRIPTION	CH	ĀM	OT	LAYERED'
FK848	STORAGE ROOM	FLOOR TILE	BLACK,OTH,FLOOR TILE	10	-	-	NO
FK849	MECHANICAL ROOM	OTHER MATERIAL	GRAY,OTH,GASK MATER	25	-	-	NO
FK850	MECHANICAL ROOM	OTHER MATERIAL	GRAY,OTH,MUD JOINT	-	-	-	NO
FK851	MECHANICAL ROOM	TRANSITE PANEL BOARD	GRAY,OTH,TRANS PANL	35	-	-	NO
FK852	EXTERIOR(LOWER)WALLS	TRANSITE PANEL BOARD	GRAY,OTH,TRANS PANL	25	-	-	NO

 $<sup>^{\</sup>mathbf{a}}$ 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 701.2 ASBESTOS-CONTAINING MATERIALS - BUILDING 701, RED CROSS

	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)	OTHER
NTIRE OFFICE AREA	_		-	-	-		_	-	-	0.65	-	-	-
(TERIOR(LOWER)WALLS	-	-	• -	-	-	-	-	-	•	-	-	•	*
CHANICAL ROOM	-	-	-	-	-	-	•	-	-	-	-	-	*
TORAGE ROOM	<u> </u>	<u>:</u>		<u> </u>		<del></del>		<del></del>		0.21	<del></del>		<u> </u>
OTALS	_	_	_	_	_		_	_	-	0.86	-	•	*

Other Material Present In Various Units Of Measure

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

Table 701.3

Other Asbestos-Containing Material - Building 701, Red Cross
Type Occupancy: Adults (Public)

· Area	Material Type	Quantity (Unit)
Exterior (Lower) Walls	Transite Panel	0.38 (MSF)
Mechanical Room	Gasket (Boiler)	2 (EA)
Room 2200	Acoustical Wall Tile	1.1 (MSF)
Room 2204	Acoustical Wall Tile	1.2 (MSF)
Room 3207	Acoustical Wall Tile	2.5 (MSF)
Room 2206	Acoustical Wall Tile	0.192 (MSF)
Room 4205	Acoustical Wall Tile	0.410 (MSF)
Room 5201	Acoustical Wall Tile	0.603 (MSF)
Room 5212	Acoustical Wall Tile	0.072 (MSF)
Room 6100	Acoustical Wall Tile	0.900 (MSF)

EA - Each

LF - Linear Feet

MSF - Thousand Square Feet

TABLE 701.4 EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 701, RED CROSS

			PRIOR.							AVG.		
SAMPLE		MATERIAL	INDEX	INDEX	<u>EXF</u>	<u>Posu</u>	<u>ire</u>	FAC	TORS	EXP.	%	
NO.	AREA	TYPE	CODE	NUMBER	1	2	3	4	5	HOURS	ASB.	
FK849	MECHANICAL ROOM	INSULATION BOARD	Α	4.200E-1	3	1	1	1	1	8.00	25	
FK851	MECHANICAL ROOM	TRANSITE PANEL BOARD	A	4.200E-1	3	1	1	1	1	8.00	35	
FK852	EXTERIOR(LOWER)WALLS	TRANSITE PANEL BOARD	A	4.200E-1	3	1	1	1	1	8.00	25	
FK837	ENTIRE OFFICE AREA	CEILING BOARD	Ā	0	2	2	1	2	4	40.00	0	
FK850-	MECHANICAL ROOM	GASKET	A	0	3	1	1	1	1	8.00	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 701.5** COST ESTIMATE\* - BUILDING 701, RED CROSS

DESCRIPTION	UNIT COST (\$)	AREĄ	AREA	AREĄ	AREA	TOTAL
		·'		<u> </u>		TOTAL
Pipe Fittings (EA)	70:30 85:80	:	:	:	:	-
4 <sup>-</sup> 8" 9-14" >14"	70.30 85.80 147.00 216.00	-	:	:	-	-
Pipe Runs (LF)					_	_
4-8"	26.50 30.50 42.50 60.80	-	<u>-</u>	:	:	-
4-8" 9-14" >14"	<b>86:88</b>	-	=	-	-	-
Sprayed/Troweled Ceilings (SF)	9.60	_	-		-	-
Floor Tile (SF)	5.60	3.6	-	-	1.2	4.8
Boilers/Tanks (SF)	37.90	-	-	-	-	-
Air Handling Equipment (SF)	20.00		-	-	-	-
Other	20.00	•	4.2	9.0	-	13.1
SUBTOTAL		3.6	4.2	9.0	1.2	17.9
Difficulty Allowance		-	-	-	•	-
SUBTOTAL		3.6	4.2	9.0	1.2	17.9
Decontamination Units Mobilization		<b>1:</b> 5	1:5	<b>1:5</b>	1: <del>5</del>	<b>2:8</b>
SUBTOTAL		5.6	6.2	11.0	3.2	25.9
Contingency a 15.00%		0.8	0.9	1.6	0.5	3.9
SUBTOTAL		6.5	7.1	12.6	3.7	29.8
Design Fee @ 10.00%	1	0.6	0.7	1.3	0.4	3.0
SUBTOTAL	***	7.1	7.8	13.9	4.0	32.8
Air Monitoring a 10.00%	,***	0.8	0.8	0.8	<u>0.8</u>	3.3
TOTAL		8.0	8.6	14.7	4.8	36.1

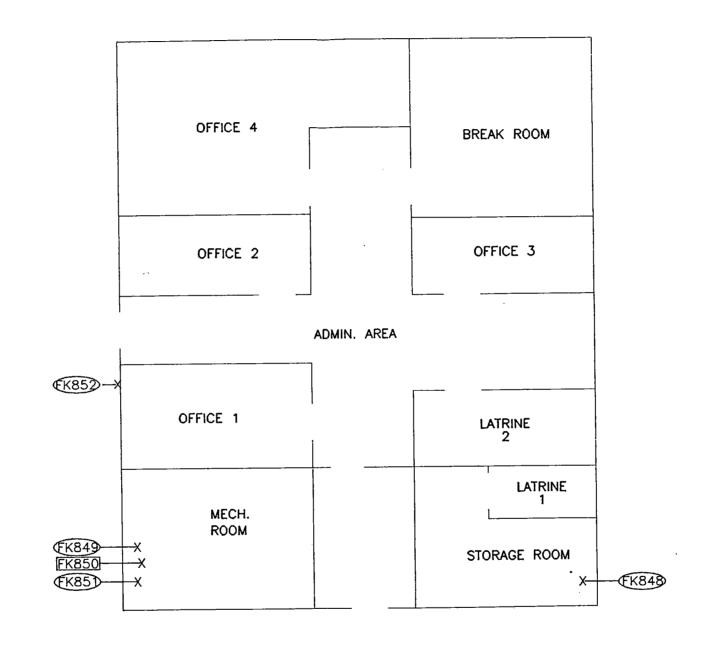
<sup>\*</sup>Amounts Are In Thousands Of Dollars

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

# 701.4 PHOTOGRAPH



Bldg. 701 Mech. Room: (Sample FK851) Transite Panel (Located Above the Furnace) Tested Positive



BLDG. 701

NOT TO SCALE

NORTH



#### **OUTDOOR RECREATION**

#### 801.1 GENERAL

Building 801 was surveyed by WESTON's inspection team on 19 August 1992.

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 nonasbestoscontaining material (non-ACM).

The location, description, and analytical results for the bulk sample from Building 801 are presented in Table 801.1.

#### 801.2 CONCLUSION

Based on the survey and the laboratory results of the sample collected in Building 801, WESTON concludes that accessible areas of Building 801 do not contain ACM.

TABLE 801.1

BULK SAMPLE ANALYSIS RESULTS - BUILDING 801, OUTDOOR RECREATION

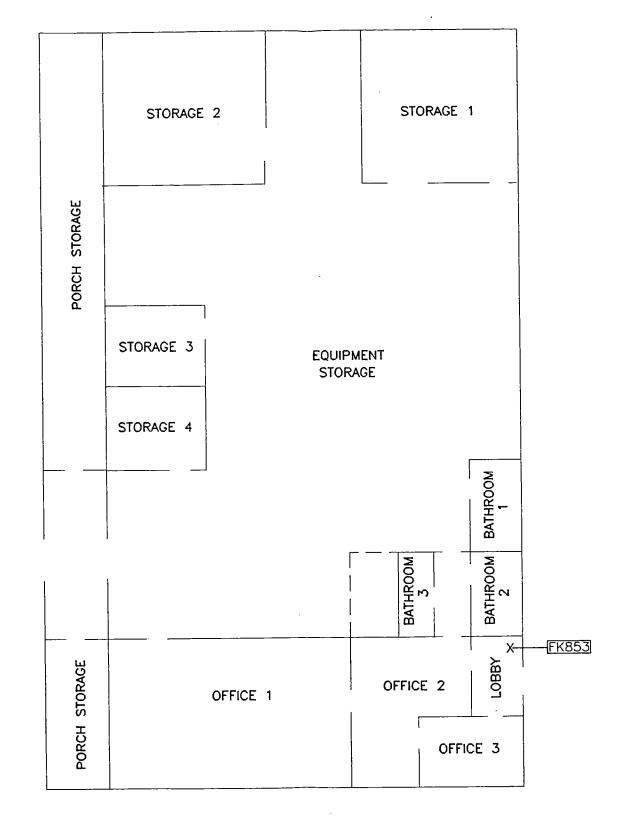
SAMPLE				PERCE	ENT ASBI	ESTOS	_
NO.	LOCATION	ITEM	DESCRIPTION	CH	ĀM	OT	LAYERED
FK853 LO	BRY	FLOOR TILE	BROWN,OTH,FLOOR TILE	-	-	-	NO

Asbestos Types
CH = Chrysotile
AM = Amosite

OT = Other

 $<sup>^{\</sup>mathbf{a}}$  Asbestos 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
N₩ = Northwest	
SE = Southeast	
SW = Southwest	



BLDG. 801

NOT TO SCALE





#### VETERINARY CLINIC

#### 810.1 GENERAL

Building 810 was surveyed by WESTON's inspection team on 20 August 1992.

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 nonasbestoscontaining material (non-ACM).

The location, description, and analytical results for the bulk sample from Building 810 are presented in Table 810.1.

#### 810.2 CONCLUSION

Based on the survey and the laboratory results of the sample collected in Building 810, WESTON concludes that accessible areas of Building 810 do not contain ACM.

TABLE 810.1

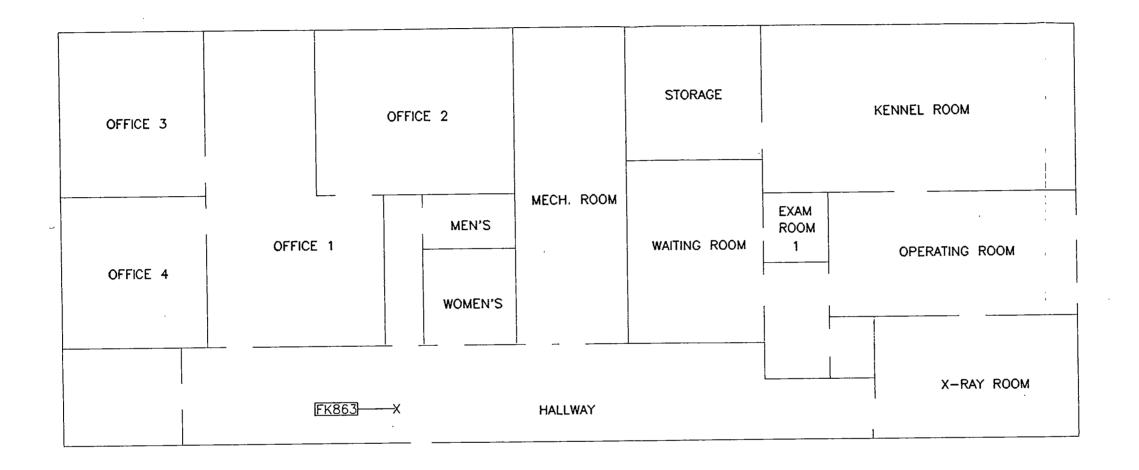
# BULK SAMPLE ANALYSIS RESULTS - BUILDING 810, VET. CLINIC

SAMPLE				PERCE	NT ASBE	STOS	
NO.	LOCATION	ITEM	DESCRIPTION	CH	MA	OT	LAYERED
FK863 HALLV	YAY	FLOOR TILE	BROWN, OTH, FLOOR TILE	-	-	-	NO
<del>.</del>						<del></del>	

<sup>&</sup>lt;sup>a</sup>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		



BLDG. 810

NOT TO SCALE



# 826 STOREHOUSE

#### 826.1 GENERAL

Building 826 was surveyed by WESTON's inspection team on 19 August 1992.

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 three samples of suspect material collected from the building. Of these samples, one was found to be asbestos-containing material (ACM). Table 826.1 lists the analytical results for the bulk samples.

#### 826.2 ACM AND EXPOSURE ASSESSMENT

The location, description, and analytical results for each bulk sample from Building 826 are presented in Table 826.1. An area-by-area inventory of ACM is provided in Tables 826.2 and 826.3. "Other Asbestos-Containing Materials," listed in Table 826.3, are materials that do not correspond to the standard caption categories listed in Table 826.2. A prioritized listing of exposure assessments is presented in Table 826.4. The method by which the exposure assessment priority index values are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.5 of this report. An itemized area-by-area cost estimate for removal and replacement is provided in Table 826.5. The method by which removal/replacement costs are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.4 of this report. Building floor plans (see attachment) indicate sample locations and building area names as they are listed in Tables 826.2 and 826.5.

### 826.3 RECOMMENDATIONS/CONCLUSIONS

- Floor tile was the material in Building 826 found to be ACM.
- Asbestos-containing floor tile present in Building 826 should be labeled under the O&M Program.

TABLE 826.1

BULK SAMPLE ANALYSIS RESULTS - BUILDING 826, STOREHOUSE

SAMPLE				PERCE	NT ASB	<u>estos</u>	
NO.	LOCATION	ITEM	DESCRIPTION	СН	AM	OT	LAYERED'
FK854	MECHANICAL ROOM	<4" PIPE FITTING	GRAY, UNK, FIT. INSUL.	-	-	-	YES
FK855	OFFICE AREA	FLOOR TILE	TAN,OTH,FLOOR TILE	-	-	-	NO
FK856	BATHROOM	FLOOR TILE	BROWN,OTH,FLOOR TILE	2	-	-	NO

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

Quadrant Codes	<u>System Codes</u>	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 826, STOREHOUSE

AREA	<u>P1</u>	PE FITT	INGS (EA) 9-14"	>14"	-<4"_	P1PE_RU 4-8"	NS (LF) 9-14"	>14"	SPRAY/TROWELED CEILINGS (MSF)	FLOOR TILE (MSF)	BOILERS/ TANKS (MSF)	AIR HANDLING EQUIPMENT (MSF)	OTHER
BATHROOM	<del>-</del>	<u></u>						<u></u>		0.04		<u> </u>	
TOTALS			<u> </u>	<u> </u>		-	<u> </u>		<del></del>	0.04	-		

 $<sup>^{\</sup>star}$  Other Material Present In Various Units Of Measure

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

### **Table 826.3**

# Other Asbestos-Containing Material - Building 826, Storehouse Type Occupancy: Adults (Public)

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

EA - Each

LF - Linear Feet

MSF - Thousand Square Feet

**TABLE 826.4** EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 826, STOREHOUSE

			PRIOR.	PRIORITY					AVG.	
SAMPLE		MATERIAL	INDEX	INDEX	EXP	OSU	RE FA	CTORS	EXP.	%
NO.	AREA	TYPE	CODE	NUMBER	1	2	3 4	5	HOURS	ASB.
FK837	OFFICE AREA	CEILING BOARD	A	0	2	2	1 2	4	40.00	0
FK850	MECHANICAL ROOM	GASKET	Ä	Ō	2	2	2 2	1	8.00	0
FK854	MECHANICAL ROOM	<4" PIPE FITTING	Α	0	2	2	2 2	1	8.00	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 826.5** COST ESTIMATE\* - BUILDING 826, STOREHOUSE

DESCRIPTION	UNIT COST (\$)	AREA	TOTAL
Pipe Fittings (EA)		<u> </u>	-
≩-3" 3-14" >14"	70.30 85.80 147.00 216.00	•	•
		-	-
Pipe Runs (LF) 44" 4-8"	36:58	:	-
4-8" 9-14" >14"	26.50 30.50 42.50 60.80	. <b>.</b>	-
Sprayed/Troweled Ceilings (SF)	9.60	-	-
Floor Tile (SF)	5.60	0.2	0.2
Boilers/Tanks (SF)	37.90	•	-
Air Handling Equipment (SF)	20.00	-	-
Other		•	-
SUBTOTAL		0.2	0.2
Difficulty Allowance		-	-
SUBTOTAL		0.2	0.2
Decontamination Units Mobilization		<b>3:</b> 8	<b>3:</b> 8
SUBTOTAL		5.2	5.2
Contingency a 15.00%		0.8	0.8
SUBTOTAL		6.0	6.0
Design Fee a 10.00%	1	0.6	0.6
SUBTOTAL	***	6.6	6.6
Air Monitoring a 10.00%	۲ <sup></sup>	0.7	0.7
TOTAL		7.3	7.3

<sup>\*</sup>Amounts Are In Thousands Of Dollars

AREA 1: BATHROOM

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

#### MONMOUTH HOUSE

#### 866.1 GENERAL

Building 866 was surveyed by WESTON's inspection team on 20 August 1992.

The first three portions of this facility report summarize the results of this inspection. Photographs of pipe run, fitting, and tank insulation sample locations are provided in Subsection 866.4.

Polarized Light Microscopy (PLM) with dispersion staining was used to analyze 10 samples of suspect material collected from the building. Of these samples, six were found to be asbestos-containing materials (ACM). Table 866.1 lists the analytical results for the bulk samples.

#### 866.2 ACM AND EXPOSURE ASSESSMENT

The location, description, and analytical results for each bulk sample from Building 866 are presented in Table 866.1. An area-by-area inventory of ACM is provided in Tables 866.2 and 866.3. "Other Asbestos-Containing Materials," listed in Table 866.3, are materials that do not correspond to the standard caption categories listed in Table 866.2. A prioritized listing of exposure assessments is presented in Table 866.4. The method by which the exposure assessment priority index values are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.5 of this report. An itemized area-by-area cost estimate for removal and replacement is provided in Table 866.5. The method by which removal/replacement costs are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.4 of this report. Building floor plans (see attachment) indicate sample locations and building area names as they are listed in Tables 866.2 and 866.5.

### 866.3 RECOMMENDATIONS/CONCLUSIONS

- The ACMs present in Building 866 are:
  - Tank insulation
  - Floor tile
  - Pipe insulation
- The mechanical room in Building 866 qualifies for the Army Asbestos Deficiency Abatement Project (AADAP).
- The asbestos-containing floor tile and pipe insulation present on the first- and second-floor areas of Building 866 should be labeled under the O&M Program.

TABLE 866.1

BULK SAMPLE ANALYSIS RESULTS - BUILDING 866, MONMOUTH HOUSE

SAMPLE				PERC	ENT ASBE	ESTOS	
NO.	LOCATION	ITEM	DESCRIPTION	CH	AM	OT	LAYERED
FK857	MECHANICAL ROOM	<4" PIPE FITTING	WHITE,UNK,FIT.INSUL.	35	-	-	NO
FK858	MECHANICAL ROOM	<4" PIPE RUN	GRAY,UNK,RUN INSUL.	10	-	-	YES
FK859	MECHANICAL ROOM	4-8" PIPE FITTING	WHITE, UNK, FIT. INSUL.	20	-	-	YES
FK860	MECHANICAL ROOM	4-8" PIPE RUN	WHITE, UNK, RUN INSUL.	20	15	-	NO
FK861	MECHANICAL ROOM	BOILERS/TANKS	WHITE, OTH, TANK INSUL	35	-	-	NO
FK891	1ST FLR (ENTIRE)	FLOOR TILE	GREEN, OTH, FLOOR TILE	2	-	-	NO
FK892	KITCHEN	FLOOR TILE	BROWN,OTH,FLOOR TILE	-	-	-	NO
FK893	OFFICE 2	FLOOR TILE	GRAY, OTH, FLOOR TILE	-	-	-	NO
FK894	ASSEMBLY AREA	FLOOR TILE	BROWN,OTH,FLOOR TILE	-	-	-	YES
FK895	OFFICE 1	ACOUSTICAL WALL TILE	WHITE,OTH,ACOUST TIL	-	-	-	YES

<sup>&</sup>lt;sup>a</sup>Asbestos content presented for layered samples represents the highest concentration layer.

SW = Southwest

Quadrant Codes	<u>System Codes</u>	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		
SE = Southeast		

**TABLE 866.2** ASBESTOS-CONTAINING MATERIALS - BUILDING 866, MONMOUTH HOUSE

	PI	PE FITT	INGS (EA)	)		PIPE RUI	NS (LF)		SPRAY/TROWELED	FLOOR TILE	BOILERS/	AIR HANDLING	
AREA	<4 <sup>11</sup>	4-8"	9-14"	>14"	<4 <sup>11</sup>	4-81	9-14"	>14"	CEILINGS (MSF)	(MSF)	TANKS (MSF)	EQUIPMENT (MSF)	OTHER
1ST FLR (ENTIRE)	-	-	-	_	-	-	-	-	-	1.90	-	-	-
1ST FLR BATHROOM	20	-	-	-	50	-	•	-	•	-	-	-	-
2ND FLR (ENTIRE)	-	-	-	-	-	-	-	-	-	2.18	-	-	-
2ND FLR BATHROOM	4	-	-	-	20	-	_	-	-	-	-	-	-
MECHANICAL ROOM	30	20			80	100			<u> </u>		0.04		<u>-</u>
TOTALS	54	20	_	-	150	100	_	_	-	4.08	0.04	-	-

Other Material Present In Various Units Of Measure

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

### **Table 866.3**

# Other Asbestos-Containing Material - Building 866, Monmouth House 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 866.4 EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 866, MONMOUTH HOUSE

SAMPLE		MATERIAL	PRIOR. INDEX	PRIORITY INDEX	EXI	osl	JRE	FAC	TORS_	AVG. Exp.	%
NO.	AREA	TYPE	CODE	NUMBER	1	2	3	4	5	HOURS	ASB.
FK857	MECHANICAL ROOM	<4" PIPE FITTING	С	1.240E04	3	2	2	3	1	8.00	35
FK858	MECHANICAL ROOM	<4" PIPE RUN	C	1.240E04	3	2	2	3	1	8.00	10
FK859	MECHANICAL ROOM	4-8" PIPE FITTING	C	1.240E04	3	2	2	3	1	8.00	20
FK860	MECHANICAL ROOM	4-8" PIPE RUN	С	1.240E04	3	2	2	3	1	8.00	35
FK861	MECHANICAL ROOM	BOILERS/TANKS	С	1.240E04	3	2	2	3	1	8.00	35
FK857	1ST FLR BATHROOM	<4" PIPE FITTING	В	3.000E02	2	2	1	1	10	10.00	35
FK857	2ND FLR BATHROOM	<4" PIPE FITTING	В	3.000E02	2	2	1	1	10	10.00	35
FK858	1ST FLR BATHROOM	<4" PIPE RUN	В	3.000E02	2	2	1	1	10	10.00	10
FK858	2ND FLR BATHROOM	<4" PIPE RUN	В	3.000E02	2	2	1	1	10	10.00	10
FK887	OFFICE 3	CEILING BOARD	Ā	0	2	2	1	2	2	10.00	0
FK895	OFFICE 1	ACOUSTICAL WALL TILE	Ä	Ō	3	3	1	2	15	20.00	0
FK895	OFFICE 2	ACOUSTICAL WALL TILE	Ä	Ö	3	3	1	2	15	20.00	0
FK895	OFFICE 3	ACOUSTICAL WALL TILE	Ä	Ŏ	3	3	1	2	15	20.00	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 866.5** COST ESTIMATE\* - BUILDING 866, MONMOUTH HOUSE

	UNIT	AREĄ	AREĄ	AREA	AREĄ	AREA	
DESCRIPTION	UNIT COST (\$)		2	3	4	5	TOTAL
Pipe Fittings (EA)	70-30	-	1.4	•	0.3	₹:}	<b>3:</b> 8
4-8" 9-14" >14"	70-30 95-80 147-00 216-00	:	=	:	:	: '	<u>:</u> .,
Pipe Runs (LF)	26 50	_	1.3	-	0.5	2.1	4.0
24-8" 9-14" >14"	26.50 30.50 42.50 60.80	-		-	-	<u>3</u> :1	<u>4:9</u>
31411	20:80	-	-	-	-	-	-
Sprayed/Troweled Ceilings (SF)	9.60	-	-	-	-	-	-
Floor Tile (SF)	5.60	10.6	-	12.2	-	-	22.8
Boilers/Tanks (SF)	37.90	-	-	-	-	1.5	1.5
Air Handling Equipment (SF)	20.00	-	-	-	-	-	-
Other		-	-	-	-	-	-
SUBTOTAL		10.6	2.7	12.2	0.8	10.5	36.9
Difficulty Allowance		-	2.7	-	0.8	15.8	19.3
SUBTOTAL		10.6	5.5	12.2	1.6	26.3	56.2
Decontamination Units Mobilization		1:2	<b>∂:</b> ₹	1:5	<b>1:</b> 2	8:\$	<b>3:</b> 8
SUBTOTAL		12.5	7.4	14.1	3.5	28.2	65.7
Contingency a 15.00%		1.9	1.1	2.1	0.5	4.2	9.9
SUBTOTAL		14.4	8.5	16.2	4.1	32.4	75.6
Design Fee @ 10.00%	,	1.4	0.8	1.6	0.4	3.2	7.6
SUBTOTAL		15.9	9.3	17.8	4.5	35.6	83.1
Air Monitoring a 10.00%	***	1.7	1.7	1.7	1.7	1.7	8.3
TOTAL		17.5	11.0	19.5	6.1	<u> 37.3</u>	91.4

AREA 3: 1ST FLR (ENTIRE)
AREA 5: MECHANICAL ROOM

<sup>\*</sup>Amounts Are In Thousands Of Dollars

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

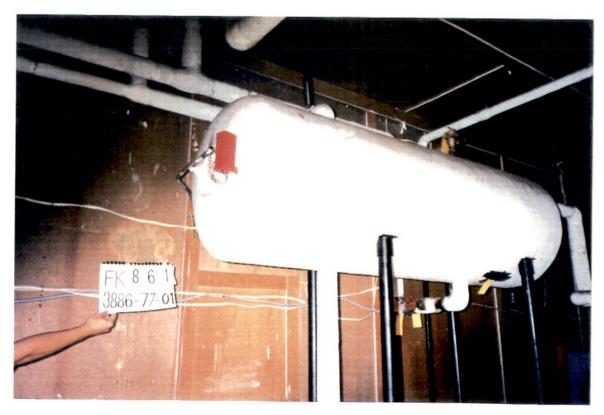
\*\*\*The Minimum Air Monitoring Fee is \$500.00 Per Building

# 866.4

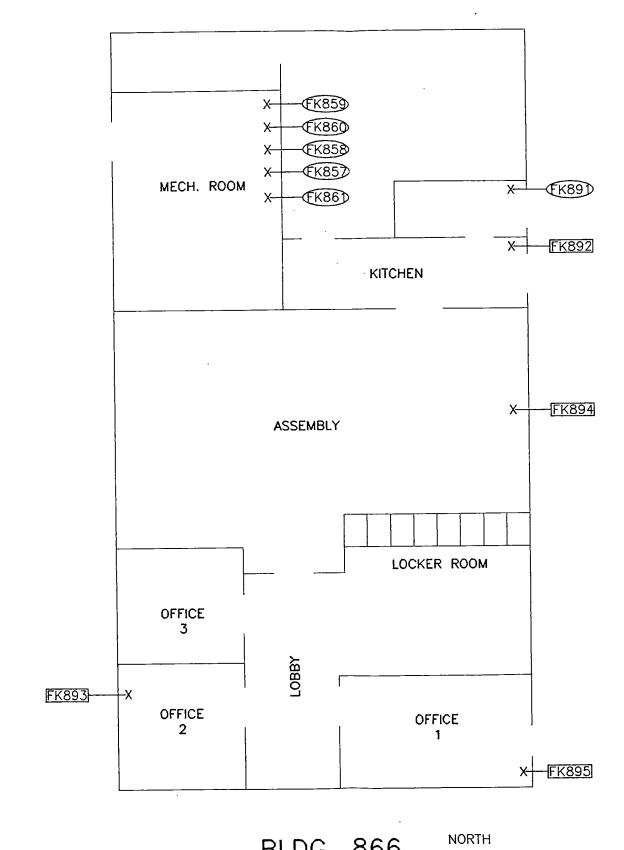
# **PHOTOGRAPHS**



Bldg. 866 Mech. Room: (Sample(s) FK859 and 860) 4"-8" Pipe Run and Fitting Insulation Tested Positive



Bldg. 866 Mech. Room: (Sample(s) Fk861) Tank Insulation Tested Positive



BLDG. 866

NOT TO SCALE





#### WAREHOUSE

#### 886.1 GENERAL

Building 886 was surveyed by WESTON's inspection team on 20 August 1992.

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 886.1 lists the analytical results for the bulk sample.

#### 886.2 ACM AND EXPOSURE ASSESSMENT

The location, description, and analytical results for the bulk sample from Building 886 are presented in Table 886.1. An area-by-area inventory of ACM is provided in Tables 886.2 and 886.3. "Other Asbestos-Containing Materials," listed in Table 886.3, are materials that do not correspond to the standard caption categories listed in Table 886.2. A prioritized listing of exposure assessments is presented in Table 886.4. The method by which the exposure assessment priority index values are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.5 of this report. An itemized area-by-area cost estimate for removal and replacement is provided in Table 886.5. The method by which removal/replacement costs are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.4 of this report. Building floor plans (see attachment) indicate sample locations and building area names as they are listed in Tables 886.2 and 886.5.

## 886.3 RECOMMENDATIONS/CONCLUSIONS

- Linoleum flooring was the material in Building 886 found to be ACM.
- Asbestos-containing linoleum flooring present in Building 886 should be labeled under the O&M Program.

TABLE 886.1

## BULK SAMPLE ANALYSIS RESULTS - BUILDING 886, WAREHOUSE

SAMPLE				PERCE	NT ASB	ESTOS	
NO.	LOCATION	ITEM	DESCRIPTION	СН	AM	OT	LAYERED
FK862 OFFICE	≣ 1	OTHER MATERIAL	BROWN,OTH,LINOLEUM	7	-	-	NO

 $<sup>^{\</sup>mathrm{a}}$ 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		

AREA	PI	PE FITT	INGS (EA) 9-14"	>14"	-<4 <sup>11</sup>	PIPE RU 4-8"	NS (LF) 9-14"	>14"	SPRAY/TROWELED CEILINGS (MSF)	FLOOR TILE (MSF)	BOILERS/ TANKS (MSF)	AIR HANDLING EQUIPMENT (MSF)	OTHER
OFFICE 1									<u> </u>	<u> </u>			
TOTALS	-		-	•	<u> </u>				<u>-</u>			<u> </u>	*

Other Material Present In Various Units Of Measure

EA - Each

LF - Linear Feet MSF - Thousand Square Feet

## **Table 886.3**

## Other Asbestos-Containing Material - Building 886, Warehouse Type Occupancy: Adults (Public)

Area	Material Type	Quantity (Unit)
Office 1	Linoleum	0.350 (MSF)

EA - Each

LF - Linear Feet

MSF - Thousand Square Feet

TABLE 886.4 EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 886, WAREHOUSE

SAMPLE		MATERIAL	PRIOR. INDEX	PRIORITY INDEX	EXI	POSL	JRE	FAC	TORS_	AVG. Exp.	*
NO.	AREA	ТҮРЕ	CODE	NUMBER '	1	2	3	4	5	HOURS	ASB.
FK862	OFFICE 1	INSULATION BOARD	A	6.000E01	2	2	1	2	2	10.00	7
FK837	OFFICE (OPEN)	CEILING BOARD	Ä	0	3	2	1	1	4	40.00	Ó
FK837	OFFICE 1	CEILING BOARD	A	0	3	2	1	1	4	40.00	0
FK841	WAREHOUSE	GASKET	A	Ó	2	2	1	2	2	10.00	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 [=] Leyel Of Activity
5 [=] Number Of Assigned Occupants

**TABLE 886.5** COST ESTIMATE\* - BUILDING 886, WAREHOUSE

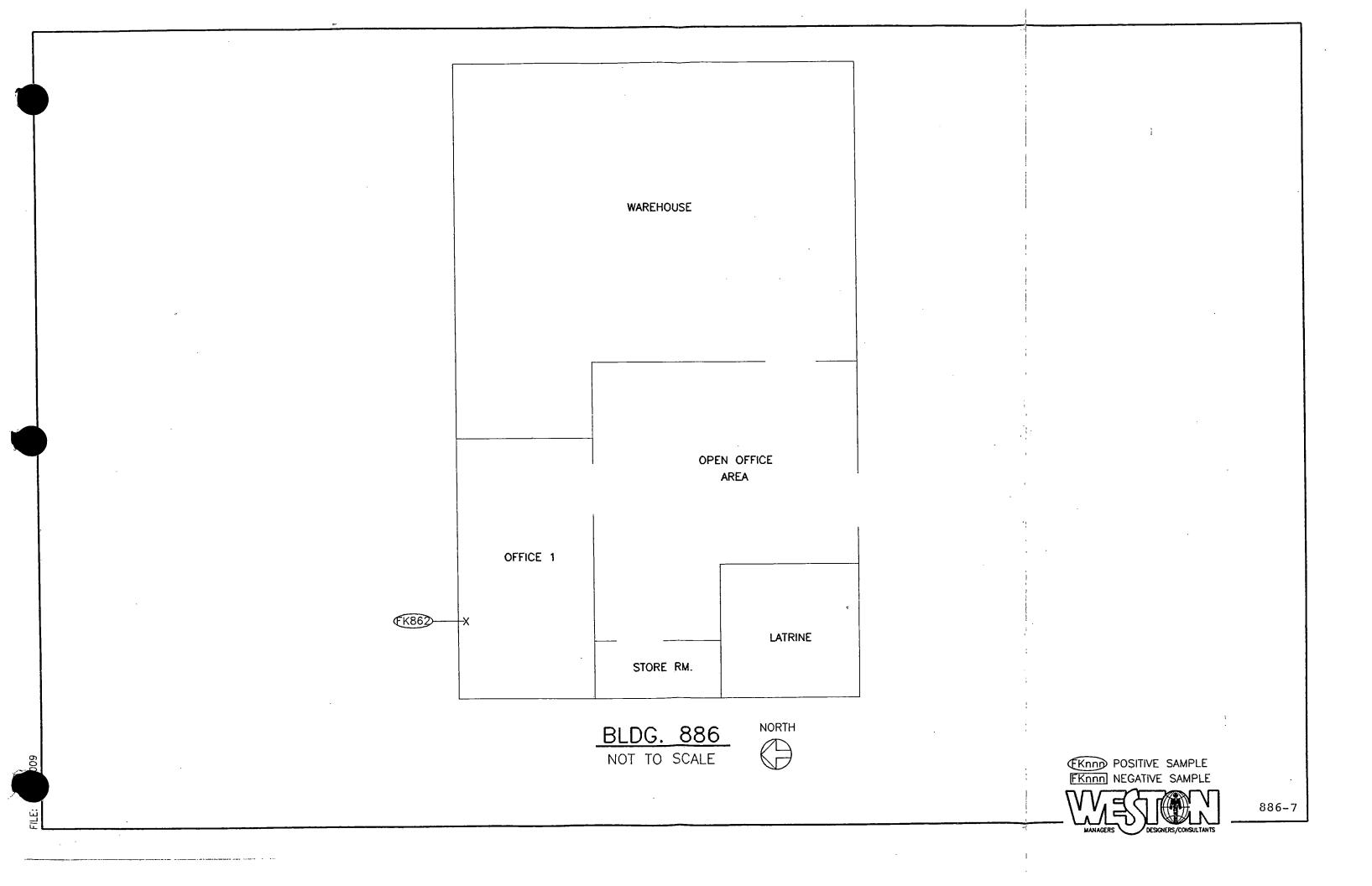
DESCRIPTION	UNIT COST (\$)	AREA	TOTAL
Pipe Fittings (EA)	79-30	<u>:</u>	-
4-8" 9-14" >14"	70.30 85.80 127.00 216.00	:	=
Pipe Runs (LF)	26 50	-	_
4-8" 9-14" >14"	26.50 30.50 60.80	:	:
Sprayed/Troweled Ceilings (SF)	9.60	-	•
Floor Tile (SF)	5.60	•	-
Boilers/Tanks (SF)	37.90	-	-
Air Handling Equipment (SF)	20.00	-	-
Other		1.5	1.5
SUBTOTAL		1.5	1.5
Difficulty Allowance		-	-
SUBTOTAL		1.5	1.5
Decontamination Units Mobilization		<b>3</b> :8	<b>3</b> :8
SUBTOTAL		6.5	6.5
Contingency a 15.00%		1.0	1.0
SUBTOTAL		7.4	7.4
Design Fee a 10.00%	,	0.7	0.7
SUBTOTAL		8.2	8.2
Air Monitoring a 10.00%	***	0.8	8.0
TOTAL		9.0	9.0

AREA 1: OFFICE 1

<sup>\*</sup>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



### INSTRUCTION BUILDING

#### 901.1 GENERAL

Building 901 was surveyed by WESTON's inspection team on 20 and 24 August 1992.

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 six samples of suspect material collected from the building. Of these samples, four were found to be asbestos-containing materials (ACM). Table 901.1 lists the analytical results for the bulk samples.

#### 901.2 ACM AND EXPOSURE ASSESSMENT

The location, description, and analytical results for each bulk sample from Building 901 are presented in Table 901.1. An area-by-area inventory of ACM is provided in Tables 901.2 and 901.3. "Other Asbestos-Containing Materials," listed in Table 901.3, are materials that do not correspond to the standard caption categories listed in Table 901.2. A prioritized listing of exposure assessments is presented in Table 901.4. The method by which the exposure assessment priority index values are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.5 of this report. An itemized area-by-area cost estimate for removal and replacement is provided in Table 901.5. The method by which removal/replacement costs are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.4 of this report. Building floor plans (see attachment) indicate sample locations and building area names as they are listed in Tables 901.2 and 901.5.

## 901.3 RECOMMENDATIONS/CONCLUSIONS

- The ACMs present in Building 901 are:
  - Floor tile
  - Transite panel
- The ACMs listed above should be labeled under the O&M Program.

TABLE 901.1

BULK SAMPLE ANALYSIS RESULTS - BUILDING 901, INSTRUCTION BUILDING

SAMPLE			,	PERC	<u>ent asbi</u>	<u>estos</u>	
NO.	LOCATION	ITEM	DESCRIPTION	CH	AM	OT	LAYERED
FK864	MECHANICAL ROOM	OTHER MATERIAL	WHITE,OTH,BREECHING	-	-	-	YES
FK886	ROOM 19	FLOOR TILE	TAN,OTH,FLOOR TILE	2	-	-	NO
FK887	ROOM 19	CEILING BOARD	WHITE, OTH, ACOUS TILE	-	-	-	YES
FK888	ROOM 19	FLOOR TILE	TAN,OTH,FLOOR TILE	2	-	-	NO
FK889	ROOM 15	FLOOR TILE	BROWN,OTH,FLOOR TILE	7	-	-	NO
FK890	NORTHEAST WING-EXT.	TRANSITE PANEL BOARD	GRAY, OTH, TRANS PANL	15	-	-	YES

<sup>&</sup>lt;sup>a</sup>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 901.2 ASBESTOS-CONTAINING MATERIALS - BUILDING 901, INSTRUCTION BUILDING

· ·	PI	PE 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)	OTHE
ALLWAY 1	-	-	-	-	-	-	-	-	· -	0.28	-	•	-
ORTHEAST WING-EXT.	-	-	_	-	-	-	-	-	•	-	-	-	*
ORTHWALL-EXTERIOR	-	-	-	-	-	-	-	-	-	-	-	-	*
ORTHWEST WING-EXT.	-	-	-	-	-	-	-	-	-	-	-	-	*
OOM 15	-	-	-	-	-	-	-	-	•	0.86	-	-	-
OOM 19	:	:		<del>-</del>			<del>-</del>	<u> </u>		0.71			<u>-</u>
OTALS	-	_	-	-	_	-	-	-	-	1.85	-	-	*

Other Material Present In Various Units Of Measure

EA - Each

LF - Linear Feet MSF - Thousand Square Feet

**Table 901.3** 

# Other Asbestos-Containing Material - Building 901, Instruction Building Type Occupancy: Adults (Public)

Area	Material Type	Quantity (Unit)
Northeast Wing-Exterior	Transite Panel	3.320 (MSF)
North Wall-Exterior	Transite Panel	0.600 (MSF)
Northwest Wing-Exterior	Transite Panel	3.320 (MSF)

EA - Each

LF - Linear Feet

MSF - Thousand Square Feet

TABLE 901.4 EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 901, INSTRUCTION BUILDING

SAMPLE		MATERIAL	PRIOR. INDEX	PRIORITY INDEX	FYPC	nei ib	F FA	CTORS	AVG. EXP.	×	
NO.	AREA	TYPE	CODE	NUMBER	1 2	2 3	4	5	HOURS	ASB.	
FK890	NORTHEAST WING-EXT.	TRANSITE PANEL BOARD	A	3.150E01	3 1	1	1	15	40.00	15	
FK890	NORTHWALL-EXTERIOR	TRANSITE PANEL BOARD	Ä	3.150E01	3 1	1	1	15	40.00	15	
FK890	NORTHWEST WING-EXT.	TRANSITE PANEL BOARD	A	3.150E01	3 1	1	1	15	40.00	15	
FK864	MECHANICAL ROOM	INSULATION BOARD	A	0	3 2	2	2	1	8.00	0	
FK887	ROOM 19	CEILING BOARD	A	0	3 1	1	1	15	40.00	0	
FK887	ROOMS 16,18,20	CEILING BOARD	Α	0	3 1	1 1	1	15	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

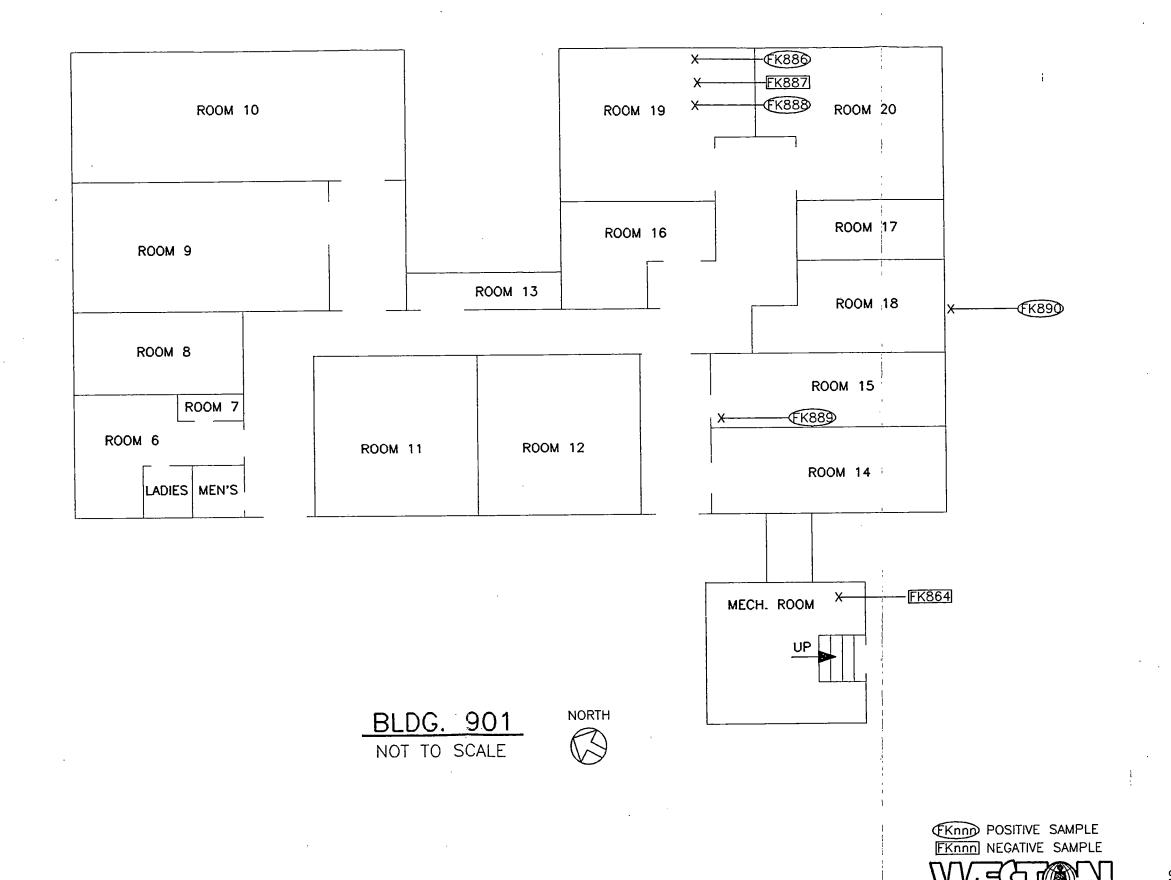
**TABLE 901.5** COST ESTIMATE\* - BUILDING 901, INSTRUCTION BUILDING

			4054	4054	4054	4054	4054	
DESCRIPTION	UNIT COST (\$)	AREA	AREA 2	AREA 3	AREA 4	AREA	AREA	TOTAL
Pipe Fittings (EA)	70.30	_	_		_	-	-	-
4-8" 9-14" >14"	70.30 85.80 147.00 216.00	:	:	:	:	:	:	=
	216:00	-	-	-	-	-	•	-
Pipe Runs (LF)	26.50	-	-	-	-	-	-	-
4-8" 9-14" >14"	26-50 30-50 42-50 60-80	-	:	-	-	=	-	-
	60.80	-	-	-	-	-	-	-
Sprayed/Troweled Ceilings (SF)	9.60	-	-	-	-	-	-	-
Floor Tile (SF)	5.60	1.5	-	-	-	4.8	3.9	10.3
Boilers/Tanks (SF)	37.90	-	-	-	-	-	-	-
Air Handling Equipment (SF)	20.00	-	_	-	-	-	-	-
Other		-	36.5	6.6	36.5	-	-	79.6
SUBTOTAL		1.5	36.5	6.6	36.5	4.8	3.9	90.0
Difficulty Allowance		-	36.5	6.6	-	2.4	-	45.5
SUBTOTAL		1.5	73.0	13.2	36.5	7.3	3.9	135.5
Decontamination Units Mobilization		8:3	8:3	8: <del>3</del>	8:5	8:5	8:5	<b>3:8</b>
SUBTOTAL		2.4	73.9	14.0	37.4	8.1	4.8	140.5
Contingency a 15.00%		0.4	11.1	2.1	5.6	1.2	0.7	21.1
SUBTOTAL		2.7	85.0	16.1	43.0	9.3	5.5	161.6
Design Fee @ 10.00%		0.3	8.5	1.6	4.3	0.9	0.5	16.2
SUBTOTAL		3.0	93.4	17.8	47.3	10.2	6.0	177.7
Air Monitoring a 10.00%	6 <b>**</b> *	3.0	3.0	3.0	<u>3.0</u>	3.0	3.0	17.8
TOTAL		6.0	96.4	20.7	50.2	13.2	9.0	195.5

<sup>\*</sup>Amounts Are In Thousands Of Dollars

AREA 3: HALLWAY 1 AREA 3: NORTHWALL-EXTERIOR AREA 5: ROOM 15

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



901-8

#### WAREHOUSE

#### 976.1 GENERAL

Building 976 was surveyed by WESTON's inspection team on 20 and 21 August 1992.

The first three portions of this facility report summarize the results of this inspection. A photograph of pipe run and fitting insulation sample location is provided in Subsection 976.4.

Polarized Light Microscopy (PLM) with dispersion staining was used to analyze nine samples of suspect material collected from the building. Of these samples, seven were found to be asbestos-containing materials (ACM). Table 976.1 lists the analytical results for the bulk samples.

#### 976.2 ACM AND EXPOSURE ASSESSMENT

The location, description, and analytical results for each bulk sample from Building 976 are presented in Table 976.1. An area-by-area inventory of ACM is provided in Tables 976.2 and 976.3. "Other Asbestos-Containing Materials," listed in Table 976.3, are materials that do not correspond to the standard caption categories listed in Table 976.2. A prioritized listing of exposure assessments is presented in Table 976.4. The method by which the exposure assessment priority index values are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.5 of this report. An itemized area-by-area cost estimate for removal and replacement is provided in Table 976.5. The method by which removal/replacement costs are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.4 of this report. Building floor plans (see attachment) indicate sample locations and building area names as they are listed in Tables 976.2 and 976.5.

## 976.3 RECOMMENDATIONS/CONCLUSIONS

- The ACMs present in Building 976 are:
  - Ceiling/wall insulation (cork with tar coating)
  - Pipe insulation
  - Transite panel
- The following areas in Building 976 qualify for the Army Asbestos Deficiency Abatement Project (AADAP):
  - Crawl space (above ceiling)
  - Storage 2
  - Chill Room III
  - Deep Freezers I and II
  - Public bathroom
  - Dry Storage/Storage 3
  - Storage 1
  - Meat cooler
  - Receiving Areas 1 and 2
  - Record Storage 1 and 2
  - Pipe passage

TABLE 976.1

BULK SAMPLE ANALYSIS RESULTS - BUILDING 976, WAREHOUSE

SAMPLE				PERCE	NT ASB	STOS	_
NO.	LOCATION	ITEM	DESCRIPTION	CH	AM	OT	LAYERED
FK865	STORAGE 3	DUPLICATE SAMPLE	BLACK,OTH,WALL INSUL	•	-	-	YES
FK866	STORAGE 2	<4" PIPE RUN	GREEN, UNK, RUN INSUL.	5	-	-	YES
FK867	STORAGE 2	<4" PIPE FITTING	WHITE, UNK, FIT. INSUL.	20	5	-	NO
FK868	DRY STORAGE/STOR. 3	OTHER MATERIAL	BLACK,OTH,WALL INSUL	1	-	-	YES
FK869	RECEIVING AREA 1	OTHER MATERIAL	BLACK, OTH, CEIL INSUL	2	-	-	YES
FK870	DEEP FREEZER II	TRANSITE PANEL BOARD	GRAY, OTH, TRANSIT PN	30	-	-	NO
FK871	RECORD STORAGE 1	EXPANSION JOINT(S)	BLACK, OTH, EXPAN JONT	-	-	-	YES
FK872	PUBLIC BATHROOM	<4" PIPE RUN	GRAY,UNK,RUN INSUL.	3	-	-	YES
FK873	PUBLIC BATHROOM	<4" PIPE FITTING	GRAY, UNK, FIT. INSUL.	30	-	-	NO

<sup>&</sup>lt;sup>a</sup>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 976.2** ASBESTOS-CONTAINING MATERIALS - BUILDING 976, WAREHOUSE

	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 <sup>H</sup>	CEILINGS (MSF)	(MSF)	TANKS (MSF)	EQUIPMENT (MSF)	OTH
CHILL ROOM III	-	_	_	_	_	_	-	-	•	-	-	•	*
CRAWLSPACE ABV CEIL	10	-	_	-	200	-	•	-	-	-	-	-	-
EEP FREEZER I	-	-	-	-	-	-	-	-	-	-	-	-	*
EEP FREEZER II	-	-	-	-	-	-	-	-	-	-	-	-	*
RY STORAGE/STOR. 3	-	-	~	-	-	-	-	-	-	· -	-	-	*
EAT COOLER	-	· <b>-</b>	-	-	_	-	-	-	-	-	-	-	*
IPE PASSAGE	-	-	_	-	-	-	-	-	-	-	-	-	*
PUBLIC BATHROOM	12	-	-	-	50		-	-	-	-	-	-	-
RECEIVING AREA 1	-	-	-	-	-	-	-	-	-	-	-	-	*
ECEIVING AREA 2	-	-	-	-	-	-	-	-	-	-	-	-	*
ECORD STORAGE 1	-	_	-	-	-	-	-	-	-	-	-	•	*
ECORD STORAGE 2	_	-	_	-	-	-	-	-	-	-	-	_	*
TORAGE 1	-	-	_	-	-	-	•	-	-	<del>-</del>	-	-	*
TORAGE 2	5			<u>-</u>	40	<u> </u>							
OTALS	27	_	_	_	290		_	-	-	-	_	-	*

Other Material Present In Various Units Of Measure

EA - Each

LF - Linear Feet MSF - Thousand Square Feet

Table 976.3

Other Asbestos-Containing Material - Building 976, Warehouse
Type Occupancy: Adults (Public)

Area	Material Type	Quantity (Unit)
Chill Room III	Transite Panel	1.870 (MSF)
Deep Freezer I	Transite Panel	6.100 (MSF)
Deep Freezer II	Transite Panel	3.650 (MSF)
Dry Storage/Storage 3	Ceiling and Wall Insulation	4.28 (MSF)
Meat Cooler	Ceiling and Wall Insulation	3.550 (MSF)
Pipe Passage	Ceiling and Wall Insulation	3.400 (MSF)
Receiving Area 1	Ceiling and Wall Insulation	6.100 (MSF)
Receiving Area 2	Ceiling and Wall Insulation	5.240 (MSF)
Record Storage 1	Ceiling and Wall Insulation	4.880 (MSF)
Record Storage 2	Ceiling and Wall Insulation	5.240 (MSF)
Storage 1	Ceiling and Wall Insulation	1.680 (MSF)

EA - Each

LF - Linear Feet

MSF - Thousand Square Feet

TABLE 976.4 EXPOSURE ASSESSMENTS (PRIORITY ORDER) -BUILDING 976, WAREHOUSE

SAMPLE		MATERIAL	PRIOR. INDEX	PRIORITY INDEX	EV	ופחם	IDE	EAC	TORS	AVG. Exp.	×	
NO.	AREA	TYPE	CODE	NUMBER		2	_		5	HOURS	ASB.	
FK867	CRAWLSPACE ABV CEIL	<4" PIPE FITTING	•	4.400E04	3	3	4	2		40.00	25	
FK867	STORAGE 2	<4" PIPE FITTING	C	4.400E04	3	3	i	2	7	40.00	25	
FK870	CHILL ROOM III	TRANSITE PANEL BOARD	Č	4.400E04	3	3	i	2	7	40.00	30	
FK870	DEEP FREEZER I	TRANSITE PANEL BOARD	č	4.400E04	3	3	i	2	Ž	40.00	30	
FK870	DEEP FREEZER II	TRANSITE PANEL BOARD	č	4.400E04	3	3	1	2	4	40.00	30	
FK873	PUBLIC BATHROOM	<4" PIPE FITTING	Č	1.240E04	3	3	1	3	1	8.00	30	
FK866	CRAWLSPACE ABV CEIL	<4" PIPE RUN	Č	7.600E03	3	3	1	2	4	40.00	5	
FK866	STORAGE 2	<4" PIPE RUN	Č	7.600E03	3	3	1	2	4	40.00	5	
FK868	DRY STORAGE/STOR. 3	PLASTER CEILINGS & WALLS	Č	7.600E03	3	3	1	2	4	40.00	1	
FK868	STORAGE 1	PLASTER CEILINGS & WALLS	Ċ	7.600E03	3	3	1	2	4	40.00	1	
FK869	MEAT COOLER	PLASTER CEILINGS & WALLS	č	7.600E03	3	3	1	2	4	40.00	2	
FK869	RECEIVING AREA 1	PLASTER CEILINGS & WALLS	Č	7.600E03	3	3	1	2	4	40.00	2	
FK869	RECEIVING AREA 2	PLASTER CEILINGS & WALLS	Č	7.600E03	3	3	1	2	4	40.00	2	
FK869	RECORD STORAGE 1	PLASTER CEILINGS & WALLS	C	7.600E03	3	3	1	2	4	40.00	2	
FK869	RECORD STORAGE 2	PLASTER CEILINGS & WALLS	С	7.600E03	3	3	1	2	4	40.00	2	
FK869	PIPE PASSAGE	PLASTER CEILINGS & WALLS	C	2.200E03	3	3	1	3	1	8.00	2	
FK872	PUBLIC BATHROOM	<4" PIPE RUN	С	2.200E03	3	3	1	3	1	8.00	3	
FK871	RECORD STORAGE 1	EXPANSION JOINTS	A	0	3	3	1	2	4	40.00	0	
FK871	RECORD STORAGE 2	EXPANSION JOINTS	Α	Ô	3	3	1	2	4	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 976.5 COST ESTIMATE\* - BUILDING 976, WAREHOUSE

DESCRIPTION	UNIT COST (\$)	AREA	AREA	AREA	AREA 4	AREA	AREA	AREA	AREA	AREA 9	AREA 10	AREA 11
Pipe Fittings (EA) 4-8" 9-14" >14"	70.30 85.80 147.80 216.00	:	0.7	:	:	:	-	:	0.8 - -	:	-	:
Pipe Runs (LF) 4-8" 9-14" >14"	26.50 30.50 42.50 60.80	:	5.3 -	:	:	:	:	:	1.3	:	:	:
Sprayed/Troweled Ceilings (SF)	9.60	-	-	_	_		-	-	-	-	-	-
Floor Tile (SF)	5.60	•	-	-	•	-	-	-	-	-	-	-
Boilers/Tanks (SF)	37.90	-	-	-	-	-	-	-	-	-	-	-
Air Handling Equipment (SF)	20.00	-	-	-	-	-	-	-	-	-	-	_
Other		20.6	-	67.1	40.2	30.0	24.9	23.8	•	42.7	36.7	34.2
SUBTOTAL		20.6	6.0	67.1	40.2	30.0	24.9	23.8	2.2	42.7	36.7	34.2
Difficulty Allowance		30.9	21.0	100.7	60.2	44.9	87.0	83.3	-	149.5	128.4	51.2
SUBTOTAL		51.4	27.0	167.8	100.4	74.9	111.8	107.1	2.2	192.2	165.1	85.4
Decontamination Units Mobilization		8:6	8:6	8:4	8:4	8:4	8:6	8:4	8:4	8:4	8:6	8:6 8:1
SUBTOTAL		52.2	27.8	168.5	101.2	75.7	112.6	107.9	3.0	192.9	165.8	86.2
Contingency @ 15.00%		7.8	4.2	25.3	15.2	11.4	16.9	16.2	0.4	28.9	24.9	12.9
SUBTOTAL		60.0	32.0	193.8	116.3	87.0	129.5	124.1	3.4	221.9	190.7	99.1
Design Fee a 10.00%		6.0	3.2	19.4	11.6	8.7	13.0	12.4	0.3	22.2	19.1	9.9
SUBTOTAL		66.0	35.2	213.2	128.0	95.7	142.5	136.5	3.7	244.1	209.8	109.0
Air Monitoring a 10.00%**	K W	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
TOTAL		77.0	46.1	224.2	138.9	106.7	153.4	147.5	14.7	255.0	220.8	120.0





<sup>\*</sup>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 976.5** (continued) COST ESTIMATE\* - BUILDING 976, WAREHOUSE

DESCRIPTION	UNIT COST (\$)	AREA 12	AREA 13	ARĘA 14	TOTAL
Pipe Fittings (EA) 4-8"	70.30 85.80	Ξ	:	0.4	1.9
3-8" 9-14" >14"	70.30 157.80 146.00	:	Ξ	:	:
Pipe Runs (LF)	26.50	-	-	1.1	7.7
4-8" 9-14" >14"	26.50 30.50 60.80	=	:	Ξ	:
Sprayed/Troweled Ceilings (SF)	9.60	-	-	-	-
Floor Tile (SF)	5.60	-	-	-	-
Boilers/Tanks (SF)	37.90	-	-	-	-
Air Handling Equipment (SF)	20.00	-	-	-	-
Other		34.3	11.8	-	366.0
SUBTOTAL		34.3	11.8	1.4	375.6
Difficulty Allowance		51.5	17.6	2.1	828.2
SUBTOTAL		85.8	29.4	3.5.	1203.8
Decontamination Units Mobilization		8:4	8:6	8:6	<b>2:</b> 8
SUBTOTAL		86.5	30.2	4.3	1214.8
Contingency a 15.00%		13.0	.4.5	0.6	182.2
SUBTOTAL		99.5	34.7	5.0	1397.1
Design Fee @ 10.00%	t	10.0	3.5	0.5	139.7
SUBTOTAL		109.5	38.2	5.5	1536.8
Air Monitoring a 10.00%	***	11.0	11.0	11.0	<u>153.7</u>
TOTAL		120.4	49.2	16.4	1690.5

<sup>\*</sup>Amounts Are In Thousands Of Dollars

AREA 12: RECORD STORAGE 2 AREA 14: STORAGE 2

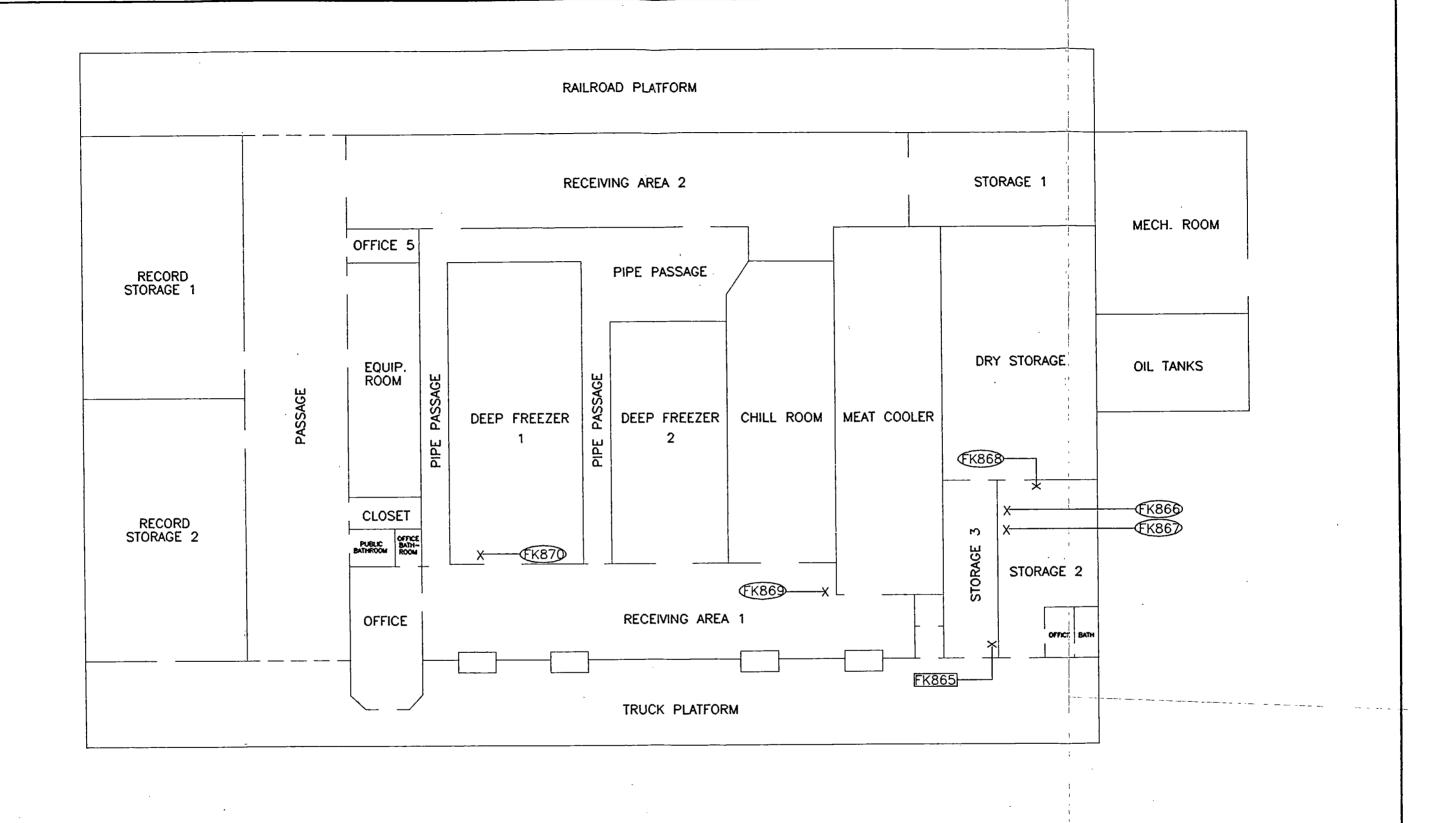
<sup>\*\*</sup>Less Than \$100 For The Area; Amount Not Printed But Included In Total(s)
\*\*\*The Minimum Air Monitoring Fee is \$500.00 Per Building

976.4

## **PHOTOGRAPH**



Bldg. 976 Public Bathroom: (Sample(s) 872 and 873) <4" Pipe Run and Fitting Insulation Tested Positive



BLDG. 976

NOT TO SCALE



FKNND POSITIVE SAMPLE
FKNND NEGATIVE SAMPLE

976-10

?

#### PROVOST MARSHALL

#### 977.1 GENERAL

Building 977 was surveyed by WESTON's inspection team on 25 August 1992.

The first three portions of this facility report summarize the results of this inspection. A photograph of pipe run and fitting insulation sample location is provided in Subsection 977.4.

Polarized Light Microscopy (PLM) with dispersion staining was used to analyze eight samples of suspect material collected from the building. Of these samples, two were found to be asbestos-containing materials (ACM). Table 977.1 lists the analytical results for the bulk samples.

#### 977.2 ACM AND EXPOSURE ASSESSMENT

The location, description, and analytical results for each bulk sample from Building 977 are presented in Table 977.1. An area-by-area inventory of ACM is provided in Tables 977.2 and 977.3. "Other Asbestos-Containing Materials," listed in Table 977.3, are materials that do not correspond to the standard caption categories listed in Table 977.2. A prioritized listing of exposure assessments is presented in Table 977.4. The method by which the exposure assessment priority index values are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.5 of this report. An itemized area-by-area cost estimate for removal and replacement is provided in Table 977.5. The method by which removal/replacement costs are calculated is described in ISSUES COMMON TO ALL BUILDINGS, Subsection 3.4 of this report. Building floor plans (see attachment) indicate sample locations and building area names as they are listed in Tables 977.2 and 977.5.

## 977.3 RECOMMENDATIONS/CONCLUSIONS

- Pipe insulation was the material in Building 977 found to be ACM.
- Asbestos-containing pipe insulation present in Building 977 should be labeled under the O&M Program.

TABLE 977.1

BULK SAMPLE ANALYSIS RESULTS - BUILDING 977, PROVOST MARSHALL

SAMPLE				PERCI	NT ASB	<b>ESTOS</b>	
NO.	LOCATION	ITEM	DESCRIPTION	CH	AM	<u> </u>	LAYERED
FK901	E.WING/PIPE GALLEY 1	<4" PIPE FITTING	GRAY,UNK,PIPE FITT.	18	-	•	NO
FK902	E.WING/PIPE GALLEY 1	<4" PIPE RUN	GRAY, UNK, PIPE INSUL	35	-	-	NO
FK903	WEST WING	FLOOR TILE	GRAY, OTH, FLOOR TILE	-	-	-	NO
FK904	WEST WING	CEILING BOARD	WHITE, OTH, CEIL BOARD	-	-	-	YES
FK905	E.WING/LOCKER ROOM	OTHER MATERIAL	BROWN, OTH, SHEET FLRG	-	-	-	YES
FK906	SOUTH WING	FLOOR TILE	GRAY, OTH, FLOOR TILE	-	-	-	YES
FK907	BOILER ROOM	9-14" PIPE FITTING	WHITE,UNK,PIPE FITT.	-	-	-	YES
FK924	INVESTIGATION OFFICE	ACOUSTICAL WALL TILE	WHITE, OTH, ACOUS. TILE	•	-	-	YES

<sup>&</sup>lt;sup>a</sup>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"	4-8"	9-14"	>1411	<4"	4-8"	9-14"	>14"	CEILINGS (MSF)	(MSF)	TANKS (MSF)	EQUIPMENT (MSF)	OTH
.WING/ABOVE CEILING	70	-	-	-	850	_	-	-	-	•	•	<u>-</u>	-
.WING/PIPE GALLEY 1	20	-	-	-	80	-	-	-	-	-	-	-	-
E.WING/PIPE GALLEY 2	<u>15</u>		<u> </u>	<del>-</del>	35	<del></del>	<del></del>	<del>-</del>				<del>-</del>	_
TOTALS	105	-	-	-	965	-			-	•			

Other Material Present In Various Units Of Measure

EA - Each

LF - Linear Feet MSF - Thousand Square Feet

## **Table 977.3**

# Other Asbestos-Containing Material - Building 977, Provost Marshall 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 977.4** EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 977, PROVOST MARSHALL

SAMPLE		MATERIAL	PRIOR. INDEX	PRIORITY INDEX	EX	POSI	JRE	FAC	TORS	AVG. Exp.	×	
NO.	ARÉA	TYPE	CODE	NUMBER	1	2	3	4	5	HOURS	ASB.	
FK901	E.WING/PIPE GALLEY 1	<4" PIPE FITTING	В.	2.750E02	3	2	2	2	1	1.00	18	
FK901	E.WING/PIPE GALLEY 2	<4" PIPE FITTING	В	2.750E02	3	2	2	2	1	1.00	18	
FK902	E.WING/PIPE GALLEY 1	<4" PIPE RUN	В	2.750E02	3	2	2	2	1	1.00	35	
FK902	E.WING/PIPE GALLEY 2	<4" PIPE RUN	В	2.750E02	3	2	2	2	1	1.00	35	
FK901	E.WING/ABOVE CEILING	<4" PIPE FITTING	A	2.500E-2	2	1	2	1	1	1.00	18	
FK902	E.WING/ABOVE CEILING	<4" PIPE RUN	A	2.500E-2	- 2	1	2	1	1	1.00	<b>3</b> 5	
FK904	E.WING/LOCKER ROOM	CEILING BOARD	Α	0	2	2	1	2	10	2.00	0	
FK904	SOUTH WING	CEILING BOARD	A	0	2	2	1	2	1	8.00	0	
FK904	WEST WING	CEILING BOARD	Α	0	2	2	1	2	20	40.00	0	
FK905	E.WING/LOCKER ROOM	INSULATION BOARD	A	.0	2	2	1	2	20	40.00	0	
FK907	BOILER ROOM	9-14" PIPE FITTING	A	0	2	2	1	2	1	8.00	0	
FK924	INVESTIGATION OFFICE	ACOUSTICAL WALL TILE	A	0	2	2	1	2	2	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 977.5

COST ESTIMATE\* - BUILDING 977, PROVOST MARSHALL

	LINTT	AREĄ	AREĄ	AREĄ	
DESCRIPTION	UNIT COST (\$)	1 _	2	<u> </u>	TOTAL
Pipe Fittings (EA)  248" 9-14" >14"	70.30 85.80 127.00 216.00	4.9 - -	1.4	1.1	7.4 -
Pipe Runs (LF)	26-50 30-50 60-80	22.5	2.1 - -	0.9	25.6 -
Sprayed/Troweled Ceilings (SF)	9.60	-	-	-	-
Floor Tile (SF)	5.60	-	-	-	-
Boilers/Tanks (SF)	<b>37.9</b> 0	-	-	-	-
Air Handling Equipment (SF)	20.00	-	-	-	•
Other		-	-	-	-
SUBTOTAL		27.4	3.5	2.0	33.0
Difficulty Allowance	•	96.1	12.3	-	108.4
SUBTOTAL		123.5	15.9	2.0	141.4
Decontamination Units Mobilization		8:5	8:5	8:5	2:8
SUBTOTAL		124.7	17.0	3.1	144.9
Contingency @ 15.00%		18.7	2.6	0.5	21.7
SUBTOTAL		143.4	19.6	3.6	166.6
Design Fee @ 10.00%	,	14.3	2.0	0.4	16.7
SUBTOTAL		157.7	21.5	4.0	183.2
Air Monitoring a 10.00%	***	6.1	6.1	6.1	18.3
TOTAL		163.8	27.7	10.1	201.6

<sup>\*</sup>Amounts Are In Thousands Of Dollars

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

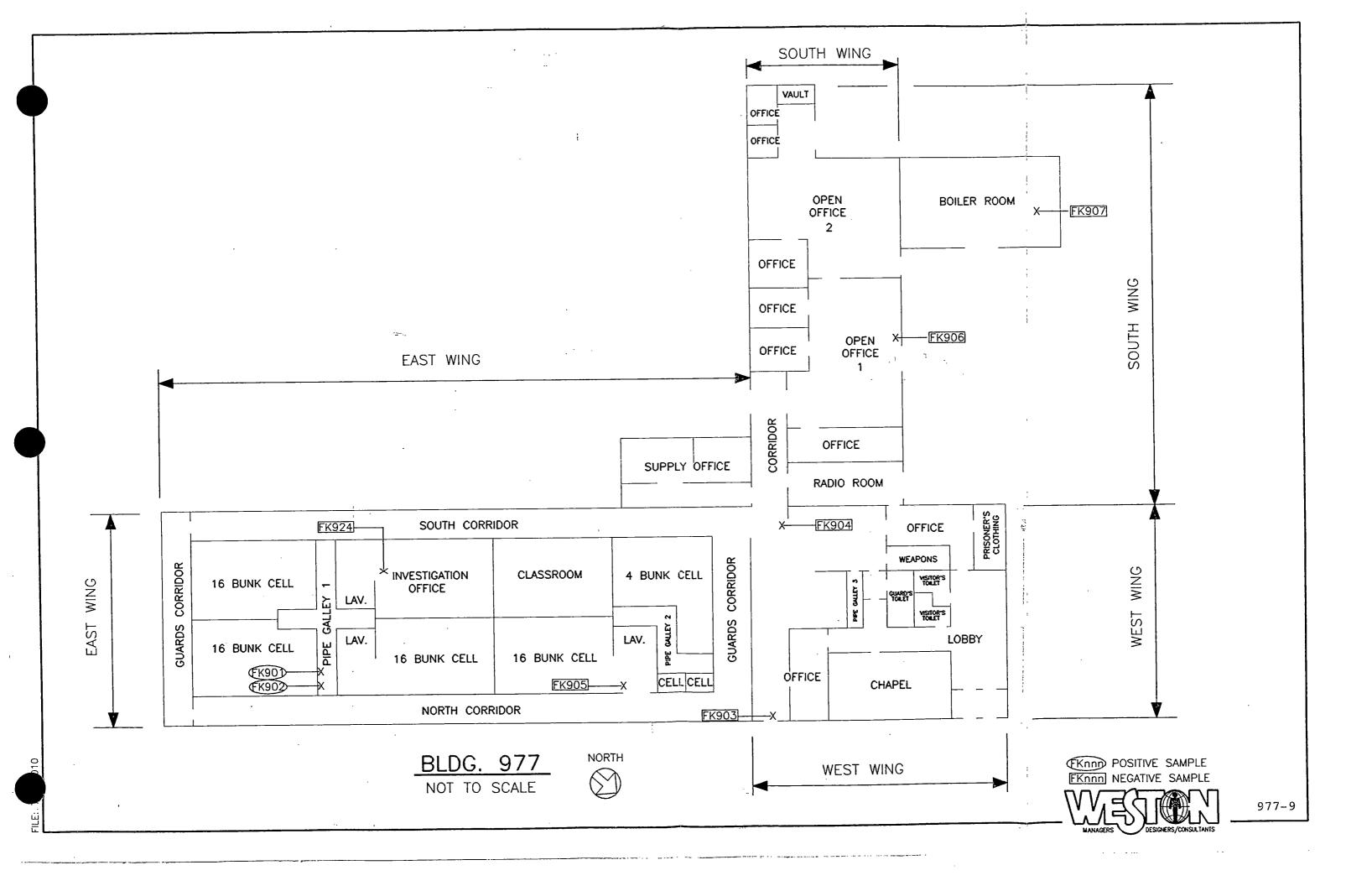
<sup>\*\*\*</sup> The Minimum Air Monitoring Fee is \$500.00 Per Building

977.4

**PHOTOGRAPH** 



Bldg. 977 E. Wing Pipe Galley: (Sample(s) FK901 and 902) <4" Pipe Run and Fitting Insulation Tested Positive



#### DOG KENNEL

#### 983.1 GENERAL

Building 938 was surveyed by WESTON's inspection team on 25 August 1992.

Polarized Light Microscopy (PLM) with dispersion staining was used to analyze two samples of suspect material collected from the building. Both samples were found to be non-asbestos-containing material (non-ACM).

The location, description, and analytical results for each of the bulk sample from Building 983 are presented in Table 983.1.

#### 983.2 CONCLUSION

Based on the survey and the laboratory results of the samples collected in Building 983, WESTON concludes that accessible areas of Building 983 do not contain ACM.

TABLE 983.1

## BULK SAMPLE ANALYSIS RESULTS - BUILDING 983, KENNEL

SAMPLE				PERCENT	<b>ASBESTOS</b>	
NO.	LOCATION	· ITEM	DESCRIPTION	CH	AM OT	LAYERED
FK899 OFF1	CE .	FLOOR TILE	WHITE, OTH, FLOOR TILE	-		YES
FK900 LATR	INE	FLOOR TILE	TAN,OTH,FLOOR TILE	-		YES

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

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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	•	•

