FORWARD

This Post-Wide Asbestos Inspection/Reinspection Report was prepared by Dewberry & Davis (D&D) for the U.S. Army Corps of Engineers, Fort Worth District, and Fort Belvoir, under Contract Number DACA63-94-D-0009. The purpose of the contract was to conduct asbestos inspections/reinspections of selected buildings at Fort Belvoir, Virginia. The inspections/reinspections were conducted between 6 September, 1994 and 2 November, 1994. In each building asbestos containing materials (ACMs), were identified, located, and quantified. Relative risks were assessed, recommendations made, and cost estimates were developed for abatement.

This volume is the Fort Belvoir Asbestos Management Plan. It includes Operations and Maintenance (O&M) procedures as well as indexes and instructions on the use of the reports and the database. Also provided is background information such as certification of the inspectors and laboratories.

This volume includes the following sections:

SECTION I Methods of Survey: This section describes the criteria for materials to be sampled and the number of samples to be taken. Also included is a description of the procedures which were followed during sampling to provide maximum safety and minimum disruption of ACMs.

SECTION II Computer Generated Reports: Reports pertaining to the overall survey are contained in this section. Also provided is an index of CADD digital files by building number.

SECTION III Risk Assessment & Cost Estimates: The Risk Assessment algorithm is the method by which field evaluation of the condition and exposure of suspect ACMs are assigned a numerical value. These values are used to calculate an Exposure Number which allows a comparison and prioritization of abatement projects. The source of cost estimates contained in the report is discussed and a list of unit prices presented.

SECTION IV Operations & Maintenance (O&M) Program: The O&M Program provides practices and procedures designed to minimize exposure to asbestos fibers. When put in place, the O&M program will be the means by which Fort Belvoir can keep known ACMs in good condition and prevent or respond quickly to unintentional fiber releases.

SECTION V Database Users Guide: This section provides operating instructions for the Fort Belvoir asbestos database.

Individual building reports are contained in Volumes II through XIV. Each volume contains an index of buildings, abbreviation key, and legend to building diagrams. A report is provided for each

building, identified by a tab with the respective building number. The contents of the individual reports are arranged as follows:

- Initial Walk Through/Building Information Summary
- Narrative Summary
- Building Summary Report
- Building Diagrams
- Certificate of Analysis
- Homogeneous Areas/Sample Summary
- Field Assessment Forms

Each sample and its field assessment information has been entered into a database system which is provided as a part of this report. Building diagrams and text files have also been provided in the following digital format.

PRODUCT	FORMAT
Narrative Summaries and Management Plan Text	Word Perfect 5.1
Sample Field Data and Risk Assessment Algorithm	DbaseIII+ Program
Building Diagrams	CADD DGN Files in MicroStation Version 5.0

Dewberry & Davis is pleased to have provided this service to the U.S. Army Corps of Engineers, Fort Worth District and Fort Belvoir. If you have questions or comments regarding this report, please feel free to contact Mr. Fred Eberle, D & D Project Manager at (703) 849-0375.

THIS REPORT HAS BEEN PREPARED FOR THE EXCLUSIVE USE OF THE U.S. ARMY CORPS OF ENGINEERS, FORT WORTH DISTRICT, AND FORT BELVOIR. IT REPRESENTS AN ASSESSMENT OF THE RELATIVE HAZARD OF ASBESTOS-CONTAINING MATERIALS IN SELECTED FORT BELVOIR BUILDINGS. THE FINDINGS AND CONCLUSIONS HEREIN ARE BASED SOLELY UPON INFORMATION DEVELOPED FOLLOWING THE METHODOLOGY AND SPECIFICATIONS OF CONTRACT NO. DACA63-94-D-0009.

SUBMITTED BY DEWBERRY & DAVIS

18 April, 1995

SECTION I

METHODS OF SURVEY

1. General: The following methods of survey and sample survey forms for the Fort Belvoir Post-Wide Asbestos Inspection/Reinspection Survey were developed by D&D and approved by the Fort Belvoir Directorate of Public Works (DPW), Environmental & Natural Resources Division prior to the start of the field work.

Sampling at Fort Belvoir was accomplished between 6 September, 1994 and 2 November, 1994. In some cases materials were assumed to contain asbestos and not sampled. This occurred where materials, which are known to typically contain asbestos, were inaccessible or sampling would damage the material. Materials assumed to contain asbestos included fire doors, flexible connectors, transite panels, ducts, and pipes. Assumed materials are identified in the reports and located on the building diagrams using a 999 identification number.

Rated fire doors were assumed to contain asbestos. In good condition, doors containing asbestos pose little hazard to building occupants. If a fire door is damaged, or to be removed, and suspect ACM is observed, a core sample should be taken and analyzed by an accredited laboratory. Fire doors testing positive for asbestos should be removed and disposed of as asbestos-containing material. Fire doors assumed to contain asbestos are identified in the reports and located on the building diagrams using a triangle symbol.

The survey consisted of a visual inspection and sampling of suspected ACM and covered the interior, exterior, and crawl spaces and any other portion of the building that may contain ACMs. Based on the following definition of friability, the inspectors separated the suspected material into friable and non-friable ACM. Friable means any material that when dry may be crumbled, pulverized, or reduced to powder by hand pressure.

- **Friable ACM** - The inspector shall report the quantity of asbestos in feet for the lengths of various pipe diameters and in square feet for blown-on and bulk ACM insulation. Dimensions shall be shown for boilers, heaters, piping systems and other equipment which may contain friable ACMs. The condition of the ACM shall also be reported. It shall be located by floor, room, and/or other position locator.

- **Non-friable ACM** - The inspector shall report the types of materials and their uses; i.e., floor tiles, transite sheeting, siding materials, shingles, gaskets, and other types. The quantity of each material shall be reported by building and the exact locations shall be noted on the building diagrams. The physical condition of these materials must also be noted. Samples taken of non-friable ACM should be taken from inconspicuous places.

2. Bulk Samples: The number of samples drawn shall be consistent with the following for each homogeneous area identified:

- **Thermal System Insulation:**
  - air cell - one sample
  - mudded materials - three samples
  - preformed pipe wrap - three samples
  - fiberglass with any type of suspect wrapping - three samples
  - packed paper - three samples
  - boiler/tank insulation - three samples
- **Surfacing Materials** - three samples
- **Miscellaneous Materials:**
  - transite - none- assumed
  - suspect flexible connectors - none - assumed
  - floor tile - none- assumed

3. Sampling Method: In general, consideration was given to selecting a sample site where possible debris could be easily contained. This involved removing objects or covering them with six-mil plastic. Also, air flow was shut off or restricted, if possible. This involved shutting down HVAC systems or simply closing windows or doors. In all cases, building occupants were asked to vacate the room or stay a safe distance away from the sample site.

D&D inspectors employed the use of the following for sample extraction: chisels, hammers, utility knives, screwdrivers, and other tools as necessary. Power tools were not used. In addition, tools necessary for patching were also utilized.

Once the sample location is selected, and steps have been taken to minimize possible contamination, the sample can be extracted. This process varies little from sample to sample.

- At a minimum, the inspector will wear a half-face respirator equipped with HEPA cartridges during the sampling process. The inspector may also wear disposable gloves and may wear various pieces of protective clothing, depending on circumstances.
- A plastic drop bag will be hung below the sample site. This bag is gussetted and at least 12-inches deep. The inside is wetted. Any debris from the sample will fall into the bag. The bag will also be used to contain wipes from tool cleaning. It will be disposed of as contaminated ACM. This method will be used in most situations.
- The sample location will be wetted with amended water. This amended water is designed to penetrate the substance.

Assistant team members also participated in an eight-hour asbestos training program that included health and safety, respirator and personal protection selection, inspection procedures and practices, and respirator fit testing. Assistant team members always work with and under the guidance of a team leader, and have received appropriate medical examinations and fit tests.

All D&D inspectors receive a yearly medical examination as required by OSHA (29 CFR1926.56). Inspectors are respirator fit tested twice a year and inspectors and managers adhere to an established respirator program.

6. Laboratory Certification: D&D uses outside accredited laboratories to analyze bulk asbestos samples. This provides excellent accuracy and a measure of objectivity. The Laboratory analyzes the bulk samples using polarized light microscopy with dispersion staining.

Biospherics, Inc., 12051 Indian Creek Court, Beltsville, MD 20705 provided laboratory analysis of the Fort Belvoir asbestos bulk samples. This laboratory is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) certification #1277, and the American Industrial Hygiene Association (AIHA) certification #145.

- The material will be extracted in a gentle manner into an ANCO coin tube. This tube will be clear with a screw top lid.

- The tube will be wet-wiped, as well as the tools. This wiping will be done in a single motion and the contaminated surface rolled into the center of the wipe. The wipe will be disposed as contaminated ACM.

- The sample area will be repaired if possible. This will be accomplished by duct tape, encapsulant, spackling, or a combination of these materials.

- The sample number and location will be annotated on the building diagrams. Pictures will be taken if necessary.

- A HEPA vacuum will be used, as necessary, during the sampling and area clean-up.

- The area will be cleaned to pre-sample conditions. Sample data will be logged and contaminated materials will be properly contained.

In some situations, it will be impossible to follow the above procedures. In these situations, the safest approach will be utilized in extracting samples.

4. Data Collection Forms: The following data collection forms were used during the field survey portion of the project.

- Initial Walk Through and Building Information Summary
- Field Assessment Form
- Homogeneous Areas/Sample Summary

The information recorded on these field forms was then entered into a Dbase III+ spread sheet data base. Subsequent reports were generated using the Fort Belvoir Risk Assessment Algorithm.

5. Inspection Team Leader Certification: The following team leaders have received the EPA AHERA training as inspectors and management planners and are licensed in the State of Virginia.

Team Leader	Inspector License No.	Management License No.
Fred Eberle	3303-000132	3304-000039
Karen Blagburn	3303-001377	3304-000922
Fred Wingert	3303-000032	3304-000005
Andrew Eury	3303-000131	3304-000588
Tom Kuepper	3303-001728	3304-000560

Asbestos Survey
Rank Buildings by Risk Index
(Immediate Hazards First)

RANK	PX	BLDG NUMBER	SX	BUILDING DESCRIPTION	RISK INDEX	LOW COST	HIGH COST
1		212		BARRACKS	78	11228.00	14777.50
1		240		THEATER	128	12865.50	19795.00
2		808		DEWITT HOSPITAL	119	303559.50	395713.00
3		326		LABORATORY	102	17555.50	22491.00
4		1017		BARDEN SCHOOL	101	41625.00	53808.50
5		1150		TRUCK RENTAL	101	210.00	280.00
6		1200		NCO CLUB	94	46505.00	67389.00
7		362		LABORATORY	93	6467.50	8430.50
8		309		SIMULATOR BLDG	91	18353.15	22833.30
9		331		MAINT. DIV.	88	50550.00	64570.00
10		247		HUMPHRY'S HALL	86	303647.50	393151.50
11		1442		ADMINISTRATION	85	73666.80	95134.60
12		315		ADMIN FACILITY	85	226762.00	292354.00
13		314		ADMIN FACILITY	83	4168.00	5571.00
14		332		HEATING PLANT	83	217.60	324.20
15		357		LABORATORY	83	178417.20	221972.90
16		3231		AIRCRAFT HANGER	83	28298.80	35579.10
17		399		LABORATORY	83	174575.50	225244.60
18		1146		PX GARAGE	83	764.00	1083.50
19		203		BARRACKS	82	76752.00	99084.00
20		1804		POST CHAPEL	82	2201.50	3094.50
21		99		STOREHOUSE	81	940.70	1399.40
22		3066		INSTRUCTION	81	28793.50	41121.00
23		1475		ADMINISTRATION	80	61643.50	80341.50
24		701		TROOP ISSUE	80	8765.00	11405.00
25		211		MAPPING SCHOOL	80	10708.00	13899.50
26		3138		HP BOILER	79	3034.70	3819.90
27		205		INSTRUCTION	79	21604.00	28302.00
28		268		ADMINISTRATION	79	2179.00	3615.00
29		231		DINING FACILITY	79	947.00	1154.00
30		374		ADMINISTRATION	79	894.50	1158.00
31		~~1962~~ GONE		BARRACKS	78	36860.00	45690.00
32		366		STOREHOUSE	77	240.00	450.00
33		316		ADMINISTRATIVE	77	68684.50	88366.50
34		950		MARKHAM SCHOOL	77	1136.50	1487.00
35		~~745~~ GONE		MAINTENANCE	77	6691.00	8478.50
36		1195		CREDIT UNION	76	705.00	1037.50
37		1471		CLINIC	76	3270.00	4284.50
38		213		BARRACKS	76	10322.50	13282.50
39		210		BARRACKS	76	4737.50	6107.50
40		358		ADMINISTRATION	75	77630.00	99865.00
41		190		MAINT SHOP	75	2272.50	2932.50
42		3137		ADMINISTRATION	75	1580.00	2475.00

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RANK	PX	BLDG NUMBER	SX	BUILDING DESCRIPTION	RISK INDEX	LOW COST	HIGH COST	
43		~~741~~ Gone		MAINTENANCE	75	9230.00	11910.00	
44		1189		BASE EXCHANGE	73	26850.00	35033.00	
45		1434		INSTRUCTION	73	3680.00	4788.00	
46		210		BARRACKS	73	24.00	45.00	
47		187		ADMINISTRATION	73	5125.25	6441.00	
48		1499		LABORATORY	72	14900.00	19200.00	
49		708		WAREHOUSE	72	7781.00	11565.00	
~~50~~		~~1030~~		~~ADMINISTRATION~~	~~72~~	~~631.00~~	~~875.00~~	Demo
51		318		LABORATORY	71	5480.00	7134.00	
52		321		CAFETERIA	71	2070.50	2695.65	
53		1440		INSTRUCTION	70	12968.00	19080.00	
54		334		SPECIAL PROJECT	70	683.50	946.95	
55		214		INSTRUCTION	70	2040.00	2695.00	
56		435		FAIRFAX CHAPEL	70	1260.00	2055.00	
57		2470		RESERVE CENTER	70	11902.40	15697.80	
58		1416		INSTRUCTION	69	11170.00	14490.00	
59		1161		RED CROSS	69	6562.50	8437.50	
60		2118		BRANCH PX	68	3398.00	4911.00	
61		~~1908~~ Gone		ADMINISTRATION	68	555.00	770.00	
62		191		FIRE STATION	68	46144.00	59328.00	
63		3065		INSTRUCTION	68	12192.00	16160.00	
64		807		BARRACKS	67	2020.00	2598.00	
65		256		POST OFFICE	67	65.00	97.50	
66		~~631~~ Gone		WAREHOUSE	66	2000.10	2503.20	
67		1445		BARRACKS	65	8200.00	12300.00	
68		1126		WAREHOUSE	65	124.00	232.50	
~~69~~		~~1935~~		~~DISPATCH OFFICE~~	~~65~~	~~4.00~~	~~7.50~~	Demo
70		317		LABORATORY	61	10374.50	13381.50	
71		20		OFFICERS CLUB	58	3842.50	5250.50	
72		~~354~~ Gone		ADMINISTRATION	58	1465.00	1895.00	
73		226		SCOTT HALL	55	3960.00	5425.00	
74		1824		POST CHAPEL	55	339.00	530.00	
75		714		ADMINISTRATION	55	4611.50	5987.50	
76		219		ADMINISTRATION	53	1155.00	1556.00	
77		201		ADMINISTRATION	53	89054.50	115611.50	
78		1001		ADMINISTRATION	52	34960.00	45011.00	
79		1426		INSTRUCTION	52	4205.25	6933.00	
80		~~1809~~ Gone		ADMINISTRATION	52	20170.00	24840.00	
81		305		NIGHT VISION	52	106042.50	136485.00	
82		805		BARRACKS	52	7630.00	9880.00	
83		2593		ADMINISTRATION	52	233288.00	300191.00	
~~84~~		~~1831~~		~~ADMINISTRATION~~	~~50~~	~~1990.00~~	~~2630.00~~	Demo
85		202		MGMT COLLEGE	50	1270.00	1660.00	

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86		507		TRANSIT QTRS	49	3154.00	4093.00
87		705		WAREHOUSE	49	4895.00	6255.00
88		1084		COLD STORAGE	49	9089.50	11686.50
89		1108		WAREHOUSE	48	1857.50	2578.50
90		1906		MAINTENANCE	48	3120.00	4360.00
91		~~1920~~ Gone		ADMINISTRATION	47	1440.00	2000.00
92		~~1931~~ Gone		POST OFFICE	46	391.50	488.00
93		~~1138~~		FURNITURE STORE	46	468.75	620.00
94		1901		ADMINISTRATION	45	1254.75	1602.00
95		1469		ADMINISTRATION	45	692.50	922.50
96		1467		CLINIC	45	128.00	186.00
97		3165		ADMINISTRATION	45	710.50	1063.50
98		3234		ADMINISTRATION	45	6977.50	8992.50
99		801		BARRACKS	45	136.40	175.80
100		~~1970~~ Gone		WAREHOUSE	45	1500.50	1956.00
101		~~1907~~ Gone		ADMINISTRATION	45	552.00	714.00
102		2101		ADMINISTRATION	44	21600.00	27900.00
103		1949		MAINTENANCE	44	1650.00	3075.00
104		1089		RECYCLING CTR.	43	4095.00	5040.00
105		3230		CONTROL TOWER	43	100.00	150.00
106		1023		BODY SHOP	43	200.00	300.00
107		~~98~~ Gone		UTILITY BLDG	43	60.00	80.00
108		~~348~~ Gone		STOREHOUSE	43	630.00	810.00
109		320		PHOTO LAB	34	14913.50	19174.50
110		1099		LOGAN CLINIC	34	43870.40	56295.30
111		246		TELEPHONE EXCH	33	21669.50	27946.50
112		324		LABORATORY	32	72120.50	90868.50
113		215		STOREHOUSE	31	5145.00	6577.50
114		220		WHEELER HALL	30	245710.00	316500.00
115		508		TRANSIT QTRS	29	3000.50	3856.00
116		257		ADMINISTRATION	29	32227.50	41587.50
117		707		MAINTENANCE	29	24451.80	31237.60
118		329		LABORATORY	29	16662.00	21423.00
119		~~1834~~		ADMINISTRATION	28	5911.50	7628.00
120		~~1961~~		ADMINISTRATION	28	5415.00	6965.00
121		3232		MAINTENANCE	28	7268.50	9409.50
122		3151		AIRCRAFT HANGER	28	22917.50	29497.50
123		325		LABORATORY	28	15113.00	19431.00
124		1968		MAINTENANCE	28	4422.00	5754.00
125		1464		ADMINISTRATION	28	22021.50	29320.50
126		470		BOQ	28	2255.00	2920.50
127		3237		FIRE RESCUE	28	12057.00	15534.00
128		1193		ADMINISTRATION	27	423.50	582.00

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129		193		INFO PROCESSING	27	43800.00	56385.00
130		1000		ADMINISTRATION	27	12201.00	16017.00
131		312		TEST ENGR BLDG	27	1990.00	2610.00
132		361		COMPUTER CENTER	27	5655.00	7185.00
133		2592		TOPO LABS	26	113525.00	189210.00
134		3145		AIRCRAFT HANGER	26	22443.50	28929.50
135		1466		ADMINISTRATION	26	199690.50	258373.50
136		3126		AIRCRAFT MAINT.	26	15476.50	19930.50
137		1155		POST EXCHANGE	26	54550.00	76370.00
138		1498		LABORATORY	26	14428.00	18581.00
139		3070		INSTRUCTION	26	17283.40	22733.80
140		258		ADMINISTRATION	26	15835.00	22005.00
141		335		WAREHOUSE	26	20314.00	26118.00
142		1412		INSTRUCTION	26	10234.00	13233.00
143		2591		ADMINISTRATION	26	12355.50	16013.50
144		323		MODEL SHOP	25	420.00	540.00
145		1154		ADMINISTRATION	25	278.90	364.80
146		3069		INSTRUCTION	25	17173.40	22578.80
147		307		GENERAL PURPOSE	25	1542.50	2047.50
148		372		INSTRUCTION	25	10270.00	13215.00
149		365		ADMINISTRATION	25	5509.00	7158.00
150		353		MINE TESTING	25	3320.00	4215.00
151		1950		MAINTENANCE	24	3470.00	5940.00
152		~~1938~~		MAINTENANCE	24	1045.50	1368.50
153		2476		MAINTENANCE	24	645.00	860.00
154		~~498~~		DPCA CFA	24	98421.75	122946.00
155		80		VISITING BOQ	24	1860.65	2320.80
156		1024		LIBRARY	24	52560.00	67580.00
157		204		INSTRUCTION	24	2000.00	2625.00
158		322		LABORATORY	24	17155.00	21960.00
159		~~1917~~ Gone		ADMINISTRATION	24	4507.00	5796.50
160		~~1916~~ Gone		ADMINISTRATION	24	1336.00	1742.00
161		~~2436~~ Gone		INSTRUCTION	24	11048.00	14206.00
162		81		BARRACKS	24	2603.80	3306.60
163		505		TRANSIT QTRS	24	1750.00	2325.00
164		1436		STOREHOUSE	24	14266.00	18342.00
165		1185		EXCHANGE OUTLET	24	270.00	350.00
166		~~1934~~ Gone		ADMINISTRATION	23	2480.00	3210.00
167		216		ADMINISTRATION	23	4612.50	5962.50
168		2991		WAREHOUSE	23	51.50	84.00
169		3136		AIRFIELD OPNS	23	39805.00	51177.50
170		1953		INSTRUCTION	23	4800.00	6720.00
171		~~1922~~ Gone		ADMINISTRATION	23	4435.00	5705.00

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172		712		WAREHOUSE	23	750.00	975.00
173		380		ADMINISTRATION	23	5495.00	7065.00
174		337		ADMINISTRATION	23	11425.00	14700.00
175		3153		MAINTENANCE	23	554.00	723.00
176		~~1812~~ Gone		FITNESS CENTER	23	2452.95	3059.40
177		630		WAREHOUSE	23	3694.50	4771.50
178		392		LABORATORY	23	96850.00	124650.00
179		~~1169~~ Gone		ADMINISTRATION	23	12310.00	15795.00
180		1822		DINING FACILITY	23	23538.75	30240.00
181		~~1813~~ Gone		STOREHOUSE	23	310.00	455.00
182		~~1805~~ Gone		ADMINISTRATION	23	131.20	188.40
183		1186		POST EXCHANGE	23	7255.00	9326.00
184		~~1819~~ Gone		ADMINISTRATION	22	50.00	75.00
185		1133		POWER PLANT	22	50.00	75.00
186		189		MOTOR POOL	22	2887.50	3712.50
187		221		INSTRUCTION	22	231.00	297.00
188		222		INSTRUCTION	22	227.50	292.50
189		704		WAREHOUSE	22	50.00	75.00
190		235		ADMINISTRATION	22	7906.50	10165.50
191		7395		SENTRY STATION	22	787.50	1012.50
192		2115		CLINIC	22	280.00	360.00
193		1494		GOLF CLUB HOUSE	22	1400.00	1800.00
194		1491		ADMINISTRATION	22	1449.00	1863.00
195		1490		STOREHOUSE	22	378.00	486.00
196		3235		HEALTH CLINIC	22	1100.00	1650.00
197		506		TRANSIT QTRS	22	350.00	525.00
198		~~303~~ Gone		ADMINISTRATION	22	7392.00	9504.00
199		200		COMMUNITY CTR.	22	720.00	936.00
200		2590		ADMINISTRATION	22	5789.00	7443.00
201		340		SECURITY OFFICE	22	4725.00	6075.00
202		1439		INSTRUCTION	22	4900.00	6300.00
203		1697		ADMINISTRATION	22	6972.00	8964.00
204		269		POST HQ	22	250.00	375.00
205		1187		EXCHANGE OUTLET	22	1330.00	1710.00
206		1199		BOWLING CENTER	22	4900.00	6300.00
207		1196		LAUNDRYMAT	22	50.00	75.00
208		270		TECH LIBRARY	9	6155.50	9730.50
209		1425		ADMINISTRATION	6	64470.00	82890.00
210		1911		ADMINISTRATION	5	4999.30	6402.60
211		1902		ADMINISTRATION	5	1587.25	2022.00
212		~~1903~~ Gone		ADMINISTRATION	5	16130.50	20788.50
213		1148		MAINTENANCE	4	1346.40	1684.80
214		1113		STOREHOUSE	4	18375.00	23625.00

Asbestos Survey
Rank Buildings by
Risk Index
(Immediate Hazards First)

RANK	PX	BLDG NUMBER	SX	BUILDING DESCRIPTION	RISK INDEX	LOW COST	HIGH COST
215		~~1802~~ Gone		FIRE STATION	4	3297.00	4239.00
216		509		TRANSIT QTRS	4	3045.00	3915.00
217		2594		ADMINISTRATION	3	26244.00	34578.00
218		1428		INSTRUCTION	3	4070.00	5698.00
219		1018		CHAPEL	3	24199.00	31113.00
220		~~1837~~		ADMINISTRATION	3	110.00	155.00
221		~~1826~~		ADMINISTRATION	3	4750.00	7875.00
222		~~1915~~		ADMINISTRATION	3	7158.00	9206.00
223		740		MAINTENANCE	3	1841.00	2367.00
224		2105		ADMINISTRATION	3	42600.00	54900.00
225		1142		WAREHOUSE	3	529.20	674.40
226		182		INDOOR POOL	3	165.60	244.20
227		1153		MORALE SUPPORT	3	1042.50	1525.00
228		3128		ADMINISTRATIVE	2	388.50	499.50
229		629		WAREHOUSE	2	1170.00	1440.00
230		~~1912~~ Gone		ADMINISTRATION	2	4252.50	5467.50
231		2990		WAREHOUSE	2	250.00	375.00
232		1952		INSTRUCTION	2	6720.00	8640.00
233		~~1806~~ Gone		EOD OFFICE	2	5152.00	6624.00
234		336		LABORATORY	2	962.50	1237.50
235		715		MAINTENANCE	2	203.00	261.00
236		718		STOREHOUSE	2	39.00	48.00
237		1810		FITNESS CENTER	2	450.00	675.00
238		238		EXCHANGE ANNEX THRIFT	2	1560.00	2080.00
239		709		WAREHOUSE	2	100.00	150.00
240		1141		WAREHOUSE	2	31.20	38.40
241		~~1923~~ Gone		ADMINISTRATION	2	124.80	153.60
242		1194		CRESTAR BANK	2	2327.50	2992.50
243		806		BARRACKS	2	7.00	9.00
244		1109		STOREHOUSE	2	1421.00	1827.00
245		1025		CHAPEL	2	15064.00	19368.00
246		1444		ADMINISTRATION	2	6300.00	8100.00
247		815		HEALTH CLINIC	2	800.00	1200.00
248		1143		WAREHOUSE	2	31.20	38.40
249		184		ADMINISTRATION	2	17500.00	22500.00
250		1147		SPORTS OFFICE	2	4053.00	6755.00
251		2120		THEATER	2	180.00	240.00
*** Total ***							
****						4683287.80	6114886.80

Asbestos Survey
Master Building List

BLDG NUMBER	BUILDING NAME	COMMENTS
20	OFFICERS CLUB	REINSPECTION
69	SNACK BAR	REINSPECTION. NO SUSPECT ASBESTOS CONTAINING BUILDING MATERIALS (ACBM)
80	VISITING BOQ	REINSPECTION
81	BARRACKS	REINSPECTION
83	GIRL SCOUTS	REINSPECTION. NO SUSPECT ACBM
96	TREATMENT COOP	REINSPECTION. NO SUSPECT ACBM ALL DEMO'D
98	UTILITY BLDG	REINSPECTION
99	STOREHOUSE	REINSPECTION
182	INDOOR POOL	REINSPECTION
184	ADMINISTRATION	REINSPECTION
187	ADMINISTRATION	REINSPECTION
189	MOTOR POOL	REINSPECTION
190	MAINT SHOP	REINSPECTION
191	FIRE STATION	REINSPECTION. (WAS 191A AND 191B)
193	INFO PROCESSING	REINSPECTION
200	COMMUNITY CTR.	REINSPECTION
201	ADMINISTRATION	REINSPECTION
202	MGMT COLLEGE	REINSPECTION
203	BARRACKS	REINSPECTION
204	INSTRUCTION	REINSPECTION
205	INSTRUCTION	REINSPECTION
206	INSTRUCTION	REINSPECTION. NO SUSPECT ACBM
208	INSTRUCTION	REINSPECTION. NO SUSPECT ACBM
210	BARRACKS	REINSPECTION
211	MAPPING SCHOOL	REINSPECTION

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Asbestos Survey
Master Building List

BLDG NUMBER	BUILDING NAME	COMMENTS
212	BARRACKS	REINSPECTION. BUILDING VACANT
213	BARRACKS	REINSPECTION
214	INSTRUCTION	REINSPECTION
215	STOREHOUSE	REINSPECTION
216	ADMINISTRATION	REINSPECTION
219	ADMINISTRATION	REINSPECTION
220	WHEELER HALL	REINSPECTION
221	INSTRUCTION	REINSPECTION.
222	INSTRUCTION	REINSPECTION.
226	SCOTT HALL	REINSPECTION
231	DINING FACILITY	REINSPECTION
235	ADMINISTRATION	REINSPECTION
238	EXCHANGE ANNEX	REINSPECTION
240	THEATER	REINSPECTION
246	TELEPHONE EXCH	REINSPECTION
247	HUMPHRY'S HALL	REINSPECTION
256	POST OFFICE	REINSPECTION
257	ADMINISTRATION	REINSPECTION
258	ADMINISTRATION	REINSPECTION
259	OUTDOOR POOL	FIRST TIME INSPECTION. NO SUSPECT ACBM
268	ADMINISTRATION	REINSPECTION
269	POST HQ	REINSPECTION. VACANT DUE TO FIRE
270	TECH LIBRARY	REINSPECTION
291	CIVILIAN PERS.	REINSPECTION. NO SUSPECT ACBM
292	WAELCHLI ROOM	REINSPECTION. NO SUSPECT ACBM
303	ADMINISTRATION	FIRST TIME INSPECTION
305	NIGHT VISION	REINSPECTION. BUILDING RENOVATED
307	GENERAL PURPOSE	REINSPECTION
309	SIMULATOR BLDG	REINSPECTION
312	TEST ENGR BLDG	REINSPECTION

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Asbestos Survey
Master Building List

BLDG NUMBER	BUILDING NAME	COMMENTS
313	STOREHOUSE	REINSPECTION. NO SUSPECT ACBM
314	ADMIN FACILITY	REINSPECTION
315	ADMIN FACILITY	REINSPECTION
316	ADMINISTRATIVE	REINSPECTION
317	LABORATORY	REINSPECTION
318	LABORATORY	REINSPECTION
319	COUNTERMINE DIV	REINSPECTION. NO SUSPECT ACBM
320	PHOTO LAB	REINSPECTION
321	CAFETERIA	REINSPECTION
322	LABORATORY	REINSPECTION
323	MODEL SHOP	REINSPECTION
324	LABORATORY	REINSPECTION
325	LABORATORY	REINSPECTION
326	LABORATORY	REINSPECTION
327	ADMINISTRATION	REINSPECTION. SCHEDULED FOR DEMOLITION
328	GARAGE	REINSPECTION
329	LABORATORY	REINSPECTION.
330	FE/WOOD SHOP	REINSPECTION. NO SUSPECT ACBM
331	MAINT. DIV.	REINSPECTION
332	HEATING PLANT	REINSPECTION
334	SPECIAL PROJECT	REINSPECTION
335	WAREHOUSE	REINSPECTION
336	LABORATORY	REINSPECTION
337	ADMINISTRATION	REINSPECTION
340	SECURITY OFFICE	REINSPECTION.
342	HEATING PLANT	FIRST TIME INSPECTION. NO SUSPECT ACBM
345	STOREHOUSE	FIRST TIME INSPECTION. NO SUSPECT ACBM
346	STOREHOUSE	FIRST TIME INSPECTION. NO SUSPECT ACBM
347	WAREHOUSE	REINSPECTION. NO SUSPECT ACBM
348	STOREHOUSE	FIRST TIME INSPECTION

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Asbestos Survey
Master Building List

BLDG NUMBER	BUILDING NAME	COMMENTS
349	STOREHOUSE	FIRST TIME INSPECTION. NO SUSPECT ACBM
352	STOREHOUSE	REINSPECTION. NO SUSPECT ACBM
353	MINE TESTING	REINSPECTION
354	ADMINISTRATION	REINSPECTION
355	STORAGE	FIRST TIME INSPECTION. NO SUSPECT ACBM
357	LABORATORY	REINSPECTION
358	ADMINISTRATION	REINSPECTION
359	MAINTENANCE	REINSPECTION. NO SUSPECT ACBM
360	ADMINISTRATION	FIRST TIME INSPECTION
361	COMPUTER CENTER	REINSPECTION
362	LABORATORY	REINSPECTION
365	ADMINISTRATION	FIRST TIME INSPECTION
366	STOREHOUSE	FIRST TIME INSPECTION
372	INSTRUCTION	REINSPECTION
374	ADMINISTRATION	REINSPECTION.
378	STOREHOUSE	REINSPECTION. NO SUSPECT ACBM
~~379~~	~~TOWER~~	~~REINSPECTION. NO SUSPECT ACBM~~ DEMO'D
380	ADMINISTRATION	REINSPECTION
381	STOREHOUSE	FIRST TIME INSPECTION
382	STOREHOUSE	FIRST TIME INSPECTION. NO SUSPECT ACBM
384	MAINTENANCE	FIRST TIME INSPECTION. NO SUSPECT ACBM
388	STOREHOUSE	FIRST TIME INSPECTION. NO SUSPECT ACBM
390	LABORATORY	BUILDING DEMOLISHED
392	LABORATORY	REINSPECTION
394	STORAGE	REINSPECTION. NO SUSPECT ACBM
397	STOREHOUSE	FIRST TIME INSPECTION. NO SUSPECT ACBM
399	LABORATORY	REINSPECTION
435	FAIRFAX CHAPEL	FIRST TIME INSPECTION
470	BOQ	REINSPECTION
~~498~~	~~DPCA CFA~~	~~REINSPECTION~~ DEMOED

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Asbestos Survey
Master Building List

BLDG NUMBER	BUILDING NAME	COMMENTS
505	TRANSIT QTRS	REINSPECTION
506	TRANSIT QTRS	REINSPECTION
507	TRANSIT QTRS	REINSPECTION
508	TRANSIT QTRS	REINSPECTION
509	TRANSIT QTRS	REINSPECTION
629	WAREHOUSE	REINSPECTION
630	WAREHOUSE	REINSPECTION
631	WAREHOUSE	REINSPECTION
701	TROOP ISSUE	REINSPECTION
704	WAREHOUSE	REINSPECTION
705	WAREHOUSE	REINSPECTION
707	MAINTENANCE	REINSPECTION
708	WAREHOUSE	REINSPECTION
709	WAREHOUSE	REINSPECTION
712	WAREHOUSE	REINSPECTION
714	ADMINISTRATION	REINSPECTION
715	MAINTENANCE	FIRST TIME INSPECTION
716	STORAGE	REINSPECTION. NO SUSPECT ACBM
718	STOREHOUSE	FIRST TIME INSPECTION.
737	STOREHOUSE	FIRST TIME INSPECTION. NO SUSPECT ACBM
740	MAINTENANCE	REINSPECTION
741	MAINTENANCE	REINSPECTION
745	MAINTENANCE	REINSPECTION
801	BARRACKS	REINSPECTION
802	MEDICAL COMPANY	REINSPECTION
805	BARRACKS	REINSPECTION
806	BARRACKS	REINSPECTION
807	BARRACKS	REINSPECTION
808	DEWITT HOSPITAL	REINSPECTION
812	HEAT PLANT	REINSPECTION. NO SUSPECT ACBM

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Asbestos Survey
Master Building List

BLDG NUMBER	BUILDING NAME	COMMENTS
815	HEALTH CLINIC	REINSPECTION
950	MARKHAM SCHOOL	REINSPECTION ALL ACM ABATED
1000	ADMINISTRATION	REINSPECTION
1001	ADMINISTRATION	REINSPECTION
1017	BARDEN SCHOOL	REINSPECTION
1018	CHAPEL	REINSPECTION
1021	STOREHOUSE	FIRST TIME INSPECTION. NO SUSPECT ACBM
1023	BODY SHOP	REINSPECTION. BUILDING RENOVATED IN 1993-94
1024	LIBRARY	REINSPECTION
1025	CHAPEL	FIRST TIME INSPECTION
~~1027~~ GONE	RELIGIOUS ED.	BUILDING DEMOLISHED
1030	ADMINISTRATION	REINSPECTION
~~1080~~ GONE	ADMINISTRATION	BUILDING DEMOLISHED
1084	COLD STORAGE	FIRST TIME INSPECTION DEMO'D
1089	RECYCLING CTR.	REINSPECTION
1099	LOGAN CLINIC	REINSPECTION
1107	STOREHOUSE	REINSPECTION. NO SUSPECT ACBM
1108	WAREHOUSE	REINSPECTION
1109	STOREHOUSE	REINSPECTION
1112	STOREHOUSE	REINSPECTION. NO SUSPECT ACBM
1113	STOREHOUSE	REINSPECTION
1114	STOREHOUSE	REINSPECTION. NO SUSPECT ACBM
1115	MAINTENANCE	BUILDING DEMOLISHED
1116	MAINTENANCE	REINSPECTION. NO SUSPECT ACBM
~~1121~~ GONE	MAINTENANCE	BUILDING DEMOLISHED
~~1122~~ GONE	ADMINISTRATION	BUILDING DEMOLISHED
1123	STOREHOUSE	REINSPECTION. NO SUSPECT ACBM
1125	GAS STATION	REINSPECTION. NO SUSPECT ACBM
1126	WAREHOUSE	REINSPECTION
1131	MILITARY POLICE	REINSPECTION. NO SUSPECT ACBM

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Asbestos Survey
Master Building List

BLDG NUMBER	BUILDING NAME	COMMENTS
1132	PRIME POWER	REINSPECTION
1133	POWER PLANT	REINSPECTION
1134	STOREHOUSE	FIRST TIME INSPECTION. NO SUSPECT ACBM
1138	FURNITURE STORE	REINSPECTION
1140	WAREHOUSE	REINSPECTION. NO SUSPECT ACBM
1141	WAREHOUSE	REINSPECTION
1142	WAREHOUSE	REINSPECTION
1143	WAREHOUSE	REINSPECTION
1144	WAREHOUSE	REINSPECTION. NO SUSPECT ACBM
1145	WAREHOUSE	REINSPECTION. NO SUSPECT ACBM
1146	PX GARAGE	REINSPECTION
1147	SPORTS OFFICE	REINSPECTION
1148	MAINTENANCE	REINSPECTION
1150	TRUCK RENTAL	FIRST TIME INSPECTION
1153	MORALE SUPPORT	REINSPECTION
1154	ADMINISTRATION	FIRST TIME INSPECTION
1155	POST EXCHANGE	REINSPECTION
1161	RED CROSS	REINSPECTION
1169	ADMINISTRATION	REINSPECTION
1170	ADMINISTRATION	REINSPECTION. BUILDING RENOVATED. NO SUSPECT ACBM
1171	REUP OFFICE	REINSPECTION. NO SUSPECT ACBM
1182	SPECKER GYM	REINSPECTION. NO SUSPECT ACBM
1185	EXCHANGE OUTLET	FIRST TIME INSPECTION
1186	POST EXCHANGE	REINSPECTION
1187	EXCHANGE OUTLET	FIRST TIME INSPECTION
1188	POST EXCHANGE	REINSPECTION. NO SUSPECT ACBM
1189	BASE EXCHANGE	REINSPECTION
1193	ADMINISTRATION	REINSPECTION
1194	CRESTAR BANK	FIRST TIME INSPECTION
1195	CREDIT UNION	FIRST TIME INSPECTION

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Asbestos Survey
Master Building List

BLDG NUMBER	BUILDING NAME	COMMENTS
1196	LAUNDRYMAT	REINSPECTION
1197	GAS STATION	REINSPECTION. NO SUSPECT ACBM
1199	BOWLING CENTER	REINSPECTION
1200	NCO CLUB	REINSPECTION ACM ABATED
1409	ADMINISTRATION	BUILDING DEMOLISHED
1412	INSTRUCTION	REINSPECTION
1416	INSTRUCTION	REINSPECTION
1423	STOREHOUSE	REINSPECTION. NO SUSPECT ACBM
1425	ADMINISTRATION	REINSPECTION
1426	INSTRUCTION	REINSPETION
1428	INSTRUCTION	REINSPECTION
1434	INSTRUCTION	REINSPECTION. UNDER RENOVATION
1436	STOREHOUSE	REINSPECTION
1437	STOREHOUSE	FIRST TIME INSPECTION
1439	INSTRUCTION	REINSPECTION
1440	INSTRUCTION	REINSPECTION
1442	ADMINISTRATION	REINSPECTION
1444	ADMINISTRATION	REINSPECTION. RENOVATED, FALL 1992
1445	BARRACKS	REINSPECTION. RENOVATED IN 1993.
1462	KAWAMURA CENTER	REINSPECTION. NO SUSPECT ACBM
1464	ADMINISTRATION	REINSPECTION. RENOVATED IN 1992
1465	ADMINISTRATION	REINSPECTION. UNABLE TO REINSPECT DUE TO ONGOING COMPLETE BUILDING RENOVATION
1466	ADMINISTRATION	REINSPECTION
1467	CLINIC	REINSPECTION
1469	ADMINISTRATION	REINSPECTION
1471	CLINIC	FIRST TIME INSPECTION
~~1474~~ GONE	ADMINISTRATION	BUILDING DEMOLISHED
1475	ADMINISTRATION	REINSPECTION DEMO'D
1490	STOREHOUSE	REINSPECTION

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Asbestos Survey
Master Building List

BLDG NUMBER	BUILDING NAME	COMMENTS
1491	ADMINISTRATION	REINSPECTION
1493	STOREHOUSE	REINSPECTION. NO SUSPECT ACBM
1494	GOLF CLUB HOUSE	FIRST TIME INSPECTION
1495	STOREHOUSE	REINSPECTION. NO SUSPECT ACBM
1496	INSTRUCTION	FIRST TIME INSPECTION. NO SUSPECT ACBM
1498	LABORATORY	FIRST TIME INSPECTION
1499	LABORATORY	FIRST TIME INSPECTION
1696	ADMINISTRATION	FIRST TIME INSPECTION. NO SUSPECT ACBM
1697	ADMINISTRATION	FIRST TIME INSPECTION
1802	FIRE STATION	REINSPECTION DEMO'D
1804	POST CHAPEL	FIRST TIME INSPECTION DEMO'D
1805	ADMINISTRATION	FIRST TIME INSPECTION DEMO'D
1806	EOD OFFICE	FIRST TIME INSPECTION DEMO'D
1809	ADMINISTRATION	REINSPECTION
1810	FITNESS CENTER	REINSPECTION
1812	FITNESS CENTER	REINSPECTION
1813	STOREHOUSE	FIRST TIME INSPECTION
1816	ADMINISTRATION	BUILDING DEMOLISHED
1817	ADMINISTRATION	BUILDING DEMOLISHED
1818	ADMINISTRATION	REINSPECTION. NO SUSPECT ACBM
1819	ADMINISTRATION	REINSPECTION
1822	DINING FACILITY	REINSPECTION
1824	POST CHAPEL	FIRST TIME INSPECTION
1825	ADMINISTRATION	BUILDING DEMOLISHED
1826	ADMINISTRATION	REINSPECTION
1831	ADMINISTRATION	REINSPECTION
1834	ADMINISTRATION	REINSPECTION
1837	ADMINISTRATION	REINSPECTION
1901	ADMINISTRATION	REINSPECTION
1902	ADMINISTRATION	REINSPECTION

DOG HE CREEK

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Asbestos Survey
Master Building List

BLDG NUMBER	BUILDING NAME	COMMENTS
1903	ADMINISTRATION	FIRST TIME INSPECTION
1906	MAINTENANCE	REINSPECTION
1907	ADMINISTRATION	REINSPECTION
1908	ADMINISTRATION	REINSPECTION
1911	ADMINISTRATION	REINSPECTION
1912	ADMINISTRATION	FIRST TIME INSPECTION
1915	ADMINISTRATION	FIRST TIME INSPECTION
1916	ADMINISTRATION	FIRST TIME INSPECTION
1917	ADMINISTRATION	FIRST TIME INSPECTION
1920	ADMINISTRATION	REINSPECTION
1922	ADMINISTRATION	REINSPECTION
1923	ADMINISTRATION	REINSPECTION
1931	POST OFFICE	REINSPECTION
1934	ADMINISTRATION	REINSPECTION
1935	DISPATCH OFFICE	FIRST TIME INSPECTION
1938	MAINTENANCE	FIRST TIME INSPECTION
1946	STOREHOUSE	FIRST TIME INSPECTION
1949	MAINTENANCE	REINSPECTION
1950	MAINTENANCE	REINSPECTION
1952	INSTRUCTION	FIRST TIME INSPECTION
1953	INSTRUCTION	REINSPECTION
1956	DISPATCH OFFICE	FIRST TIME INSPECTION
1961	ADMINISTRATION	REINSPECTION
1962	BARRACKS	REINSPECTION
1968	MAINTENANCE	REINSPECTION
1970	WAREHOUSE	REINSPECTION
2101	ADMINISTRATION	FIRST TIME INSPECTION
2102	BARRACKS	REINSPECTION. NO SUSPECT ACBM
2105	ADMINISTRATION	FIRST TIME INSPECTION
2111	BARRACKS	REINSPECTION. NO SUSPECT ACBM

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Asbestos Survey
Master Building List

BLDG NUMBER	BUILDING NAME	COMMENTS
2113	ADMINISTRATION	REINSPECTION. NO SUSPECT ACBM
2115	CLINIC	REINSPECTION
2117	HEATING PLANT	REINSPECTION. NO SUSPECT ACBM
2118	BRANCH PX	REINSPECTION
2120	THEATER	REINSPECTION
2393	FIRING RANGE	FIRST TIME INSPECTION
METAL BLDG — 2436 : DEMO	INSTRUCTION	FIRST TIME INSPECTION
~~2461~~ GONE	INSTRUCTION	BUILDING DEMOLISHED
2470	RESERVE CENTER	REINSPECTION
2473	MAINTENANCE	REINSPECTION. NO SUSPECT ACBM
2476	MAINTENANCE	REINSPECTION
2477	STOREHOUSE	REINSPECTION. NO SUSPECT ACBM
2590	ADMINISTRATION	FIRST TIME INSPECTION
2591	ADMINISTRATION	FIRST TIME INSPECTION
Humphries 2592	TOPO LABS	FIRST TIME INSPECTION
2593	ADMINISTRATION	REINSPECTION
2594	ADMINISTRATION	FIRST TIME INSPECTION
2845 CLEAN	ADMINISTRATION	BUILDING NOT INSPECTED PER FT BELVOIR DPW COR, JAMES GREGORY
2901	GOLF CLUB HOUSE	BUILDING DEMOLISHED. REPLACED WITH NEW BUILDING IN 1993.
2903	STOREHOUSE	FIRST TIME INSPECTION. NO SUSPECT ACBM
2904	STOREHOUSE	FIRST TIME INSPECTION. NO SUSPECT ACBM
2905	STOREHOUSE	FIRST TIME INSPECTION. NO SUSPECT ACBM
2907	MAINTENANCE	FIRST TIME INSPECTION
2990	WAREHOUSE	REINSPECTION
2991	WAREHOUSE	REINSPECTION
3065	INSTRUCTION	REINSPECTION ALL DEMO'D
3066	INSTRUCTION	REINSPECTION
3067	STOREHOUSE	FIRST TIME INSPECTION. NO SUSPECT ACBM

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Asbestos Survey
Master Building List

BLDG NUMBER	BUILDING NAME	COMMENTS
3069	INSTRUCTION	REINSPECTION
3070	INSTRUCTION	REINSPECTION
3074	STOREHOUSE	FIRST TIME INSPECTION. NO SUSPECT ACBM
3075	GAS CHAMBER	FIRST TIME INSPECTION. NO SUSPECT ACBM
3085	UNKNOWN	BUILDING DEMOLISHED
3086	INSTRUCTION	REINSPECTION. NO SUSPECT ACBM
3087	INSTRUCTION	REINSPECTION. NO SUSPECT ACBM
3122	STOREHOUSE	FIRST TIME INSPECTION. NO SUSPECT ACBM
3126	AIRCRAFT MAINT.	REINSPECTION
3128	ADMINISTRATIVE	REINSPECTION
3136	AIRFIELD OPNS	REINSPECTION
3137	ADMINISTRATION	REINSPECTION
3138	HP BOILER	FIRST TIME INSPECTION
3140	AIRCRAFT HANGER	REINSPECTION. NO SUSPECT ACBM
3141	ADMINISTRATION	FIRST TIME INSPECTION (PART OF BUILDING 3140)
3145	AIRCRAFT HANGER	REINSPECTION
3151	AIRCRAFT HANGER	REINSPECTION
3153	MAINTENANCE	REINSPECTION
3165	ADMINISTRATION	REINSPECTION
3170	PUMP STATION	FIRST TIME INSPECTION. NO SUSPECT ACBM
3230	CONTROL TOWER	REINSPECTION
3231	AIRCRAFT HANGER	REINSPECTION.
3232	MAINTENANCE	REINSPECTION
3234	ADMINISTRATION	REINSPECTION
3235	HEALTH CLINIC	REINSPECTION
3237	FIRE RESCUE	REINSPECTION
7326	STOREHOUSE	REINSPECTION. NO SUSPECT ACBM
7386	PUMP STATION	REINSPECTION. NO SUSPECT ACBM
7395	SENTRY STATION	FIRST TIME INSPECTION.

Asbestos Survey
Master Building List

BLDG NUMBER	BUILDING NAME	COMMENTS
20	OFFICERS CLUB	REINSPECTION
69	SNACK BAR	REINSPECTION. NO SUSPECT ASBESTOS CONTAINING BUILDING MATERIALS (ACBM)
80	VISITING BOQ	REINSPECTION
81	BARRACKS	REINSPECTION
83	GIRL SCOUTS	REINSPECTION. NO SUSPECT ACBM
96	TREATMENT COOP	REINSPECTION. NO SUSPECT ACBM
98	UTILITY BLDG	REINSPECTION
99	STOREHOUSE	REINSPECTION
182	INDOOR POOL	REINSPECTION
184	ADMINISTRATION	REINSPECTION
187	ADMINISTRATION	REINSPECTION
189	MOTOR POOL	REINSPECTION
190	MAINT SHOP	REINSPECTION
191	FIRE STATION	REINSPECTION. (WAS 191A AND 191B)
193	INFO PROCESSING	REINSPECTION
200	COMMUNITY CTR.	REINSPECTION
201	ADMINISTRATION	REINSPECTION
202	MGMT COLLEGE	REINSPECTION
203	BARRACKS	REINSPECTION
204	INSTRUCTION	REINSPECTION
205	INSTRUCTION	REINSPECTION
206	INSTRUCTION	REINSPECTION. NO SUSPECT ACBM
208	INSTRUCTION	REINSPECTION. NO SUSPECT ACBM
210	BARRACKS	REINSPECTION
211	MAPPING SCHOOL	REINSPECTION

Asbestos Survey
Master Building List

BLDG NUMBER	BUILDING NAME	COMMENTS
212	BARRACKS	REINSPECTION. BUILDING VACANT
213	BARRACKS	REINSPECTION
214	INSTRUCTION	REINSPECTION
215	STOREHOUSE	REINSPECTION
216	ADMINISTRATION	REINSPECTION
219	ADMINISTRATION	REINSPECTION
220	WHEELER HALL	REINSPECTION
221	INSTRUCTION	REINSPECTION.
222	INSTRUCTION	REINSPECTION.
226	SCOTT HALL	REINSPECTION
231	DINING FACILITY	REINSPECTION
235	ADMINISTRATION	REINSPECTION
238	EXCHANGE ANNEX	REINSPECTION
240	THEATER	REINSPECTION
246	TELEPHONE EXCH	REINSPECTION
247	HUMPHRY'S HALL	REINSPECTION
256	POST OFFICE	REINSPECTION
257	ADMINISTRATION	REINSPECTION
258	ADMINISTRATION	REINSPECTION
259	OUTDOOR POOL	FIRST TIME INSPECTION. NO SUSPECT ACBM
268	ADMINISTRATION	REINSPECTION
269	POST HQ	REINSPECTION. VACANT DUE TO FIRE
270	TECH LIBRARY	REINSPECTION
291	CIVILIAN PERS.	REINSPECTION. NO SUSPECT ACBM
292	WAELCHLI ROOM	REINSPECTION. NO SUSPECT ACBM
303	ADMINISTRATION	FIRST TIME INSPECTION
305	NIGHT VISION	REINSPECTION. BUILDING RENOVATED
307	GENERAL PURPOSE	REINSPECTION
309	SIMULATOR BLDG	REINSPECTION
312	TEST ENGR BLDG	REINSPECTION

Asbestos Survey
Master Building List

BLDG NUMBER	BUILDING NAME	COMMENTS
313	STOREHOUSE	REINSPECTION. NO SUSPECT ACBM
314	ADMIN FACILITY	REINSPECTION
315	ADMIN FACILITY	REINSPECTION
316	ADMINISTRATIVE	REINSPECTION
317	LABORATORY	REINSPECTION
318	LABORATORY	REINSPECTION
319	COUNTERMINE DIV	REINSPECTION. NO SUSPECT ACBM
320	PHOTO LAB	REINSPECTION
321	CAFETERIA	REINSPECTION
322	LABORATORY	REINSPECTION
323	MODEL SHOP	REINSPECTION
324	LABORATORY	REINSPECTION
325	LABORATORY	REINSPECTION
326	LABORATORY	REINSPECTION
327	ADMINISTRATION	REINSPECTION. SCHEDULED FOR DEMOLITION
328	GARAGE	REINSPECTION
329	LABORATORY	REINSPECTION.
330	FE/WOOD SHOP	REINSPECTION. NO SUSPECT ACBM
331	MAINT. DIV.	REINSPECTION
332	HEATING PLANT	REINSPECTION
334	SPECIAL PROJECT	REINSPECTION
335	WAREHOUSE	REINSPECTION
336	LABORATORY	REINSPECTION
337	ADMINISTRATION	REINSPECTION
340	SECURITY OFFICE	REINSPECTION.
342	HEATING PLANT	FIRST TIME INSPECTION. NO SUSPECT ACBM
345	STOREHOUSE	FIRST TIME INSPECTION. NO SUSPECT ACBM
346	STOREHOUSE	FIRST TIME INSPECTION. NO SUSPECT ACBM
347	WAREHOUSE	REINSPECTION. NO SUSPECT ACBM
348	STOREHOUSE	FIRST TIME INSPECTION

Asbestos Survey
Master Building List

BLDG NUMBER	BUILDING NAME	COMMENTS
349	STOREHOUSE	FIRST TIME INSPECTION. NO SUSPECT ACBM
352	STOREHOUSE	REINSPECTION. NO SUSPECT ACBM
353	MINE TESTING	REINSPECTION
354	ADMINISTRATION	REINSPECTION
355	STORAGE	FIRST TIME INSPECTION. NO SUSPECT ACBM
357	LABORATORY	REINSPECTION
358	ADMINISTRATION	REINSPECTION
359	MAINTENANCE	REINSPECTION. NO SUSPECT ACBM
360	ADMINISTRATION	FIRST TIME INSPECTION
361	COMPUTER CENTER	REINSPECTION
362	LABORATORY	REINSPECTION
365	ADMINISTRATION	FIRST TIME INSPECTION
366	STOREHOUSE	FIRST TIME INSPECTION
372	INSTRUCTION	REINSPECTION
374	ADMINISTRATION	REINSPECTION.
378	STOREHOUSE	REINSPECTION. NO SUSPECT ACBM
379	TOWER	REINSPECTION. NO SUSPECT ACBM
380	ADMINISTRATION	REINSPECTION
381	STOREHOUSE	FIRST TIME INSPECTION
382	STOREHOUSE	FIRST TIME INSPECTION. NO SUSPECT ACBM
384	MAINTENANCE	FIRST TIME INSPECTION. NO SUSPECT ACBM
388	STOREHOUSE	FIRST TIME INSPECTION. NO SUSPECT ACBM
390	LABORATORY	BUILDING DEMOLISHED
392	LABORATORY	REINSPECTION
394	STORAGE	REINSPECTION. NO SUSPECT ACBM
397	STOREHOUSE	FIRST TIME INSPECTION. NO SUSPECT ACBM
399	LABORATORY	REINSPECTION
435	FAIRFAX CHAPEL	FIRST TIME INSPECTION
470	BOQ	REINSPECTION
498	DPCA CFA	REINSPECTION

Asbestos Survey
Master Building List

BLDG NUMBER	BUILDING NAME	COMMENTS
505	TRANSIT QTRS	REINSPECTION
506	TRANSIT QTRS	REINSPECTION
507	TRANSIT QTRS	REINSPECTION
508	TRANSIT QTRS	REINSPECTION
509	TRANSIT QTRS	REINSPECTION
629	WAREHOUSE	REINSPECTION
630	WAREHOUSE	REINSPECTION
631	WAREHOUSE	REINSPECTION
701	TROOP ISSUE	REINSPECTION
704	WAREHOUSE	REINSPECTION
705	WAREHOUSE	REINSPECTION
707	MAINTENANCE	REINSPECTION
708	WAREHOUSE	REINSPECTION
709	WAREHOUSE	REINSPECTION
712	WAREHOUSE	REINSPECTION
714	ADMINISTRATION	REINSPECTION
715	MAINTENANCE	FIRST TIME INSPECTION
716	STORAGE	REINSPECTION. NO SUSPECT ACBM
718	STOREHOUSE	FIRST TIME INSPECTION.
737	STOREHOUSE	FIRST TIME INSPECTION. NO SUSPECT ACBM
740	MAINTENANCE	REINSPECTION
741	MAINTENANCE	REINSPECTION
745	MAINTENANCE	REINSPECTION
801	BARRACKS	REINSPECTION
802	MEDICAL COMPANY	REINSPECTION
805	BARRACKS	REINSPECTION
806	BARRACKS	REINSPECTION
807	BARRACKS	REINSPECTION
808	DEWITT HOSPITAL	REINSPECTION
812	HEAT PLANT	REINSPECTION. NO SUSPECT ACBM

Asbestos Survey
Master Building List

BLDG NUMBER	BUILDING NAME	COMMENTS
815	HEALTH CLINIC	REINSPECTION
950	MARKHAM SCHOOL	REINSPECTION
1000	ADMINISTRATION	REINSPECTION
1001	ADMINISTRATION	REINSPECTION
1017	BARDEN SCHOOL	REINSPECTION
1018	CHAPEL	REINSPECTION
1021	STOREHOUSE	FIRST TIME INSPECTION. NO SUSPECT ACBM
1023	BODY SHOP	REINSPECTION. BUILDING RENOVATED IN 1993-94
1024	LIBRARY	REINSPECTION
1025	CHAPEL	FIRST TIME INSPECTION
~~1027~~ GONE	RELIGIOUS ED.	BUILDING DEMOLISHED
1030	ADMINISTRATION	REINSPECTION
~~1080~~ GONE	ADMINISTRATION	BUILDING DEMOLISHED
1084	COLD STORAGE	FIRST TIME INSPECTION
1089	RECYCLING CTR.	REINSPECTION
1099	LOGAN CLINIC	REINSPECTION
1107	STOREHOUSE	REINSPECTION. NO SUSPECT ACBM
1108	WAREHOUSE	REINSPECTION
1109	STOREHOUSE	REINSPECTION
1112	STOREHOUSE	REINSPECTION. NO SUSPECT ACBM
1113	STOREHOUSE	REINSPECTION
1114	STOREHOUSE	REINSPECTION. NO SUSPECT ACBM
1115	MAINTENANCE	BUILDING DEMOLISHED
1116	MAINTENANCE	REINSPECTION. NO SUSPECT ACBM
~~1121~~ GONE	MAINTENANCE	BUILDING DEMOLISHED
~~1122~~ GONE	ADMINISTRATION	BUILDING DEMOLISHED
1123	STOREHOUSE	REINSPECTION. NO SUSPECT ACBM
1125	GAS STATION	REINSPECTION. NO SUSPECT ACBM
1126	WAREHOUSE	REINSPECTION
1131	MILITARY POLICE	REINSPECTION. NO SUSPECT ACBM

Asbestos Survey
Master Building List

BLDG NUMBER	BUILDING NAME	COMMENTS
1132	PRIME POWER	REINSPECTION
1133	POWER PLANT	REINSPECTION
1134	STOREHOUSE	FIRST TIME INSPECTION. NO SUSPECT ACBM
1138	FURNITURE STORE	REINSPECTION
1140	WAREHOUSE	REINSPECTION. NO SUSPECT ACBM
1141	WAREHOUSE	REINSPECTION
1142	WAREHOUSE	REINSPECTION
1143	WAREHOUSE	REINSPECTION
1144	WAREHOUSE	REINSPECTION. NO SUSPECT ACBM
1145	WAREHOUSE	REINSPECTION. NO SUSPECT ACBM
1146	PX GARAGE	REINSPECTION
1147	SPORTS OFFICE	REINSPECTION
1148	MAINTENANCE	REINSPECTION
1150	TRUCK RENTAL	FIRST TIME INSPECTION
1153	MORALE SUPPORT	REINSPECTION
1154	ADMINISTRATION	FIRST TIME INSPECTION
1155	POST EXCHANGE	REINSPECTION
1161	RED CROSS	REINSPECTION
1169	ADMINISTRATION	REINSPECTION
1170	ADMINISTRATION	REINSPECTION. BUILDING RENOVATED. NO SUSPECT ACBM
1171	REUP OFFICE	REINSPECTION. NO SUSPECT ACBM
1182	SPECKER GYM	REINSPECTION. NO SUSPECT ACBM
1185	EXCHANGE OUTLET	FIRST TIME INSPECTION
1186	POST EXCHANGE	REINSPECTION
1187	EXCHANGE OUTLET	FIRST TIME INSPECTION
1188	POST EXCHANGE	REINSPECTION. NO SUSPECT ACBM
1189	BASE EXCHANGE	REINSPECTION
1193	ADMINISTRATION	REINSPECTION
1194	CRESTAR BANK	FIRST TIME INSPECTION
1195	CREDIT UNION	FIRST TIME INSPECTION

Asbestos Survey
Master Building List

BLDG NUMBER	BUILDING NAME	COMMENTS
1196	LAUNDRYMAT	REINSPECTION
1197	GAS STATION	REINSPECTION. NO SUSPECT ACBM
1199	BOWLING CENTER	REINSPECTION
1200	NCO CLUB	REINSPECTION
1409	ADMINISTRATION	BUILDING DEMOLISHED
1412	INSTRUCTION	REINSPECTION
1416	INSTRUCTION	REINSPECTION
1423	STOREHOUSE	REINSPECTION. NO SUSPECT ACBM
1425	ADMINISTRATION	REINSPECTION
1426	INSTRUCTION	REINSPETION
1428	INSTRUCTION	REINSPECTION
1434	INSTRUCTION	REINSPECTION. UNDER RENOVATION
1436	STOREHOUSE	REINSPECTION
1437	STOREHOUSE	FIRST TIME INSPECTION
1439	INSTRUCTION	REINSPECTION
1440	INSTRUCTION	REINSPECTION
1442	ADMINISTRATION	REINSPECTION
1444	ADMINISTRATION	REINSPECTION. RENOVATED, FALL 1992
1445	BARRACKS	REINSPECTION. RENOVATED IN 1993.
1462	KAWAMURA CENTER	REINSPECTION. NO SUSPECT ACBM
1464	ADMINISTRATION	REINSPECTION. RENOVATED IN 1992
1465	ADMINISTRATION	REINSPECTION. UNABLE TO REINSPECT DUE TO ONGOING COMPLETE BUILDING RENOVATION
1466	ADMINISTRATION	REINSPECTION
1467	CLINIC	REINSPECTION
1469	ADMINISTRATION	REINSPECTION
1471	CLINIC	FIRST TIME INSPECTION
~~1474~~ GONE	ADMINISTRATION	BUILDING DEMOLISHED
1475	ADMINISTRATION	REINSPECTION
1490	STOREHOUSE	REINSPECTION

Asbestos Survey
Master Building List

BLDG NUMBER	BUILDING NAME	COMMENTS
1491	ADMINISTRATION	REINSPECTION
1493	STOREHOUSE	REINSPECTION. NO SUSPECT ACBM
1494	GOLF CLUB HOUSE	FIRST TIME INSPECTION
1495	STOREHOUSE	REINSPECTION. NO SUSPECT ACBM
1496	INSTRUCTION	FIRST TIME INSPECTION. NO SUSPECT ACBM
1498	LABORATORY	FIRST TIME INSPECTION
1499	LABORATORY	FIRST TIME INSPECTION
1696	ADMINISTRATION	FIRST TIME INSPECTION. NO SUSPECT ACBM
1697	ADMINISTRATION	FIRST TIME INSPECTION
1802	FIRE STATION	REINSPECTION
1804	POST CHAPEL	FIRST TIME INSPECTION
1805	ADMINISTRATION	FIRST TIME INSPECTION
1806	EOD OFFICE	FIRST TIME INSPECTION
1809	ADMINISTRATION	REINSPECTION
1810	FITNESS CENTER	REINSPECTION
1812	FITNESS CENTER	REINSPECTION
1813	STOREHOUSE	FIRST TIME INSPECTION
1816	ADMINISTRATION	BUILDING DEMOLISHED
1817	ADMINISTRATION	BUILDING DEMOLISHED
1818	ADMINISTRATION	REINSPECTION. NO SUSPECT ACBM
1819	ADMINISTRATION	REINSPECTION
1822	DINING FACILITY	REINSPECTION
1824	POST CHAPEL	FIRST TIME INSPECTION
1825	ADMINISTRATION	BUILDING DEMOLISHED
1826	ADMINISTRATION	REINSPECTION
1831	ADMINISTRATION	REINSPECTION
1834	ADMINISTRATION	REINSPECTION
1837	ADMINISTRATION	REINSPECTION
1901	ADMINISTRATION	REINSPECTION
1902	ADMINISTRATION	REINSPECTION

Asbestos Survey
Master Building List

BLDG NUMBER	BUILDING NAME	COMMENTS
1903	ADMINISTRATION	FIRST TIME INSPECTION
1906	MAINTENANCE	REINSPECTION
1907	ADMINISTRATION	REINSPECTION
1908	ADMINISTRATION	REINSPECTION
1911	ADMINISTRATION	REINSPECTION
1912	ADMINISTRATION	FIRST TIME INSPECTION
1915	ADMINISTRATION	FIRST TIME INSPECTION
1916	ADMINISTRATION	FIRST TIME INSPECTION
1917	ADMINISTRATION	FIRST TIME INSPECTION
1920	ADMINISTRATION	REINSPECTION
1922	ADMINISTRATION	REINSPECTION
1923	ADMINISTRATION	REINSPECTION
1931	POST OFFICE	REINSPECTION
1934	ADMINISTRATION	REINSPECTION
1935	DISPATCH OFFICE	FIRST TIME INSPECTION
1938	MAINTENANCE	FIRST TIME INSPECTION
1946	STOREHOUSE	FIRST TIME INSPECTION
1949	MAINTENANCE	REINSPECTION
1950	MAINTENANCE	REINSPECTION
1952	INSTRUCTION	FIRST TIME INSPECTION
1953	INSTRUCTION	REINSPECTION
1956	DISPATCH OFFICE	FIRST TIME INSPECTION
1961	ADMINISTRATION	REINSPECTION
1962	BARRACKS	REINSPECTION
1968	MAINTENANCE	REINSPECTION
1970	WAREHOUSE	REINSPECTION
2101	ADMINISTRATION	FIRST TIME INSPECTION
2102	BARRACKS	REINSPECTION. NO SUSPECT ACBM
2105	ADMINISTRATION	FIRST TIME INSPECTION
2111	BARRACKS	REINSPECTION. NO SUSPECT ACBM

Asbestos Survey
Master Building List

BLDG NUMBER	BUILDING NAME	COMMENTS
2113	ADMINISTRATION	REINSPECTION. NO SUSPECT ACBM
2115	CLINIC	REINSPECTION
2117	HEATING PLANT	REINSPECTION. NO SUSPECT ACBM
2118	BRANCH PX	REINSPECTION
2120	THEATER	REINSPECTION
2393	FIRING RANGE	FIRST TIME INSPECTION
2436 : Demo	INSTRUCTION	FIRST TIME INSPECTION
~~2461~~ GONE	INSTRUCTION	BUILDING DEMOLISHED
2470	RESERVE CENTER	REINSPECTION
2473	MAINTENANCE	REINSPECTION. NO SUSPECT ACBM
2476	MAINTENANCE	REINSPECTION
2477	STOREHOUSE	REINSPECTION. NO SUSPECT ACBM
2590	ADMINISTRATION	FIRST TIME INSPECTION
2591	ADMINISTRATION	FIRST TIME INSPECTION
2592	TOPO LABS	FIRST TIME INSPECTION
2593	ADMINISTRATION	REINSPECTION
2594	ADMINISTRATION	FIRST TIME INSPECTION
2845	ADMINISTRATION	BUILDING NOT INSPECTED PER FT BELVOIR DPW COR, JAMES GREGORY
2901	GOLF CLUB HOUSE	BUILDING DEMOLISHED. REPLACED WITH NEW BUILDING IN 1993.
2903	STOREHOUSE	FIRST TIME INSPECTION. NO SUSPECT ACBM
2904	STOREHOUSE	FIRST TIME INSPECTION. NO SUSPECT ACBM
2905	STOREHOUSE	FIRST TIME INSPECTION. NO SUSPECT ACBM
2907	MAINTENANCE	FIRST TIME INSPECTION
2990	WAREHOUSE	REINSPECTION
2991	WAREHOUSE	REINSPECTION
3065	INSTRUCTION	REINSPECTION
3066	INSTRUCTION	REINSPECTION
3067	STOREHOUSE	FIRST TIME INSPECTION. NO SUSPECT ACBM

Asbestos Survey
Master Building List

BLDG NUMBER	BUILDING NAME	COMMENTS
3069	INSTRUCTION	REINSPECTION
3070	INSTRUCTION	REINSPECTION
3074	STOREHOUSE	FIRST TIME INSPECTION. NO SUSPECT ACBM
3075	GAS CHAMBER	FIRST TIME INSPECTION. NO SUSPECT ACBM
3085	UNKNOWN	BUILDING DEMOLISHED
3086	INSTRUCTION	REINSPECTION. NO SUSPECT ACBM
3087	INSTRUCTION	REINSPECTION. NO SUSPECT ACBM
3122	STOREHOUSE	FIRST TIME INSPECTION. NO SUSPECT ACBM
3126	AIRCRAFT MAINT.	REINSPECTION
3128	ADMINISTRATIVE	REINSPECTION
3136	AIRFIELD OPNS	REINSPECTION
3137	ADMINISTRATION	REINSPECTION
3138	HP BOILER	FIRST TIME INSPECTION
3140	AIRCRAFT HANGER	REINSPECTION. NO SUSPECT ACBM
3141	ADMINISTRATION	FIRST TIME INSPECTION (PART OF BUILDING 3140)
3145	AIRCRAFT HANGER	REINSPECTION
3151	AIRCRAFT HANGER	REINSPECTION
3153	MAINTENANCE	REINSPECTION
3165	ADMINISTRATION	REINSPECTION
3170	PUMP STATION	FIRST TIME INSPECTION. NO SUSPECT ACBM
3230	CONTROL TOWER	REINSPECTION
3231	AIRCRAFT HANGER	REINSPECTION.
3232	MAINTENANCE	REINSPECTION
3234	ADMINISTRATION	REINSPECTION
3235	HEALTH CLINIC	REINSPECTION
3237	FIRE RESCUE	REINSPECTION
7326	STOREHOUSE	REINSPECTION. NO SUSPECT ACBM
7386	PUMP STATION	REINSPECTION. NO SUSPECT ACBM
7395	SENTRY STATION	FIRST TIME INSPECTION.

Asbestos Survey
Rank Individual Area
by Risk Index
(Immediate Hazards First)

BLDG NUMBER	SAMPLE NUMBER	RISK INDEX	LOW COST	HIGH COST	MATERIAL TYPE	ROOM USE	COMMENTS
212	P797	77	400.00	750.00	ABOVE C/AT	BATHROOM	PIH
1150	B4	147	0.00	0.00	TANK INSULATION		
1150	B6	147	0.00	0.00	TANK INSULATION		
1150	B5	147	0.00	0.00	TANK INSULATION		
1442	P23313	142	420.00	560.00	FLEXIBLE DUCT CONNECTORS		
1442	P23335	142	420.00	560.00	FLEXIBLE DUCT CONNECTORS		
191	P364	138	1344.00	1728.00	FLOOR COVERING		
99	P6	133	4.00	6.00	DEBRIS		
358	P27	133	240.00	320.00	AIRDUCT MATERIAL		
1017	999B	133	150.00	200.00	PIPE JOINTS		
334	P1877	133	300.00	450.00	DEBRIS		
205	P14	129	2.00	3.00	DEBRIS		
211	P517	124	120.00	160.00	HARD JOINTS		
1146	P6	115	140.00	262.50	STRAIGHT PIPE INSULSTION		
99	P4	115	645.00	860.00	PIPE JOINTS		
99	P3	115	200.00	375.00	STRAIGHT PIPE INSULATION		
99	P5	115	80.00	144.00	BOILER JACKET		
1146	P6A	115	0.00	0.00	STRAIGHT PIPE INSULSTSION		
701	P6	115	375.00	500.00	PIPE JOINTS		
701	P5A	115	0.00	0.00	STRAIGHT PIPE INSULATION		
240	P9A	115	1628.00	3052.50	STRAIGHT PIPE INSULATION		
357	P1318	113	192.50	247.50	FLOOR TILE (CARPET OVER TILE)		
210	104	113	0.00	0.00	BROWN		
318	P1531	113	4350.00	5655.00	ACOUSTICAL CEILING TILE		
357	P1327	113	0.00	0.00	FLOOR TILE (CARPET OVER TILE)		
210	105	113	0.00	0.00	BROWN		
187	P393	111	16.00	30.00	STRAIGHT PIPE INSULATION		
1440	P23292	107	6288.00	10480.00	CEILING COVERING		

Asbestos Survey
Rank Individual Area
by Risk Index
(Immediate Hazards First)

BLDG NUMBER	SAMPLE NUMBER	RISK INDEX	LOW COST	HIGH COST	MATERIAL TYPE	ROOM USE	COMMENTS
331	P1166	106	120.00	160.00	GASKET		
1804	A7	102	2.00	3.00	DEBRIS		
1017	P13	102	270.00	360.00	PIPE JOINTS		
1017	P13A	102	0.00	0.00	PIPE JOINTS		
358	P32	101	77000.00	99000.00	FLOOR TILE		
362	P2044	101	4.00	6.00	DEBRIS		
332	P1236	97	48.00	90.00	STRAIGHT PIPE		
3231	P2	97	540.00	720.00	PIPE JOINTS		
240	B7	97	0.00	0.00	ELBOWS		
240	B1	97	1232.00	2310.00	STRAIGHT PIPE INSULATION		
240	B6	97	0.00	0.00	ELBOWS		
240	B5	97	375.00	500.00	ELBOWS		
332	103	95	3.60	4.20	BOILER TANK INSULATION		
1200	P3A	95	0.00	0.00	SPRAY ON CEILING		
1200	P3	95	18750.00	31250.00	SPRAY ON CEILING		
807	S1	95	4.00	6.00	DEBRIS ON DIRT FLOOR		
212	P1335	93	270.00	360.00	PIPE JOINT INSULATION		
1161	P5	92	6562.50	8437.50	FLOOR TILE		
1161	P6	92	0.00	0.00	FLOOR TILE		
374	P6	92	165.00	220.00	PIPE JOINT		
374	P9	92	0.00	0.00	PIPE JOINT (IN ATTIC)		
1189	P7	92	2.00	3.00	DEBRIS		
1017	999A	92	200.00	375.00	STRAIGHT PIPE		
1434	999A	89	96.00	180.00	STRAIGHT PIPE		
309	P1558	89	414.00	483.00	BOILER/TANK INSULATION		
309	P1562	89	225.00	300.00	FITTINGS (T'S,ELBOW'S, VALVES)		
309	P1559	89	0.00	0.00	BOILER/TANK INSULATION		
1475	P15	89	15.00	20.00	PIPE JOINT		

Asbestos Survey
Rank Individual Area
by Risk Index
(Immediate Hazards First)

BLDG NUMBER	SAMPLE NUMBER	RISK INDEX	LOW COST	HIGH COST	MATERIAL TYPE	ROOM USE	COMMENTS
309	P1564	89	30.00	45.00	DEBRIS		
358	P28	89	240.00	320.00	AIRDUCT MATERIAL		
1200	P16	89	0.00	0.00	PIPE JOINT INSULATION		
1200	P15	89	930.00	1240.00	PIPE JOINT INSULATION		
745	P10	89	833.00	1071.00	FLOOR TILE		
99	P999A	89	11.70	14.40	TRANSITE WALLBOARD		
247	999A	88	8.00	15.00	AIRCELL RISER		
332	203	88	16.00	30.00	STRAIGHT PIPE		
741	P2	86	9030.00	11610.00	FLOOR TILE		
741	P9	86	0.00	0.00	FLOOR TILE		
745	P1	86	1750.00	2250.00	FLOOR TILE		
190	P1	86	1855.00	2385.00	FLOOR TILE		
190	P1A	86	0.00	0.00	FLOOR TILE		
741	P3	86	0.00	0.00	FLOOR TILE		
374	P7	86	10.00	12.50	PATCHING MATERIAL		
362	P2144	83	0.00	0.00	FLOOR TILE		
1416	999A	83	600.00	900.00	FIRE DOORS		
3066	P5	83	120.00	160.00	FLEXIBLE CONNECTORS		
210	102	83	24.00	45.00	CORRIGATED PIPE		
2470	999A	83	1850.00	2775.00	FIRE DOOR		
362	P2143	83	0.00	0.00	FLOOR TILE		
362	P2059	83	3055.50	3928.50	FLOOR TILE		
1146	P8	83	4.00	6.00	DEBRIS		
1146	P10	83	0.00	0.00	DEBRIS		
214	P16A	80	0.00	0.00	HARD JOINTS		
256	999B	80	45.00	60.00	PIPE JOINTS		
1499	999A	80	1750.00	2250.00	FLOOR TILE		
214	P16	80	1515.00	2020.00	HARD JOINTS		

Asbestos Survey
Rank Individual Area
by Risk Index
(Immediate Hazards First)

BLDG NUMBER	SAMPLE NUMBER	RISK INDEX	LOW COST	HIGH COST	MATERIAL TYPE	ROOM USE	COMMENTS
1195	104	80	525.00	700.00	PIPE JOINTS		
1195	105	80	0.00	0.00	PIPE JOINTS		
1195	106	80	0.00	0.00			
808	P47	80	16065.00	21420.00	PIPE JOINTS		
3065	P5	80	1200.00	2000.00	PLASTER		
950	999A	77	150.00	225.00	FIRE DOORS		
366	103	77	0.00	0.00	STRAIGHT PIPE INSULATION		
362	P2042	77	375.00	500.00	FITTINGS AND ELBOWS		
362	P2043	77	0.00	0.00	FITTINGS AND ELBOWS		
1442	999A	77	1900.00	2850.00	FIRE DOORS		
366	101	77	240.00	450.00	STRAIGHT PIPE INSULATION		
366	102	77	0.00	0.00	STRAIGHT PIPE INSULATION		
701	P5	77	200.00	375.00	STRAIGHT PIPE INSULATION		
240	P11A	77	500.00	937.50	STRAIGHT PIPE INSULATION		
240	P11	77	500.00	937.50	STRAIGHT PIPE INSULATION		
240	P9	77	1628.00	3052.50	STRAIGHT PIPE INSULATION		
708	999A	77	1200.00	2250.00	STRAIGHT PIPE		
745	P15	75	60.00	80.00	ROPE INSULATION		
1150	B3	74	0.00	0.00	PIPE JOINT INSULATION		
1150	B2	74	0.00	0.00	PIPE JOINT INSULATION		
1962	P7	74	0.00	0.00	GYPSUM BOARD		
1150	B1	74	150.00	200.00	PIPE JOINT INSULATION		
1150	B9	74	0.00	0.00	STRAIGHT PIPE INSULATION		
1150	B10	74	60.00	80.00	GASKET		
268	P1405	74	20.00	30.00	DEBRIS IN ATTIC		
187	P380	74	2876.25	3540.00	TRANSITE WALLBOARD		
1150	B8	74	0.00	0.00	STRAIGHT PIPE INSULATION		
1150	B7	74	0.00	0.00	STRAIGHT PIPE INSULATION		

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BLDG NUMBER	SAMPLE NUMBER	RISK INDEX	LOW COST	HIGH COST	MATERIAL TYPE	ROOM USE	COMMENTS
1442	P23312	74	0.00	0.00	TANK INSULATION		
1442	P23311	74	226.80	264.60	TANK INSULATION		
213	P1333	72	0.00	0.00	FLOOR TILE		
213	P769	72	10272.50	13207.50	FLOOR TILE		
213	P783	72	0.00	0.00	FLOOR TILE		
399	P104	71	48927.00	63605.10	CEILING TILE		
399	P202	71	0.00	0.00	CEILING TILE		
399	P301	71	0.00	0.00	CEILING TILE		
1471	107	71	15.00	20.00	PIPE JOINT		
211	P516	71	132.00	247.50	STRAIGHT PIPE INSULATION-AIRCELL		
332	102	71	0.00	0.00	ROPE GASKET		
2118	P1000X	71	10.00	11.00	FIXTURE PAPER		
1017	999C	71	400.00	600.00	FIRE DOORS		
1126	P23036	68	124.00	232.50	STRAIGHT PIPE INSULATION		
3231	999A	68	250.00	375.00	FIRE DOORS		
1030	P23276	68	60.00	80.00	FLEXIBLE DUCT CONNECTOR		
314	999A	68	160.00	240.00	DEBRIS		
435	999B	68	170.00	255.00	DEBRIS		
631	P2	68	756.00	972.00	SHEET VINYL		
190	P2	68	367.50	472.50	FLOOR TILE		
1200	P22	66	755.00	1359.00	INNER INSULATION		
1200	P22A	66	0.00	0.00	INNER INSULATION		
315	P1645	65	120.00	225.00	STRAIGHT PIPE		
315	P1646	65	150.00	200.00	ELBOWS		
1471	104	65	44.00	82.50	PAPER		
210	999A	65	50.00	75.00	FIRE DOOR		

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BLDG NUMBER	SAMPLE NUMBER	RISK INDEX	LOW COST	HIGH COST	MATERIAL TYPE	ROOM USE	COMMENTS
321	B1	65	8.00	15.00	PRESSED PAPER WITHIN WALL. PAPER WRAPPED		
3066	P3	65	1200.00	2000.00	PLASTER		
1445	999A	65	8200.00	12300.00	FIRE DOORS (NEW)		
3066	102	65	0.00	0.00	COATING OVER GYPSUM BOARD		
321	P2207	65	2020.50	2626.65	ACOUSTICAL CEILING TILE		
3066	101	65	16992.00	25488.00	COATING OVER GYPSUM BOARD		
240	B4	65	0.00	0.00	STRAIGHT PIPE INSULATION		
240	B3	65	0.00	0.00	STRAIGHT PIPE INSULATION		
240	B2	65	0.00	0.00	STRAIGHT PIPE INSULATION		
3138	110	65	48.00	90.00	STRAIGHT PIPE INSULATION		
3138	111	65	0.00	0.00	STRAIGHT PIPE INSULATION		
231	101	65	255.00	340.00	PIPE JOINTS		
231	102	65	0.00	0.00	PIPE JOINTS		
211	P504	64	10136.00	13032.00	WHITE/BEIGE		
316	P1800	64	80.00	150.00	PIPE INSULATION		
203	999A	62	100.00	150.00	FIRE DOOR		
203	P285	62	100.00	150.00	FIRE DOOR		
3137	999B	62	100.00	150.00	FIRE DOORS		
211	999A	62	200.00	300.00	WOOD FIRE DOORS		
1935	104	62	4.00	7.50	STRAIGHT PIPE		
326	P854	62	16093.00	20691.00	FLOOR TILE		
315	P1642	62	36750.00	47775.00	CEILING TILE		
326	P994	62	0.00	0.00	FLOOR TILE		
326	P865	62	0.00	0.00	FLOOR TILE		
326	P864	62	0.00	0.00	FLOOR TILE		
326	P863	62	0.00	0.00	FLOOR TILE		
326	P859	62	0.00	0.00	FLOOR TILE		

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BLDG NUMBER	SAMPLE NUMBER	RISK INDEX	LOW COST	HIGH COST	MATERIAL TYPE	ROOM USE	COMMENTS
326	P855	62	0.00	0.00	FLOOR TILE		
326	P856	62	0.00	0.00	FLOOR TILE		
326	P857	62	0.00	0.00	FLOOR TILE		
326	P861	62	0.00	0.00	FLOOR TILE		
374	999A	62	2.00	3.00	DEBRIS		
435	999A	62	640.00	1200.00	STRAIGHT PIPE INSULATION		
3137	P23157	62	450.00	600.00	PIPE JOINTS, HARD		
1908	P10	62	60.00	80.00	GASKET AT WALL PENETRATION		
240	P12A	61	0.00	0.00	PIPE JOINT		
240	P10A	61	0.00	0.00	PIPE JOINT		
240	P12	61	0.00	0.00	PIPE JOINT		
240	P10	61	2910.00	3880.00	PIPE JOINTS		
1108	P23012	60	1305.50	1678.50	FLOOR TILE		
1475	P14	60	2784.00	4640.00	PLASTER		
314	P1594	59	270.00	360.00	ELBOWS		
318	999A	59	50.00	75.00	FIRE DOOR		
318	101	59	1080.00	1404.00	ACOUSTICAL WALL TILE		
1475	999A	59	100.00	150.00	FIRE DOOR		
2593	P1000X	59	950.00	1425.00	FIRE DOORS		
1907	P117	59	48.00	66.00	AIRCELL		
20	B1	59	410.00	738.00	FLUE INSULATION		
332	202	59	0.00	0.00	TANK INSULATION		
332	P1237	59	150.00	200.00	PIPE JOINTS		
210	999B	58	120.00	160.00	FLEXIBLE DUCT CONNECTOR		
219	P1302	57	0.00	0.00	PIPE JOINT INSULATION		
219	P1301	57	105.00	140.00	PIPE JOINT INSULATION		
1084	106	56	0.00	0.00	WALL CORK		
3234	999A	56	100.00	150.00	FIRE DOOR		

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BLDG NUMBER	SAMPLE NUMBER	RISK INDEX	LOW COST	HIGH COST	MATERIAL TYPE	ROOM USE	COMMENTS
808	P208	54	0.00	0.00	PIPE JOINTS		
808	P313	54	0.00	0.00	PIPE JOINTS		
808	P216	54	0.00	0.00	PIPE JOINTS		
1475	P1000X	54	60.00	80.00	FLEXIBLE DUCT CONNECTOR		
2593	P1000Y	54	960.00	1280.00	FLEXIBLE CONNECTORS		
354	P1928	53	72.00	84.00	BOILER/TANK INSULATION		
507	999B	53	120.00	160.00	ELBOW FITTINGS		
354	P1930	53	0.00	0.00	FITTINGS (ELBOWS,VALVES)		
354	P1929	53	0.00	0.00	FITTINGS (ELBOWS,VALVES)		
357	P1083	53	60.00	80.00	FLEXIBLE DUCT CONNECTOR		
212	999A	53	120.00	160.00	FLEXIBLE DUCT CONNECTOR		
2470	P11	53	14.40	16.80	TANK INSULATION		
1023	999A	53	200.00	300.00	FIRE DOORS		
354	P1921	53	420.00	560.00	FITTINGS (ELBOWS, VALVES)		
1906	101	53	60.00	80.00	ROPE GASKET		
714	P16	52	0.00	0.00	STRAIGHT PIPE INSULATION		
317	P2273	52	0.00	0.00	FLOOR TILE		
314	P1591	52	0.00	0.00	FLOOR TILE		
212	P791	52	10290.00	13230.00	WHITE/BROWN STREAK		
1824	A1	52	120.00	160.00	PIPE JOINTS ALONG CEILING		
317	P2272	52	2590.00	3330.00	FLOOR TILE		
317	P2282	52	0.00	0.00	FLOOR TILE		
1824	A2	52	0.00	0.00	PIPE JOINTS ALONG CEILING		
950	999C	52	60.00	80.00	FLEXIBLE DUCT CONNECTOR		
1824	A3	52	75.00	100.00	PIPE JOINTS ALONG CEILING		
314	P1580	52	3458.00	4446.00	FLOOR TILE		
314	P1592	52	0.00	0.00	FLOOR TILE		
314	P1595	52	0.00	0.00	FLOOR TILE		

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BLDG NUMBER	SAMPLE NUMBER	RISK INDEX	LOW COST	HIGH COST	MATERIAL TYPE	ROOM USE	COMMENTS
201	999A	50	1300.00	1950.00	FIRE DOORS (NEW)		
1809	P2	50	14625.00	17550.00	GYBSUM BOARD		
1809	P2A	50	0.00	0.00	GYPSUM BOARD		
1030	102	50	175.00	225.00	TAR PAPER ON DUCT		
2101	999B	50	600.00	900.00	FIRE DOORS		
212	P1336	50	148.00	277.50	STRAIGHT PIPE INSULATION AIRCELL		
213	999A	50	50.00	75.00	FIRE DOOR		
1809	P2B	50	0.00	0.00	GYPSUM BOARD		
20	P328	50	910.00	1170.00	FLOOR TILE		
1962	P4A	50	0.00	0.00	GYPSUM BOARD		
1970	P3	50	62.50	75.00	GYPSUM BOARD		
1962	P4	50	26950.00	32340.00	GYPSUM BOARD		
1138	P2452	50	420.00	560.00	AIRDUCT MATERIAL		
1831	P23193	48	0.00	0.00	DUCT INSULATION		
1831	P23132	48	0.00	0.00	DUCT INSULATION		
1831	P23125	48	800.00	1100.00	DUCT INSULATION		
1804	A4	48	195.00	260.00	MUD JOINTS		
1804	A5	48	195.00	260.00	MUD JOINTS		
1804	A6	48	195.00	260.00	MUD JOINTS		
20	P322	48	60.00	80.00	FLEXIBLE DUCT CONNECTOR		
1017	P18	47	180.00	240.00	FLEXIBLE DUCT CONNECTOR		
226	P5	47	520.00	975.00	STRAIGHT PIPE INSULATION		
801	999A	47	50.00	75.00	FIRE DOOR		
3230	999A	47	100.00	150.00	FIRE DOORS		
1931	999A	47	175.50	216.00	TRANSITE WALLBOARD ADDED		
226	P9	47	0.00	0.00	STRAIGHT PIPE INSULATION		
247	999B	47	12800.00	19200.00	FIRE DOORS		

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BLDG NUMBER	SAMPLE NUMBER	RISK INDEX	LOW COST	HIGH COST	MATERIAL TYPE	ROOM USE	COMMENTS
1949	P7	47	1600.00	3000.00	AIRCELL, METAL CASING SPLIT & DAMAGED		
305	999A	47	750.00	1125.00	FIRE DOORS		
1440	999A	47	240.00	320.00	FLEXIBLE DUCT CONNECTOR		
1469	P1000X	47	150.00	225.00	FIRE DOORS		
705	P12	46	630.00	810.00	FLOOR TILE		
705	P2	46	2555.00	3285.00	FLOOR TILE		
357	P1049	45	40607.00	52209.00	FLOOR COVERING		
1001	999A	44	300.00	450.00	FIRE DOORS		
211	P524	44	120.00	160.00	FLEXIBLE DUCT CONNECTOR		
805	P1682	44	120.00	160.00	FLEXIBLE CONNECTOR		
1138	999A	44	48.75	60.00	TRANSITE WALLBOARD		
231	P7A	43	0.00	0.00	TANK INSULATION		
231	P7B	43	0.00	0.00	TANK INSULATION		
231	P7	43	612.00	714.00	TANK INSULATION		
1920	P5	43	240.00	450.00	AIRCELL ABOVE DROP CEILING		
201	201	43	2190.00	3650.00	MASTIC (TILE REMOVED)		
348	999A	43	630.00	810.00	FLOOR TILE		
1426	P4	43	0.00	0.00	ELBOWS		
201	202	43	0.00	0.00	MASTIC (ASBESTOS FLOOR TILE REMOVED)		
745	P1000X	42	3900.00	4800.00	TRANSITE WALLBOARD		
1089	P7	42	4095.00	5040.00	TRANSITE WALLBOARD		
202	P2B	42	0.00	0.00	PIPE JOINT INSULATION		
202	P2A	42	120.00	160.00	PIPE JOINT INSULATION		
219	P1250	41	858.00	1056.00	TRANSITE WALLBOARD		
3165	999A	41	700.00	1050.00	FIRE DOORS		
98	P1000X	41	60.00	80.00	FLEXIBLE CONNECTOR		

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BLDG NUMBER	SAMPLE NUMBER	RISK INDEX	LOW COST	HIGH COST	MATERIAL TYPE	ROOM USE	COMMENTS
3138	108	41	925.20	1079.40	TANK INSULATION		
240	P3	41	900.00	1170.00	ACOUSTICAL CEILING TILE		
1901	P12	41	48.75	60.00	AIRCELL ON WALLS		
3138	109	41	0.00	0.00	TANK INSULATION		
334	P1883	41	271.50	352.95	CEILING TILE (ABOVE DROP CEILING)		
1471	999C	41	250.00	375.00	FIRE DOORS		
357	P1075	41	137057.70	168686.40	WALL BOARD		
1467	999A	41	100.00	150.00	FIRE DOORS		
314	P1593	40	280.00	525.00	STRAIGHT PIPE		
305	P1840	40	292.50	360.00	TRANSITE BOARD		
331	P145	40	8970.00	11040.00	TRANSITE WALL BOARD		
701	P2	40	6510.00	8370.00	FLOOR TILE		
701	P8	40	0.00	0.00	FLOOR TILE		
1920	P6	38	150.00	200.00	PIPE JOINTS ABOVE DROP CEILING		
1812	999A	38	150.00	225.00	FIRE DOORS		
1961	999A	38	60.00	80.00	FLEXIBLE CONNECTOR		
3234	P2	38	6877.50	8842.50	FLOOR TILE		
1922	P1000X	38	60.00	80.00	FLEXIBLE CONNECTOR		
205	P5	38	1170.00	1560.00	PIPE JOINT INSULATION		
219	P1303	38	0.00	0.00	PIPE JOINT INSULATION		
205	P4	38	560.00	1050.00	STRAIGHT PIPE INSULATION		
205	P4A	38	0.00	0.00	STRAIGHT PIPE INSULATION		
801	P1669	38	86.40	100.80	TANK INSULATION		
1017	P12	38	160.00	300.00	STRAIGHT PIPE		
205	P5A	38	0.00	0.00	PIPE JOINTS		
808	999A	38	900.00	1237.50	INSULLATION ON DUCT		
1017	P12A	38	0.00	0.00	STRAIGHT PIPE		

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BLDG NUMBER	SAMPLE NUMBER	RISK INDEX	LOW COST	HIGH COST	MATERIAL TYPE	ROOM USE	COMMENTS
1200	P11	38	0.00	0.00	FLOOR TILE		
1200	P12	38	0.00	0.00	FLOOR TILE		
1416	P7	38	70.00	90.00	FLOOR TILE		
1200	P8	38	25970.00	33390.00	FLOOR TILE		
1200	P19	38	0.00	0.00	FLOOR TILE		
1416	P6	38	10500.00	13500.00	FLOOR TILE		
210	P730	36	0.00	0.00	VINYL FLOOR TILE		
1475	P2	36	0.00	0.00	FLOOR TILE		
1475	P1	36	58684.50	75451.50	FLOOR TILE		
1475	P7	36	0.00	0.00	FLOOR TILE		
210	P708	36	4567.50	5872.50	VINYL FLOOR TILE		
2470	P2	36	10038.00	12906.00	FLOOR TILE		
210	P722	36	0.00	0.00	VINYL FLOOR TILE		
210	P726	36	0.00	0.00	VINYL FLOOR TILE		
3231	P13	36	0.00	0.00	FLOOR TILE		
3231	P12	36	0.00	0.00	FLOOR TILE		
3231	P3	36	0.00	0.00	FLOOR TILE		
3231	P7	36	0.00	0.00	FLOOR TILE		
3231	P5	36	11413.50	14674.50	FLOOR TILE		
3231	P6	36	0.00	0.00	FLOOR TILE		
1017	P1000X	36	0.00	0.00	TANK INSULATION		
1906	P2	35	60.00	80.00	GASKETS		
3231	P1000Z	35	16095.30	19809.60	TRANSITE BOARD		
1108	P23014	35	272.00	510.00	STRAIGHT PIPE INSULATION		
246	999C	35	10801.00	13887.00	FLOOR TILE		
1108	P23015	35	180.00	240.00	PIPE FITTINGS		
805	P1704	35	0.00	0.00	FLOOR TILE		
805	P1683	35	7210.00	9270.00	FLOOR TILE		

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BLDG NUMBER	SAMPLE NUMBER	RISK INDEX	LOW COST	HIGH COST	MATERIAL TYPE	ROOM USE	COMMENTS
220	P13	35	450.00	600.00	PIPE JOINTS		
361	999A	35	50.00	75.00	FIRE DOOR		
714	P15	35	24.00	45.00	STRAIGHT PIPE INSULATION		
3145	999B	35	250.00	375.00	FIRE DOOR		
268	P1407	35	1304.00	2445.00	STRAIGHT PIPE INSULATION		
3165	102	35	10.50	13.50	FLOOR TILE		
269	999A	35	250.00	375.00	FIRE DOORS		
268	P1412	35	0.00	0.00	STRAIGHT PIPE INSULATION		
268	P1416	35	0.00	0.00	STRAIGHT PIPE INSULATION		
3126	P2	35	15326.50	19705.50	FLOOR TILE		
3126	P3	35	0.00	0.00	FLOOR TILE		
1824	A4	35	48.00	90.00	STRAIGHT PIPE ABOVE CEILING		
1824	A5	35	0.00	0.00	STRAIGHT PIPE ABOVE CEILING		
1412	999A	35	350.00	525.00	FIRE DOOR		
1030	999A	35	300.00	450.00	FIRE DOORS		
1824	A6	35	96.00	180.00	STRAIGHT PIPE ABOVE CEILING		
2593	P1	34	77126.00	99162.00	FLOOR TILE		
205	999A	34	650.00	975.00	FIRE DOORS		
1099	999A	34	3.90	4.80			
1950	P1188	34	2400.00	4500.00	AIRCELL METAL CASING IS DAMAGED		
1499	109	34	300.00	400.00	ELBOWS		
246	999D	33	350.00	450.00	FLOOR TILE		
808	P22	33	0.00	0.00	FLOOR TILE		
808	P23	33	0.00	0.00	FLOOR TILE		
808	P309	33	0.00	0.00	FLOOR TILE		
808	P412	33	0.00	0.00	FLOOR TILE		
808	P218	33	0.00	0.00	FLOOR TILE		

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BLDG NUMBER	SAMPLE NUMBER	RISK INDEX	LOW COST	HIGH COST	MATERIAL TYPE	ROOM USE	COMMENTS
1017	P11	33	0.00	0.00	FLOOR TILE		
1017	P10	33	0.00	0.00	FLOOR TILE		
808	P211	33	0.00	0.00	FLOOR TILE		
1017	P9	33	0.00	0.00	FLOOR TILE		
1017	P8	33	40040.00	51480.00	FLOOR TILE		
808	P506	33	0.00	0.00	FLOOR TILE		
808	P14	33	0.00	0.00	FLOOR TILE		
808	P13	33	278169.50	357646.50	FLOOR TILE		
808	P15	33	0.00	0.00	FLOOR TILE		
808	P15A	33	0.00	0.00	FLOOR TILE		
808	P205	33	0.00	0.00	FLOOR TILE		
808	P16	33	0.00	0.00	FLOOR TILE		
808	P20	33	0.00	0.00	FLOOR TILE		
808	P160	33	0.00	0.00	FLOOR TILE		
808	P17	33	0.00	0.00	FLOOR TILE		
246	P2	33	1750.00	2250.00	FLOOR TILE		
808	P18	33	0.00	0.00	FLOOR TILE		
950	999D	33	0.00	0.00	FLOOR TILE		
399	P1000X	32	400.00	600.00	FIRE DOOR		
226	P10A	32	0.00	0.00	ELBOWS		
226	P10	32	120.00	160.00	ELBOWS		
2118	P3	32	1960.00	2520.00	FLOOR TILE		
219	P1300	32	192.00	360.00	STRAIGHT PIPE INSULATION		
190	999A	32	50.00	75.00	FIRE DOOR		
708	P1000X	32	2067.00	2544.00	TRANSITE WALLBOARD		
268	P1404	32	855.00	1140.00	PIPE JOINTS		
268	P1408	32	0.00	0.00	PIPE JOINTS		
268	P1411	32	0.00	0.00	PIPE JOINTS		

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BLDG NUMBER	SAMPLE NUMBER	RISK INDEX	LOW COST	HIGH COST	MATERIAL TYPE	ROOM USE	COMMENTS
268	P1415	32	0.00	0.00	PIPE JOINTS		
257	P835	32	240.00	450.00	AIRCELL		
3137	P23156	32	680.00	1275.00	AIRCELL STRAIGHT PIPE		
257	P836	32	0.00	0.00	AIRCELL		
257	P834	32	225.00	300.00	PIPE JOINTS ABOVE CEILING		
257	P837	32	0.00	0.00	PIPE JOINTS ABOVE CIELING		
256	999A	32	20.00	37.50	STRAIGHT PIPE ABOVE CEILING		
741	999A	32	200.00	300.00	FIRE DOORS		
714	P9	32	255.00	340.00	PIPE JOINTS		
1697	999A	32	6972.00	8964.00	FLOOR TILE		
498	P8	31	66621.75	81996.00	TRANSITE SIDING		
246	P1	31	122.50	157.50	FLOOR TILE		
246	999E	31	7336.00	9432.00	FLOOR TILE		
1962	P1	31	8750.00	11250.00	FLOOR TILE		
1962	P1A	31	0.00	0.00	FLOOR TILE		
1961	P8	31	122.50	157.50	FLOOR TILE		
1099	P2416	30	0.00	0.00			
322	P867	30	15400.00	19800.00	WALL COVERING		
1099	P2411	30	41877.50	53842.50			
1099	P2417	30	0.00	0.00			
1099	P2415	30	0.00	0.00			
1099	P2412	30	0.00	0.00			
1017	P16	30	185.00	203.50	LIGHT FIXTURE PAPER		
331	P1016	30	0.00	0.00	FLOOR TILE		
3137	P23162	30	0.00	0.00	FLOOR TILE		
3137	999A	30	350.00	450.00	FLOOR TILE		
1916	999C	30	1176.00	1512.00	FLOOR TILE		
1491	P1	30	1449.00	1863.00	FLOOR TILE		

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BLDG NUMBER	SAMPLE NUMBER	RISK INDEX	LOW COST	HIGH COST	MATERIAL TYPE	ROOM USE	COMMENTS
331	P1017	30	0.00	0.00	FLOOR TILE		
331	P1329	30	0.00	0.00	FLOOR TILE		
331	P1021	30	0.00	0.00	FLOOR TILE		
357	P1054	30	0.00	0.00	FLOOR COVERING		
357	P1050	30	0.00	0.00	FLOOR COVERING		
331	P1018	30	0.00	0.00	FLOOR TILE		
331	P1020	30	0.00	0.00	FLOOR TILE		
331	P574	30	40250.00	51750.00	FLOOR TILE		
331	P1015	30	0.00	0.00	FLOOR TILE		
331	999A	29	300.00	450.00	FIRE DOORS		
399	P1	29	125128.50	160879.50	FLOOR TILE		
399	P105	29	0.00	0.00	FLOOR TILE		
1426	P2	29	1125.00	1500.00	ELBOWS		
1469	P1	29	542.50	697.50	FLOOR TILE		
315	999A	29	400.00	600.00	FIRE DOOR		
399	P200	29	0.00	0.00	FLOOR TILE		
1466	999A	29	7600.00	11400.00	FIRE DOORS		
1189	P3	29	24500.00	31500.00	FLOOR TILE		
1189	P1	29	1218.00	2030.00	FLOOR TILE		
3151	999A	29	150.00	225.00	FIRE DOOR		
712	999A	29	50.00	75.00	FIRE DOOR		
240	999A	28	120.00	160.00	FLEXIBLE DUCT CONNECTOR		
1024	999A	28	60.00	80.00	FLEX CONNECTOR		
362	P2048	28	0.00	0.00	FLOOR TILE		
362	P2047	28	0.00	0.00	FLOOR TILE		
807	P45	28	2016.00	2592.00	FLOOR TILE		
2593	P1A	28	154252.00	198324.00	FLOOR TILE		
366	107	28	0.00	0.00	ELBOWS		

Asbestos Survey
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BLDG NUMBER	SAMPLE NUMBER	RISK INDEX	LOW COST	HIGH COST	MATERIAL TYPE	ROOM USE	COMMENTS
2593	P1B	28	0.00	0.00	FLOOR TILE		
1471	999B	28	2387.00	3069.00	FLOOR TILE		
235	P1	28	7906.50	10165.50	BROWN FLOOR TILE		
362	P2045	28	2583.00	3321.00	FLOOR TILE		
1464	102	27	300.00	500.00	EXPOSED MASTIC		
1464	101	27	150.00	250.00	EXPOSED MASTIC		
1426	P1	27	2520.00	4725.00	STRAIGHT PIPE		
1426	P3	27	0.00	0.00	STRAIGHT PIPE		
322	P868	27	1755.00	2160.00	TRANSITE WALLBOARD		
708	P12	27	0.00	0.00	TAR WRAP		
258	P590	27	35.00	45.00	FLOOR TILE		
1906	P1	26	2100.00	2700.00	FLOOR TILE		
2991	P1000X	26	32.00	60.00	STRAIGHT PIPE AT HANGERS		
3151	P23007	26	0.00	0.00	FLOOR TILE		
220	P19	26	244300.00	314100.00	FLOOR TILE		
220	P21	26	0.00	0.00	FLOOR TILE		
200	P413	26	720.00	936.00	CEILING TILE		
3151	P23008	26	0.00	0.00	FLOOR TILE		
3145	P1	26	6405.00	8235.00	FLOOR TILE		
220	P20	26	0.00	0.00	FLOOR TILE		
3237	P23170	26	0.00	0.00	FLOOR TILE		
1920	P4	26	1050.00	1350.00	FLOOR TILE		
3237	P23168	26	5904.50	7591.50	FLOOR TILE		
309	P1569	26	17.50	22.50	FLOOR COVERING		
315	P1630	26	0.00	0.00	FLOOR TILE		
203	P264	26	74872.00	96264.00	VINYL FLOOR TILE		
315	P1629	26	189042.00	243054.00	FLOOR TILE		
320	P2224	26	0.00	0.00	FLOOR TILE		

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BLDG NUMBER	SAMPLE NUMBER	RISK INDEX	LOW COST	HIGH COST	MATERIAL TYPE	ROOM USE	COMMENTS
317	P2290	26	700.00	900.00	FLOOR COVERING		
320	P2222	26	0.00	0.00	FLOOR TILE		
3069	999A	26	200.00	300.00	FIRE DOORS		
1187	999A	26	1330.00	1710.00	FLOOR TILE		
315	P1640	26	0.00	0.00	FLOOR TILE		
3070	999A	26	250.00	375.00	FIRE DOORS		
320	P2213	26	12183.50	15664.50	FLOOR TILE		
372	P1000X	26	50.00	75.00	FIRE DOOR		
320	P2216	26	0.00	0.00	FLOOR TILE		
320	P2217	26	0.00	0.00	FLOOR TILE		
203	P275	26	0.00	0.00	VINYL FLOOR TILE		
203	P276	26	0.00	0.00	VINYL FLOOR TILE		
203	P278	26	0.00	0.00	VINYL FLOOR TILE		
1440	P23287	26	6440.00	8280.00	FLOOR TILE		
203	P274	26	0.00	0.00	VINYL FLOOR TILE		
203	P271	26	0.00	0.00	VINYL FLOOR TILE		
324	P2293	26	32427.50	41692.50	FLOOR TILE		
324	P2298	26	0.00	0.00	FLOOR TILE		
315	P1632	26	0.00	0.00	FLOOR TILE		
324	P2299	26	0.00	0.00	FLOOR TILE		
3237	P23169	26	6002.50	7717.50	FLOOR TILE		
1434	P23052	26	3584.00	4608.00	FLOOR TILE		
1434	P23131	26	0.00	0.00	FLOOR TILE		
1434	P23130	26	0.00	0.00	FLOOR TILE		
1434	P23053	26	0.00	0.00	FLOOR TILE		
508	P1933	25	798.00	1026.00	FLOOR TILE		
508	P1937	25	0.00	0.00	FLOOR TILE		
1961	P5	25	420.00	540.00	FLOOR TILE		

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BLDG NUMBER	SAMPLE NUMBER	RISK INDEX	LOW COST	HIGH COST	MATERIAL TYPE	ROOM USE	COMMENTS
193	P3	25	42350.00	54450.00	FLOOR TILE		
215	P1359	25	0.00	0.00	FLOOR TILE		
3138	106	25	2061.50	2650.50	FLOOR TILE		
1169	P1	25	11725.00	15075.00	FLOOR TILE		
193	P4	25	0.00	0.00	FLOOR TILE		
1931	P8	25	156.00	192.00	TRANSITE WALLBOARD		
215	P1358	25	4462.50	5737.50	FLOOR TILE		
215	P1365	25	0.00	0.00	FLOOR TILE		
215	P1362	25	0.00	0.00	FLOOR TILE		
3138	107	25	0.00	0.00	FLOOR TILE		
215	P1361	25	0.00	0.00	FLOOR TILE		
1146	P7A	25	0.00	0.00	PIPE JOINTS		
1961	P3	25	4812.50	6187.50	FLOOR TILE		
1146	P7	25	150.00	200.00	PIPE JOINTS		
20	P330	25	0.00	0.00	FLOOR TILE		
374	P1	25	717.50	922.50	FLOOR TILE		
507	999A	25	84.00	108.00	FLOOR TILE		
1412	P6	25	9884.00	12708.00	FLOOR TILE		
1412	P7	25	0.00	0.00	FLOOR TILE		
1490	P1	24	378.00	486.00	FLOOR TILE		
392	P1	24	96250.00	123750.00	FLOOR TILE		
3065	P1	24	10920.00	14040.00	FLOOR TILE		
1442	P23321	24	70700.00	90900.00	FLOOR TILE UNDER CARPET		
1442	P23324	24	0.00	0.00	FLOOR TILE UNDER CARPET		
2590	999A	24	5789.00	7443.00	FLOOR TILE		
1426	P1000X	24	380.25	468.00	TRANSITE		
1185	999B	24	60.00	80.00	FLEXIBLE CONNECTOR		
1466	P1	24	192090.50	246973.50	BROWN/WHITE		

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BLDG NUMBER	SAMPLE NUMBER	RISK INDEX	LOW COST	HIGH COST	MATERIAL TYPE	ROOM USE	COMMENTS
1953	P1	24	3360.00	4320.00	FLOOR TILE		
1968	P9	24	280.00	360.00	FLOOR TILE		
1968	P11	24	1092.00	1404.00	FLOOR TILE		
1498	999A	24	13783.00	17721.00	FLOOR TILE		
1189	P8	24	1050.00	1400.00	PIPE JOINTS		
1968	P10	24	2870.00	3690.00	FLOOR TILE		
2115	P3	24	280.00	360.00	FLOOR TILE		
2592	999A	24	113400.00	189000.00	FLOOR TILE		
220	P11	24	960.00	1800.00	STRAIGHT PIPE INSULATION		
1466	P2	24	0.00	0.00	BROWN/WHITE		
3151	P23002	23	22767.50	29272.50	FLOOR TILE		
3232	999A	23	300.00	450.00	FIRE DOOR		
708	P1000Z	23	50.00	75.00	FIRE DOOR		
365	999A	23	350.00	525.00	FIRE DOOR		
1834	P11	23	4.00	5.50	INSULATION ON FLUE PIPE		
1199	P2	23	4900.00	6300.00	FLOOR TILE		
3235	999A	23	1100.00	1650.00	FIRE DOORS		
1193	P10	23	63.00	81.00	FLOOR TILE		
1962	P1000X	23	200.00	300.00	FIRE DOORS		
1099	P2413	23	1989.00	2448.00			
1193	P1	23	63.00	81.00	FLOOR TILE		
216	999A	23	150.00	225.00	FIRE DOORS		
3237	999A	23	150.00	225.00	FIRE DOORS		
325	P2245	23	0.00	0.00	FLOOR TILE		
505	999A	23	350.00	525.00	FIRE DOORS		
506	999A	23	350.00	525.00	FIRE DOORS		
1822	999A	23	23100.00	29700.00	FLOOR TILE		
325	P2246	23	15113.00	19431.00	FLOOR TILE		

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BLDG NUMBER	SAMPLE NUMBER	RISK INDEX	LOW COST	HIGH COST	MATERIAL TYPE	ROOM USE	COMMENTS
324	999A	23	1200.00	1800.00	FIRE DOORS		
312	999A	23	200.00	300.00	FIRE DOORS		
1467	P6	23	28.00	36.00	FLOOR TILE		
358	999A	23	150.00	225.00	FIRE DOORS		
325	P2248	23	0.00	0.00	FLOOR TILE		
380	P6	23	1925.00	2475.00	FLOOR TILE		
1185	999A	23	210.00	270.00	FLOOR TILE		
325	P2249	23	0.00	0.00	FLOOR TILE		
316	999A	23	50.00	75.00	FIRE DOOR		
317	999A	23	200.00	300.00	FIRE DOOR		
362	999A	23	450.00	675.00	FIRE DOORS		
303	999A	22	7392.00	9504.00	FLOOR TILE		
2476	P2	22	645.00	860.00	PIPE JOINTS		
1439	999A	22	4900.00	6300.00	FLOOR TILE		
329	P1911	22	0.00	0.00	FLOOR TILE		
324	P1534	22	38493.00	47376.00	TRANSITE WALL COVERING		
329	P1909	22	9310.00	11970.00	FLOOR TILE		
312	P1826	22	1750.00	2250.00	FLOOR TILE		
312	P1827	22	0.00	0.00	FLOOR TILE		
3066	P6	22	10423.00	13401.00	FLOOR TILE		
361	P5	22	0.00	0.00	FLOOR TILE		
1001	P931	22	0.00	0.00	FLOOR TILE		
324	P2296	22	0.00	0.00	TRANSITE WALL COVERING		
1001	P930	22	34650.00	44550.00	FLOOR TILE		
3136	P2464	22	39795.00	51165.00	FLOOR TILE		
361	P3	22	3850.00	4950.00	FLOOR TILE		
316	999B	22	105.00	135.00	FLOOR TILE		
329	P1910	22	0.00	0.00	FLOOR TILE		

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BLDG NUMBER	SAMPLE NUMBER	RISK INDEX	LOW COST	HIGH COST	MATERIAL TYPE	ROOM USE	COMMENTS
2476	P2A	22	0.00	0.00	PIPE JOINTS		
316	P1802	22	68449.50	88006.50	FLOOR TILE		
316	P1803	22	0.00	0.00	FLOOR TILE		
316	P1805	22	0.00	0.00	FLOOR TILE		
1471	999A	22	574.00	738.00	FLOOR TILE UNDER CARPET		
316	P1809	22	0.00	0.00	FLOOR TILE		
1001	P936	22	0.00	0.00	FLOOR TILE		
1001	P937	22	0.00	0.00	FLOOR TILE		
317	P2271	22	0.00	0.00	FLOOR TILE		
317	P2283	22	0.00	0.00	FLOOR TILE		
321	P2210	22	42.00	54.00	FLOOR TILE		
317	P2268	22	6884.50	8851.50	FLOOR TILE		
317	P2291	22	0.00	0.00	FLOOR TILE		
505	999B	22	1400.00	1800.00	FLOOR TILE		
320	P2229	22	0.00	0.00	FLOOR TILE		
320	P2223	22	2730.00	3510.00	FLOOR TILE		
247	P194	22	343.00	441.00	GRAY		
247	P339	22	101.50	130.50	GRAY		
1024	P1	22	52500.00	67500.00	FLOOR TILE		
247	P338	22	1837.50	2362.50	TAN		
247	P199	22	175.00	225.00	BLUE		
247	P172	22	105.00	135.00	PINK		
1155	P3	22	16365.00	27275.00	MASTIC UNDER TILE		
1155	P3A	22	0.00	0.00	MASTIC UNDER TILE		
247	P169	22	4970.00	6390.00	TAN		
337	999B	22	11375.00	14625.00	FLOOR TILE		
247	P170	22	51975.00	66825.00	WHITE		
247	P183	22	54022.50	69457.50	PINK		

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BLDG NUMBER	SAMPLE NUMBER	RISK INDEX	LOW COST	HIGH COST	MATERIAL TYPE	ROOM USE	COMMENTS
323	999A	22	420.00	540.00	FLOOR TILE		
247	P174	22	177310.00	227970.00	BROWN		
1499	108	22	300.00	400.00	PIPE VALVES		
226	P6	22	3220.00	4140.00	FLOOR TILE		
950	P7	22	612.50	787.50	FLOOR TILE		
226	P6A	22	0.00	0.00	FLOOR TILE		
329	999A	22	7350.00	9450.00	FLOOR TILE		
365	999B	22	700.00	900.00	FLOOR TILE		
1499	107	22	300.00	400.00	ELBOWS		
187	P385	21	2233.00	2871.00	FLOOR TILE		
258	999A	21	1400.00	1800.00	FLOOR TILE		
187	P386	21	0.00	0.00	FLOOR TILE		
191	999A	21	22400.00	28800.00	NEW FLOOR TILE OVER OLD GREEN 9X9 TILE		
202	P13	21	1050.00	1350.00	FLOOR TILE		
3232	P10	21	0.00	0.00	FLOOR TILE		
3232	P7	21	4028.50	5179.50	FLOOR TILE		
3232	P8	21	2940.00	3780.00	FLOOR TILE		
204	999A	21	1750.00	2250.00	FLOOR TILE		
1834	P4	21	4375.00	5625.00	FLOOR TILE		
189	999A	21	2887.50	3712.50	NEW FLOOR TILE		
705	999A	21	1008.00	1296.00	FLOOR TILE		
20	P331	21	7.00	9.00	FLOOR TILE		
20	P318	21	2005.50	2578.50	FLOOR TILE		
1834	P3	21	1312.50	1687.50	FLOOR TILE		
20	P335	21	0.00	0.00	FLOOR TILE		
507	999E	21	2800.00	3600.00	FLOOR TILE		
714	999B	21	273.00	351.00	FLOOR TILE		

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BLDG NUMBER	SAMPLE NUMBER	RISK INDEX	LOW COST	HIGH COST	MATERIAL TYPE	ROOM USE	COMMENTS
707	999B	21	525.00	675.00	FLOOR TILE		
81	999A	21	1575.00	2025.00	FLOOR TILE		
340	999A	21	4725.00	6075.00	FLOOR TILE		
205	999B	21	595.00	765.00	FLOOR TILE		
222	999A	21	227.50	292.50	FLOOR TILE		
80	999A	21	560.00	720.00	FLOOR TILE		
221	999A	21	231.00	297.00	FLOOR TILE		
246	999A	21	910.00	1170.00	FLOOR TILE		
1917	999A	21	4427.50	5692.50	FLOOR TILE		
3126	999A	21	150.00	225.00	FIRE DOORS		
353	P1978	21	2345.00	3015.00	FLOOR TILE		
2436	101	21	78.00	96.00	TRANSITE WALLBOARD		
353	P1979	21	0.00	0.00	FLOOR TILE		
354	P1925	21	973.00	1251.00	FLOOR TILE		
1154	999A	21	147.00	189.00	FLOOR TILE		
354	P1926	21	0.00	0.00	FLOOR TILE		
3066	P4	21	58.50	72.00	TRANSITE WALLBOARD		
354	P1923	21	0.00	0.00	FLOOR TILE		
508	999A	21	2100.00	2700.00	FLOOR TILE		
1494	999A	21	1400.00	1800.00	FLOOR TILE		
508	P1939	21	52.50	67.50	VINYL SHEET FLOORING		
1907	P119	21	504.00	648.00	FLOOR TILE		
204	999B	20	250.00	375.00	FIRE DOORS		
1000	106	20	0.00	0.00	STRAIGHT PIPE		
1464	999A	20	3900.00	5850.00	FIRE DOORS		
202	999A	20	100.00	150.00	FIRE DOOR		
1000	105	20	0.00	0.00	STRAIGHT PIPE		
1000	104	20	560.00	1050.00	STRAIGHT PIPE		

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BLDG NUMBER	SAMPLE NUMBER	RISK INDEX	LOW COST	HIGH COST	MATERIAL TYPE	ROOM USE	COMMENTS
3153	999A	20	50.00	75.00	FIRE DOOR		
2592	105	20	0.00	0.00	FLOOR MASTIC		
630	999A	20	100.00	150.00	FIRE DOORS		
704	P1000Y	20	50.00	75.00	FIRE DOOR		
1968	P8	20	180.00	300.00	MASTIC		
1193	P1000X	20	200.00	300.00	FIRE DOOR		
7395	999A	20	787.50	1012.50	FLOOR TILE		
193	999A	20	250.00	375.00	FIRE DOORS		
1155	999A	20	38185.00	49095.00	REPLACEMENT TILE		
1908	999A	20	300.00	450.00	FIRE DOORS		
1196	999A	20	50.00	75.00	FIRE DOOR		
1186	P1	20	7245.00	9315.00	FLOOR TILE		
950	P1	20	195.00	260.00	3/4"WATER,1" & 5" HEATING		
305	P1845	20	0.00	0.00	FLOOR TILE		
331	P1022	20	910.00	1170.00	FLOOR COVERING		
470	P8C	20	0.00	0.00	FLOOR TILE		
307	P1388	20	1242.50	1597.50	FLOOR TILE		
305	P1847	20	0.00	0.00	FLOOR TILE		
315	P1643	20	300.00	500.00	MASTIC		
1133	999A	20	50.00	75.00	FIRE DOOR		
307	P1389	20	0.00	0.00	FLOOR TILE		
366	999A	20	0.00	0.00	FLOOR TILE		
309	P1577	20	0.00	0.00	FLOOR TILE		
309	P1567	20	0.00	0.00	FLOOR TILE		
309	P1570	20	0.00	0.00	FLOOR TILE		
1804	A1	20	200.00	375.00	AIRCELL		
1804	A2	20	200.00	375.00	AIRCELL		
1804	A3	20	0.00	0.00	AIRCELL		

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BLDG NUMBER	SAMPLE NUMBER	RISK INDEX	LOW COST	HIGH COST	MATERIAL TYPE	ROOM USE	COMMENTS
309	P1706	20	0.00	0.00	FLOOR TILE		
305	P1842	20	105000.00	135000.00	FLOOR TILE		
950	101	20	24.00	30.00	TAR WRAP AC COMPRESSOR		
1154	999B	20	50.00	75.00	FIRE DOOR		
309	P1566	20	1904.00	2448.00	FLOOR TILE		
1436	P23215	20	14266.00	18342.00	FLOOR TILE		
470	P15A	20	0.00	0.00	VINYL SHEET		
1436	P23226	20	0.00	0.00	FLOOR TILE		
470	P15	20	0.00	0.00	VINYL SHEET		
2591	999A	20	10895.50	14008.50	FLOOR TILE		
1809	999A	20	750.00	1125.00	FIRE DOORS		
1819	999A	20	50.00	75.00	FIRE DOOR		
1934	999A	20	100.00	150.00	FIRE DOORS		
1813	999B	20	250.00	375.00	FIRE DOORS		
335	P2016	20	0.00	0.00	FLOOR TILE		9X9 FLOOR TILE
335	P2018	20	0.00	0.00	FLOOR TILE		9X9 FLOOR TILE
1805	999A	20	100.00	150.00	FIRE DOORS		
1938	999C	20	100.00	150.00	FIRE DOORS		
335	P2015	20	20314.00	26118.00	FLOOR TILE		9X9 FLOOR TILE
509	999A	19	420.00	540.00	FLOOR TILE		
3128	999A	19	388.50	499.50	FLOOR TILE		
3136	P23140	19	10.00	12.50	TAR SPACKLING ON FIBERGLASS		
1464	P23350	19	0.00	0.00	FLOOR TILE UNDER CARPET & TILE		
1464	P23343	19	17671.50	22720.50	FLOOR TILE UNDER CARPET & UNDER TILE		
1916	999B	19	100.00	150.00	FIRE DOORS		
1952	999A	19	6720.00	8640.00	FLOOR TILE		
2101	999A	19	21000.00	27000.00	FLOOR TILE		

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BLDG NUMBER	SAMPLE NUMBER	RISK INDEX	LOW COST	HIGH COST	MATERIAL TYPE	ROOM USE	COMMENTS
1938	999A	19	885.50	1138.50	FLOOR TILE		
1911	P6	19	1953.00	2511.00	FLOOR TILE		
1802	P2A	19	0.00	0.00	FLOOR TILE		
1922	P5	19	4375.00	5625.00	FLOOR TILE		
509	P2023	19	2275.00	2925.00	FLOOR TILE		
191	999B	19	22400.00	28800.00	FLOOR TILE		
1109	P23027	19	1421.00	1827.00	FLOOR TILE		
509	P2025	19	350.00	450.00	FLOOR TILE		
3153	999B	19	504.00	648.00	FLOOR TILE		
1931	P1000X	19	60.00	80.00	FLEXIBLE CONNECTOR		
1837	999B	19	60.00	80.00	FLEXIBLE CONNECTORS		
1084	999A	19	2100.00	2700.00	FLOOR TILE		
1146	P2	19	420.00	540.00	FLOOR TILE		
1950	P1185	19	770.00	990.00	FLOOR TILE		
498	999A	19	300.00	450.00	FIRE DOORS		
214	P3	19	525.00	675.00	FLOOR TILE		
1970	P1	19	1288.00	1656.00	FLOOR TILE		
1802	P2	19	2877.00	3699.00	FLOOR TILE		
745	P12	18	148.00	277.50	STRAIGHT PIPE INSULATION		
1142	999A	18	420.00	540.00	FLOOR TILE		
1084	111	18	0.00	0.00	TAR ON WALLS & CEILING		
712	P1	18	700.00	900.00	FLOOR TILE		
2120	P1000X	18	180.00	240.00	FLEXIBLE CONNECTORS		
1084	105	18	0.00	0.00	TAR PAPER ON CEILING		
1084	104	18	0.00	0.00	TAR PAPER ON CEILING		
1084	103	18	6989.50	8986.50	TAR PAPER ON CEILING		
1084	112	18	0.00	0.00	TAR ON WALLS & CEILING		
1498	107	18	645.00	860.00	PIPE JOINTS		

Asbestos Survey
Rank Individual Area
by Risk Index
(Immediate Hazards First)

BLDG NUMBER	SAMPLE NUMBER	RISK INDEX	LOW COST	HIGH COST	MATERIAL TYPE	ROOM USE	COMMENTS
1498	108	18	0.00	0.00	PIPE JOINTS		
1498	109	18	0.00	0.00	PIPE JOINTS		
2991	101	18	19.50	24.00	TRANSITE WALLBOARD AT FLUE		
2594	999A	18	22344.00	28728.00	FLOOR TILE		
1498	110	18	0.00	0.00	PIPE JOINTS		
372	P4	18	0.00	0.00	FLOOR TILE		
1915	999B	18	60.00	80.00	CANVAS CONNECTOR		
372	P2	18	0.00	0.00	FLOOR TILE		
372	P1	18	10220.00	13140.00	FLOOR TILE		
808	P1000Y	18	540.00	720.00	FLEXIBLE CONNECTORS		
1195	110	18	0.00	0.00			
1194	999A	18	2327.50	2992.50	FLOOR TILE		
1195	111	18	0.00	0.00			
1195	109	18	180.00	337.50	STRAIGHT PIPE		
808	P213	17	96.00	160.00	MASTIC		
808	P1000W	17	117.00	144.00	TRANSITE WALL PANELS		
1826	999A	17	250.00	375.00	FIRE DOORS		
2592	999B	17	50.00	75.00	FIRE DOORS		
1834	999A	17	100.00	150.00	FIRE DOORS		
1837	999A	17	50.00	75.00	FIRE DOOR		
1970	P1000X	17	150.00	225.00	FIRE DOORS		
740	P3	17	441.00	567.00	FLOOR TILE		
1113	P2514	17	18375.00	23625.00	FLOOR TILE		
1113	P2515	17	0.00	0.00	FLOOR TILE		
1113	P2516	17	0.00	0.00	FLOOR TILE		
1962	P10A	17	960.00	1800.00	AIRCELL		
1810	999A	17	450.00	675.00	FIRE DOORS		
1426	999A	17	180.00	240.00	CONNECTORS		

Asbestos Survey
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BLDG NUMBER	SAMPLE NUMBER	RISK INDEX	LOW COST	HIGH COST	MATERIAL TYPE	ROOM USE	COMMENTS
357	999A	17	500.00	750.00	FIRE DOOR		
470	P1000X	17	1100.00	1650.00	FIRE DOOR		
392	P1000X	17	600.00	900.00	FIRE DOORS		
307	999A	17	300.00	450.00	FIRE DOORS		
380	P8	17	3570.00	4590.00	FLOOR TILE		
309	999A	17	500.00	750.00	FIRE DOORS		
1912	999A	17	4252.50	5467.50	FLOOR TILE COVERED BY CARPET		
201	P251	16	0.00	0.00	VINYL FLOOR TILE UNDER CARPET		
201	P246	16	0.00	0.00	VINYL FLOOR TILE UNDER CARPET		
201	P245	16	85564.50	110011.50	VINYL FLOOR TILE UNDER CARPET		
1030	104	16	48.00	60.00	TAR WRAP		
201	P249	16	0.00	0.00	VINYL FLOOR TILE UNDER CARPET		
1916	999A	16	60.00	80.00	FLEXIBLE CONNECTOR		
1030	103	16	48.00	60.00	TAR WRAP		
808	P36	16	7672.00	14385.00	STRAIGHT PIPE		
808	P112	16	0.00	0.00	STRAIGHT PIPE		
808	P43	16	0.00	0.00	STRAIGHT PIPE		
808	P166	16	0.00	0.00	STRAIGHT PIPE		
808	P115	16	0.00	0.00	STRAIGHT PIPE		
808	P207	16	0.00	0.00	STRAIGHT PIPE		
1812	P4	16	2302.95	2834.40	TRANSITE WALLBOARD		
1425	999A	16	32235.00	41445.00	FLOOR TILE		
815	999A	16	800.00	1200.00	FIRE DOORS		
270	P1551	15	4704.00	7840.00	CEILING PLASTER		
270	P1556	15	0.00	0.00	CEILING PLASTER		
1153	P1000X	15	487.50	600.00	WALL AND CEILING TRANSITE BOARD		
1901	P11	15	156.00	192.00	TRANSITE WALLBOARD		

Asbestos Survey
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BLDG NUMBER	SAMPLE NUMBER	RISK INDEX	LOW COST	HIGH COST	MATERIAL TYPE	ROOM USE	COMMENTS
1802	P4	15	420.00	540.00	FLOOR TILE		
1018	P3	15	24199.00	31113.00	FLOOR TILE		
1018	P8	15	0.00	0.00	FLOOR TILE		
1917	999B	15	60.00	80.00	FLEXIBLE CONNECTOR		
950	999B	15	95.00	104.50	LIGHT FIXTURE PAPER		
1428	P23219	15	2849.00	3663.00	FLOOR TILE		
1903	104	15	78.00	96.00	TRANSITE WALLBOARD		
1917	106	15	19.50	24.00	TRANSITE WALLBOARD		
1831	P23120	15	1190.00	1530.00	FLOOR TILE		
1813	999A	15	60.00	80.00	FLEXIBLE CONNECTOR		
1428	P23220	15	1221.00	2035.00	MASTIC		
1806	999A	15	5152.00	6624.00	FLOOR TILE		
3145	P2	14	15368.50	19759.50	FLOOR TILE		
1949	999A	14	50.00	75.00	FIRE DOOR		
1017	106	14	40.00	50.00	PATCHING MATERIAL ON ROOF DRAIN		
1025	999A	14	15064.00	19368.00	FLOOR TILE		
2118	P2	14	1428.00	2380.00	MASTIC		
806	P57	14	7.00	9.00	FLOOR TILE		
1902	P15	14	336.00	432.00	FLOOR TILE		
2990	999A	14	250.00	375.00	FIRE DOORS		
1444	P2344	14	6300.00	8100.00	FLOOR TILE UNDER CARPET		
1911	P4	14	637.00	819.00	FLOOR TILE		
1911	P5	14	1953.00	2511.00	FLOOR TILE		
1902	P10	14	910.00	1170.00	FLOOR TILE		
2436	999B	14	10850.00	13950.00	FLOOR TILE		
1911	P7	13	456.30	561.60	TRANSITE WALLBOARD, INCLUDES CEILING		

Asbestos Survey
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BLDG NUMBER	SAMPLE NUMBER	RISK INDEX	LOW COST	HIGH COST	MATERIAL TYPE	ROOM USE	COMMENTS
1938	999B	13	60.00	80.00	FLEXIBLE CONNECTOR		
1902	P11	13	195.00	240.00	TRANSITE WALLBOARD		
326	P991	13	1462.50	1800.00	TRANSITE WALL BOARD		
1923	P1	13	124.80	153.60	TRANSITE WALLBOARD		
1903	999D	13	300.00	450.00	FIRE DOORS		
2105	999B	13	600.00	900.00	FIRE DOORS		
1834	P1000X	13	120.00	160.00	FLEXIBLE CONNECTORS		
707	P1000Z	13	120.00	160.00	FLEXIBLE CONNECTOR		
714	P17	13	0.00	0.00	FLOOR TILE		
740	P4	13	1400.00	1800.00	FLOOR TILE		
715	999A	13	203.00	261.00	FLOOR TILE		
714	P12	13	0.00	0.00	FLOOR TILE		
714	P10	13	3909.50	5026.50	FLOOR TILE		
714	P11	13	0.00	0.00	FLOOR TILE		
1189	101	13	80.00	100.00	TAR WRAP		
714	P14	13	0.00	0.00	FLOOR TILE		
1189	102	13	0.00	0.00	TAR WRAP		
81	P4	12	748.80	921.60	TRANSITE WALLBOARD IN STAIRWELLS		
80	P13	12	364.65	448.80	TRANSITE WALLBOARD		
3145	999A	12	420.00	560.00	FLEXIBLE CONNECTORS		
1822	P18	12	438.75	540.00	TRANSITE BOARD ABOVE CEILING		
3070	P4	12	15750.00	20250.00	FLOOR TILE		
3069	P6	12	15750.00	20250.00	FLOOR TILE		
2591	999B	12	60.00	80.00	FLEXIBLE CONNECTOR		
2591	108	12	1400.00	1925.00	DUCT INSULATION		
2591	109	12	0.00	0.00	DUCT INSULATION		
2591	110	12	0.00	0.00	DUCT INSULATION		

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BLDG NUMBER	SAMPLE NUMBER	RISK INDEX	LOW COST	HIGH COST	MATERIAL TYPE	ROOM USE	COMMENTS
336	P1651	12	962.50	1237.50	FLOOR TILE (COVERED BY CARPET)		
334	P1885	12	0.00	0.00	FLOOR TILE		
309	P1575	12	15262.65	18784.80	TRANSITE WALLBOARD		
1902	P14	12	146.25	180.00	TRANSITE WALLBOARD		
334	P1884	12	112.00	144.00	FLOOR TILE		
1154	999C	12	81.90	100.80	TRANSITE WALLBOARD		
1148	P2	11	504.00	648.00	FLOOR TILE		
1147	P1	11	4053.00	6755.00	ONLY MASTIC IS POSITIVE		
184	999A	11	17500.00	22500.00	FLOOR TILE		
270	P2061	11	60.00	80.00	FLEXIBLE CONNECTOR		
182	999B	11	150.00	225.00	FIRE DOORS		
1950	999A	11	300.00	450.00	FIRE DOORS		
2594	999B	11	3900.00	5850.00	FIRE DOORS		
193	P11	11	1200.00	1560.00	ACOUSTICAL TILE ABOVE DROP CEILING		
246	999B	11	400.00	600.00	FIRE DOORS		
81	P5	11	280.00	360.00	FLOOR TILE		
238	P1000X	10	1560.00	2080.00	FLEXIBLE CONNECTOR		
1901	P7	10	1050.00	1350.00	FLOOR TILE		
707	999A	10	499.20	614.40	TRANSITE WALLBOARD		
1148	999A	10	468.00	576.00	TRANSITE WALLBOARD		
258	P587	10	10080.00	12960.00	FLOOR TILE		
3065	P1000X	10	72.00	120.00	TRANSITE PLASTER		
718	999A	10	39.00	48.00	TRANSITE BULK HEAD		
1903	999B	10	195.00	240.00	TRANSITE WALLBOARD AS PART OF CEILING		
361	P9	10	1755.00	2160.00	TRANSITE WALLBOARD		
353	999A	10	975.00	1200.00	TRANSITE WALLBOARD		

Asbestos Survey
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BLDG NUMBER	SAMPLE NUMBER	RISK INDEX	LOW COST	HIGH COST	MATERIAL TYPE	ROOM USE	COMMENTS
1915	999A	9	7098.00	9126.00	FLOOR TILE		
1805	104	9	31.20	38.40	TRANSITE WALLBOARD		
3070	P3	9	1200.00	2000.00	PLASTER		
1804	999A	9	1050.00	1350.00	FLOOR TILE		
1934	P3	9	2380.00	3060.00	FLOOR TILE		
3069	P3	9	1200.00	2000.00	PLASTER		
630	999B	9	3594.50	4621.50	FLOOR TILE		
1148	P1000X	9	374.40	460.80	TRANSITE WALLBOARD		
1142	999B	9	109.20	134.40	TRANSITE WALLBOARD		
1143	999A	9	31.20	38.40	TRANSITE WALLBOARD		
80	P8	9	936.00	1152.00	TRANSITE WALLBOARD		
1908	P8	9	195.00	240.00	NEW TRANSITE WALLBOARD		
805	999A	9	300.00	450.00	FIRE DOORS		
365	999C	8	4459.00	5733.00	FLOOR TILE		
705	999B	8	702.00	864.00	TRANSITE BOARD		
226	999A	8	100.00	150.00	FIRE DOORS		
707	P1000Y	8	1887.60	2323.20	TRANSITE WALLBOARD		
240	P6	8	3022.50	3720.00	TRANSITE WALLBOARD		
1141	999A	8	31.20	38.40	TRANSITE WALLBOARD		
240	999B	8	50.00	75.00	FIRE DOOR		
337	999A	8	50.00	75.00	FIRE DOOR		
323	P5	8	0.00	0.00	FLOOR TILE		
323	P4	8	0.00	0.00	FLOOR TILE		
323	P1	8	0.00	0.00	FLOOR TILE		
1425	P1344	8	0.00	0.00	FLOOR TILE		
1425	P1353	8	0.00	0.00	FLOOR TILE		
1425	P1350	8	0.00	0.00	FLOOR TILE		
1425	P1354	8	32235.00	41445.00	FLOOR TILE		

Asbestos Survey
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BLDG NUMBER	SAMPLE NUMBER	RISK INDEX	LOW COST	HIGH COST	MATERIAL TYPE	ROOM USE	COMMENTS
470	999A	8	1155.00	1270.50	LIGHT FIXTURE PAPER		
508	P1946	7	50.00	62.50	TAR PUTTY		
1000	P2155	7	11641.00	14967.00	FLOOR TILE		
231	103	7	80.00	100.00	TAR WRAP		
205	P9	7	18627.00	23949.00	FLOOR TILE		
270	P1548	7	0.00	0.00	FLOOR TILE		
270	P1549	7	0.00	0.00	FLOOR TILE		
707	P5	7	0.00	0.00	FLOOR TILE		
270	P1553	7	1291.50	1660.50	FLOOR TILE		
1193	P14	7	97.50	120.00	TRANSITE WALLBOARD		
707	P4	7	0.00	0.00	FLOOR TILE		
270	999A	7	100.00	150.00	FIRE DOORS		
270	P1552	7	0.00	0.00	FLOOR TILE		
182	999A	7	15.60	19.20	TRANSITE BOARD ON FLOOR		
216	P11	7	4462.50	5737.50	FLOOR TILE		
205	P12	7	0.00	0.00	FLOOR TILE		
707	P3	7	20055.00	25785.00	FLOOR TILE		
1153	P2	7	555.00	925.00	MASTIC		
707	P1000X	7	1365.00	1680.00	TRANSITE WALLBOARD		
1804	999B	7	164.50	211.50	FLOOR TILE		
1903	999C	7	15557.50	20002.50	FLOOR TILE		
3070	P2	6	23.40	28.80	TRANSITE WALLBOARD		
3069	P1	6	23.40	28.80	TRANSITE WALLBOARD		
2105	999A	6	42000.00	54000.00	FLOOR TILE		
258	P586	6	4320.00	7200.00	MASTIC		
1953	P1A	6	1440.00	2400.00	MASTIC		
1906	P1A	6	900.00	1500.00	MASTIC		
709	P1000Y	6	100.00	150.00	FIRE DOORS		

Asbestos Survey
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BLDG NUMBER	SAMPLE NUMBER	RISK INDEX	LOW COST	HIGH COST	MATERIAL TYPE	ROOM USE	COMMENTS
1108	999A	6	100.00	150.00	FIRE DOORS		
1826	P4	6	4500.00	7500.00	MASTIC		
2592	B3	6	75.00	135.00	FLU STACK INSULATION		
20	999A	5	450.00	675.00	FIRE DOORS		
1186	P1000X	5	10.00	11.00	FIXTURE PAPER		
631	999A	5	1244.10	1531.20	TRANSITE WALLBOARD AROUND DOOR AND SOFFIT		
1146	P1000X	5	50.00	75.00	FIRE DOOR		
701	999A	5	1680.00	2160.00	FLOOR TILE		
3070	999B	5	60.00	80.00	FLEXIBLE CONNECTOR		
2436	999A	5	120.00	160.00	FLEXIBLE CONNECTORS		
1809	P3	4	4795.00	6165.00	FLOOR TILE UNDER CARAPET		
1169	P1000X	4	585.00	720.00	TRANSITE WALLBOARD		
714	999A	4	150.00	225.00	FIRE DOORS		
629	999A	4	1170.00	1440.00	SOFFIT		
1499	999B	3	12250.00	15750.00	FLOOR TILE		
329	B1	1	2.00	3.00	DEBRIS		
1001	999B	1	10.00	11.00	FIXTURE PAPER		
507	999D	1	50.00	75.00	FIRE DOOR		
507	999C	1	100.00	150.00	DEBRIS		
498	P7	1	31500.00	40500.00	FLOOR TILE		
435	999C	1	450.00	600.00	PIPE JOINTS		
399	P303	1	0.00	0.00	FLOOR TILE		
257	P1315	1	31762.50	40837.50	FLOOR TILE		
215	P1379	1	682.50	840.00	TRANSITE BOARD		
708	S1	1	4464.00	6696.00	INSULATION DEBRIS		
399	B1	1	120.00	160.00	FLEX CONNECTOR		
203	P291	1	1680.00	2520.00	FIRING RANGE DEBRIS		

Asbestos Survey
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BLDG NUMBER	SAMPLE NUMBER	RISK INDEX	LOW COST	HIGH COST	MATERIAL TYPE	ROOM USE	COMMENTS
1200	P999A	1	100.00	150.00	FIRE DOOR		
312	B1	1	40.00	60.00	DEBRIS		
805	P1685	1	0.00	0.00	FLOOR TILE		
805	P1702	1	0.00	0.00	FLOOR TILE		
805	P1684	1	0.00	0.00	FLOOR TILE		
805	P1703	1	0.00	0.00	FLOOR TILE		
*** Total ***			4683287.80	6114886.80			

Asbestos Survey
Samples To-date List

BLDG NUMBER	SAMPLE NUMBER	LAB ID	CAD LOC	MATERIAL TYPE	TOTAL ASBESTOS
0	0				0
0	0				0
0	0				0
0	0				0
0	0				0
0	0				0
0	0				0
0	0				0
20	P331	20331	F6	FLOOR TILE	5
20	P335	20335	H4	FLOOR TILE	5
20	999A	ASSUMED		FIRE DOORS	50
20	P330	20330	F6	FLOOR TILE	10
20	P318	20318	E5	FLOOR TILE	5
20	P328	20328	H6	FLOOR TILE	5
20	B1	165-01	F5	FLUE INSULATION	15
20	B3	165-03	F5	PATCHING MATERIAL	0
20	B2	165-02	F5	BLANKET INSULATION	0
20	P322	20322	D7	FLEXIBLE DUCT CONNECTOR	0
80	P8	8008	I6	TRANSITE WALLBOARD	60
80	P13	8013	G7	TRANSITE WALLBOARD	65
80	999A	ASSUMED	H7	FLOOR TILE	0
81	999A	ASSUMED	E7	FLOOR TILE	0
81	P5	8105	E7	FLOOR TILE	2
81	P4	8104	E6	TRANSITE WALLBOARD IN STAIRWELLS	50
98	P1000X	9800X	G3	FLEXIBLE CONNECTOR	3
99	P3	9903	F3	STRAIGHT PIPE INSULATION	65
99	P999A	ASSUMED	H5	TRANSITE WALLBOARD	50
99	P6	9906	G4	DEBRIS	10
99	P4	9904	F3	PIPE JOINTS	70
99	P5	9905	G4	BOILER JACKET	70
182	999B	ASSUMED	I5	FIRE DOORS	50
182	999A	ASSUMED	I4	TRANSITE BOARD ON FLOOR	50
184	999A	ASSUMED	B5	FLOOR TILE	5
187	P385	187385	J4	FLOOR TILE	5
187	P386	187386	J4	FLOOR TILE	1
187	P380	187380	D5	TRANSITE WALLBOARD	45
187	P393	187393	I6	STRAIGHT PIPE INSULATION	60
189	999A	ASSUMED	H4	NEW FLOOR TILE	5
190	P1	19001	D7	FLOOR TILE	4
190	P1A	19001A	D5	FLOOR TILE	5
190	P2	19002	D6	FLOOR TILE	3
190	999A	ASSUMED	K5	FIRE DOOR	0
191	999B	ASSUMED	H3	FLOOR TILE	0
191	P364	191364	G7	FLOOR COVERING	55
191	999A	ASSUMED	H3	NEW FLOOR TILE OVER OLD GREEN 9X9 TILE	5
193	999A	ASSUMED	G5	FIRE DOORS	50
193	P3	19303	G6	FLOOR TILE	2
193	P4	19304	G5	FLOOR TILE	2

Asbestos Survey
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BLDG NUMBER	SAMPLE NUMBER	LAB ID	CAD LOC	MATERIAL TYPE	TOTAL ASBESTOS
193	P11	19311	D4	ACOUSTICAL TILE ABOVE DROP CEILING	5
200	P413	200413	I5	CEILING TILE	25
201	202	0037-02	H5	MASTIC (ASBESTOS FLOOR TILE REMOVED)	10
201	P246	201246	J6	VINYL FLOOR TILE UNDER CARPET	5
201	999A	ASSUMED	C6	FIRE DOORS (NEW)	50
201	P245	201245	J6	VINYL FLOOR TILE UNDER CARPET	5
201	P251	201251	J5	VINYL FLOOR TILE UNDER CARPET	5
201	P249	201249	F5	VINYL FLOOR TILE UNDER CARPET	5
201	201	0037-01	H5	MASTIC (TILE REMOVED)	10
202	P2A	20202A	I7	PIPE JOINT INSULATION	20
202	P13	20213	H6	FLOOR TILE	2
202	P2B	20202B	B6	PIPE JOINT INSULATION	5
202	999A	ASSUMED	J5	FIRE DOOR	50
203	P285	203285	G5	FIRE DOOR	30
203	999A	ASSUMED	G5	FIRE DOOR	50
203	P291	203291	I6	FIRING RANGE DEBRIS	60
203	P276	203276	K4	VINYL FLOOR TILE	5
203	P278	203278	G4	VINYL FLOOR TILE	5
203	P264	203264	H4	VINYL FLOOR TILE	5
203	P274	203274	J4	VINYL FLOOR TILE	5
203	P271	203271	E4	VINYL FLOOR TILE	5
203	P275	203275	J4	VINYL FLOOR TILE	5
204	999B	ASSUMED	F6	FIRE DOORS	0
204	999A	ASSUMED	F5	FLOOR TILE	5
205	P5A	20505A	D5	PIPE JOINTS	0
205	999B	ASSUMED	G7	FLOOR TILE	0
205	P5	20505	F5	PIPE JOINT INSULATION	10
205	999A	ASSUMED	F6	FIRE DOORS	50
205	P14	20514	D5	DEBRIS	65
205	P9	20509	J6	FLOOR TILE	2
205	P12	20512	D5	FLOOR TILE	2
205	P4	20504	F5	STRAIGHT PIPE INSULATION	10
205	P4A	20504A	D5	STRAIGHT PIPE INSULATION	20
210	999B	ASSUMED	C5	FLEXIBLE DUCT CONNECTOR	50
210	101	0030-01	D6	BROWN PAPER	0
210	P730	210730	E5	VINYL FLOOR TILE	5
210	104	0030-04	D6	BROWN	2
210	105	0030-05	D6	BROWN	5
210	P722	210722	G6	VINYL FLOOR TILE	5
210	102	0030-02	D6	CORRIGATED PIPE	40
210	P726	210726	G4	VINYL FLOOR TILE	5
210	999A	ASSUMED	G4	FIRE DOOR	50
210	103	0030-03	D5	GRAY FLAT	0
210	P708	210708	G6	VINYL FLOOR TILE	5
211	P516	211516	H6	STRAIGHT PIPE INSULATION-AIRCELL	20
211	P504	211504	H4	WHITE/BEIGE	5
211	999A	ASSUMED	G4	WOOD FIRE DOORS	50
211	P517	211517	H6	HARD JOINTS	60

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BLDG NUMBER	SAMPLE NUMBER	LAB ID	CAD LOC	MATERIAL TYPE	TOTAL ASBESTOS
211	P524	211524	B6	FLEXIBLE DUCT CONNECTOR	70
212	P1335	2121335	I5	PIPE JOINT INSULATION	60
212	P1336	2121336	I5	STRAIGHT PIPE INSULATION AIRCELL	35
212	P797	212797	J6	ABOVE C/AT	45
212	999A	ASSUMED	K5	FLEXIBLE DUCT CONNECTOR	50
212	P791	212791	G5	WHITE/BROWN STREAK	5
213	999A	ASSUMED	F5	FIRE DOOR	50
213	P1333	2131333	F6	FLOOR TILE	5
213	P769	213769	J4	FLOOR TILE	5
213	P783	213783	F5	FLOOR TILE	5
213	201	029-01	G6	PLASTER	0
214	P3	21403	J7	FLOOR TILE	2
214	P16	21416	D7	HARD JOINTS	65
214	P16A	21416A	D4	HARD JOINTS	70
215	P1359	2151359	H7	FLOOR TILE	5
215	P1361	2151361	G7	FLOOR TILE	10
215	P1365	2151365	G7	FLOOR TILE	5
215	P1362	2151362	G7	FLOOR TILE	5
215	P1358	2151358	H7	FLOOR TILE	5
215	P1379	2151379	H6	TRANSITE BOARD	25
216	999A	ASSUMED	G5	FIRE DOORS	50
216	P11	21611	F8	FLOOR TILE	5
219	P1303	2191303	E5	PIPE JOINT INSULATION	20
219	P1300	2191300	E5	STRAIGHT PIPE INSULATION	45
219	P1302	2191302	E5	PIPE JOINT INSULATION	60
219	P1301	2191301	E5	PIPE JOINT INSULATION	60
219	P1250	2191250	J7	TRANSITE WALLBOARD	60
220	P19	22019	C6	FLOOR TILE	4
220	P20	22020	C6	FLOOR TILE	5
220	P21	22021	J5	FLOOR TILE	2
220	P11	22011	C5	STRAIGHT PIPE INSULATION	2
220	P13	22013	C5	PIPE JOINTS	80
221	999A	ASSUMED	F6	FLOOR TILE	0
222	999A	ASSUMED	F4	FLOOR TILE	0
226	P5	22605	F5	STRAIGHT PIPE INSULATION	5
226	P10	22610	E6	ELBOWS	5
226	P6A	22606A	F5	FLOOR TILE	2
226	999A	ASSUMED	I4	FIRE DOORS	50
226	P9	22609	E6	STRAIGHT PIPE INSULATION	5
226	P10A	22610A	E6	ELBOWS	5
226	P6	22606	F	FLOOR TILE	2
231	102	021-02	E7	PIPE JOINTS	5
231	P7B	23107B	C4	TANK INSULATION	59
231	P7A	23107A	C4	TANK INSULATION	70
231	P7	23107	C4	TANK INSULATION	70
231	101	021-01	E7	PIPE JOINTS	2
231	103	021-03	E7	TAR WRAP	0
235	P1	23501	E8	BROWN FLOOR TILE	2

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Samples To-date List

BLDG NUMBER	SAMPLE NUMBER	LAB ID	CAD LOC	MATERIAL TYPE	TOTAL ASBESTOS
238	P1000X	23800X		FLEXIBLE CONNECTOR	3
240	P3	24003	K3	ACOUSTICAL CEILING TILE	65
240	B1	177-01	F7	STRAIGHT PIPE INSULATION	65
240	B2	177-02	E5	STRAIGHT PIPE INSULATION	36
240	P6	24006	I7	TRANSITE WALLBOARD	45
240	P12A	24012A	K5	PIPE JOINT	65
240	P12	24012	K5	PIPE JOINT	65
240	P11A	24011A	K5	STRAIGHT PIPE INSULATION	15
240	P9	24009	B6	STRAIGHT PIPE INSULATION	10
240	P10	24010	B6	PIPE JOINTS	65
240	999A	ASSUMED	J5	FLEXIBLE DUCT CONNECTOR	50
240	B4	177-04	D6	STRAIGHT PIPE INSULATION	45
240	999B	ASSUMED	J4	FIRE DOOR	50
240	B5	177-05	F5	ELBOWS	65
240	P9A	24009A	B6	STRAIGHT PIPE INSULATION	65
240	B3	177-03	E5	STRAIGHT PIPE INSULATION	40
240	P10A	24010A	B6	PIPE JOINT	65
240	B6	177-06	F6	ELBOWS	65
240	P11	24011	K5	STRAIGHT PIPE INSULATION	15
240	B7	177-07	D5	ELBOWS	65
246	P2	24602	G6	FLOOR TILE	0
246	999C	ASSUMED	C2	FLOOR TILE	5
246	P1	24601	I7	FLOOR TILE	2
246	999B	ASSUMED	C3	FIRE DOORS	50
246	999E	ASSUMED	C2	FLOOR TILE	5
246	999A	ASSUMED	C2	FLOOR TILE	5
246	999D	ASSUMED	C2	FLOOR TILE	5
247	999B	ASSUMED	D2	FIRE DOORS	0
247	P183	247183	F2	PINK	5
247	P199	247199	B9	BLUE	10
247	P172	247172	E4	PINK	5
247	P174	247174	E5	BROWN	10
247	P339	247339	G6	GRAY	15
247	P338	247338	E2	TAN	10
247	999A	ASSUMED	F6	AIRCELL RISER	0
247	P194	247194	H6	GRAY	10
247	P170	247170	E4	WHITE	5
247	P169	247169	C3	TAN	5
256	999B	ASSUMED	G6	PIPE JOINTS	20
256	999A	ASSUMED	G6	STRAIGHT PIPE ABOVE CEILING	15
257	P834	257834	E5	PIPE JOINTS ABOVE CEILING	35
257	P837	050988	E5	PIPE JOINTS ABOVE CIELING	45
257	P835	257835	E5	AIRCELL	10
257	P836	257836	E5	AIRCELL	15
257	P1315	2571315	C5	FLOOR TILE	10
258	P587	258587	F6	FLOOR TILE	5
258	P590	258590	D5	FLOOR TILE	25
258	P586	258586	D6	MASTIC	5

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BLDG NUMBER	SAMPLE NUMBER	LAB ID	CAD LOC	MATERIAL TYPE	TOTAL ASBESTOS
258	999A	ASSUMED	C4	FLOOR TILE	5
268	P1416	2681416	K5	STRAIGHT PIPE INSULATION	10
268	P1405	2681405	C5	DEBRIS IN ATTIC	5
268	P1404	2681404	C5	PIPE JOINTS	5
268	P1408	2681408	E4	PIPE JOINTS	35
268	P1411	2681411	H4	PIPE JOINTS	30
268	P1415	2681415	H4	PIPE JOINTS	20
268	P1407	2681407	E4	STRAIGHT PIPE INSULATION	45
268	P1412	2681412	H4	STRAIGHT PIPE INSULATION	10
269	B1	030-01	I5	FLOOR TILE	0
269	B2	030-02	G5	CEILING PLASTER	0
269	B3	030-03	E5	FLOOR TAR PAPER	0
269	101	030-04	C5	FLOOR MASTIC	0
269	102	030-05	E4	FLOOR MASTIC	0
269	201	030-06	K5	CEILING PLASTER	0
269	202	030-07	K7	DEBRIS	0
269	203	030-08	G5	CEILING PLASTER	0
269	999A	ASSUMED	D5	FIRE DOORS	50
270	P1553	2701553	E4	FLOOR TILE	5
270	P1548	2701548	E5	FLOOR TILE	1
270	P1556	2701556	C5	CEILING PLASTER	5
270	P2061	2702061	D5	FLEXIBLE CONNECTOR	50
270	P1551	2701551	C5	CEILING PLASTER	5
270	P1549	2701549	E6	FLOOR TILE	1
270	P1552	2701552	F4	FLOOR TILE	1
270	999A	ASSUMED	H5	FIRE DOORS	50
303	999A	ASSUMED	B4	FLOOR TILE	5
303	102	022-02	G5	ACOUSTICAL CEILING TILE	0
303	101	022-01	B6	ACOUSTICAL CEEILING TILE	0
303	103	022-3	K6	ACOUSTICAL CEILING TILE	0
305	999A	ASSUMED	F5	FIRE DOORS	50
305	P1847	3051847	G4	FLOOR TILE	5
305	P1842	3051842	E4	FLOOR TILE	5
305	P1845	3051845	G5	FLOOR TILE	5
305	P1840	3051840	F5	TRANSITE BOARD	15
307	P1389	3071389	F6	FLOOR TILE	5
307	999A	ASSUMED	D5	FIRE DOORS	50
307	101	09-100	D4		0
307	P1388	3071388	D7	FLOOR TILE	5
309	P1577	3091577	E8	FLOOR TILE	5
309	P1567	3091567	F5	FLOOR TILE	5
309	P1570	3091570	E8	FLOOR TILE	5
309	P1706	3091706	F4	FLOOR TILE	5
309	P1558	3091558	F2	BOILER/TANK INSULATION	40
309	P1559	3091559	F3	BOILER/TANK INSULATION	50
309	P1562	3091562	F2	FITTINGS (T'S,ELBOW'S, VALVES)	5
309	P1564	3091564	E3	DEBRIS	45
309	999A	ASSUMED	D6	FIRE DOORS	50

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Samples To-date List

BLDG NUMBER	SAMPLE NUMBER	LAB ID	CAD LOC	MATERIAL TYPE	TOTAL ASBESTOS
309	P1569	3091569	F6	FLOOR COVERING	5
309	P1566	3091566	G6	FLOOR TILE	5
309	P1575	3091575	F7	TRANSITE WALLBOARD	35
312	P1826	3121826	L6	FLOOR TILE	5
312	P1827	3121827	L6	FLOOR TILE	5
312	B1	0024-01	I4	DEBRIS	5
312	999A	ASSUMED	G6	FIRE DOORS	50
314	999A	ASSUMED	I8	DEBRIS	50
314	P1591	3141591	D5	FLOOR TILE	5
314	P1580	3411580	J5	FLOOR TILE	5
314	P1592	3141592	D5	FLOOR TILE	5
314	P1593	3141593	C6	STRAIGHT PIPE	35
314	P1595	3141595	B5	FLOOR TILE	5
314	P1594	3141594	C6	ELBOWS	60
315	P1645	3151645	B5	STRAIGHT PIPE	40
315	P1643	3151643	K6	MASTIC	5
315	P1629	3151629	I6	FLOOR TILE	5
315	999A	ASSUMED	K6	FIRE DOOR	50
315	P1646	3151646	B5	ELBOWS	40
315	P1642	3151642	K6	CEILING TILE	15
315	P1630	3151630	B6	FLOOR TILE	5
315	P1640	3151640	K6	FLOOR TILE	5
315	P1632	3151632	B6	FLOOR TILE	5
316	B1	0036-01	E5	FLEXIBLE DUCT CONNECTOR	0
316	999A	ASSUMED	B5	FIRE DOOR	50
316	P1802	3161802	I8	FLOOR TILE	5
316	P1803	3161803	B5	FLOOR TILE	5
316	P1805	3161805	B6	FLOOR TILE	5
316	P1809	3161809	K5	FLOOR TILE	5
316	999B	ASSUMED	K4	FLOOR TILE	5
316	P1800	3161800	C5	PIPE INSULATION	5
317	P2272	3172272	C7	FLOOR TILE	5
317	P2282	3172282	H5	FLOOR TILE	5
317	P2273	3172273	C7	FLOOR TILE	5
317	P2291	3172291	F5	FLOOR TILE	5
317	P2268	3172268	C4	FLOOR TILE	5
317	P2271	3172271	D5	FLOOR TILE	5
317	P2283	3172283	H4	FLOOR TILE	5
317	999A	ASSUMED	H4	FIRE DOOR	50
317	P2290	3172290	E6	FLOOR COVERING	10
318	P1531	3181531	E4	ACOUSTICAL CEILING TILE	5
318	999A	ASSUMED	G7	FIRE DOOR	50
318	101	0018-01	J4	ACOUSTICAL WALL TILE	5
320	P2213	3202213	G7	FLOOR TILE	5
320	P2217	3202217	G4	FLOOR TILE	5
320	P2224	3202224	I5	FLOOR TILE	5
320	P2222	3202222	B5	FLOOR TILE	5
320	P2223	3202223	J5	FLOOR TILE	5

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BLDG NUMBER	SAMPLE NUMBER	LAB ID	CAD LOC	MATERIAL TYPE	TOTAL ASBESTOS
320	P2229	3202229	F5	FLOOR TILE	5
320	P2216	3202216	G4	FLOOR TILE	5
321	P2210	3212210	E4	FLOOR TILE	5
321	P2207	3212207	E3	ACOUSTICAL CEILING TILE	20
321	B1	0032-01	J7	PRESSED PAPER WITHIN WALL. PAPER WRAPPED	35
322	P868	322868	E5	TRANSITE WALLBOARD	60
322	101	49-01	G4	CONCRETE LINING	0
322	P867	322867	G4	WALL COVERING	55
323	P1	32301	G4	FLOOR TILE	2
323	P4	32304	C5	FLOOR TILE	2
323	P5	32305	C4	FLOOR TILE	3
323	999A	ASSUMED	C6	FLOOR TILE	0
324	P2296	3242296	I7	TRANSITE WALL COVERING	16
324	P2293	3242293	D3	FLOOR TILE	5
324	999A	ASSUMED	C6	FIRE DOORS	50
324	P1534	3241534	J6	TRANSITE WALL COVERING	10
324	P2299	3242299	F5	FLOOR TILE	5
324	P2298	3242298	F5	FLOOR TILE	5
325	P2249	3252249	C7	FLOOR TILE	5
325	P2248	3252248	C7	FLOOR TILE	5
325	P2246	3252246	K5	FLOOR TILE	5
325	P2245	3252245	K5	FLOOR TILE	0
326	P863	326863	E4	FLOOR TILE	10
326	P855	326855	I4	FLOOR TILE	10
326	P856	326856	I4	FLOOR TILE	5
326	P854	326854	I4	FLOOR TILE	5
326	P861	326861	D4	FLOOR TILE	10
326	P857	326857	I4	FLOOR TILE	5
326	P859	326859	I4	FLOOR TILE	5
326	P865	326865	D6	FLOOR TILE	5
326	P991	326991	G7	TRANSITE WALL BOARD	50
326	P864	326864	E6	FLOOR TILE	5
326	P994	326994	H4	FLOOR TILE	5
328	B2	0047-02	J3	HARD PIPE	0
328	B1	0047-01	J3	HARD PIPE	0
329	P1909	3291909	D4	FLOOR TILE	5
329	P1910	3291910	D3	FLOOR TILE	5
329	P1911	3291911	D4	FLOOR TILE	5
329	999A	ASSUMED	G4	FLOOR TILE	0
329	B1	0027-01	J3	DEBRIS	2
331	P1018	3311018	E8	FLOOR TILE	5
331	999A	ASSUMED	I2	FIRE DOORS	50
331	P145	331145	I6	TRANSITE WALL BOARD	35
331	P1166	3311166	H2	GASKET	80
331	P574	331574	C7	FLOOR TILE	5
331	P1329	3311329	D8	FLOOR TILE	5
331	P1021	3311021	E8	FLOOR TILE	25
331	P1020	3311020	E8	FLOOR TILE	5

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BLDG NUMBER	SAMPLE NUMBER	LAB ID	CAD LOC	MATERIAL TYPE	TOTAL ASBESTOS
331	P1022	3311022	C6	FLOOR COVERING	35
331	P1017	3311017	I7	FLOOR TILE	5
331	P1016	3311016	D8	FLOOR TILE	5
331	P1015	3311015	D8	FLOOR TILE	5
332	P1237	3321237	J7	PIPE JOINTS	0
332	P1236	3321236	J4	STRAIGHT PIPE	0
332	203	020-05	J6	STRAIGHT PIPE	75
332	202	020-04	K5	TANK INSULATION	30
332	103	020-03	D5	BOILER TANK INSULATION	20
332	102	020-02	C6	ROPE GASKET	10
334	P1885	3341885	H4	FLOOR TILE	5
334	P1883	3341883	H4	CEILING TILE (ABOVE DROP CEILING)	5
334	P1884	3341884	H4	FLOOR TILE	5
334	P1877	3341877	K3	DEBRIS	0
335	P2018	3352018	C6	FLOOR TILE	5
335	P2016	3352016	G5	FLOOR TILE	5
335	P2015	3352015	K5	FLOOR TILE	5
336	P1651	3361651	D5	FLOOR TILE (COVERED BY CARPET)	5
337	999A	ASSUMED	G6	FIRE DOOR	50
337	999B	ASSUMED	E4	FLOOR TILE	0
340	999A	ASSUMED	C3	FLOOR TILE	0
348	999A	ASSUMED	C7	FLOOR TILE	5
353	999A	ASSUMED	C4	TRANSITE WALLBOARD	50
353	P1979	3531979	B6	FLOOR TILE	5
353	P1978	3531978	B6	FLOOR TILE	5
354	P1923	3541923	D6	FLOOR TILE	5
354	P1928	3541928	K4	BOILER/TANK INSULATION	10
354	P1929	3541929	J4	FITTINGS (ELBOWS,VALVES)	5
354	P1921	3541921	C5	FITTINGS (ELBOWS, VALVES)	5
354	P1926	3541926	H4	FLOOR TILE	5
354	P1930	3541930	J4	FITTINGS (ELBOWS,VALVES)	5
354	P1925	3541925	G4	FLOOR TILE	5
357	999A	ASSUMED	C5	FIRE DOOR	50
357	P1054	3571054	D2	FLOOR COVERING	35
357	P1318	3571318	E7	FLOOR TILE (CARPET OVER TILE)	5
357	P1327	3571327	I3	FLOOR TILE (CARPET OVER TILE)	5
357	P1049	3571049	J6	FLOOR COVERING	55
357	P1083	3571083	C4	FLEXIBLE DUCT CONNECTOR	65
357	P1050	3571050	E3	FLOOR COVERING	45
357	P1075	3571075	C4	WALL BOARD	60
358	999A	ASSUMED	E5	FIRE DOORS	50
358	P32	35832	D5	FLOOR TILE	5
358	P28	35828	H4	AIRDUCT MATERIAL	35
358	P27	35827	I4	AIRDUCT MATERIAL	90
360	101	023-01	F4	ACOUSTICAL CEILING TILE	0
361	999A	ASSUMED	J7	FIRE DOOR	50
361	P9	36109	J4	TRANSITE WALLBOARD	65
361	P5	36105	G8	FLOOR TILE	2

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BLDG NUMBER	SAMPLE NUMBER	LAB ID	CAD LOC	MATERIAL TYPE	TOTAL ASBESTOS
361	P3	36103	G6	FLOOR TILE	35
362	P2043	3622043	C5	FITTINGS AND ELBOWS	5
362	P2048	3622048	E6	FLOOR TILE	5
362	999A	ASSUMED	D5	FIRE DOORS	50
362	P2042	3622042	C5	FITTINGS AND ELBOWS	5
362	P2047	3622047	G5	FLOOR TILE	5
362	P2143	3622143	G5	FLOOR TILE	5
362	P2045	3622045	E4	FLOOR TILE	5
362	P2044	3622044	D5	DEBRIS	5
362	P2144	3622144	I4	FLOOR TILE	5
362	P2059	3622059	H4	FLOOR TILE	5
365	101	026-01	H5	ACOUSTICAL CEILING TILE	0
365	102	026-02	H4		0
365	103	026-03	G5		0
365	104	026-04	E7		0
365	105	026-05	C5		0
365	106	026-06	G7		0
365	999C	ASSUMED	C3	FLOOR TILE	5
365	999B	ASSUMED	C3	FLOOR TILE	5
365	999A	ASSUMED	F5	FIRE DOOR	50
366	104	0041-04	K6	FLU INSULATION	0
366	109	0041-09	H6	ELBOWS	0
366	108	0041-08	H6	ELBOWS	0
366	107	0041-07	I8	ELBOWS	1
366	106	0041-06	I8	ELBOW	0
366	105	0041-05	I6	ELBOWS	0
366	103	0041-03	I6	STRAIGHT PIPE INSULATION	10
366	102	0041-02	I7	STRAIGHT PIPE INSULATION	15
366	101	0041-01	I7	STRAIGHT PIPE INSULATION	15
366	999A	ASSUMED	C3	FLOOR TILE	5
372	P4	37204	E4	FLOOR TILE	2
372	P2	37202	E5	FLOOR TILE	2
372	P1	37201	E5	FLOOR TILE	2
372	P1000X	3721000X	E4	FIRE DOOR	3
374	P7	37407	E5	PATCHING MATERIAL	2
374	P6	37406	E5	PIPE JOINT	4
374	P9	37409	C7	PIPE JOINT (IN ATTIC)	4
374	P1	37401	H5	FLOOR TILE	2
374	999A	ASSUMED	E7	DEBRIS	0
380	P6	38006	I6	FLOOR TILE	2
380	P8	38008	F4	FLOOR TILE	2
381	101	0035-01	K4	INSULATION	0
381	102	0035-02	K4	INSULATION	0
392	P1	39201	G6	FLOOR TILE	3
392	P1000X	39200X	G7	FIRE DOORS	3
399	P301	399301	J6	CEILING TILE	4
399	P202	399202	J5	CEILING TILE	2
399	P105	399105	H6	FLOOR TILE	2

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BLDG NUMBER	SAMPLE NUMBER	LAB ID	CAD LOC	MATERIAL TYPE	TOTAL ASBESTOS
399	P1000X	39900X	G5	FIRE DOOR	3
399	P104	399104	J5	CEILING TILE	2
399	P1	39901	I5	FLOOR TILE	2
399	P200	399200	J6	FLOOR TILE	2
399	P303	399303	J6	FLOOR TILE	2
399	B1	0023-01	G5	FLEX CONNECTOR	10
435	999C	ASSUMED	D4	PIPE JOINTS	50
435	999A	ASSUMED	C4	STRAIGHT PIPE INSULATION	50
435	999B	ASSUMED	D4	DEBRIS	50
470	P8C	4708C	B4	FLOOR TILE	2
470	P1000X	47000X	D4	FIRE DOOR	3
470	P15	47015	C7	VINYL SHEET	30
470	P15A	47015A	F4	VINYL SHEET	25
470	999A	ASSUMED	B4	LIGHT FIXTURE PAPER	0
498	P8	49808	A4	TRANSITE SIDING	30
498	P7	49807	F6	FLOOR TILE	2
498	999A	ASSUMED	F6	FIRE DOORS	0
505	999B	ASSUMED	F6	FLOOR TILE	5
505	999A	ASSUMED	B5	FIRE DOORS	50
506	999A	ASSUMED	K4	FIRE DOORS	50
507	999B	ASSUMED	H5	ELBOW FITTINGS	15
507	999A	ASSUMED	B5	FLOOR TILE	5
507	999C	ASSUMED	H5	DEBRIS	50
507	999D	ASSUMED	F6	FIRE DOOR	50
507	999E	ASSUMED	B5	FLOOR TILE	0
508	P1933	5081933	K5	FLOOR TILE	0
508	P1939	5081939	F6	VINYL SHEET FLOORING	0
508	P1946	5081946	G5	TAR PUTTY	0
508	P1937	5081937	F6	FLOOR TILE	0
508	999A	ASSUMED	B5	FLOOR TILE	5
509	999A	ASSUMED	G6	FLOOR TILE	5
509	P2025	5092025	H5	FLOOR TILE	0
509	P2023	5092023	K5	FLOOR TILE	0
629	999A	ASSUMED	B4	SOFFIT	50
630	101	029-01	I5	DOT SERPENTINE	0
630	102	029-02	I7	DOT SERPENTINE	0
630	999A	ASSUMED	K5	FIRE DOORS	50
630	103	029-03	K7	DOT SERPENTINE	0
630	999B	ASSUMED	I6	FLOOR TILE	0
631	P2	63102	I4	SHEET VINYL	2
631	999A	ASSUMED	J7	TRANSITE WALLBOARD AROUND DOOR AND SOFFIT	50
701	999A	ASSUMED	I4	FLOOR TILE	5
701	P6	70106	I6	PIPE JOINTS	85
701	P8	70108	G4	FLOOR TILE	4
701	P5	70105	I6	STRAIGHT PIPE INSULATION	2
701	P2	70102	H5	FLOOR TILE	3
701	P5A	70105A	H6	STRAIGHT PIPE INSULATION	85
704	P1000Y	70400Y	C7	FIRE DOOR	1

Asbestos Survey
Samples To-date List

BLDG NUMBER	SAMPLE NUMBER	LAB ID	CAD LOC	MATERIAL TYPE	TOTAL ASBESTOS
705	P12	70512	C7	FLOOR TILE	2
705	999A	ASSUMED	C5	FLOOR TILE	5
705	P2	70502	I6	FLOOR TILE	3
705	999B	ASSUMED	C7	TRANSITE BOARD	50
707	999B	ASSUMED	G5	FLOOR TILE	0
707	P1000X	70700X	I7	TRANSITE WALLBOARD	3
707	999A	ASSUMED	F3	TRANSITE WALLBOARD	50
707	P1000Y	70700Y	H6	TRANSITE WALLBOARD	3
707	P1000Z	70700Z	H6	FLEXIBLE CONNECTOR	3
707	P5	70705	H6	FLOOR TILE	2
707	P4	70704	I5	FLOOR TILE	2
707	P3	70703	F5	FLOOR TILE	2
708	S1	160-01	I5	INSULATION DEBRIS	50
708	P12	70812	J7	TAR WRAP	90
708	P1000Z	70800Z	I7	FIRE DOOR	3
708	P1000X	70800X	H4	TRANSITE WALLBOARD	3
708	999A	ASSUMED	H4	STRAIGHT PIPE	0
709	P1000Y	70900Y	H8	FIRE DOORS	3
712	P1	71201	J6	FLOOR TILE	2
712	999A	ASSUMED	J6	FIRE DOOR	0
714	999B	ASSUMED	J7	FLOOR TILE	0
714	P11	71411	C4	FLOOR TILE	2
714	P10	71410	C4	FLOOR TILE	2
714	P17	71417	I5	FLOOR TILE	2
714	P12	71412	F5	FLOOR TILE	2
714	P14	71414	G4	FLOOR TILE	2
714	P16	71416	G4	STRAIGHT PIPE INSULATION	60
714	999A	ASSUMED	C5	FIRE DOORS	50
714	P9	71409	C4	PIPE JOINTS	2
714	P15	71415	G4	STRAIGHT PIPE INSULATION	25
715	101	28-01	J6	DOT SERPENTINE	0
715	102	28-02	K6	DOT SERPENTINE	0
715	103	28-03	J6	DOT SERPENTINE	0
715	999A	ASSUMED	B4	FLOOR TILE	5
718	999A	ASSUMED	D7	TRANSITE BULK HEAD	50
740	P4	74004	H6	FLOOR TILE	2
740	P3	74003	E5	FLOOR TILE	2
741	999A	ASSUMED	C5	FIRE DOORS	50
741	P9	74109	H5	FLOOR TILE	3
741	P3	74103	G6	FLOOR TILE	2
741	P2	74102	G6	FLOOR TILE	2
745	P1	74501	C4	FLOOR TILE	2
745	P10	74510	I6	FLOOR TILE	2
745	P1000X	7451000X	F6	TRANSITE WALLBOARD	3
745	P15	74515	F5	ROPE INSULATION	60
745	P12	74512	J6	STRAIGHT PIPE INSULATION	40
801	P1669	8011669	H4	TANK INSULATION	5
801	999A	ASSUMED	B4	FIRE DOOR	50

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BLDG NUMBER	SAMPLE NUMBER	LAB ID	CAD LOC	MATERIAL TYPE	TOTAL ASBESTOS
802	101	051-01	E7		0
802	102	051-02	H8		0
802	103	051-03	I5		0
805	999A	ASSUMED	E5	FIRE DOORS	50
805	P1685	8051685	F5	FLOOR TILE	0
805	P1684	8051684	F5	FLOOR TILE	0
805	P1702	8051702	H6	FLOOR TILE	0
805	P1703	8051703	H6	FLOOR TILE	0
805	P1683	8051683	F5	FLOOR TILE	5
805	P1682	8051682	J6	FLEXIBLE CONNECTOR	50
805	P1704	8051704	H6	FLOOR TILE	5
806	P57	80657	B5	FLOOR TILE	5
807	P45	80745	C5	FLOOR TILE	5
807	S1	163-01	C4	DEBRIS ON DIRT FLOOR	60
808	P115	808115	G6	STRAIGHT PIPE	0
808	P112	808112	G6	STRAIGHT PIPE	0
808	P207	808207	D6	STRAIGHT PIPE	0
808	P1000Y	80800Y		FLEXIBLE CONNECTORS	0
808	P13	80813	G6	FLOOR TILE	0
808	P14	80814	G6	FLOOR TILE	0
808	P43	80843	D9	STRAIGHT PIPE	0
808	P15	80815	G6	FLOOR TILE	0
808	P15A	80815A	C6	FLOOR TILE	0
808	P16	80816	C5	FLOOR TILE	0
808	P36	80836	E5	STRAIGHT PIPE	0
808	P313	808313	D6	PIPE JOINTS	0
808	P216	808216	D5	PIPE JOINTS	0
808	P208	808208	D6	PIPE JOINTS	0
808	P160	808160	C6	FLOOR TILE	0
808	P47	80847		PIPE JOINTS	0
808	999A	ASSUMED		INSULLATION ON DUCT	0
808	P213	808213	E7	MASTIC	0
808	P1000W	80800W		TRANSITE WALL PANELS	0
808	P17	80817	E6	FLOOR TILE	0
808	P166	808166	F6	STRAIGHT PIPE	0
808	P18	80818	G7	FLOOR TILE	0
808	P205	808205	C4	FLOOR TILE	0
808	P20	80820	E7	FLOOR TILE	0
808	P211	808211	E7	FLOOR TILE	0
808	P506	808506	D5	FLOOR TILE	0
808	P412	808412	H5	FLOOR TILE	0
808	P309	808309	D5	FLOOR TILE	0
808	P23	80823	C6	FLOOR TILE	0
808	P22	80822	B5	FLOOR TILE	0
808	P218	808218	C5	FLOOR TILE	0
815	999A	ASSUMED	D5	FIRE DOORS	50
950	999B	ASSUMED	D2	LIGHT FIXTURE PAPER	5
950	999C	ASSUMED	F7	FLEXIBLE DUCT CONNECTOR	5

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BLDG NUMBER	SAMPLE NUMBER	LAB ID	CAD LOC	MATERIAL TYPE	TOTAL ASBESTOS
950	P1	95001	D8	3/4"WATER,1" & 5" HEATING	2
950	999D	ASSUMED	D2	FLOOR TILE	5
950	999A	ASSUMED	D6	FIRE DOORS	50
950	101	0028-01	F9	TAR WRAP AC COMPRESSOR	5
950	P7	95007	E5	FLOOR TILE	0
1000	101	172-01	E5	ACOUSTICAL CEILING TILE	0
1000	102	172-02	E4	ACOUSTICAL CEILING TILE	0
1000	103	172-03	F4	ACOUSTICAL CEILING TILE	0
1000	105	1052-02	E3	STRAIGHT PIPE	0
1000	104	1052-01	F4	STRAIGHT PIPE	0
1000	P2155	10002155	K5	FLOOR TILE	0
1000	106	1052-03	F4	STRAIGHT PIPE	0
1001	999B	ASSUMED	J5	FIXTURE PAPER	50
1001	P930	1001930	B5	FLOOR TILE	5
1001	P931	1001931	B3	FLOOR TILE	5
1001	999A	ASSUMED	B4	FIRE DOORS	50
1001	P936	9361001	J6	FLOOR TILE	5
1001	P937	1001937	J6	FLOOR TILE	5
1017	106	0040-06	C4	PATCHING MATERIAL ON ROOF DRAIN	5
1017	P8	101708	D6	FLOOR TILE	0
1017	P10	101710	C3	FLOOR TILE	0
1017	P11	101711	D4	FLOOR TILE	0
1017	P1000X	101700X	C7	TANK INSULATION	0
1017	P18	101718	I6	FLEXIBLE DUCT CONNECTOR	0
1017	P12A	101712A	K7	STRAIGHT PIPE	0
1017	P13	101713	K7	PIPE JOINTS	0
1017	P13A	101713A	K7	PIPE JOINTS	0
1017	999A	ASSUMED	F6	STRAIGHT PIPE	0
1017	999B	ASSUMED	F6	PIPE JOINTS	0
1017	P9	101709	D7	FLOOR TILE	0
1017	999C	ASSUMED	C6	FIRE DOORS	0
1017	P12	101712	K7	STRAIGHT PIPE	0
1017	P16	101716	C4	LIGHT FIXTURE PAPER	0
1018	P8	101808	F7	FLOOR TILE	2
1018	P3	101803	F7	FLOOR TILE	5
1023	999A	ASSUMED	I3	FIRE DOORS	50
1024	P1	102401	D7	FLOOR TILE	2
1024	999A	ASSUMED	I3	FLEX CONNECTOR	0
1025	105	038-05	J6		0
1025	104	038-04	K7		0
1025	103	038-03	J7		0
1025	106	038-06	K6		0
1025	102	038-02	B6		0
1025	101	038-01	B6	ACOUSTICAL CEILING TILE	0
1025	999A	ASSUMED	C4	FLOOR TILE	5
1030	P23276	10302327	G6	FLEXIBLE DUCT CONNECTOR	60
1030	101	0050-01	G6	TAR PAPER ON DUCT	0
1030	102	0050-02	G6	TAR PAPER ON DUCT	5

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BLDG NUMBER	SAMPLE NUMBER	LAB ID	CAD LOC	MATERIAL TYPE	TOTAL ASBESTOS
1030	103	0050-03	D5	TAR WRAP	2
1030	104	0050-04	D5	TAR WRAP	2
1030	999A	ASSUMED	B5	FIRE DOORS	50
1084	101	055-01	H7	TAR WRAP	0
1084	103	055-03	H6	TAR PAPER ON CEILING	10
1084	114	055-14	G5	PIPE JOINTS	0
1084	115	055-15	C4	ON PIPE	0
1084	999A	ASSUMED		FLOOR TILE	5
1084	112	055-12	B7	TAR ON WALLS & CEILING	5
1084	111	055-11	B7	TAR ON WALLS & CEILING	5
1084	116	055-16	C4	ON PIPE	0
1084	107	055-07	H6	WALL CORK	0
1084	113	055-13	G5	PIPE JOINT	0
1084	105	055-05	H6	TAR PAPER ON CEILING	2
1084	104	055-04	H6	TAR PAPER ON CEILING	5
1084	106	055-06	F7	WALL CORK	2
1084	102	055-02	H7	TAR WRAP	0
1089	P7	108907	J5	TRANSITE WALLBOARD	35
1099	P2411	10992411	E6		0
1099	P2412	10992412	E3		0
1099	P2415	10992415	K3		0
1099	P2417	10992417	G6		0
1099	P2413	10992413	E3		0
1099	999A	ASSUMED	D6		0
1099	P2416	10992416	J6		0
1108	P23014	11082301	H3	STRAIGHT PIPE INSULATION	5
1108	999A	ASSUMED	H4	FIRE DOORS	50
1108	P23015	11082301	H2	PIPE FITTINGS	20
1108	P23012	11082301	H2	FLOOR TILE	5
1109	P23027	11092302	J7	FLOOR TILE	5
1113	P2514	11132514	E6	FLOOR TILE	5
1113	P2515	11132515	E6	FLOOR TILE	5
1113	P2516	11132516	E3	FLOOR TILE	5
1126	P23036	11262303	K4	STRAIGHT PIPE INSULATION	0
1133	999A	ASSUMED	I5	FIRE DOOR	50
1138	P2452	11382452	C5	AIRDUCT MATERIAL	25
1138	999A	ASSUMED	C5	TRANSITE WALLBOARD	50
1141	999A	ASSUMED	K5	TRANSITE WALLBOARD	50
1142	999B	ASSUMED	D5	TRANSITE WALLBOARD	50
1142	999A	ASSUMED	C4	FLOOR TILE	5
1143	999A	ASSUMED	C5	TRANSITE WALLBOARD	50
1146	P7A	114607A	E5	PIPE JOINTS	90
1146	P10	114610	E5	DEBRIS	15
1146	P1000X	114600X	F6	FIRE DOOR	3
1146	P2	114602	H5	FLOOR TILE	2
1146	P7	114607	E5	PIPE JOINTS	80
1146	P6A	114606A	F6	STRAIGHT PIPE INSULSTSION	70
1146	P8	114608	F6	DEBRIS	2

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Samples To-date List

BLDG NUMBER	SAMPLE NUMBER	LAB ID	CAD LOC	MATERIAL TYPE	TOTAL ASBESTOS
1146	P6	114606	F6	STRAIGHT PIPE INSULSTION	60
1147	P1	114701	I6	ONLY MASTIC IS POSITIVE	2
1148	P2	114802	B6	FLOOR TILE	3
1148	P1000X	114800X	C8	TRANSITE WALLBOARD	3
1148	999A	ASSUMED	I5	TRANSITE WALLBOARD	50
1150	B5	31-08	E6	TANK INSULATION	67
1150	B4	31-07	F5	TANK INSULATION	65
1150	B3	31-06	I7	PIPE JOINT INSULATION	2
1150	B7	31-10	E6	STRAIGHT PIPE INSULATION	40
1150	B8	31-11	F6	STRAIGHT PIPE INSULATION	27
1150	B2	31-05	I7	PIPE JOINT INSULATION	2
1150	B1	31-04	E7	PIPE JOINT INSULATION	2
1150	B6	31-09	D6	TANK INSULATION	65
1150	2	31-02	G4	ACOUSTIC TILE	0
1150	B10	31-13	F7	GASKET	7
1150	3	31-03	J3	ACOUSTIC TILE	0
1150	1	31-01	H7	ACOUSTIC TILE	0
1150	B9	31-12	D6	STRAIGHT PIPE INSULATION	25
1153	P1000X	115300X	F7	WALL AND CEILING TRANSITE BOARD	3
1153	P2	115302	E6	MASTIC	2
1154	101	173-01	J6	SERPENTINE	0
1154	999C	ASSUMED	F4	TRANSITE WALLBOARD	50
1154	999B	ASSUMED	K6	FIRE DOOR	50
1154	999A	ASSUMED	I6	FLOOR TILE	5
1154	103	173-03	K4	SERPENTINE	0
1154	102	173-02	K7	SERPENTINE	0
1155	P3	115503	H4	MASTIC UNDER TILE	0
1155	P3A	11553A	F5	MASTIC UNDER TILE	0
1155	999A	ASSUMED	I4	REPLACEMENT TILE	0
1161	P5	116105	B5	FLOOR TILE	2
1161	P6	116106	G5	FLOOR TILE	2
1169	P1	116901	I6	FLOOR TILE	2
1169	P1000X	116900X	E5	TRANSITE WALLBOARD	3
1185	999B	ASSUMED	G6	FLEXIBLE CONNECTOR	50
1185	999A	ASSUMED	D7	FLOOR TILE	5
1185	103	174-03	I8	TEXTURED WITH HOLES	0
1185	102	174-02	D3	TEXTURED WITH HOLES	0
1185	101	174-01	I5	TEXTURED WITH HOLES	0
1186	P1	118601	C4	FLOOR TILE	2
1186	P1000X	118600X	D4	FIXTURE PAPER	3
1187	101	171-01	E6	SERPENTINE	0
1187	103	171-03	K7	SERPENTINE	0
1187	999A	ASSUMED	C4	FLOOR TILE	5
1187	102	171-02	I6	SERPENTINE	0
1189	P7	118907		DEBRIS	0
1189	P1	118901	I4	FLOOR TILE	2
1189	P8	118908	D5	PIPE JOINTS	2
1189	101	25-01	H4	TAR WRAP	2

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BLDG NUMBER	SAMPLE NUMBER	LAB ID	CAD LOC	MATERIAL TYPE	TOTAL ASBESTOS
1189	P3	118903	D4	FLOOR TILE	2
1189	102	25-02	H4	TAR WRAP	2
1193	P1000X	119300X	J4	FIRE DOOR	3
1193	P14	119314	D7	TRANSITE WALLBOARD	85
1193	P10	119310	G8	FLOOR TILE	2
1193	P1	119301	K7	FLOOR TILE	0
1194	999A	ASSUMED	B6	FLOOR TILE	0
1194	102	039-02	F7		0
1194	101	039-01	H6		0
1194	103	039-03	H8		0
1195	112	043-12	F7		0
1195	108	043-08	H7		0
1195	113	043-13	G8		0
1195	102	043-02	G3		0
1195	115	043-15	E4		0
1195	103	043-03	G4		0
1195	116	043-16	E3		0
1195	109	043-09	H6	STRAIGHT PIPE	0
1195	106	043-06	H7		0
1195	105	043-05	H7	PIPE JOINTS	0
1195	104	043-04	H7	PIPE JOINTS	0
1195	999A		E7	FLOOR TILE	0
1195	114	043-14	I6		0
1195	111	043-11	H6		0
1195	110	043-10	H6		0
1195	107	043-07	H7		0
1195	117	043-17	E3		0
1195	101	043-01	F3		0
1196	999A	ASSUMED	J4	FIRE DOOR	50
1199	P2	119902	H3	FLOOR TILE	2
1200	P3	120003	E6	SPRAY ON CEILING	10
1200	P3A	120003A	F3	SPRAY ON CEILING	10
1200	B1	0042-01	F6	ON PIPES LEADING TO ICE CHEST	0
1200	P999A	ASSUMED	G6	FIRE DOOR	50
1200	P19	120019	E3	FLOOR TILE	2
1200	P16	120016	G6	PIPE JOINT INSULATION	5
1200	P11	120011	G3	FLOOR TILE	2
1200	P22A	120022A	J6	INNER INSULATION	60
1200	P15	120015	G6	PIPE JOINT INSULATION	2
1200	P22	120022	J6	INNER INSULATION	60
1200	B2	0042-02	F6	ON PIPES LEADING TO ICE CHEST	0
1200	P8	120008	G5	FLOOR TILE	2
1200	P12	120012	G3	FLOOR TILE	2
1412	P7	141207	C7	FLOOR TILE	2
1412	999A	ASSUMED	D4	FIRE DOOR	50
1412	P6	141206	C7	FLOOR TILE	2
1416	P7	141607	G7	FLOOR TILE	10
1416	P6	141606	G7	FLOOR TILE	2

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BLDG NUMBER	SAMPLE NUMBER	LAB ID	CAD LOC	MATERIAL TYPE	TOTAL ASBESTOS
1416	999A	ASSUMED	E7	FIRE DOORS	50
1425	P1354	14251354	G4	FLOOR TILE	0
1425	P1344	14251344	C4	FLOOR TILE	0
1425	P1350	14251350	J9	FLOOR TILE	0
1425	P1353	14251353	J5	FLOOR TILE	0
1425	999A	ASSUMED	B3	FLOOR TILE	0
1426	P1000X	142600X	D5	TRANSITE	3
1426	999A	ASSUMED	J6	CONNECTORS	5
1426	P2	142602	D7	ELBOWS	5
1426	P4	142604	D5	ELBOWS	80
1426	P1	142601	D7	STRAIGHT PIPE	35
1426	P3	142603	D5	STRAIGHT PIPE	5
1428	P23219	14282321	E6	FLOOR TILE	5
1428	P23220	14282322	E6	MASTIC	0
1434	P23052	23052	B5	FLOOR TILE	5
1434	P23053	23053	C4	FLOOR TILE	5
1434	P23130	23130	D2	FLOOR TILE	5
1434	P23131	23131	D2	FLOOR TILE	5
1434	999A	ASSUMED	E4	STRAIGHT PIPE	5
1436	P23215	14362321	C6	FLOOR TILE	5
1436	P23226	14362322	E3	FLOOR TILE	5
1437	101	0021-01	D6	PAPER COVERING ON CONCRETE	0
1437	102	0021-02	D7	PAPER COVERING CONCRETE	0
1439	999A	ASSUMED	C3	FLOOR TILE	5
1440	999A	ASSUMED	K6	FLEXIBLE DUCT CONNECTOR	50
1440	P23287	14402328	J6	FLOOR TILE	5
1440	P23292	14402329	L6	CEILING COVERING	5
1442	P23321	14422332	E5	FLOOR TILE UNDER CARPET	5
1442	P23324	14422332	J5	FLOOR TILE UNDER CARPET	5
1442	P23335	14422333	E5	FLEXIBLE DUCT CONNECTORS	95
1442	P23311	14422331	E5	TANK INSULATION	20
1442	P23312	14422331	E5	TANK INSULATION	20
1442	P23313	14422331	F5	FLEXIBLE DUCT CONNECTORS	65
1442	999A	ASSUMED	C5	FIRE DOORS	50
1444	P2344	14442344	C6	FLOOR TILE UNDER CARPET	5
1445	999A	ASSUMED	C3	FIRE DOORS (NEW)	50
1464	P23350	14642335	E7	FLOOR TILE UNDER CARPET & TILE	5
1464	P23343	14642334	G7	FLOOR TILE UNDER CARPET & UNDER TILE	5
1464	102	0033-02	C6	EXPOSED MASTIC	10
1464	103	0033-03	C6	TAR WRAP	0
1464	101	0033-01	B6	EXPOSED MASTIC	10
1464	999A	ASSUMED	F3	FIRE DOORS	0
1466	P2	146602	E7	BROWN/WHITE	0
1466	P1	146601	K8	BROWN/WHITE	0
1466	999A	ASSUMED	D4	FIRE DOORS	0
1467	P6	146706	G7	FLOOR TILE	2
1467	999A	ASSUMED	I5	FIRE DOORS	50
1469	P1	146901	F7	FLOOR TILE	4

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BLDG NUMBER	SAMPLE NUMBER	LAB ID	CAD LOC	MATERIAL TYPE	TOTAL ASBESTOS
1469	P1000X	146900X	B5	FIRE DOORS	3
1471	104	0034-04	I3	PAPER	10
1471	106	0034-06	J7	PAPER	0
1471	107	0034-07	K3	PIPE JOINT	2
1471	999A	ASSUMED	B3	FLOOR TILE UNDER CARPET	5
1471	999B	ASSUMED	D3	FLOOR TILE	5
1471	105	0034-05	J5	PAPER	0
1471	999C	ASSUMED	D3	FIRE DOORS	50
1475	P14	147614	K4	PLASTER	2
1475	P1000X	147500X	H9	FLEXIBLE DUCT CONNECTOR	3
1475	P2	147502	D7	FLOOR TILE	2
1475	P15	147515	K7	PIPE JOINT	5
1475	P7	147507	D8	FLOOR TILE	2
1475	999A	ASSUMED	G3	FIRE DOOR	50
1475	P1	147501	D7	FLOOR TILE	2
1490	P1	149001	G5	FLOOR TILE	3
1491	P1	149101	F6	FLOOR TILE	2
1494	999A	ASSUMED	C5	FLOOR TILE	0
1498	110	22-10	F4	PIPE JOINTS	2
1498	101	22-01	F7	ACOUSTICAL CEILING TILE	0
1498	102	22-02	C6	ACOUSTICAL CEILING TILE	0
1498	103	22-03	C4	ACOUSTICAL CEILING TILE	0
1498	104	22-04	J7	ACOUSTICAL CEILING TILE	0
1498	105	22-05	H6	ACOUSTICAL CEILING TILE	0
1498	106	22-06	I4	ACOUSTICAL CEILING TILE	0
1498	999A	ASSUMED	B4	FLOOR TILE	5
1498	107	22-07	K5	PIPE JOINTS	2
1498	108	22-08	K5	PIPE JOINTS	2
1498	109	22-09	K4	PIPE JOINTS	2
1499	109	24-09	J7	ELBOWS	5
1499	108	24-08	K6	PIPE VALVES	20
1499	107	24-07	K6	ELBOWS	20
1499	999B	ASSUMED	B3	FLOOR TILE	5
1499	999A	ASSUMED	F6	FLOOR TILE	5
1499	106	24-06	F5	ACOUSTICAL CEILING TILE	0
1499	105	24-05	D4	ACOUSTICAL CEILING TILE	0
1499	103	24-03	G4	ACOUSTICAL CEILING TILE	0
1499	102	24-02	G6	ACOUSTICAL CEILING TILE	0
1499	104	24-04	D6	ACOUSTICAL CEILING TILE	0
1499	101	24-01	J4	ACOUSTICAL CEILING TILE	0
1697	999A	ASSUMED	B4	FLOOR TILE	0
1802	P2A	180202A	E4	FLOOR TILE	0
1802	P2	180202	E4	FLOOR TILE	3
1802	P4	1802	H6	FLOOR TILE	3
1804	105	168-12	K4	TEXTURED	0
1804	104	168-11	J5	TEXTURED	0
1804	999B	ASSUMED	B6	FLOOR TILE	5
1804	999A	ASSUMED	J4	FLOOR TILE	5

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BLDG NUMBER	SAMPLE NUMBER	LAB ID	CAD LOC	MATERIAL TYPE	TOTAL ASBESTOS
1804	103	168-10	B6	SERPENTINE	0
1804	101	168-08	B6	SERPENTINE	0
1804	102	168-09	B6	SERPENTINE	0
1804	106	168-13	J6	TEXTURED	0
1804	A7	168-07	C5	DEBRIS	65
1804	A1	168-01	C4	AIRCELL	20
1804	A2	168-02	C6	AIRCELL	20
1804	A3	168-03	C4	AIRCELL	20
1804	A4	168-04	C4	MUD JOINTS	65
1804	A5	168-05	C6	MUD JOINTS	65
1804	A6	168-06	C5	MUD JOINTS	65
1805	102	170-02	G5	ACOUSTIC TILE	0
1805	101	170-01	D6	ACOUSTIC TILE	0
1805	999A	ASSUMED	C5	FIRE DOORS	50
1805	104	170-04	K4	TRANSITE WALLBOARD	20
1805	103	170-03	I5	ACOUSTIC TILE	0
1806	999A	ASSUMED	B3	FLOOR TILE	0
1809	999A	ASSUMED	D4	FIRE DOORS	50
1809	P2B	180902B	B5	GYPSUM BOARD	2
1809	P3	189003	F6	FLOOR TILE UNDER CARAPET	2
1809	P2A	180902A	C8	GYPSUM BOARD	2
1809	P2	180902	D4	GYBSUM BOARD	2
1810	999A	ASSUMED	D7	FIRE DOORS	50
1812	999A	ASSUMED	H7	FIRE DOORS	50
1812	P4	181204	C5	TRANSITE WALLBOARD	70
1813	999B	ASSUMED	F6	FIRE DOORS	50
1813	999A	ASSUMED	F6	FLEXIBLE CONNECTOR	50
1819	999A	ASSUMED	B6	FIRE DOOR	50
1822	999A	ASSUMED	C4	FLOOR TILE	5
1822	P18	182218	J4	TRANSITE BOARD ABOVE CEILING	60
1824	103	182-03	B6	PIN DOT	0
1824	A3	182-06	D4	PIPE JOINTS ALONG CEILING	75
1824	A2	182-05	D4	PIPE JOINTS ALONG CEILING	75
1824	A4	182-07	D5	STRAIGHT PIPE ABOVE CEILING	25
1824	101	182-01	C6	PIN DOT	0
1824	A1	182-04	D5	PIPE JOINTS ALONG CEILING	75
1824	102	182-02	C6	PIN DOT	0
1824	A5	182-08	D5	STRAIGHT PIPE ABOVE CEILING	20
1824	A6	182-09	D5	STRAIGHT PIPE ABOVE CEILING	20
1826	999A	ASSUMED	C6	FIRE DOORS	50
1826	P4	182604	D6	MASTIC	2
1831	P23132	18312313	J6	DUCT INSULATION	10
1831	102	0054-02	J6	TAR WRAP	0
1831	P23120	18312312	C6	FLOOR TILE	5
1831	101	0054-01	J6	TAR WRAP	0
1831	P23193	18312319	J6	DUCT INSULATION	15
1831	P23125	18312212	J6	DUCT INSULATION	40
1834	999A	ASSUMED	D3	FIRE DOORS	50

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BLDG NUMBER	SAMPLE NUMBER	LAB ID	CAD LOC	MATERIAL TYPE	TOTAL ASBESTOS
1834	P3	183403	I3	FLOOR TILE	2
1834	P4	183404	H6	FLOOR TILE	10
1834	P1000X	183400X	J7	FLEXIBLE CONNECTORS	3
1834	P11	183411	J7	INSULATION ON FLUE PIPE	20
1837	999A	ASSUMED	K6	FIRE DOOR	50
1837	999B	ASSUMED	B6	FLEXIBLE CONNECTORS	50
1901	P11	190111	J7	TRANSITE WALLBOARD	40
1901	P7	190107	E5	FLOOR TILE	2
1901	P12	190112	J6	AIRCELL ON WALLS	35
1902	P10	1902	J5	FLOOR TILE	2
1902	P11	190211	I4	TRANSITE WALLBOARD	85
1902	P14	190214	C4	TRANSITE WALLBOARD	85
1902	P15	190215	C3	FLOOR TILE	3
1903	103	180-04	F4	ACOUSTIC TILE	0
1903	999B	ASSUMED	D7	TRANSITE WALLBOARD AS PART OF CEILING	50
1903	104	180-01	C6	TRANSITE WALLBOARD	10
1903	102	180-03	G5	ACOUSTIC TILE	0
1903	999C	ASSUMED	B3	FLOOR TILE	5
1903	999D	ASSUMED	C3	FIRE DOORS	50
1903	101	180-02	F6	ACOUSTIC TILE	0
1906	P1	190601	I6	FLOOR TILE	2
1906	P1A	190601A	I7	MASTIC	2
1906	101	161-01	J6	ROPE GASKET	60
1906	P2	190602	J6	GASKETS	0
1907	P119	1907119	K5	FLOOR TILE	0
1907	P117	1907117	K6	AIRCELL	50
1908	P8	190808	I5	NEW TRANSITE WALLBOARD	30
1908	999A	ASSUMED	B6	FIRE DOORS	50
1908	P10	190810	I6	GASKET AT WALL PENETRATION	60
1911	P6	191106	C5	FLOOR TILE	5
1911	P5	191105	C5	FLOOR TILE	5
1911	P4	191104	I5	FLOOR TILE	5
1911	P7	191107	I7	TRANSITE WALLBOARD, INCLUDES CEILING	75
1912	101	167-01	J6	SERPENTINE	0
1912	102	167-02	J3	SERPENTINE	0
1912	103	167-03	G4	SERPENTINE	0
1912	999A	ASSUMED	D4	FLOOR TILE COVERED BY CARPET	5
1915	999B	ASSUMED	C6	CANVAS CONNECTOR	50
1915	101	176-01	D6	SPECKLED	0
1915	102	176-02	I6	SPECKLED	0
1915	103	176-03	J4	SPECKLED	0
1915	999A	ASSUMED	D4	FLOOR TILE	5
1916	999A	ASSUMED	E4	FLEXIBLE CONNECTOR	50
1916	101	179-01	K5	ACOUSTIC TILE	0
1916	102	179-02	D6	ACOUSTIC TILE	0
1916	103	179-03	D5	ACOUSTIC TILE	0
1916	999B	ASSUMED	E6	FIRE DOORS	50
1916	999C	ASSUMED	D5	FLOOR TILE	5

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BLDG NUMBER	SAMPLE NUMBER	LAB ID	CAD LOC	MATERIAL TYPE	TOTAL ASBESTOS
1917	102	164-02	G4	ACOUSTIC TILE	0
1917	106	164-06	G5	TRANSITE WALLBOARD	20
1917	101	164-01	D3	ACOUSTIC TILE	0
1917	103	164-03	G3	ACOUSTIC TILE	0
1917	999A	ASSUMED	C3	FLOOR TILE	5
1917	999B	ASSUMED	F5	FLEXIBLE CONNECTOR	50
1917	104	164-04	G5	WALL TILE, DOTS	0
1917	105	164-05	F5	WALL TILE, DOT	0
1920	P6	192006	B6	PIPE JOINTS ABOVE DROP CEILING	65
1920	P4	192004	E5	FLOOR TILE	2
1920	P5	192005	B5	AIRCELL ABOVE DROP CEILING	80
1922	P1000X	192200X	D4	FLEXIBLE CONNECTOR	3
1922	P5	192205	H6	FLOOR TILE	0
1923	P1	192301	J4	TRANSITE WALLBOARD	25
1931	P8	193108	C4	TRANSITE WALLBOARD	85
1931	P1000X	193100X	C5	FLEXIBLE CONNECTOR	3
1931	999A	ASSUMED	B4	TRANSITE WALLBOARD ADDED	50
1934	999A	ASSUMED	D7	FIRE DOORS	50
1934	P3	193403	J6	FLOOR TILE	2
1935	104	166-04	I6	STRAIGHT PIPE	20
1935	101	166-01	I3	SERPENTINE	0
1935	102	166-02	J3	SERPENTINE	0
1935	103	166-03	I3	SERPENTINE	0
1938	999A	ASSUMED	B3	FLOOR TILE	5
1938	999B	ASSUMED	B6	FLEXIBLE CONNECTOR	50
1938	999C	ASSUMED	B7	FIRE DOORS	50
1949	999A	ASSUMED	B6	FIRE DOOR	50
1949	P7	194907	B6	AIRCELL, METAL CASING SPLIT & DAMAGED	35
1950	P1188	19501188	B4	AIRCELL METAL CASING IS DAMAGED	65
1950	999A	ASSUMED	E6	FIRE DOORS	50
1950	P1185	19501185	K4	FLOOR TILE	5
1952	101	185-01	J6	SERPENTING	0
1952	102	185-02	J7	SERPENTINE	0
1952	103	185-03	E4	SERPENTINE	0
1952	104	185-04	G6	PITTED	0
1952	105	185-05	E6	PITTED	0
1952	106	185-06	F6	PITTED	0
1952	999A	ASSUMED	C3	FLOOR TILE	5
1953	P1	195301	G6	FLOOR TILE	2
1953	P1A	195301A	C6	MASTIC	2
1956	101	181-01	F4	ACOUSTIC TILE	0
1956	102	181-02	D4	ACOUSTIC TILE	0
1956	103	181-03	D7	ACOUSTIC TILE	0
1961	P8	196108	J4	FLOOR TILE	2
1961	999A	ASSUMED	J7	FLEXIBLE CONNECTOR	50
1961	P3	196103	I5	FLOOR TILE	2
1961	P5	196105	J5	FLOOR TILE	2
1962	P1A	196201A	I6	FLOOR TILE	2

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BLDG NUMBER	SAMPLE NUMBER	LAB ID	CAD LOC	MATERIAL TYPE	TOTAL ASBESTOS
1962	P1000X	196200X	C6	FIRE DOORS	3
1962	P10A	196210A	F6	AIRCELL	25
1962	P4A	196204A	D6	GYPSUM BOARD	3
1962	P4	196204	F6	GYPSUM BOARD	2
1962	P1	196201	J5	FLOOR TILE	2
1962	P7	196207	D5	GYPSUM BOARD	75
1968	P10	196810	G5	FLOOR TILE	2
1968	P9	196809	G5	FLOOR TILE	2
1968	P8	196808	G5	MASTIC	2
1968	P11	196811	G6	FLOOR TILE	2
1970	P1	197001	J7	FLOOR TILE	2
1970	P3	197003	K6	GYPSUM BOARD	65
1970	P1000X	197000X	J7	FIRE DOORS	3
2101	101	175-01	J4	PORES, FISSURES	0
2101	102	175-02	G3	PORES,FISSURES	0
2101	103	175-03	D8	PORES,FISSURES	0
2101	999A	ASSUMED	B2	FLOOR TILE	5
2101	999B	ASSUMED	C8	FIRE DOORS	50
2105	999A	ASSUMED	B2	FLOOR TILE	5
2105	101	169-01	I2	FISSRED	0
2105	102	169-02	G4	FISSURED	0
2105	103	169-03	C5	FISSURED	0
2105	999B	ASSUMED	C8	FIRE DOORS	50
2105	104	169-04	E5	ACOUSTIC TILE	0
2115	P3	211503	C5	FLOOR TILE	2
2118	P3	211803	F5	FLOOR TILE	2
2118	P2	211802	I5	MASTIC	2
2118	P1000X	211800X	G4	FIXTURE PAPER	3
2120	P1000X	212000X	J5	FLEXIBLE CONNECTORS	3
2393	101	184-01	J6	FISSURES	0
2393	102	184-02	J8	FISSURES	0
2393	103	184-03	J7	FISSURES	0
2393	104	184-04	J5	GLUED TO DOOR	0
2436	101	183-01	J6	TRANSITE WALLBOARD	17
2436	999A	ASSUMED	J6	FLEXIBLE CONNECTORS	50
2436	999B	ASSUMED	C3	FLOOR TILE	5
2470	P11	247011	F4	TANK INSULATION	2
2470	P2	247002	F6	FLOOR TILE	2
2470	999A	ASSUMED	C6	FIRE DOOR	50
2476	P2A	247602A	I6	PIPE JOINTS	5
2476	P2	247602	I4	PIPE JOINTS	5
2590	B2	0017-02	I5	DOT GOUGE	0
2590	B1	0017-01	G6	DOT GOUGE	0
2590	999A	ASSUMED	D2	FLOOR TILE	5
2590	101	0017-03	I5	DOT GOUGE	0
2591	103	0052-03	E3	ACOUSTIC TILE	0
2591	108	0052-08	E7	DUCT INSULATION	80
2591	999A	ASSUMED	F6	FLOOR TILE	5

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BLDG NUMBER	SAMPLE NUMBER	LAB ID	CAD LOC	MATERIAL TYPE	TOTAL ASBESTOS
2591	B1	0051-11	G3	ACOUSTIC TILE	0
2591	101	0052-01	G3	ACOUSTIC TILE	0
2591	102	0052-02	I4	ACOUSTIC TILE	0
2591	107	0052-07	J8	EXTERIOR COATING	0
2591	106	0052-06	J8	EXTERIOR COATING	0
2591	104	0052-04	F6	ACOUSTIC TILE	0
2591	105	0052-05	G5	ACOUSTIC TILE	0
2591	999B	ASSUMED	E7	FLEXIBLE CONNECTOR	50
2591	110	0052-10	E7	DUCT INSULATION	80
2591	109	0052-09	E7	DUCT INSULATION	80
2592	105	32-05		FLOOR MASTIC	5
2592	109	32-12		ACOUSTICAL CEILING TILE	0
2592	999A	ASSUMED	C2	FLOOR TILE	5
2592	111	32-14		ACOUSTICAL CEILING TILE	0
2592	103	32-03		ACOUSTICAL CEILING TILE	0
2592	102	32-02		ACOUSTICAL CEILING TILE	0
2592	104	32-04		ACOUSTICAL CEILING TILE	0
2592	106	32-09		SPRAYON CEILING	0
2592	107	32-10		SPRAYON CEILING	0
2592	108	32-11		SPRAYON CEILING	0
2592	B1	32-06		TANK INSULATION	0
2592	B2	32-07		FLU STACK INSULATION	0
2592	B3	32-08		FLU STACK INSULATION	35
2592	101	32-01		ACOUSTICAL CEILING TILE	0
2592	112	32-15		ACOUSTICAL CEILING TILE	0
2592	999B	ASSUMED		FIRE DOORS	50
2592	113	32-16		ACOUSTICAL CEILING TILE	0
2592	114	32-17		ACOUSTICAL CEILING TILE	0
2592	110	32-13		ACOUSTICAL CEILING TILE	0
2593	P1	259301	E6	FLOOR TILE	2
2593	P1000Y	259300Y	E4	FLEXIBLE CONNECTORS	3
2593	P1A	259301A	F6	FLOOR TILE	2
2593	P1000X	259300X	E5	FIRE DOORS	3
2593	P1B	259301B	F6	FLOOR TILE	2
2594	120	27-20	I6	OATMEAL	0
2594	119	27-19	H5	OATMEAL	0
2594	118	27-18	I6	OATMEAL	0
2594	117	27-17	F6	PIPE JOINTS	0
2594	116	27-16	F6	STRAIGHT PIPE	0
2594	115	27-15	E6	TANK INSULATION	0
2594	114	27-14	E6	TANK INSULATION	0
2594	113	27-13	E6	TANK INSULATION	0
2594	112	27-12	F7	TANK INSULATION	0
2594	111	27-11	F7	TANK INSULATION	0
2594	110	27-10	F7	TANK INSULATION	0
2594	109	27-09	G7	TANK INSULATION	0
2594	108	27-08	G6	TANK INSULATION	0
2594	107	27-07	F6	TANK INSULATION	0

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BLDG NUMBER	SAMPLE NUMBER	LAB ID	CAD LOC	MATERIAL TYPE	TOTAL ASBESTOS
2594	106	27-06	G6	TANK INSULATION	0
2594	105	27-05	G6	TANK INSULATION	0
2594	104	27-04	F6	TANK INSULATION	0
2594	103	27-03	G5	TANK INSULATION	0
2594	102	27-02	G6	TANK INSULATION	0
2594	101	27-01	G5	TANK INSULATION	0
2594	999B	ASSUMED	D7	FIRE DOORS	50
2594	999A	ASSUMED	E3	FLOOR TILE	5
2594	126	27-26	I8	PIN GOUGE	0
2594	125	27-25	H6	PIN GOUGE	0
2594	124	27-24	G6	PIN GOUGE	0
2594	122	27-22	H6	PIN GOUGE	0
2594	123	27-23	H7	PIN GOUGE	0
2594	121	27-21	H6	PIN GOUGE	0
2907	102	0053-02	D6	GOUGED	0
2907	101	0053-01	E7	GOUGED	0
2907	103	0053-03	C3	GOUGED	0
2990	999A	ASSUMED	C7	FIRE DOORS	50
2991	101	178-01	E3	TRANSITE WALLBOARD AT FLUE	42
2991	P1000X	299100X	E3	STRAIGHT PIPE AT HANGERS	3
3065	P1000X	306500X	C4	TRANSITE PLASTER	3
3065	P5	306505	C4	PLASTER	5
3065	P1	306501	F5	FLOOR TILE	10
3066	P3	306603	F7	PLASTER	2
3066	101	0044-01	F3	COATING OVER GYPSUM BOARD	2
3066	P6	306606	H4	FLOOR TILE	3
3066	P4	306604	G7	TRANSITE WALLBOARD	75
3066	P5	3066	G7	FLEXIBLE CONNECTORS	80
3066	102	0044-02	C5	COATING OVER GYPSUM BOARD	2
3069	P1	306901	C4	TRANSITE WALLBOARD	55
3069	P6	306906	C5	FLOOR TILE	2
3069	P3	306903	D4	PLASTER	5
3069	999A	ASSUMED	C4	FIRE DOORS	50
3070	999A	ASSUMED	C4	FIRE DOORS	50
3070	999B	ASSUMED	C4	FLEXIBLE CONNECTOR	50
3070	P3	307003	C4	PLASTER	5
3070	P4	307004	D7	FLOOR TILE	3
3070	P2	307002	C4	TRANSITE WALLBOARD	75
3126	P2	312602	F8	FLOOR TILE	2
3126	P3	312603	H8	FLOOR TILE	2
3126	999A	ASSUMED	F4	FIRE DOORS	50
3128	999A	ASSUMED	I5	FLOOR TILE	5
3136	P2464	31362464	C5	FLOOR TILE	5
3136	P23140	31362314	F7	TAR SPACKLING ON FIBERGLASS	10
3137	P23162	31372316	J7	FLOOR TILE	5
3137	999B	ASSUMED	D3	FIRE DOORS	50
3137	P23156	31372315	F8	AIRCELL STRAIGHT PIPE	5
3137	P23157	31372315	F8	PIPE JOINTS, HARD	10

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BLDG NUMBER	SAMPLE NUMBER	LAB ID	CAD LOC	MATERIAL TYPE	TOTAL ASBESTOS
3137	999A	ASSUMED	G6	FLOOR TILE	5
3138	101	26-01	J6	SERPENTINE	0
3138	102	26-02	J6	SERPENTINE	0
3138	103	26-03	J6	SERPENTINE	0
3138	104	26-04	J7	PEG BOARD	0
3138	105	26-05	J7	PEG BOARD	0
3138	106	26-06	J8	FLOOR TILE	1
3138	107	26-07	F6	FLOOR TILE	5
3138	112	26-12	E2	DEBRIS FROM BOILER	0
3138	108	26-08	H4	TANK INSULATION	35
3138	109	26-09	I5	TANK INSULATION	15
3138	110	26-10	I4	STRAIGHT PIPE INSULATION	35
3138	111	26-11	H4	STRAIGHT PIPE INSULATION	25
3138	113	26-13	E6	TANK INSULATION	0
3138	114	26-14	D3	TANK INSULATION	0
3138	115	26-15	D3	PIPE ELBOW	0
3138	117	26-17	C5	TANK INSULATION	0
3138	116	26-16	C4	TANK INSULATION	0
3145	P1	314501	G4	FLOOR TILE	2
3145	999A	ASSUMED	C5	FLEXIBLE CONNECTORS	50
3145	999B	ASSUMED	C5	FIRE DOOR	50
3145	P2	314502	F5	FLOOR TILE	2
3151	P23002	31512300	D7	FLOOR TILE	5
3151	P23007	31512300	J3	FLOOR TILE	5
3151	P23008	31512300	J3	FLOOR TILE	10
3151	999A	ASSUMED	J4	FIRE DOOR	50
3153	999A	ASSUMED	J3	FIRE DOOR	50
3153	999B	ASSUMED	H7	FLOOR TILE	5
3165	999A	ASSUMED	D4	FIRE DOORS	50
3165	101	0019-01	E5	FLOOR TILE	0
3165	102	0019-02	E5	FLOOR TILE	1
3230	999A	ASSUMED	H4	FIRE DOORS	50
3230	602	0020-02	F4	TAR WRAP	0
3230	601	0020-01	F3	TAR WRAP	0
3231	P6	323106	E4	FLOOR TILE	0
3231	P7	323107	E7	FLOOR TILE	0
3231	P3	323103	I5	FLOOR TILE	0
3231	P12	323112	D4	FLOOR TILE	0
3231	P13	323113	E5	FLOOR TILE	0
3231	P1000Z	323100Z	D3	TRANSITE BOARD	0
3231	999A	ASSUMED	E5	FIRE DOORS	0
3231	P2	323102	I5	PIPE JOINTS	0
3231	P5	323105	E7	FLOOR TILE	0
3232	999A	ASSUMED	E5	FIRE DOOR	50
3232	P8	323208	E5	FLOOR TILE	3
3232	P10	323210	E4	FLOOR TILE	2
3232	P7	323207	E6	FLOOR TILE	2
3234	P2	323402	D5	FLOOR TILE	2

Asbestos Survey
Samples To-date List

BLDG NUMBER	SAMPLE NUMBER	LAB ID	CAD LOC	MATERIAL TYPE	TOTAL ASBESTOS
3234	999A	ASSUMED	I5	FIRE DOOR	50
3235	999A	ASSUMED	D4	FIRE DOORS	50
3237	P23168	32372316	E2	FLOOR TILE	5
3237	P23170	32372317	E2	FLOOR TILE	5
3237	P23169	32372316	G5	FLOOR TILE	0
3237	999A	ASSUMED	E3	FIRE DOORS	0
7395	999A	ASSUMED	D3	FLOOR TILE	5

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VOLUME II

BUILDING NUMBERS

20	69	80	81	83
96	98	99	182	184
187	189	190	191	193
200	201	202	203	204
205	206	208	210	211

VOLUME III

BUILDING NUMBERS

212	213	214	215	216
219	220	221	222	226
231	235	238	240	246
247	256	257	258	259
268	269	270	291	292

VOLUME IV

BUILDING NUMBERS

303	305	307	309	312
313	314	315	316	317
318	319	320	321	322
323	324	325	326	327
328	329	330	331	332

VOLUME V

BUILDING NUMBERS

334	335	336	337	340
342	345	346	347	348
349	352	353	354	355
357	358	359	360	361
362	365	366	372	374

VOLUME VI

BUILDING NUMBERS

378	379	380	381	382
384	388	390	392	394
397	399	435	470	498
505	506	507	508	509
629	630	631	701	704

VOLUME VII

BUILDING NUMBERS

705	707	708	709	712
714	715	716	718	737
740	741	745	801	802
805	806	807	808	812
815	950	1000	1001	1017

VOLUME VIII

BUILDING NUMBERS

1018 1021 1023 1024 1025

1030 1084 1089 1099 1107

1108 1109 1112 1113 1114

1116 1123 1125 1126 1131

1132 1133 1134 1138 1140

VOLUME IX

BUILDING NUMBERS

1141 1142 1143 1144 1145

1146 1147 1148 1150 1153

1154 1155 1161 1169 1170

1171 1182 1185 1186 1187

1188 1189 1193 1194 1195

VOLUME X

BUILDING NUMBERS

1196 1197 1199 1200 1412

1416 1423 1425 1426 1428

1434 1436 1437 1439 1440

1442 1444 1445 1462 1464

1465 1466 1467 1469

VOLUME XI

BUILDING NUMBERS

1471 1475 1490 1491 1493

1494 1495 1496 1498 1499

1696 1697 1802 1804 1805

1806 1809 1810 1812 1813

1818 1819 1822 1824 1826

VOLUME XII

BUILDING NUMBERS

1831 1834 1837 1901 1902

1903 1906 1907 1908 1911

1912 1915 1916 1917 1920

1922 1923 1931 1934 1935

1938 1946 1949 1950 1952

VOLUME XIII

BUILDING NUMBERS

1953 1956 1961 1962 1968

1970 2101 2102 2105 2111

2113 2115 2117 2118 2120

2393 2436 2470 2473 2476

2477 2590 2591 2592 2593

VOLUME XIV

BUILDING NUMBERS

2594 2903 2904 2905 2907

2990 2991 3065 3066 3067

3069 3070 3074 3075 3086

3087 3122 3126 3128 3136

3137 3138 3140 3141 3145

3151 3153 3165 3170 3230

3231 3232 3234 3235 3237

7326 7386 7395

```
total 49
  16 drwxrwxr-x   2 ritchie  users       7536 Feb 17 13:02 correct
   1 -rwxrwxrwx   1 ritchie  users        293 Jan  3 14:51 ftbel.ptb
   2 drwxrwxr-x   2 ritchie  users        672 Feb 17 13:04 newdgn
  30 drwxrwxr-x   2 ritchie  users      14592 Feb 17 14:38 plots

./correct:
total 55496
 150 -rwxrwxr-x   1 ritchie  users      75264 Feb  8 18:01 fb1000-1.dgn
  52 -rwxrwxr-x   1 ritchie  users      26112 Feb  8 18:02 fb1000-b.dgn
 160 -rwxrwxr-x   1 ritchie  users      80384 Feb  8 18:02 fb1001.dgn
 292 -rwxrwxr-x   1 ritchie  users     147456 Feb  8 18:06 fb1017-1.dgn
 127 -rwxrwxr-x   1 ritchie  users      64512 Feb  8 18:08 fb1017.dgn
 120 -rwxrwxr-x   1 ritchie  users      60928 Feb  8 18:09 fb1018.dgn
  49 -rwxrwxr-x   1 ritchie  users      24576 Feb 15 16:39 fb1021.dgn
  81 -rwxrwxr-x   1 ritchie  users      40960 Feb  8 18:13 fb1023.dgn
  98 -rwxrwxr-x   1 ritchie  users      49664 Feb  8 18:13 fb1024.dgn
 120 -rwxrwxr-x   1 ritchie  users      60928 Feb  8 18:22 fb1025.dgn
 122 -rwxrwxr-x   1 ritchie  users      61952 Feb  8 18:24 fb1030-1.dgn
  82 -rwxrwxr-x   1 ritchie  users      41472 Feb  8 18:25 fb1030-2.dgn
 213 -rwxrwxr-x   1 ritchie  users     107520 Feb  8 18:25 fb1084.dgn
  84 -rw-rw-r--   1 ritchie  users      42496 Feb  8 18:26 fb1089.dgn
 262 -rwxrwxr-x   1 ritchie  users     132608 Feb  8 18:27 fb1099-1.dgn
 101 -rwxrwxr-x   1 ritchie  users      51200 Feb  8 18:27 fb1099-b.dgn
 117 -rwxrwxr-x   1 ritchie  users      59392 Feb  8 18:28 fb1107.dgn
 137 -rwxrwxr-x   1 ritchie  users      69632 Feb  8 18:36 fb1108-1.dgn
  98 -rwxrwxr-x   1 ritchie  users      49664 Feb  8 18:36 fb1108-2.dgn
  99 -rwxrwxr-x   1 ritchie  users      50176 Feb  8 18:37 fb1109.dgn
  49 -rwxrwxr-x   1 ritchie  users      24576 Feb  8 18:41 fb1112.dgn
 117 -rwxrwxr-x   1 ritchie  users      59392 Feb  8 18:41 fb1113.dgn
  74 -rwxrwxr-x   1 ritchie  users      37376 Feb  8 18:42 fb1114.dgn
 101 -rwxrwxr-x   1 ritchie  users      51200 Feb  8 18:53 fb1116.dgn
 101 -rwxrwxr-x   1 ritchie  users      51200 Feb  8 18:58 fb1123.dgn
  58 -rwxrwxr-x   1 ritchie  users      29184 Feb 13 13:00 fb1125.dgn
  73 -rwxrwxr-x   1 ritchie  users      36864 Feb  8 18:58 fb1126.dgn
 103 -rwxrwxr-x   1 ritchie  users      52224 Feb  8 18:59 fb1131.dgn
 108 -rwxrwxr-x   1 ritchie  users      54784 Feb  8 19:00 fb1132.dgn
 146 -rwxrwxr-x   1 ritchie  users      73216 Feb  8 19:02 fb1133.dgn
  49 -rwxrwxr-x   1 ritchie  users      24576 Feb  8 19:04 fb1134.dgn
  92 -rwxrwxr-x   1 ritchie  users      46592 Feb  8 19:07 fb1138.dgn
  64 -rwxrwxr-x   1 ritchie  users      32256 Feb  8 19:08 fb1140.dgn
  64 -rwxrwxr-x   1 ritchie  users      32256 Feb  8 19:10 fb1141.dgn
  76 -rwxrwxr-x   1 ritchie  users      38400 Feb  8 19:15 fb1142.dgn
  87 -rwxrwxr-x   1 ritchie  users      44032 Feb  8 19:49 fb1143.dgn
  68 -rwxrwxr-x   1 ritchie  users      34304 Feb  8 19:51 fb1144.dgn
  53 -rwxrwxr-x   1 ritchie  users      26624 Feb  8 19:55 fb1145.dgn
 101 -rw-rw-r--   1 ritchie  users      51200 Feb  9 12:23 fb1146.dgn
 159 -rw-rw-r--   1 ritchie  users      79872 Feb  9 12:25 fb1147.dgn
  90 -rw-rw-r--   1 ritchie  users      45568 Feb  9 12:30 fb1148.dgn
 111 -rwxrwxr-x   1 ritchie  users      56320 Feb  9 12:32 fb1150-b.dgn
  59 -rwxrwxr-x   1 ritchie  users      29696 Feb  9 12:32 fb1150-c.dgn
  77 -rwxrwxr-x   1 ritchie  users      38912 Feb  9 12:33 fb1150.dgn
 115 -rw-rw-r--   1 ritchie  users      58368 Feb  9 12:33 fb1153.dgn
  81 -rwxrwxr-x   1 ritchie  users      40960 Feb  9 12:35 fb1154.dgn
  88 -rw-rw-r--   1 ritchie  users      44544 Feb  9 12:36 fb1155.dgn
  90 -rwxrwxr-x   1 ritchie  users      45568 Feb  9 12:39 fb1161.dgn
  78 -rw-rw-r--   1 ritchie  users      39424 Feb  9 12:49 fb1169.dgn
  71 -rw-rw-r--   1 ritchie  users      35840 Feb  9 13:18 fb1170.dgn
  91 -rw-rw-r--   1 ritchie  users      46080 Feb  9 13:20 fb1171.dgn
  76 -rw-rw-r--   1 ritchie  users      38400 Feb  9 13:21 fb1182.dgn
  87 -rwxrwxr-x   1 ritchie  users      44032 Feb 15 16:49 fb1185.dgn
 417 -rw-rw-r--   1 ritchie  users     210944 Feb  9 13:23 fb1186.dgn
  79 -rwxrwxr-x   1 ritchie  users      39936 Feb  9 13:23 fb1187.dgn
  92 -rw-rw-r--   1 ritchie  users      46592 Feb  9 13:25 fb1188.dgn
 258 -rw-rw-r--   1 ritchie  users     130560 Feb  9 13:32 fb1189.dgn
 177 -rw-rw-r--   1 ritchie  users      89088 Feb  9 13:40 fb1193.dgn
```

```
  81 -rwxrwxr-x   1 ritchie  users    40960 Feb  9 13:42 fb1194.dgn
 157 -rwxrwxr-x   1 ritchie  users    78848 Feb 15 16:50 fb1195.dgn
  55 -rw-rw-r--   1 ritchie  users    27648 Feb  9 13:43 fb1196.dgn
  54 -rw-rw-r--   1 ritchie  users    27136 Feb  9 13:45 fb1197.dgn
  70 -rw-rw-r--   1 ritchie  users    35328 Feb  9 13:46 fb1199.dgn
 144 -rwxrwxr-x   1 ritchie  users    72192 Feb  9 13:48 fb1200.dgn
  77 -rwxrwxr-x   1 ritchie  users    38912 Feb  9 13:49 fb1412.dgn
 103 -rwxrwxr-x   1 ritchie  users    52224 Feb  9 14:14 fb1416.dgn
  61 -rwxrwxr-x   1 ritchie  users    30720 Feb  9 14:16 fb1423.dgn
 196 -rwxrwxr-x   1 ritchie  users    98816 Feb  9 14:18 fb1425-1.dgn
 161 -rwxrwxr-x   1 ritchie  users    80896 Feb  9 14:33 fb1425-2.dgn
 118 -rw-rw-r--   1 ritchie  users    59904 Feb  9 14:39 fb1426.dgn
  83 -rwxrwxr-x   1 ritchie  users    41984 Feb  9 14:39 fb1428.dgn
 154 -rwxrwxr-x   1 ritchie  users    77312 Feb  9 14:41 fb1434-1.dgn
 115 -rwxrwxr-x   1 ritchie  users    58368 Feb  9 14:42 fb1434-2.dgn
 133 -rwxrwxr-x   1 ritchie  users    67584 Feb  9 14:43 fb1436.dgn
  61 -rwxrwxr-x   1 ritchie  users    30720 Feb  9 14:44 fb1437.dgn
  66 -rwxrwxr-x   1 ritchie  users    33280 Feb  9 14:44 fb1439.dgn
 235 -rwxrwxr-x   1 ritchie  users   118784 Feb  9 14:45 fb1440-1.dgn
  76 -rwxrwxr-x   1 ritchie  users    38400 Feb  9 14:46 fb1440-2.dgn
 178 -rwxrwxr-x   1 ritchie  users    89600 Feb  9 14:49 fb1442-1.dgn
 162 -rwxrwxr-x   1 ritchie  users    81408 Feb  9 14:51 fb1442-2.dgn
  87 -rwxrwxr-x   1 ritchie  users    44032 Feb  9 14:54 fb1444.dgn
 266 -rwxrwxr-x   1 ritchie  users   134656 Feb  9 14:56 fb1445.dgn
  72 -rwxrwxr-x   1 ritchie  users    36352 Feb  9 14:56 fb1462.dgn
 290 -rwxrwxr-x   1 ritchie  users   146432 Feb  9 14:59 fb1464.dgn
 314 -rwxrwxr-x   1 ritchie  users   158720 Feb  9 15:01 fb1466.dgn
  87 -rw-rw-r--   1 ritchie  users    44032 Feb  9 15:02 fb1467.dgn
  99 -rw-rw-r--   1 ritchie  users    50176 Feb  9 15:03 fb1469.dgn
 105 -rwxrwxr-x   1 ritchie  users    53248 Feb  9 15:04 fb1471.dgn
 117 -rw-rw-r--   1 ritchie  users    59392 Feb  9 15:14 fb1475.dgn
  75 -rw-rw-r--   1 ritchie  users    37888 Feb  9 15:14 fb1490.dgn
  77 -rw-rw-r--   1 ritchie  users    38912 Feb  9 15:14 fb1491.dgn
  55 -rwxrwxr-x   1 ritchie  users    27648 Feb  9 15:16 fb1493.dgn
 107 -rwxrwxr-x   1 ritchie  users    54272 Feb  9 15:17 fb1494a.dgn
  69 -rw-rw-r--   1 ritchie  users    34816 Feb  9 15:18 fb1495.dgn
  55 -rwxrwxr-x   1 ritchie  users    27648 Feb  9 15:20 fb1496.dgn
 126 -rwxrwxr-x   1 ritchie  users    64000 Feb  9 15:25 fb1498.dgn
 116 -rwxrwxr-x   1 ritchie  users    58880 Feb  9 15:28 fb1499.dgn
  51 -rwxrwxr-x   1 ritchie  users    25600 Feb  9 15:29 fb1696.dgn
  56 -rwxrwxr-x   1 ritchie  users    28160 Feb  9 15:30 fb1697.dgn
  81 -rwxrwxr-x   1 ritchie  users    40960 Feb  9 15:31 fb1802.dgn
 112 -rwxrwxr-x   1 ritchie  users    56832 Feb  9 15:36 fb1804-a.dgn
 110 -rwxrwxr-x   1 ritchie  users    55808 Feb  9 15:33 fb1804.dgn
  72 -rwxrwxr-x   1 ritchie  users    36352 Feb 13 15:38 fb1805.dgn
  60 -rwxrwxr-x   1 ritchie  users    30208 Feb  9 15:37 fb1806.dgn
 119 -rw-rw-r--   1 ritchie  users    60416 Feb  9 15:40 fb1809.dgn
  77 -rw-rw-r--   1 ritchie  users    38912 Feb  9 15:45 fb1810.dgn
 211 -rw-rw-r--   1 ritchie  users   106496 Feb  9 15:49 fb1812.dgn
  63 -rwxrwxr-x   1 ritchie  users    31744 Feb  9 15:50 fb1813.dgn
  78 -rwxrwxr-x   1 ritchie  users    39424 Feb  9 16:05 fb1818.dgn
  78 -rwxrwxr-x   1 ritchie  users    39424 Feb  9 16:06 fb1819.dgn
 119 -rwxrwxr-x   1 ritchie  users    60416 Feb  7 14:23 fb182.dgn
 114 -rwxrwxr-x   1 ritchie  users    57856 Feb  9 16:07 fb1822.dgn
 116 -rwxrwxr-x   1 ritchie  users    58880 Feb  9 16:20 fb1824-a.dgn
  87 -rwxrwxr-x   1 ritchie  users    44032 Feb  9 16:16 fb1824.dgn
  75 -rw-rw-r--   1 ritchie  users    37888 Feb  9 16:22 fb1826.dgn
 104 -rwxrwxr-x   1 ritchie  users    52736 Feb  9 16:23 fb1831.dgn
  91 -rwxrwxr-x   1 ritchie  users    46080 Feb  9 16:25 fb1834.dgn
  65 -rwxrwxr-x   1 ritchie  users    32768 Feb  9 16:26 fb1837.dgn
  94 -rwxrwxr-x   1 ritchie  users    47616 Feb  7 14:24 fb184.dgn
 124 -rwxrwxr-x   1 ritchie  users    62976 Feb  7 14:26 fb187.dgn
 148 -rwxrwxr-x   1 ritchie  users    74240 Feb  7 14:27 fb189.dgn
  96 -rw-rw-r--   1 ritchie  users    48640 Feb 10 12:47 fb190.dgn
  96 -rwxrwxr-x   1 ritchie  users    48640 Feb  9 16:26 fb1901.dgn
 110 -rwxrwxr-x   1 ritchie  users    55808 Feb  9 16:28 fb1902.dgn
```

```
111 -rwxrwxr-x   1 ritchie  users     56320 Feb  9 16:31 fb1903.dgn
386 -rw-rw-r--   1 ritchie  users    195584 Feb  9 16:34 fb1906.dgn
 76 -rwxrwxr-x   1 ritchie  users     38400 Feb  9 16:35 fb1907.dgn
 87 -rw-rw-r--   1 ritchie  users     44032 Feb  9 16:41 fb1908.dgn
103 -rwxrwxr-x   1 ritchie  users     52224 Feb 10 12:48 fb191-1.dgn
102 -rwxrwxr-x   1 ritchie  users     51712 Feb 10 12:48 fb191-2.dgn
106 -rwxrwxr-x   1 ritchie  users     53760 Feb  9 16:57 fb1911.dgn
 78 -rwxrwxr-x   1 ritchie  users     39424 Feb  9 16:59 fb1912.dgn
 75 -rwxrwxr-x   1 ritchie  users     37888 Feb  9 17:00 fb1915.dgn
 83 -rwxrwxr-x   1 ritchie  users     41984 Feb  9 17:06 fb1916.dgn
 93 -rwxrwxr-x   1 ritchie  users     47104 Feb  9 17:07 fb1917.dgn
 78 -rwxrwxr-x   1 ritchie  users     39424 Feb  9 17:08 fb1920.dgn
 75 -rwxrwxr-x   1 ritchie  users     37888 Feb  9 17:09 fb1922.dgn
 79 -rw-rw-r--   1 ritchie  users     39936 Feb  9 17:09 fb1923.dgn
146 -rwxrwxr-x   1 ritchie  users     73216 Feb  7 14:36 fb193.dgn
 82 -rwxrwxr-x   1 ritchie  users     41472 Feb  9 17:11 fb1931.dgn
115 -rw-rw-r--   1 ritchie  users     58368 Feb  9 17:32 fb1934.dgn
 76 -rwxrwxr-x   1 ritchie  users     38400 Feb  9 17:36 fb1935.dgn
 57 -rwxrwxr-x   1 ritchie  users     28672 Feb  9 17:38 fb1938.dgn
 48 -rwxrwxr-x   1 ritchie  users     24064 Feb  9 17:39 fb1946.dgn
 79 -rw-rw-r--   1 ritchie  users     39936 Feb  9 17:41 fb1949.dgn
119 -rwxrwxr-x   1 ritchie  users     60416 Feb  9 17:43 fb1950.dgn
 93 -rwxrwxr-x   1 ritchie  users     47104 Feb  9 17:44 fb1952.dgn
 69 -rw-rw-r--   1 ritchie  users     34816 Feb  9 17:45 fb1953.dgn
 67 -rwxrwxr-x   1 ritchie  users     33792 Feb  9 17:46 fb1956.dgn
 80 -rwxrwxr-x   1 ritchie  users     40448 Feb  9 17:48 fb1961.dgn
309 -rw-rw-r--   1 ritchie  users    156160 Feb  9 18:17 fb1962.dgn
308 -rw-rw-r--   1 ritchie  users    155648 Feb  9 18:17 fb1968.dgn
 72 -rw-rw-r--   1 ritchie  users     36352 Feb  9 18:21 fb1970.dgn
202 -rwxrwxr-x   1 ritchie  users    101888 Feb  7 14:01 fb20-1.dgn
224 -rwxrwxr-x   1 ritchie  users    113152 Feb  7 14:08 fb20-2.dgn
 97 -rwxrwxr-x   1 ritchie  users     49152 Feb  7 14:08 fb20-3.dgn
165 -rwxrwxr-x   1 ritchie  users     82944 Feb  7 14:09 fb20-b.dgn
191 -rwxrwxr-x   1 ritchie  users     96256 Feb  7 14:38 fb200-1.dgn
 89 -rwxrwxr-x   1 ritchie  users     45056 Feb  7 14:38 fb200-m.dgn
207 -rwxrwxr-x   1 ritchie  users    104448 Feb  7 14:46 fb201-1.dgn
147 -rwxrwxr-x   1 ritchie  users     73728 Feb  7 14:48 fb201-2.dgn
 81 -rwxrwxr-x   1 ritchie  users     40960 Feb  7 14:49 fb201-a.dgn
184 -rwxrwxr-x   1 ritchie  users     92672 Feb  7 14:42 fb201-b.dgn
336 -rwxrwxr-x   1 ritchie  users    169984 Feb  7 14:53 fb202.dgn
126 -rwxrwxr-x   1 ritchie  users     64000 Feb  7 14:56 fb203-1.dgn
 96 -rwxrwxr-x   1 ritchie  users     48640 Feb  7 14:57 fb203-2.dgn
169 -rwxrwxr-x   1 ritchie  users     84992 Feb  7 15:01 fb203-a.dgn
 83 -rwxrwxr-x   1 ritchie  users     41984 Feb  7 14:54 fb203-b.dgn
157 -rwxrwxr-x   1 ritchie  users     78848 Feb  7 15:03 fb204.dgn
279 -rwxrwxr-x   1 ritchie  users    140800 Feb  7 15:07 fb205.dgn
 89 -rwxrwxr-x   1 ritchie  users     45056 Feb  7 15:12 fb206-1.dgn
 94 -rwxrwxr-x   1 ritchie  users     47616 Feb  7 15:13 fb206-2.dgn
 47 -rwxrwxr-x   1 ritchie  users     23552 Feb  7 15:14 fb206-a.dgn
 74 -rwxrwxr-x   1 ritchie  users     37376 Feb  7 15:12 fb206-b.dgn
100 -rwxrwxr-x   1 ritchie  users     50688 Feb  7 15:16 fb208-1.dgn
 97 -rwxrwxr-x   1 ritchie  users     49152 Feb  7 15:17 fb208-2.dgn
 65 -rwxrwxr-x   1 ritchie  users     32768 Feb  7 15:15 fb208-b.dgn
136 -rwxrwxr-x   1 ritchie  users     69120 Feb  7 15:39 fb210-1.dgn
109 -rwxrwxr-x   1 ritchie  users     55296 Feb  7 15:40 fb210-2.dgn
 82 -rwxrwxr-x   1 ritchie  users     41472 Feb  7 15:28 fb210-b.dgn
112 -rwxrwxr-x   1 ritchie  users     56832 Feb  9 18:24 fb2101.dgn
204 -rwxrwxr-x   1 ritchie  users    102912 Feb  9 18:25 fb2102.dgn
116 -rwxrwxr-x   1 ritchie  users     58880 Feb  9 18:30 fb2105.dgn
116 -rwxrwxr-x   1 ritchie  users     58880 Feb  7 15:42 fb211-1.dgn
 93 -rwxrwxr-x   1 ritchie  users     47104 Feb  7 15:43 fb211-2.dgn
 66 -rwxrwxr-x   1 ritchie  users     33280 Feb  7 15:44 fb211-a.dgn
 92 -rwxrwxr-x   1 ritchie  users     46592 Feb  7 15:41 fb211-b.dgn
113 -rwxrwxr-x   1 ritchie  users     57344 Feb  9 18:32 fb2111.dgn
 77 -rw-rw-r--   1 ritchie  users     38912 Feb  9 18:34 fb2113.dgn
471 -rw-rw-r--   1 ritchie  users    238592 Feb  9 18:34 fb2115.dgn
```

```
  51 -rw-rw-r--   1 ritchie  users    25600 Feb  9 18:35 fb2117.dgn
  82 -rw-rw-r--   1 ritchie  users    41472 Feb  9 18:37 fb2118.dgn
 101 -rwxrwxr-x   1 ritchie  users    51200 Feb  7 15:44 fb212-1.dgn
  92 -rwxrwxr-x   1 ritchie  users    46592 Feb  7 15:47 fb212-2.dgn
 124 -rwxrwxr-x   1 ritchie  users    62976 Feb  7 15:46 fb212-b.dgn
  79 -rw-rw-r--   1 ritchie  users    39936 Feb 13 18:16 fb2120.dgn
 108 -rwxrwxr-x   1 ritchie  users    54784 Feb  7 15:52 fb213-1.dgn
 117 -rwxrwxr-x   1 ritchie  users    59392 Feb  7 16:24 fb213-2.dgn
  99 -rwxrwxr-x   1 ritchie  users    50176 Feb  7 15:51 fb213-b.dgn
 152 -rwxrwxr-x   1 ritchie  users    76288 Feb  7 16:27 fb214.dgn
 137 -rwxrwxr-x   1 ritchie  users    69632 Feb  7 16:27 fb215-1.dgn
  64 -rwxrwxr-x   1 ritchie  users    32256 Feb  7 16:29 fb215-2.dgn
 153 -rwxrwxr-x   1 ritchie  users    76800 Feb 10 15:16 fb216.dgn
 179 -rwxrwxr-x   1 ritchie  users    90112 Feb  7 16:31 fb219-1.dgn
 152 -rwxrwxr-x   1 ritchie  users    76288 Feb  7 16:32 fb219-2.dgn
 119 -rwxrwxr-x   1 ritchie  users    60416 Feb  7 16:31 fb219-b.dgn
 218 -rw-rw-r--   1 ritchie  users   110080 Feb 10 15:18 fb220.dgn
  72 -rwxrwxr-x   1 ritchie  users    36352 Feb  7 16:35 fb221.dgn
  67 -rwxrwxr-x   1 ritchie  users    33792 Feb  7 16:38 fb222.dgn
 130 -rwxrwxr-x   1 ritchie  users    66048 Feb  7 16:39 fb226.dgn
  94 -rwxrwxr-x   1 ritchie  users    47616 Feb 10 15:19 fb231.dgn
  68 -rwxrwxr-x   1 ritchie  users    34304 Feb  7 16:39 fb235.dgn
  81 -rwxrwxr-x   1 ritchie  users    40960 Feb 14 13:13 fb238.dgn
  75 -rwxrwxr-x   1 ritchie  users    37888 Feb  9 18:48 fb2393.dgn
 114 -rwxrwxr-x   1 ritchie  users    57856 Feb  7 16:40 fb240-b.dgn
 352 -rwxrwxr-x   1 ritchie  users   178176 Feb  7 16:46 fb240.dgn
  66 -rwxrwxr-x   1 ritchie  users    33280 Feb  9 18:56 fb2436.dgn
 114 -rwxrwxr-x   1 ritchie  users    57856 Feb  7 16:49 fb246.dgn
 218 -rwxrwxr-x   1 ritchie  users   110080 Feb  7 17:01 fb247-1.dgn
 223 -rwxrwxr-x   1 ritchie  users   112640 Feb  7 17:03 fb247-2.dgn
 262 -rwxrwxr-x   1 ritchie  users   132608 Feb  7 17:04 fb247-3.dgn
 146 -rwxrwxr-x   1 ritchie  users    73216 Feb  7 17:12 fb247-b.dgn
  72 -rwxrwxr-x   1 ritchie  users    36352 Feb  7 17:05 fb247-p.dgn
 129 -rwxrwxr-x   1 ritchie  users    65536 Feb  9 18:58 fb2470.dgn
  56 -rw-rw-r--   1 ritchie  users    28160 Feb  9 18:59 fb2473.dgn
 178 -rw-rw-r--   1 ritchie  users    89600 Feb  9 19:01 fb2476.dgn
  58 -rw-rw-r--   1 ritchie  users    29184 Feb  9 19:04 fb2477.dgn
 147 -rwxrwxr-x   1 ritchie  users    73728 Feb  7 17:12 fb256.dgn
 203 -rwxrwxr-x   1 ritchie  users   102400 Feb  7 17:14 fb257-1.dgn
 121 -rwxrwxr-x   1 ritchie  users    61440 Feb  7 17:13 fb257-b.dgn
  87 -rwxrwxr-x   1 ritchie  users    44032 Feb  7 17:18 fb258-1.dgn
  77 -rwxrwxr-x   1 ritchie  users    38912 Feb  7 17:21 fb258-a.dgn
  76 -rwxrwxr-x   1 ritchie  users    38400 Feb  7 17:19 fb258-b.dgn
  52 -rwxrwxr-x   1 ritchie  users    26112 Feb  7 17:22 fb259.dgn
  81 -rwxrwxr-x   1 ritchie  users    40960 Feb 13 18:52 fb2590.dgn
 146 -rwxrwxr-x   1 ritchie  users    73216 Feb  9 19:48 fb2591.dgn
 164 -rwxrwxr-x   1 ritchie  users    82432 Feb 14 13:14 fb2592.dgn
 291 -rw-rw-r--   1 ritchie  users   146944 Feb 10 12:52 fb2593.dgn
 366 -rwxrwxr-x   1 ritchie  users   185344 Feb 10 12:53 fb2594.dgn
 105 -rwxrwxr-x   1 ritchie  users    53248 Feb  7 17:28 fb268-1.dgn
  79 -rwxrwxr-x   1 ritchie  users    39936 Feb  7 17:25 fb268-2.dgn
 148 -rwxrwxr-x   1 ritchie  users    74240 Feb  7 17:27 fb268-a.dgn
 103 -rwxrwxr-x   1 ritchie  users    52224 Feb  7 17:23 fb268-b.dgn
 204 -rwxrwxr-x   1 ritchie  users   102912 Feb  7 17:30 fb269-1.dgn
 187 -rwxrwxr-x   1 ritchie  users    94208 Feb  7 17:31 fb269-2.dgn
  59 -rwxrwxr-x   1 ritchie  users    29696 Feb  7 17:32 fb269-a.dgn
 168 -rwxrwxr-x   1 ritchie  users    84480 Feb  7 17:29 fb269-b.dgn
 143 -rwxrwxr-x   1 ritchie  users    71680 Feb  7 17:33 fb270-1.dgn
 152 -rwxrwxr-x   1 ritchie  users    76288 Feb  7 17:34 fb270-2.dgn
  68 -rwxrwxr-x   1 ritchie  users    34304 Feb  7 17:37 fb270-a.dgn
 109 -rwxrwxr-x   1 ritchie  users    55296 Feb  7 17:32 fb270-b.dgn
  49 -rwxrwxr-x   1 ritchie  users    24576 Feb 10 12:54 fb2903.dgn
  50 -rwxrwxr-x   1 ritchie  users    25088 Feb 10 12:56 fb2904.dgn
  49 -rwxrwxr-x   1 ritchie  users    24576 Feb 10 12:57 fb2905.dgn
  67 -rwxrwxr-x   1 ritchie  users    33792 Feb 13 19:04 fb2907.dgn
 119 -rwxrwxr-x   1 ritchie  users    60416 Feb  7 17:38 fb291.dgn
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116 -rwxrwxr-x   1 ritchie  users     58880 Feb  7 17:39 fb292.dgn
 59 -rw-rw-r--   1 ritchie  users     29696 Feb 10 12:58 fb2990.dgn
 68 -rw-rw-r--   1 ritchie  users     34304 Feb 10 12:59 fb2991.dgn
 77 -rwxrwxr-x   1 ritchie  users     38912 Feb  7 17:57 fb303.dgn
248 -rwxrwxr-x   1 ritchie  users    125440 Feb  7 18:00 fb305-1.dgn
257 -rwxrwxr-x   1 ritchie  users    130048 Feb  7 18:05 fb305-2.dgn
235 -rwxrwxr-x   1 ritchie  users    118784 Feb  7 18:06 fb305-3.dgn
 86 -rwxrwxr-x   1 ritchie  users     43520 Feb 13 12:21 fb3065.dgn
129 -rwxrwxr-x   1 ritchie  users     65536 Feb 10 13:01 fb3066.dgn
 49 -rwxrwxr-x   1 ritchie  users     24576 Feb 10 13:03 fb3067.dgn
 88 -rwxrwxr-x   1 ritchie  users     44544 Feb 10 13:04 fb3069.dgn
160 -rwxrwxr-x   1 ritchie  users     80384 Feb  7 18:17 fb307-1.dgn
164 -rwxrwxr-x   1 ritchie  users     82432 Feb  7 18:24 fb307-2.dgn
100 -rwxrwxr-x   1 ritchie  users     50688 Feb  7 18:26 fb307-c.dgn
 84 -rwxrwxr-x   1 ritchie  users     42496 Feb 10 13:07 fb3070.dgn
 49 -rwxrwxr-x   1 ritchie  users     24576 Feb 10 13:08 fb3074.dgn
 49 -rwxrwxr-x   1 ritchie  users     24576 Feb 10 13:10 fb3075.dgn
 60 -rwxrwxr-x   1 ritchie  users     30208 Feb 10 13:12 fb3086.dgn
 56 -rwxrwxr-x   1 ritchie  users     28160 Feb 10 13:13 fb3087.dgn
264 -rwxrwxr-x   1 ritchie  users    133632 Feb  7 18:32 fb309-1.dgn
204 -rwxrwxr-x   1 ritchie  users    102912 Feb  7 18:34 fb309-2.dgn
152 -rwxrwxr-x   1 ritchie  users     76288 Feb  7 18:34 fb309-m.dgn
133 -rwxrwxr-x   1 ritchie  users     67584 Feb  7 18:41 fb312-1.dgn
113 -rwxrwxr-x   1 ritchie  users     57344 Feb  7 18:56 fb312-2.dgn
 85 -rwxrwxr-x   1 ritchie  users     43008 Feb  7 18:35 fb312-b.dgn
 49 -rwxrwxr-x   1 ritchie  users     24576 Feb 10 13:14 fb3122.dgn
 83 -rw-rw-r--   1 ritchie  users     41984 Feb 10 13:16 fb3126.dgn
 53 -rwxrwxr-x   1 ritchie  users     26624 Feb 10 13:18 fb3128.dgn
 58 -rwxrwxr-x   1 ritchie  users     29184 Feb  7 18:58 fb313.dgn
 96 -rwxrwxr-x   1 ritchie  users     48640 Feb 10 13:19 fb3136-1.dgn
 87 -rwxrwxr-x   1 ritchie  users     44032 Feb 10 13:19 fb3136-2.dgn
 56 -rwxrwxr-x   1 ritchie  users     28160 Feb 10 13:19 fb3136-b.dgn
 99 -rwxrwxr-x   1 ritchie  users     50176 Feb 10 13:25 fb3137.dgn
152 -rwxrwxr-x   1 ritchie  users     76288 Feb 10 13:27 fb3138.dgn
142 -rwxrwxr-x   1 ritchie  users     71168 Feb  7 19:03 fb314-1.dgn
111 -rwxrwxr-x   1 ritchie  users     56320 Feb  7 19:04 fb314-2.dgn
 95 -rwxrwxr-x   1 ritchie  users     48128 Feb  7 19:01 fb314-b.dgn
 64 -rw-rw-r--   1 ritchie  users     32256 Feb 10 13:39 fb3140.dgn
120 -rw-rw-r--   1 ritchie  users     60928 Feb 10 13:46 fb3145.dgn
174 -rwxrwxr-x   1 ritchie  users     87552 Feb  7 19:21 fb315-1.dgn
160 -rwxrwxr-x   1 ritchie  users     80384 Feb  7 19:22 fb315-2.dgn
 93 -rwxrwxr-x   1 ritchie  users     47104 Feb  7 19:10 fb315-b.dgn
149 -rwxrwxr-x   1 ritchie  users     74752 Feb 10 13:50 fb3151-1.dgn
143 -rwxrwxr-x   1 ritchie  users     71680 Feb 10 14:01 fb3151-2.dgn
 59 -rw-rw-r--   1 ritchie  users     29696 Feb 10 14:15 fb3153.dgn
134 -rwxrwxr-x   1 ritchie  users     68096 Feb  7 19:24 fb316-1.dgn
120 -rwxrwxr-x   1 ritchie  users     60928 Feb  7 19:29 fb316-2.dgn
 90 -rwxrwxr-x   1 ritchie  users     45568 Feb  7 19:23 fb316-b.dgn
115 -rwxrwxr-x   1 ritchie  users     58368 Feb 10 14:17 fb3165.dgn
169 -rwxrwxr-x   1 ritchie  users     84992 Feb  7 19:33 fb317-1.dgn
 60 -rwxrwxr-x   1 ritchie  users     30208 Feb  7 19:33 fb317-b.dgn
 49 -rwxrwxr-x   1 ritchie  users     24576 Feb 10 14:18 fb3170.dgn
195 -rwxrwxr-x   1 ritchie  users     98304 Feb  7 19:35 fb318-1.dgn
 60 -rwxrwxr-x   1 ritchie  users     30208 Feb  7 19:35 fb318-b.dgn
 83 -rwxrwxr-x   1 ritchie  users     41984 Feb  7 19:38 fb319-1.dgn
 63 -rwxrwxr-x   1 ritchie  users     31744 Feb  7 19:37 fb319-b.dgn
163 -rwxrwxr-x   1 ritchie  users     81920 Feb  7 19:42 fb320-1.dgn
 56 -rwxrwxr-x   1 ritchie  users     28160 Feb  7 19:43 fb320-a.dgn
 60 -rwxrwxr-x   1 ritchie  users     30208 Feb  7 19:43 fb320-b.dgn
128 -rwxrwxr-x   1 ritchie  users     65024 Feb  7 19:47 fb321-1.dgn
 46 -rwxrwxr-x   1 ritchie  users     23040 Feb  7 19:48 fb321-b.dgn
175 -rwxrwxr-x   1 ritchie  users     88064 Feb  7 19:49 fb322-1.dgn
121 -rwxrwxr-x   1 ritchie  users     61440 Feb  7 19:49 fb322-2.dgn
101 -rwxrwxr-x   1 ritchie  users     51200 Feb  7 19:51 fb322-b.dgn
118 -rw-rw-r--   1 ritchie  users     59904 Feb  8 12:07 fb323.dgn
 64 -rwxrwxr-x   1 ritchie  users     32256 Feb 10 14:18 fb3230.dgn
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 66 -rw-rw-rw-   1 ritchie  users     33280 Feb 10 14:21 fb3230a.dgn
262 -rw-rw-r--   1 ritchie  users    132608 Feb 10 14:26 fb3231.dgn
101 -rw-rw-r--   1 ritchie  users     51200 Feb 10 14:47 fb3232.dgn
 69 -rwxrwxr-x   1 ritchie  users     34816 Feb 10 14:47 fb3234.dgn
 87 -rwxrwxr-x   1 ritchie  users     44032 Feb 10 14:48 fb3235.dgn
109 -rwxrwxr-x   1 ritchie  users     55296 Feb 10 14:49 fb3237.dgn
303 -rwxrwxr-x   1 ritchie  users    153088 Feb  8 12:19 fb324.dgn
169 -rwxrwxr-x   1 ritchie  users     84992 Feb  8 12:20 fb325-1.dgn
 80 -rwxrwxr-x   1 ritchie  users     40448 Feb  8 12:20 fb325-b.dgn
159 -rwxrwxr-x   1 ritchie  users     79872 Feb  8 12:21 fb326-1.dgn
 54 -rwxrwxr-x   1 ritchie  users     27136 Feb  8 12:22 fb326-b.dgn
 90 -rwxrwxr-x   1 ritchie  users     45568 Feb  8 12:23 fb328.dgn
148 -rwxrwxr-x   1 ritchie  users     74240 Feb  8 12:24 fb329-1.dgn
 76 -rwxrwxr-x   1 ritchie  users     38400 Feb  8 12:28 fb329-b.dgn
 62 -rw-rw-r--   1 ritchie  users     31232 Feb  8 12:31 fb330.dgn
491 -rwxrwxr-x   1 ritchie  users    248832 Feb  8 12:38 fb331-1.dgn
 74 -rwxrwxr-x   1 ritchie  users     37376 Feb  8 12:38 fb331-2.dgn
109 -rwxrwxr-x   1 ritchie  users     55296 Feb  8 12:40 fb332.dgn
 91 -rwxrwxr-x   1 ritchie  users     46080 Feb  8 13:18 fb334-1.dgn
 66 -rwxrwxr-x   1 ritchie  users     33280 Feb  8 13:19 fb334-2.dgn
 66 -rwxrwxr-x   1 ritchie  users     33280 Feb 15 16:40 fb334-b.dgn
126 -rwxrwxr-x   1 ritchie  users     64000 Feb  8 13:20 fb335.dgn
 78 -rwxrwxr-x   1 ritchie  users     39424 Feb  8 13:20 fb336.dgn
110 -rwxrwxr-x   1 ritchie  users     55808 Feb  8 13:22 fb337-1.dgn
 69 -rwxrwxr-x   1 ritchie  users     34816 Feb  8 13:22 fb337-2.dgn
 84 -rwxrwxr-x   1 ritchie  users     42496 Feb  8 13:25 fb340.dgn
 49 -rwxrwxr-x   1 ritchie  users     24576 Feb  8 13:27 fb342.dgn
 51 -rwxrwxr-x   1 ritchie  users     25600 Feb  8 13:28 fb345.dgn
 51 -rwxrwxr-x   1 ritchie  users     25600 Feb  8 13:30 fb346.dgn
 68 -rwxrwxr-x   1 ritchie  users     34304 Feb  8 13:32 fb347.dgn
 51 -rwxrwxr-x   1 ritchie  users     25600 Feb  8 13:33 fb348.dgn
 50 -rwxrwxr-x   1 ritchie  users     25088 Feb  8 13:34 fb349.dgn
 57 -rwxrwxr-x   1 ritchie  users     28672 Feb  8 13:35 fb352.dgn
121 -rwxrwxr-x   1 ritchie  users     61440 Feb  8 13:37 fb353.dgn
169 -rwxrwxr-x   1 ritchie  users     84992 Feb  8 13:39 fb354.dgn
 49 -rwxrwxr-x   1 ritchie  users     24576 Feb  8 13:40 fb355.dgn
374 -rwxrwxr-x   1 ritchie  users    189440 Feb  8 13:41 fb357-1.dgn
395 -rwxrwxr-x   1 ritchie  users    200192 Feb  8 13:44 fb357-2.dgn
284 -rwxrwxr-x   1 ritchie  users    143360 Feb  8 13:42 fb357-1.dgn
 89 -rwxrwxr-x   1 ritchie  users     45056 Feb  8 13:45 fb357-p.dgn
273 -rwxrwxr-x   1 ritchie  users    137728 Feb  8 13:44 fb357-u.dgn
 77 -rwxrwxr-x   1 ritchie  users     38912 Feb  8 13:46 fb358-2.dgn
 92 -rwxrwxr-x   1 ritchie  users     46592 Feb  8 13:45 fb358-b.dgn
 67 -rwxrwxr-x   1 ritchie  users     33792 Feb  8 13:46 fb358.dgn
 66 -rwxrwxr-x   1 ritchie  users     33280 Feb  8 13:50 fb359.dgn
 75 -rwxrwxr-x   1 ritchie  users     37888 Feb  8 13:48 fb359a.dgn
 58 -rwxrwxr-x   1 ritchie  users     29184 Feb  8 13:50 fb360.dgn
109 -rwxrwxr-x   1 ritchie  users     55296 Feb  8 13:53 fb361.dgn
184 -rwxrwxr-x   1 ritchie  users     92672 Feb  8 13:54 fb362-1.dgn
169 -rwxrwxr-x   1 ritchie  users     84992 Feb  8 14:00 fb362-b.dgn
114 -rwxrwxr-x   1 ritchie  users     57856 Feb  8 14:13 fb365.dgn
114 -rwxrwxr-x   1 ritchie  users     57856 Feb  8 14:14 fb366.dgn
173 -rw-rw-r--   1 ritchie  users     87040 Feb  8 14:17 fb372.dgn
102 -rw-rw-r--   1 ritchie  users     51712 Feb 10 16:46 fb374.dgn
 59 -rwxrwxr-x   1 ritchie  users     29696 Feb  8 14:24 fb378.dgn
 76 -rwxrwxr-x   1 ritchie  users     38400 Feb  8 14:26 fb379.dgn
 78 -rw-rw-r--   1 ritchie  users     39424 Feb  8 14:28 fb380.dgn
 61 -rwxrwxr-x   1 ritchie  users     30720 Feb  8 14:29 fb381.dgn
 48 -rwxrwxr-x   1 ritchie  users     24064 Feb  8 14:30 fb382.dgn
 50 -rwxrwxr-x   1 ritchie  users     25088 Feb  8 14:32 fb384.dgn
 53 -rwxrwxr-x   1 ritchie  users     26624 Feb  8 14:34 fb388.dgn
 38 -rwxrwxr-x   1 ritchie  users     18944 Feb 17 13:02 fb390.dgn
380 -rw-rw-r--   1 ritchie  users    192512 Feb  8 14:37 fb392.dgn
 51 -rw-rw-r--   1 ritchie  users     25600 Feb  8 14:38 fb394.dgn
 50 -rwxrwxr-x   1 ritchie  users     25088 Feb  8 14:39 fb397.dgn
547 -rw-rw-r--   1 ritchie  users    276992 Feb  8 14:51 fb399.dgn
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   64 -rwxrwxr-x   1 ritchie  users     32256 Feb  8 15:13 fb435-1.dgn
   81 -rwxrwxr-x   1 ritchie  users     40960 Feb  8 15:12 fb435-c.dgn
  688 -rw-rw-r--   1 ritchie  users    348672 Feb  8 15:24 fb470.dgn
  406 -rw-rw-r--   1 ritchie  users    205312 Feb  8 15:20 fb470a.dgn
  250 -rw-rw-r--   1 ritchie  users    126464 Feb  8 15:28 fb498.dgn
  167 -rwxrwxr-x   1 ritchie  users     83968 Feb  8 15:31 fb505-1.dgn
   78 -rwxrwxr-x   1 ritchie  users     39424 Feb  8 15:31 fb505-b.dgn
  169 -rwxrwxr-x   1 ritchie  users     84992 Feb  8 15:35 fb506-1.dgn
  168 -rwxrwxr-x   1 ritchie  users     84480 Feb  8 15:35 fb506-2.dgn
  172 -rwxrwxr-x   1 ritchie  users     86528 Feb  8 15:36 fb506-3.dgn
   76 -rwxrwxr-x   1 ritchie  users     38400 Feb  8 15:33 fb506-b.dgn
  125 -rwxrwxr-x   1 ritchie  users     63488 Feb  8 15:45 fb507.dgn
  151 -rwxrwxr-x   1 ritchie  users     75776 Feb  8 15:46 fb508-1.dgn
  175 -rwxrwxr-x   1 ritchie  users     88064 Feb  8 15:46 fb508-2.dgn
   92 -rwxrwxr-x   1 ritchie  users     46592 Feb  8 15:45 fb508-b.dgn
  169 -rwxrwxr-x   1 ritchie  users     84992 Feb  8 15:46 fb509-1.dgn
  169 -rwxrwxr-x   1 ritchie  users     84992 Feb  8 15:47 fb509-2.dgn
   79 -rwxrwxr-x   1 ritchie  users     39936 Feb  8 15:48 fb509-b.dgn
   91 -rwxrwxr-x   1 ritchie  users     46080 Feb  8 15:50 fb629.dgn
  110 -rwxrwxr-x   1 ritchie  users     55808 Feb  8 15:51 fb630.dgn
   92 -rwxrwxr-x   1 ritchie  users     46592 Feb  8 15:52 fb631.dgn
   57 -rwxrwxr-x   1 ritchie  users     28672 Feb  7 14:11 fb69.dgn
  116 -rw-rw-r--   1 ritchie  users     58880 Feb  8 15:54 fb701.dgn
   55 -rw-rw-r--   1 ritchie  users     27648 Feb  8 15:55 fb704.dgn
   90 -rw-rw-r--   1 ritchie  users     45568 Feb  8 16:04 fb705.dgn
  154 -rw-rw-r--   1 ritchie  users     77312 Feb  8 16:08 fb707.dgn
  202 -rw-rw-r--   1 ritchie  users    101888 Feb  8 16:22 fb708.dgn
   64 -rw-rw-r--   1 ritchie  users     32256 Feb  8 16:24 fb709.dgn
   64 -rw-rw-r--   1 ritchie  users     32256 Feb  8 16:25 fb712.dgn
  560 -rw-rw-r--   1 ritchie  users    283648 Feb  8 16:32 fb714.dgn
   63 -rwxrwxr-x   1 ritchie  users     31744 Feb  8 16:42 fb715.dgn
   48 -rwxrwxr-x   1 ritchie  users     24064 Feb  8 16:45 fb716.dgn
   54 -rwxrwxr-x   1 ritchie  users     27136 Feb  8 16:48 fb718.dgn
   58 -rwxrwxr-x   1 ritchie  users     29184 Feb 10 14:49 fb7326.dgn
   49 -rwxrwxr-x   1 ritchie  users     24576 Feb  8 16:51 fb737.dgn
   58 -rw-rw-r--   1 ritchie  users     29184 Feb 10 14:50 fb7386.dgn
   56 -rwxrwxr-x   1 ritchie  users     28160 Feb 10 14:52 fb7395.dgn
  104 -rw-rw-r--   1 ritchie  users     52736 Feb  8 17:01 fb740.dgn
   79 -rw-rw-r--   1 ritchie  users     39936 Feb  8 17:06 fb741.dgn
  114 -rw-rw-r--   1 ritchie  users     57856 Feb  8 17:16 fb745.dgn
  155 -rwxrwxr-x   1 ritchie  users     77824 Feb  7 14:11 fb80.dgn
  204 -rwxrwxr-x   1 ritchie  users    102912 Feb  8 17:43 fb801-1.dgn
  126 -rwxrwxr-x   1 ritchie  users     64000 Feb  8 17:43 fb801-2.dgn
   88 -rwxrwxr-x   1 ritchie  users     44544 Feb  8 17:44 fb802.dgn
  163 -rwxrwxr-x   1 ritchie  users     81920 Feb  8 17:45 fb805-1.dgn
  124 -rwxrwxr-x   1 ritchie  users     62976 Feb  8 17:48 fb805-2.dgn
   97 -rwxrwxr-x   1 ritchie  users     49152 Feb  8 17:44 fb805-b.dgn
  100 -rwxrwxr-x   1 ritchie  users     50688 Feb  8 17:51 fb806.dgn
   84 -rwxrwxr-x   1 ritchie  users     42496 Feb  8 17:52 fb807-b.dgn
  122 -rwxrwxr-x   1 ritchie  users     61952 Feb  8 17:52 fb807.dgn
  166 -rwxrwxr-x   1 ritchie  users     83456 Feb  7 14:16 fb81.dgn
   58 -rwxrwxr-x   1 ritchie  users     29184 Feb  8 17:54 fb812.dgn
  118 -rwxrwxr-x   1 ritchie  users     59904 Feb  8 17:57 fb815.dgn
   58 -rwxrwxr-x   1 ritchie  users     29184 Feb  7 14:17 fb83.dgn
  144 -rwxrwxr-x   1 ritchie  users     72192 Feb  8 18:00 fb950.dgn
   61 -rwxrwxr-x   1 ritchie  users     30720 Feb  7 14:18 fb96.dgn
   63 -rwxrwxr-x   1 ritchie  users     31744 Feb  7 14:19 fb98.dgn
  166 -rwxrwxr-x   1 ritchie  users     83456 Feb  7 14:20 fb99.dgn
    2 -rw-rw-rw-   1 ritchie  users      1024 Feb  7 13:55 ftbel.cdx
  203 -rwxrwxrwx   1 ritchie  users    102400 Feb  7 13:55 ftbel.cel
    2 -rw-rw-rw-   1 ritchie  users       768 Jan 23 14:19 ftbel.tbl
  894 -rw-rw-r--   1 ritchie  users    453632 Feb 13 13:11 hosp1m.dgn
  744 -rw-rw-r--   1 ritchie  users    377344 Feb 13 14:15 hosp2a.dgn

./newdgn:
total 8275
```

```
  25 -rw-rw-r--   1 ritchie  users      12288 Nov 11 13:04 fb131016t.dgn
 469 -rw-rw-r--   1 ritchie  users     237568 Nov 11 12:56 fb1326.dgn
 247 -rw-rw-r--   1 ritchie  users     124928 Nov 11 12:56 fb1348.dgn
 199 -rw-rw-r--   1 ritchie  users     100352 Nov 11 12:57 fb1478.dgn
 187 -rw-rw-r--   1 ritchie  users      94208 Nov 11 12:57 fb1484.dgn
  89 -rw-rw-r--   1 ritchie  users      45056 Nov 11 12:57 fb1485.dgn
  89 -rw-rw-r--   1 ritchie  users      45056 Nov 11 12:57 fb1487.dgn
 646 -rw-rw-r--   1 ritchie  users     327680 Nov 11 12:58 fb2009.dgn
  33 -rw-rw-r--   1 ritchie  users      16384 Nov 11 12:58 fb2010.dgn
  61 -rw-rw-r--   1 ritchie  users      30720 Nov 11 12:58 fb2015.dgn
 937 -rw-rw-r--   1 ritchie  users     475136 Nov 11 12:58 fb2021.dgn
 179 -rw-rw-r--   1 ritchie  users      90112 Nov 11 12:58 fb2033.dgn
 207 -rw-rw-r--   1 ritchie  users     104448 Nov 11 12:58 fb2034.dgn
  73 -rw-rw-r--   1 ritchie  users      36864 Nov 11 12:58 fb2036.dgn
  85 -rw-rw-r--   1 ritchie  users      43008 Nov 11 12:58 fb2037.dgn
  53 -rw-rw-r--   1 ritchie  users      26624 Nov 11 12:58 fb2040.dgn
 525 -rw-rw-r--   1 ritchie  users     266240 Nov 11 13:13 fb2041.dgn
 586 -rw-rw-r--   1 ritchie  users     296960 Nov 11 12:58 fb2073.dgn
 707 -rw-rw-r--   1 ritchie  users     358400 Nov 11 12:58 fb2089.dgn
 143 -rw-rw-r--   1 ritchie  users      71680 Nov 11 12:58 fb2099.dgn
 175 -rw-rw-r--   1 ritchie  users      88064 Nov 11 12:58 fb2107.dgn
  73 -rw-rw-r--   1 ritchie  users      36864 Nov 11 12:58 fb2283.dgn
  89 -rw-rw-r--   1 ritchie  users      45056 Nov 11 12:58 fb2284.dgn
 101 -rw-rw-r--   1 ritchie  users      51200 Nov 11 12:58 fb2286.dgn
  97 -rw-rw-r--   1 ritchie  users      49152 Nov 11 12:58 fb2418.dgn
 324 -rw-rw-r--   1 ritchie  users     163840 Nov 11 12:59 fb2455.dgn
  93 -rw-rw-r--   1 ritchie  users      47104 Nov 11 12:59 fb2457.dgn
 143 -rw-rw-r--   1 ritchie  users      71680 Nov 11 12:59 fb371.dgn
 945 -rw-rw-r--   1 ritchie  users     479232 Nov 11 13:00 fb6001.dgn
  85 -rw-rw-r--   1 ritchie  users      43008 Nov 11 13:00 fb6003.dgn
 147 -rw-rw-r--   1 ritchie  users      73728 Nov 11 13:00 fb611.dgn
  49 -rw-rw-r--   1 ritchie  users      24576 Nov 11 13:00 fb641.dgn
 207 -rw-rw-r--   1 ritchie  users     104448 Nov 11 13:00 fb739.dgn
 105 -rw-rw-r--   1 ritchie  users      53248 Nov 11 13:00 fb743.dgn
  37 -rw-rw-r--   1 ritchie  users      18432 Nov 11 13:00 fb758.dgn
  65 -rw-rw-r--   1 ritchie  users      32768 Nov 11 13:00 fb788.dgn
```

SECTION II

COMPUTER GENERATED REPORTS

General: This section contains the following overall asbestos survey reports and indexes to each building and digital files:

- Master Building List - Tab A
- Rank Buildings by Risk Index - Tab B
- Rank Individual Areas by Risk Index - Tab C
- Samples To-date List - Tab D
- Individual Building Report Index - Tab E
- MicroStation DGN Files Index - Tab F

SECTION III

RISK ASSESSMENT & COST ESTIMATES

1. General: The algorithm presented below is an expansion of the old EPA or Sawyer algorithm used by the State of Virginia for asbestos surveys. Advantages are that it uses well defined criteria that can be amended to reflect field conditions, it keeps exposure or risk numbers in low values (≤227.25) and it can be worked without a calculator. It can be modified and tailored to meet specific needs, if necessary.

2. Data Conversion Protocol: D&D analyzed the data base documentation from the two previous asbestos surveys at Fort. Belvoir. The data files from the previous surveys were determined to be incompatible with D&D's existing DbaseIII+ program which included data management of asbestos survey information and the calculation of risk assessments. The D&D program uses a risk assessment algorithm to transfer raw field data into risk assessment values. The program is also designed to determine abatement priorities by comparing the risk assessment values.

Because the file structures of the two data base systems were incompatible, D&D entered the raw data from the previous surveys into the D&D program. Since data from the previous surveys, as well as the D&D survey were entered in the same manner, all algorithm calculations for Risk Index and Cost Estimates are determined consistently for all buildings.

3. Exposure Factors: Following is a brief description of each exposure factor and the range and extent of each score value. The subrange scores are also discussed, as well as the calculation of the risk index number. Levels of risk and proposed options for dealing with each asbestos situation are also explained.

The eight exposure factors are: 1) material condition, 2) water damage, 3) exposed surface area, 4) accessibility, 5) activity and movement, 6) air plenum or direct air stream, 7) friability, and 8) asbestos content.

FACTOR ONE: MATERIAL CONDITION

This factor is comprised of three levels:

A. NO DAMAGE: Material is intact and shows no sign of deterioration.

NUMERICAL VALUE: 0

B. MODERATE DAMAGE - SMALL AREAS: Through visual inspection and physical contact there are indications that ten percent or is breaking up into layers or beginning to fall. There may be small areas where the material is deteriorating. There may be signs of accidental or intentional damage.

NUMERICAL VALUE: 2

C. WIDESPREAD SEVERE DAMAGE: Greater than ten percent of the material is damaged. Large pieces are dislodged and/or debris in the area is evident. Parts of the material may be suspended from the ceilings or may have fallen to the floor. Evidence of severe accidental or intentional damage.

NUMERICAL VALUE: 5

The score is adjusted up one point or down one point depending on the building's age. If the age of the material and/or building in question is greater than 30-years, the objective variable is increased by one. If the building's age is less than 15-years, it is reduced by one. If the age is between 15-and 30-years, the score does not change.

If the type of material, in particular pipe coverings, is a magnesium or calcium silicate performed pipe having a tendency to deteriorate more rapidly, the score is increased by one; and if the material type is corrugated air cell or a paper product, it is reduced by one. For ceiling plasters or fireproofing, if the material type is more cementitious, the value is reduced by one. If it is a cotton candy Cafco-type blaze shield or sound shield, it is increased by one. For standard acoustical plaster materials, there is no change in the subvariable.

FACTOR TWO: WATER DAMAGE

This factor is comprised of three levels:

A. NO WATER DAMAGE: No water stains or evidence of the material being disturbed by water. No stains on the floor or walls to indicate past water damage.

NUMERICAL VALUE: 0

B. MINOR WATER DAMAGE: Small areas of the material or adjacent floor and/or walls show water stains and ceiling material may be slightly buckled. However, pieces have not fallen from the ceiling and the damage affects ten percent or less of the material.

NUMERICAL VALUE: 1

C. MODERATE TO MAJOR WATER DAMAGE: Water has dislodged some of the material and caused the material to break away, or has become saturated and has the potential to fall, and/or greater than ten percent of the material has been affected. Asbestos fibers have been carried from the asbestos-containing material by water and evaporation has occurred and/or the fibers have been deposited on other surfaces.

NUMERICAL VALUE: 2

If the roof above the material is a sloped or hipped roof, the value is reduced by 0.5 points. If it is a flat, built-up roof the value is increased by 0.5. If the substrate type is metal or concrete, the value is reduced by 0.5.

FACTOR THREE: EXPOSED SURFACE AREA

This factor is comprised of three levels:

A. MATERIAL IS COMPLETELY COVERED: Not visible without removing non ACM covering or enclosure.

NUMERICAL VALUE: 0

B. LESS THAN TEN PERCENT OF THE MATERIAL IS EXPOSED: A small portion of the covering or enclosure has been damaged or removed allowing fibers to pass through the barrier

NUMERICAL VALUE: 1

C. GREATER THAN TEN PERCENT OF THE MATERIAL IS EXPOSED: More than ten percent of the covering or enclosure has been damaged or removed exposing ACM.

NUMERICAL VALUE: 4

If a central HVAC system is part of the plenum area, the general determination is increased by one point. If there is no plenum, only an enclosed dead space, it is reduced by one. If there is a semipermanent or permanent enclosure under the fireproofing or acoustical plaster, isolating the mechanical system, the general determination is reduced by 0.5.

FACTOR FOUR: ACCESSIBILITY

This factor is comprised of three levels:

A. NOT ACCESSIBLE: The building occupants cannot contact the material. For example it is located above a tight suspended ceiling or is concealed by ducts or piping.

NUMERICAL VALUE: 0

B. RARELY ACCESSIBLE: Building occupants rarely touch the material or cause damage to it. The material is contacted only during abnormal activity such as infrequent maintenance or repair of nearby heating ventilation, lighting or plumbing systems.

NUMERICAL VALUE: 1

C. HIGHLY ACCESSIBLE: The building occupants can contact the material during normal activity, at which time they routinely touch and dislodge the material cause damage to it. Material is contacted frequently due to routine maintenance.

NUMERICAL VALUE: 4

If the ceiling height or material height is greater than nine and one half-feet, the subjective score is reduced by one point. If it is under nine and one half-feet the score is increased by one.

Since the building occupancy and use status tells a great deal about how often the material is going to be accessed, the numerical value can be adjusted by 1.5 or more depending on the type of occupancy. Pipe chases, crawl spaces, attics and mechanical air handling rooms have values reduced by 1.5, whereas major boiler rooms, classrooms, secretarial pools, barracks, office, etc. have values increased by 1.5.

FACTOR FIVE: ACTIVITY AND MOVEMENT

The factor is comprised of four levels:

A. NO ACTIVITY: This level includes unoccupied spaces such as chases or crawl spaces.

NUMERICAL VALUE: 0

B. LOW ACTIVITY: This level would normally include such areas as administrative offices, libraries, boiler rooms and those classrooms where the population is quiet and non-destructive.

NUMERICAL VALUE: 0

C. MODERATE ACTIVITY: This level describes areas such as corridors, classrooms, barracks or other areas where activities exist that could disturb asbestos materials and result in fibers being released from the material into the immediate area.

NUMERICAL VALUE: 1

D. HIGH ACTIVITY LEVEL: This level includes areas such as gymnasiums and shops where activities exist which are likely to cause damage and release asbestos fibers. If also includes areas such as classrooms or corridors which are subject to disruptive activity or vandalism.

NUMERICAL VALUE: 2

The next step is to determine whether there is sedentary or non-sedentary movement. If the area is a library or other sedentary work environment, the subjective variable is reduced by 0.5. However, if the area has a great deal of activity, such as in a hallway, a barracks, a maintenance shed, etc., the variable will be increased by 0.5. If the area is subject to sound or mechanical vibration, such as an auditorium, band hall, an air handling or boiler room, the variable is increased by 0.5.

If the area contains no recognizable sound or mechanical vibrations, or if no air handling systems are on the roof, the subjective variable is reduced by 0.5 points.

FACTOR SIX: AIR PLENUM OR DIRECT AIR STREAM

This factor is comprised of two levels:

A. NO AIR PLENUM OR DIRECT AIR STREAM PRESENT: The space is completely isolated with no air movement.

NUMERICAL VALUE: 0

B. AIR PLENUM OR DIRECT AIR STREAM PRESENT: Look for dust patterns deposited by an air stream on surfaces next to air supply diffusers. Fan rooms coated with asbestos-containing material may be contributing asbestos fibers to the building air if the circulation system draws air from such a coated room. Look for debris from the asbestos-containing material being deposited on dampers and filters of the air intake.

NUMERICAL VALUE: 1

Look at the velocity of the air flow. If the air flow is recognizable by human feeling, rather than being subtle, the variable is increased by 0.25. If it is non-recognizable, the value is reduced by 0.25. If the air flow is a constant, steady stream the value is reduced by 0.25. If the air flow is an impact air flow, such as through thermostatic action where large gusts of air impact the material from time to time, the value is increased by 0.25.

FACTOR SEVEN: FRIABILITY

This factor is comprised of four levels:

A. NOT FRIABLE: Material that is hard and crusty. Cannot be damaged by hand. Sharp tools are required to penetrate material.

NUMERICAL VALUE: 0

B. LOW FRIABILITY: Material that is difficult yet possible to damage by hand. Material can be indented by forceful impact. If the granular, cementitious asbestos-containing material is rubbed, it leaves granules on the hand, but no powder.

NUMERICAL VALUE: 1

C. MODERATE FRIABILITY: Fairly easy to dislodge and crush or pulverize. Material may be removed in small or large pieces. Material is soft and can easily be indented by hand pressure. The granular, cementitious asbestos-containing material leaves a powder residue on the hands when rubbed.

NUMERICAL VALUE: 2

D. HIGH FRIABILITY: The material is fluffy, spongy, or flaking and may have pieces hanging down. Easily crushed or pulverized by minimal hand pressure. Material may disintegrate or fall apart when touched.

NUMERICAL VALUE: 3

FACTOR EIGHT: ASBESTOS CONTENT

The entry for asbestos content is taken from the laboratory report. The percentage for all types of asbestos present should be combined for the total asbestos content. The numerical value is assigned based upon the report of analysis, not on appearance of the material. This factor is comprised of three levels:

A. TRACE AMOUNTS TO ONE PERCENT: Lab results of less than one percent are considered to be non-asbestos.

NUMERICAL VALUE: 0

B. ONE PERCENT TO FIFTY PERCENT: Ceiling and wall coatings most frequently encountered in this category are the granular, cementitious acoustical plasters.

NUMERICAL VALUE: 2

C. FIFTY PERCENT TO ONE HUNDRED PERCENT: Most frequently, materials containing over 50-percent asbestos are pipe and boiler wrapping, or fibrous, cotton candy-type, sprayed-on insulation.

NUMERICAL VALUE: 3

4. Risk Index Calculation: The Risk Index is derived from the Factor Scores by a formula. After entering the chosen Factor Scores for Factors 1 through 8:

- Add Factors 1 through 6 for SUM
- Multiply Factor 7 times Factor 8 for PRODUCT
- Multiply SUM times PRODUCT for Risk Index

This number, called the Risk Index, represents the result of the risk assessment for a sample or for the building as a whole. The values can range from 1 to 227.25. The higher the numerical value, the greater the hazard. Risk Index numbers are used to determine the levels of risk.

FACTOR 1 a
FACTOR 2 b
FACTOR 3 c
FACTOR 4 d
FACTOR 5 e
FACTOR 6 + f

SUM (a+b+c+d+e+f)

FACTOR 7 g
FACTOR 8 x h SUM x PRODUCT = RISK INDEX

PRODUCT (gxh)

5. Correlation of Risk Index to Levels of Risk: Compare the Risk Index to the Risk Level number on the EXPOSURE ASSESSMENT KEY to determine whether action is needed. For example, a Risk Index of 75 indicates that the asbestos should be removed. A Risk Index of 10, however, might suggest encapsulation or deferral of action. In this case it is necessary to further analyze the situation, perhaps to consider factors such as length of time that action could be deferred.

The Risk Index can be used:

- To determine whether corrective action should be initiated, or can be deferred. With a score of 0 to 19, corrective action can usually be deferred. This is assuming that an Operations and Maintenance program will be implemented and that inadvertent damage to the material will be avoided.

- To set priorities for decision making. The higher the Risk Index, the higher the priority.

- To select a corrective action. The level of risk indicates methods found to be appropriate in most exposure situations. The recommended corrective action is to be considered as a guideline for decision making. Local conditions will have significant influence on corrective action selection.

EXPOSURE ASSESSMENT KEY

Level of Risk	Risk Index Range
I	61 - 227
II	40 - 60
III	20 - 39
IV	1 - 19

Level of Risk	Recommended Corrective Action
Level I	Areas in this level may pose a high exposure potential. Materials are usually in poor condition. However, materials could be in good condition but have a high potential for exposure depending on friability, accessibility, air movement, and vibration. Fireproofing is a material that can exhibit this condition. Corrective actions recommended for items in this level shall be given the highest priority.
Level II	Areas listed in this level have materials that are not in as poor condition as Level I but still pose a relatively high level for exposure. The ultimate corrective action plan should be removal. However, in the interim, proper repair/encapsulation of the material and/or an Operations and Maintenance Program will be necessary.
Level III	These areas pose a moderate exposure potential. Corrective action should be aimed at eliminating the factors causing materials to deteriorate. Minor repairs may be all that are necessary for now. At a minimum, an Operations and Maintenance Program will be necessary to monitor the conditions of these materials. Again, corrective action will likely be removal, but other options may also be stated.
Level IV	These materials have a relatively low exposure potential. Monitoring and minor repair will keep these materials in their present condition. An Operations and Maintenance Program will be required. Removal may be recommended but with other options available.

6. Computation of Building Risk Index: In addition to the Risk Index for individual samples, the database will also compute a Building Risk Index. The Building Risk Index is a composite of the values for all samples in a building. The result is a number similar in value to the Sample Risk Index, used to establish priorities by building.

Calculation of the Building Risk Index begins with the highest Sample Risk Index value for the subject building. It is assigned a value equal to the lowest Risk Index value in the Level of Risk range. Next, the database determines the number of samples which occur in each Level of Risk. That number is multiplied by 4 for Level I samples, 3 for Level II samples, 2 for Level III samples and 1 for Level IV samples. The Building risk is the sum of the assigned value of the highest Sample Risk Index plus the combined values based on the number of samples in each Level of Risk. An example is provided below:

Page No. 1

FORT BELVOIR ASBESTOS SURVEY
SUMMARY REPORT FOR BUILDING 212
CH-Chrysotile AM-Amosite CR-Crocidolite
* Value shown above - refer to text & support documents.

02/02/95

SAMPLE NUMBER	LOCATION	BUILDING MATERIAL	FRIABILITY	DAMAGE	(CH)	(AM)	(CR)	TOTAL ASBESTOS	QUANTITY	RISK INDEX	RECOMMENDATION	COST OF REMOVAL
999 A		FLEXIBLE CONNECTOR	HIGH	MODERATE	50	0	0	50	2 EA	53	O & M	280 - 440
P 791		VINYL TILE	MODERATE	MODERATE	5	0	0	5	2940 SF	52	O & M	10290 - 13230
P 797		STRAIGHT PIPE	HIGH	SEVERE	35	10	0	45	100 LF	77	REMOVAL	800 - 1200
P 802		STRAIGHT PIPE	LOW	NONE	40	0	0	40		1	REMOVAL	*
P 1335		PIPE JOINT	HIGH	MODERATE	60	0	0	60	18 EA	93	O & M	360 - 630
P 1338		STRAIGHT PIPE	HIGH	MODERATE	35	0	0	35	37 LF	50	O & M	296 - 444

Highest Sample Risk Index:

Highest Risk Index	Level of Risk	Assigned Value		
93	I	61	=	61
	II	40		
	III	20		
	IV	1		

No. of Level of Risk Samples:

No. of Samples	Level of Risk	Multiplier		Product
2	I	4	=	8
3	II	3	=	9
0	III	2	=	0
1	IV	1	=	1
				18
TOTAL BUILDING RISK INDEX (61+18)				79

The total Building Risk Index is multiplied by 1000 for all buildings with a potential immediate hazard (PIH). This is done to artificially inflate the number so that all such buildings will be moved to the top of the priority list.

6. Basis of Cost Estimate: The estimate of asbestos removal costs was developed using Means Construction cost manuals as the basis for unit prices for the removal of each material type. Further investigations and consultations were made with local abatement contractors to fine tune the cost factors and arrive at a low and high price.

A cost (per unit of material) was then calculated by combining the material and labor costs with transportation and disposal costs. The unit costs presented represent a "range" to be used as a basis for entertaining bids for abatement of each building as a separate entity. The cost estimate is also based on the following assumptions:

- All work will be accomplished by a private contractor licensed to do asbestos abatement.
- All abatement work within a building will be completed under a single contract and at one time.
- Building spaces which are to be abated are cleared of all furnishings and equipment.

Costs which are not included in the estimate, because they will vary with individual buildings and the way in which contracts are awarded include:

- Relocation of personnel and furnishings from areas to be abated.
- Insurance and bonding as required by the contract award.
- Hygiene services, including air monitoring and site inspections.
- Containment zones.

Please note that changes in abatement technology, along with Federal, State and local requirements and guidelines for asbestos abatement can have a significant effect on the final price of a project. The removal of certain non-friable ACMs is not regulated under NESHAP. As a result, the removal cost of some non-friable materials will be significantly less. In addition, complex variables affect the calculation of the duration and containment zone design for any abatement project. It is our recommendation that an abatement project designer be consulted when a project is put out to bid. This will assure a well defined statement of work and accurate cost estimate.

7. Unit Costs for Removal: The unit costs listed below have been entered into the database system and are used to calculate the estimates in the summary reports.

CODE	MATERIAL DESCRIPTION	LOW COST	HIGH COST
AS	ASPHALT ROOF SHINGLE	1.00	2.00 SF
AT	ACOUSTICAL TILE	1.50	1.95 SF
BI	BLOWN-IN INSULATION	1.75	2.85 SF
BJ	BOILER JACKET	5.00	9.00 SF
BU	BUILT-UP ROOF	3.00	5.00 SF
CG	COATING	12.00	18.00 SF
CN	WELDING CURTAIN	1.25	1.75 SF
CP	CORRUGATED PAPER	1.95	2.40 SF
DE	DEBRIS	2.00	3.00 SF
DT	DUCT INSULATION	4.00	5.50 SF
EI	ELECTRICAL INSULATOR	15.00	20.00 EA
FC	FLEXIBLE CONNECTOR	60.00	80.00 EA
FD	FIRE DOOR	50.00	75.00 EA
FL	FLASHING	3.50	7.00 SF
FP	FIXTURE PAPER	5.00	5.50 EA
GA	GASKETS	60.00	80.00 EA
GB	GYPSUM BOARD	2.50	3.00 SF
GM	GLUE/MASTIC	3.50	4.50 SF
II	INCINERATOR INSULATION	7.00	12.00 SF
IN	INSULATION, LOOSE OR BATT	1.75	2.85 SF
IP	INSULATION PANELS	3.00	3.75 SF
IW	INSULATION WRAP	8.00	12.00 LF
MA	MASTIC	1.50	2.50 SF
PB	PARTICLE/ COMPOSITION BOARD	1.95	2.40 SF
PC	PIPE COVERING	4.00	6.50 LF
PD	ASBESTOS PAD	40.00	60.00 EA
PG	PEG BOARD (TRANSITE)	1.95	2.40 SF
PH	PIPE HANGER	15.00	20.00 EA
PJ	PIPE JOINT	15.00	20.00 EA
PL	TEXTURED/SMOOTH PLASTER	6.00	10.00 SF
PM	PATCHING MATERIAL	10.00	12.50 SF
RO	ROPE INSULATION	40.00	60.00 EA
RR	ROLL ROOFING	1.00	2.00 SF

CODE	MATERIAL DESCRIPTION	LOW COST	HIGH COST
SI	SPRAY-ON INSULATION	1.75	2.50 SF
SK	STACK BREECHING/ EXHAUST STACK	5.00	9.00 SF
SO	SPRAY-ON PLASTER	3.00	5.00 SF
SP	STRAIGHT PIPE	4.00	7.50 LF
ST	STAIR TREAD	5.00	7.00 EA
TB	TRANSITE BOARD	1.95	2.40 SF
TD	TRANSITE DUCT	3.80	4.50 SF
TK	TANK INSULATION	3.60	4.20 SF
TP	TRANSITE PIPE	8.50	9.20 LF
TR	TAR PAPER	3.50	4.50 SF
TW	TAR WRAP	8.00	10.00 LF
UL	UNDERLAYMENT	3.50	4.50 SF
VB	VINYL BASE	.35	.45 LF
VE	VINYL EXTERIOR	3.20	4.50 SF
VS	VINYL SHEET	3.50	4.50 SF
VT	VINYL TILE	3.50	4.50 SF

TAB G

STANDARD OPERATING PROCEDURES

ASBESTOS TRAINING AND O&M WORK PRACTICES FOR CUSTODIAL AND MAINTENANCE WORKERS

STANDING OPERATING PROCEDURES

ASBESTOS TRAINING AND O&M WORK PRACTICES FOR CUSTODIAL AND MAINTENANCE WORKERS

1. GENERAL:

a. OSHA and EPA require a worker training program for all employees exposed to asbestos containing material (ACM) fiber levels (either measured or anticipated) at or above specified action levels (0.1 f/cc, 8-hour time-weighted average (TWA) and/or the excursion limit of 1.0 f/cc, 30-minute TWA). The duration and subject matter of the training should be based upon the actual or anticipated work environment.

b. With proper training, custodial and maintenance staff can successfully deal with ACM in place, and greatly reduce the accidental release of asbestos fibers. Training sessions should provide basic information on how to deal with all types of maintenance activities involving ACM.

c. This SOP identifies general recommended training and O&M work practices. Supervisors should consult the following regulations to ensure that all aspects of required training incorporated into their asbestos training and O&M work practices program.

2. APPLICABLE REGULATIONS: The following regulations are designed to protect workers. They deal with specific requirements concerning worker protection and procedures used to control ACM.

- OSHA Construction Industry Standard for Asbestos - 29 CFR 1926.1101
- OSHA General Industry Standard for Asbestos - 29 CFR 1920.1001
- OSHA Respiratory Protection Standard - 29 CFR 1910.134
- EPA Worker Protection Rule - 40 CFR 763 Subpart G
- EPA National Emission Standards for Hazardous Air Pollutants (NESHAP) - 40 CFR 61 Subpart M
- EPA Asbestos Hazard Emergency Response Act (AHERA) regulations - 40 CFR 763 Subpart E
- EPA Asbestos Ban and Phaseout Rule - 40 CFR 763 Subpart I

3. ASBESTOS TRAINING REQUIREMENTS:

a. Level 1: Awareness Training: All members of the maintenance and custodial staff (including; janitors, custodians, custodian services, volunteers, electricians, heating/air conditioning engineers, plumbers, etc.) who may work in buildings that contain ACMs shall receive Level 1 Awareness Training of at least two-hours, whether or not they are required to work with ACM. Training shall include, but not be limited to:

- The various uses and forms of asbestos.
- The health effects associated with exposure to asbestos.
- Location of the asbestos inspection reports and who they can contact to find out specific information about where the asbestos is located within specific buildings.
- Recognition of damage, deterioration and delamination of asbestos containing materials.
- The name and telephone number of the Asbestos Program Manager who should be contacted to report problems or ask additional questions.
- Availability and location of the Asbestos Management Plan.

b. Level 2: Special O&M Training: All members of the maintenance or custodial staff who conduct any activities that will result in the disturbance of ACM shall receive at least 16-hours of training. Training shall include, but not be limited to:

- The two-hour General Awareness Class.
- Federal, State, and local asbestos regulations.
- Descriptions of the proper methods of handling ACM., including waste handling and disposal..
- Information on the use of respiratory protection as contained in the EPA/NIOSH Guide to Respiratory Protection for the Asbestos Abatement Industry.
- Protective clothing donning, use, and handling.
- Hands-on exercises for techniques such as glovebag work and HEPA vacuum use and maintenance.
- Appropriate and proper worker decontamination procedures.

c. Designated Persons and New Employees: Training must be conducted within 60 days after commencement of employment.

4. WORKER PROTECTION AND EQUIPMENT:

a. Air Quality Levels: OSHA Regulation 29 CFR 1926.1101 sets standards for three levels of airborne asbestos fibers.

- **The Action Level:** The action level is defined at 0.1f/cc over a time weighted average (TWA) of 8-hours for more than 30-days per year, then the Contractor shall be required to:
    - Provide a respirator for the employees.
    - Place the employees in a medical surveillance program.
- **The Permissible Exposure Limit (PEL):** The PEL is defined at 0.1 f/cc for a TWA of 8-hours. If an employee is exposed, or can reasonable be expected to be exposed, to the PEL, the employer must immediately:
    - Provide a respirator for the employees.
    - Have the employees under a medical surveillance program.
- **The Excursion Limit:** The excursion limit is defined at 1.0 f/cc for a TWA of 30-minutes. If an employee is exposed, or can reasonably be expected to be exposed, at or above the excursion limit, then the employee must:
    - Wear a respirator.
    - Be under a medical surveillance program.

b. Medical Surveillance Program: OSHA regulation CFR 29 1926.1101 requires that any person required to wear a respirator or who can reasonably be expected to be exposed to asbestos fibers at the Action Level, PEL or Excursion Limit be covered under a medical surveillance program which includes, but is not limited to the following elements:

- **OSHA Medical History :**
    - Documentation of any past exposure to asbestos.
    - Documentation that substantiates other medical considerations affecting the risk for developing any asbestos related diseases, (i.e.. smoking).

- **Physical Examination:**

    - Documents a baseline of the persons health, so that a doctor will have something to compare the persons health to in the future.

    - Specific information about the employees duties and anticipated exposure levels must be provided for the doctor.
    - The examination is conducted yearly.
    - The examination shall be provided at no cost to the employee.
    - The examination shall be conducted in accordance with OSHA regulations.
    - Results of the examination are provided to the employer, who has 30 days to give a copy to the employee.
    - The medical records shall be kept on file for 30-years past the termination of the employee.

c. Respirators: OSHA regulations require that any person exposed to either the PEL or the excursion limit, or any person exposed to the action level for more than 30-days must wear a respirator. In addition the employer shall have a written respirator protection program. The following actions must be complied with in accordance with CFR 29 1926.1101:

- The employee must pass a medical examination.
- No beards, mustaches, or long sideburns that will interfere with the seal of the mask to the face are permitted.
- Each employee must be issued, at no cost to themselves, their own respirator.
- Each time the employee puts on their respirator, they must conduct a positive and negative seal check.
- Each employee issued a respirator must have a qualitative fit test.
- Each respirator shall be fitted with HEPA filters.
- The employee shall wear the respirator whenever they conduct any work that will disturb asbestos.

d. Protective Clothing: Employees handling asbestos shall wear the following personal protective equipment:

- Tyvek coveralls.
- Eye protection.
- Hand and foot protection.
- Head covering.

5. BASIC O&M PROCEDURES WHERE ACM IS PRESENT.

a. Basic O&M procedures where ACM is present should be conducted in a manner that continues to protect building occupants as well as protecting the person conducting the cleaning/maintenance from ACM. Basic O&M procedures to minimize an/or contain asbestos fibers may include wet methods, use of mini-enclosures, use of portable power tools equipped with special local ventilation attachments, and avoidance of the following activities:

- Holes must not be drilled in ACMs.
- Plants or pictures must not be hung on structures covered with ACMs.
- Do not sand ACM floor tile.
- Do not damage ACMs while moving furniture or other objects.
- Do not install curtains, drapes, or dividers in such a way that they damage ACM.
- Do not dust floors, ceilings, moldings, or other surfaces in ACM environments with a dry brush or sweep with a dry broom.
- Do not use an ordinary vacuum to clean up ACM containing debris.
- Do not remove ceiling tiles below ACM without wearing the proper respirator protection, clearing the area of other people, and observing asbestos removal waste procedures.
- Do not remove ventilation system filters while dry.
- Do not shake ventilation system filters.

b. O&M activities can be divided into three categories with regard to their potential for disturbing ACM:

- Those which are unlikely to involve any direct disturbance of ACM; for example, cleaning shelves or counter tops with a damp cloth.

- Those which may cause accidental disturbance of ACM; for example, working on a fixture near a ceiling with surfacing ACM.

- Those which involve intentional small-scale manipulation or disturbance of ACM; for example, removing a small segment of thermal system insulation ACM to repair a pipe leak.

c. O&M work practices should be established for each type of ACM that is present in the building as well as for each type and category of maintenance activity performed. Special work practices, such as wet wiping, area isolation, HEPA vacuuming , and the use of personal protective equipment may be needed where disturbance of ACM is likely.

d. Maintenance and custodial staff should limit certain activities in the vicinity of ACM that may cause damage, for example: ACM damage caused accidentally with broom handles, ladders, and fork lifts while performing custodial or maintenance tasks.

6. O&M CLEANING PRACTICES:

a. If asbestos containing dust or debris is present in some areas of a building special cleaning practices should be instituted to collect residual asbestos dust. Routinely cleaning floors using wet methods is an example of one such practice. Custodial and maintenance workers in the course of normal work should identify and report areas which are in need of special cleaning or repair.

b. Proper O&M cleaning is important for two reasons:

- The use of improper techniques to clean up asbestos debris caused by previous deterioration or damage may result in widespread contamination, and potentially increase airborne asbestos fiber levels in the building.

- Improper cleaning may cause damage to the ACM, thus releasing more airborne asbestos fibers.

c. Special clean up should include the following techniques:

- Wet cleaning or wet-wiping practices.
- Use of HEPA vacuums.

Care must be exercised in the disposal of wet cloths, rags, or mops that have been used to pick up asbestos fibers. They should not be left to dry out, since the collected fibers may be released at some later time when disturbed. HEPA vacuums should be moved to a physically isolated area before the filters are removed. Personnel should put on proper protective equipment before emptying the dust and debris into properly labeled, sealed, and leak-tight containers for disposal as asbestos-containing waste.

d. Decisions regarding special cleaning practices should be based on the building inspection and ACM assessment data, including the potential for ACM disturbance. In general, the building would not need special O&M cleaning when the building contains only nonfriable (not easily crumbled) ACM , or ACM which has been encapsulated, encased, or enclosed behind airtight barriers or is known to be undamaged/undisturbed since the last special cleaning.

7. RESPONSE PROCEDURES FOR ASBESTOS FIBER RELEASE EPISODES:

a. Special Response Procedures: Special response procedures are generally needed to minimize the spread of fibers throughout the building after asbestos fiber releases occur, such as a partial collapse of an ACM ceiling or wall. These procedures are needed whether the ACM disturbance is intentional or unintentional. Fiber release episodes may be categorized as minor and major.

b. Minor Fiber Release: A minor fiber release involves the unexpected falling or dislodging of less than or equal to three-square feet or three-linear feet of ACM. The following procedures should be implemented immediately :

- Any person who has successfully completed Level 2, Special O&M Training can respond to a minor fiber release.

- Personnel responding to a minor release episode shall wear personal protective clothing, to include:

    - Coveralls.
    - Respirator.
    - Hand and foot protection.
    - Eye protection.

- The work area should be restricted by locking doors or putting up barrier tape.
- Heating, ventilating, air conditioning (HVAC) systems should be shut off or modified to restrict air movement into or out of the incident area.
- Critical barriers and warning signs should be installed.
- The Director of Public Works (DPW) Asbestos Program Manager and MEDDAC should be notified.
- Work procedures should include:

    - Mist air and wet down debris with amended water.
    - Place all gross debris in sealed, leak-tight containers.
    - Conduct necessary repairs to damaged asbestos surface.
    - Post-clean room using initial cleaning procedures.
    - Remove and dispose of any containment structures used in the room.
    - Remove and dispose of coveralls, hand and foot covering.
    - Seal all waste in appropriate bags
    - Remove, clean and disinfect respirator.
    - Fill out proper record keeping sheet.
    - Send copy of report to DPW-Asbestos Program Manager within 24-hours.

c. Major Fiber Release: A major fiber release is defined as one involving more than three- square or three-linear feet of ACM. The following procedures should be implemented immediately following a major fiber release:

- Only a Virginia licensed asbestos contractor can respond to a major fiber release episode. The licensed contractor should conduct the following action after being notified of the episode by the DPW Asbestos Program Manager:

    - Restrict access to the area by locking doors or putting up barrier tape.

- Immediately notify the MEDDAC.
- Post warning signs.
- Shut-off or modify the HVAC system or any other source of air movement within the immediate area.
- Mist air and wet down debris with amended water.
- Place all gross debris in sealed, leak-tight containers.
- Post-clean room using initial cleaning procedures.
- Remove and dispose of any containment structures used in the room.
- Remove and dispose of coveralls, hand and foot covering.
- Seal all waste in appropriate bags
- Remove, clean and disinfect respirator.
- Fill out proper record keeping sheet.
- Conduct final clearance air monitoring to verify satisfactory clean up.
- Send copy to the Asbestos Program Manager within 24-hours.

8. SMALL-SCALE SHORT-DURATION O&M ACTIVITIES:

a. Routine maintenance that will involve disturbing asbestos is called small-scale short-duration activities. This is different from ACM fiber release episodes because the asbestos has not yet been disturbed. This is a scheduled maintenance activity that will involve disturbing or removing asbestos in order to perform the maintenance activity.

b. OSHA 29 CFR 1926.58 defines small-scale short-duration activities are tasks such as, but not limited to:

- Removal of ACM on pipes.
- Removal of small quantities of ACM insulation on beams or above ceilings.
- Replacement of an ACM gasket or a valve.
- Installation or removal of a small section of drywall.
- Installation of electrical conduits through or proximate to ACM.

c. EPA Regulation 40 CFR 763 Subpart E, Appendix B further defines small-scale short-duration maintenance activities by the following considerations:

- Removal of small quantities of ACM, only if required in the performance on another maintenance activity not intended as asbestos abatement.
- Removal of ACM thermal system insulation not to exceed amounts greater than those which can be contained in a single glove-bag.
- Minor repairs to damaged thermal system insulation which do not require removal.
- Repairs to a piece of ACM wallboard.

- Repairs involving encapsulation, enclosure or removal, to small amounts of friable ACM only if required in the performance of emergency or routine maintenance activity and not intended solely as asbestos abatement. Such work may not exceed amounts greater than those which can be contained in a single prefabricated mini-enclosure. Such an enclosure shall conform spatially and geometrically to the localized work area in order to perform its intended containment function.

d. Any person who has successfully completed Level 2 , Special O&M training may respond to small-scale short-duration maintenance activities. The following actions should be taken prior to the start of the activity:

- Notify the DPW Asbestos Program Manager prior to the start of the activity.
- All personnel involved with the maintenance activity shall wear personal protective clothing, to include:
    - Coveralls.
    - Respirator.
    - Hand and foot coverings.
    - Eye protection.
- Restrict access to the work area by locking doors or putting up barrier tape.
- Post warning signs.
- Shut-off or modify HVAC systems to restrict air movement into or out of the area,
- Remove all moveable objects from the work area.
- Cover all remaining items in the work area with six-mil plastic to protect them from ACM dust and fibers.
- Set-up critical barriers and necessary containment structures.
- Keep ACM thoroughly saturated with amended water during the entire work process.
- Place all gross debris in sealed, leak-tight containers.
- Post-clean room using initial cleaning procedures.
- Remove and dispose of any containment structures used in the room.
- Remove and dispose of coveralls, hand and foot covering.
- Seal all waste in appropriate bags
- Remove, clean and disinfect respirator.
- Fill out proper record keeping sheet.
- Conduct final clearance air monitoring to verify satisfactory clean up.
- Send copy of report to DPW Asbestos Program Manager within 24-hours.

9. ASBESTOS WASTE:

a. All waste must be containerized within two labeled, six-mil plastic bags. The bags must have the tops goosenecked and sealed with duct tape. Rigid or sharp debris should be placed in a burlap bag first.

b. Containerized debris should be thoroughly saturated with amended water and not exceed 35 pounds (able to be handled by one person).

c. Asbestos waste shall be turned into Fort Belvoir's hazardous waste building within 24-hours of project completion. Arrangements should be made with the DPW Asbestos Program Manager.

10. FINAL CLEARANCE: At the conclusion of any asbestos work the DPW Asbestos Program Manager or MEDDAC will have the option of:

- Visually inspecting the work to determine if the job was properly completed.
- Collecting air samples.
- Require further cleaning, if either the visual inspection or the air samples indicate that the clearance level will not be met.

11. SUBMITTALS: Copies of the following must be provided to the DPW Asbestos Program Manager for review and approval prior to any work being conducted on ACM:

- **Training Records to include:**
  - The trainee's name and job title
  - The date(s) training was conducted.
  - The training course provider.
  - The number of hours of training completed.
- **Medical Surveillance Records:**
  - The name and social security number of the employee.
  - A copy of the employee's medical examination results, including the physicians written recommendations.
  - Written Respirator Protection Program.
  - Manufacturers data sheets from all equipment that is to be utilized for any asbestos work.

12. RECORD KEEPING: Records shall be kept for the following and a copy forwarded to the DPW Asbestos Program Manager within 24-hours of any action:

- **Any minor fiber release episode:**
  - The date and location of the episode
  - The method of repair.
  - A description of preventive measures used or response action(s) taken.
- **Any major fiber release episode:**
  - The date and location of the incident.
  - A list of the Fort Belvoir agencies contacted.
  - A description of preventive measures taken while waiting for the licensed contractor to respond.
- **Small-scale short-duration activities:**
  - The name of the person(s) performing the activity.
  - The location, start and completion dates of the activity.
  - A description of the activity including preventive measures.
  - A description of the waste, to include the number of bags generated and what type of container was utilized.

TAB H

SAMPLE MEDICAL QUESTIONNAIRES

TAB H-2

PART 1
INITIAL MEDICAL QUESTIONNAIRE

1. NAME _____

2. SOCIAL SECURITY ___ ___ ___ ___ ___ ___ ___ ___ ___
(1 2 3 4 5 6 7 8 9)

3. CLOCK NUMBER ___ ___ ___ ___ ___ ___
(10 11 12 13 14 15)

4. PRESENT OCCUPATION _____

5. PLANT _____

6. ADDRESS _____

7. _____
(Zip Code)

8. TELEPHONE NUMBER _____

9. INTERVIEWER _____

10. DATE _____ ___ ___ ___ ___ ___ ___
(16 17 18 19 20 21)

11. Date of Birth _____ ___ ___ ___ ___ ___ ___
Month Day Year (22 23 24 25 26 27)

12. Place of Birth _____

13. Sex
1. Male ___
2. Female ___

14. What is your marital status?
1. Single ___
2. Married ___
3. Widowed ___
4. Separated/ Divorced ___

15. Race
1. White ___ 4. Hispanic ___
2. Black ___ 5. Indian ___
3. Asian ___ 6. Other ___

16. What is the highest grade completed in school? _____
(For example 12 years is completion of high school)

OCCUPATIONAL HISTORY

17A. Have you ever worked full time (30 hours per week or more) for 6 months or more? 1. Yes ___ 2. No ___

IF YES TO 17A:

B. Have you ever worked for a year or more in any dusty job? 1. Yes ___ 2. No ___ 3. Does not apply ___

Specify job/industry _____ Total Years Worked ___

Was dust exposure: 1. Mild ___ 2. Moderate ___ 3. Severe ___

C. Have you ever been exposed to gas or chemical fumes in your work? 1. Yes ___ 2. No ___

Specify job/industry _____ Total Years Worked ___

Was exposure: 1. Mild ___ 2. Moderate ___ 3. Severe ___

D. What has been your usual occupation or job--the one you have worked at the longest?

1. Job occupation _____
2. Number of years employed in this occupation _____
3. Position/job title _____
4. Business, field or industry _____

(Record on lines the years in which you have worked in any of these industries, e.g. 1960-1969)

Have you ever worked:

		YES	NO
E.	In a mine?	[ ]	[ ]
F.	In a quarry?	[ ]	[ ]
G.	In a foundry?	[ ]	[ ]
H.	In a pottery?	[ ]	[ ]
I.	In a cotton, flax, or hemp mill?	[ ]	[ ]
J.	With asbestos?	[ ]	[ ]

18. PAST MEDICAL HISTORY

	YES	NO
A. Do you consider yourself to be in good health?	[ ]	[ ]
If "NO" state reason _____		
B. Have you any defect of vision?	[ ]	[ ]
If "YES" state nature of defect _____		
C. Have you any hearing defect?	[ ]	[ ]
If "YES" state nature of defect _____		
D. Are you suffering from or have you ever suffered from:		
a. Epilepsy for fits, seizures, convulsions?	[ ]	[ ]
b. Rheumatic fever?	[ ]	[ ]
c. Kidney disease?	[ ]	[ ]
d. Bladder disease?	[ ]	[ ]
e. Diabetes?	[ ]	[ ]
f. Jaundice?	[ ]	[ ]

19. CHEST COLDS AND CHEST ILLNESSES

19A. If you get a cold, does it usually go to your chest? (Usually means more than 1/2 the time) — 1. Yes __ 2. No __ 3. Don't get colds __

20A. During the past 3 years, have you had any chest illnesses that have kept you off work, indoors, at home, or in bed? — 1. Yes __ 2. No __

IF YES TO 20A:

B. Did you produce phlem with any of these chest illnesses? — 1. Yes __ 2. No __ 3. Does No. Apply __

C. In the last 3 years, how many such illnesses with (increased) phlegm did you have which lasted a week or more? — Number of illnesses __ No such illnesses __

21. Did you have any lung trouble before the age of 16? — 1. Yes __ 2. No __

22. Have you ever had any of the following?

1A. Attacks of bronchitis? — 1. Yes __ 2. No __

IF YES TO 1A:

B. Was it confirmed by a doctor? — 1. Yes __ 2. No __ 3. Does Not Apply __

C. At what age was your first attack? — Age in Years __ Does Not Apply __

2A. Pneumonia (include bronchopneumonia)? — 1. Yes __ 2. No __

IF YES TO 2A:

B. Was it confirmed by a doctor? — 1. Yes __ 2. No __ 3. Does Not Apply __

C. At what age did you first have it? — Age in Years __ Does Not Apply __

3A. Hay Fever: — 1. Yes __ 2. No __

IF YES TO 3A:

B. Was it confirmed by a doctor? — 1. Yes __ 2. No __ 3. Does Not Apply __

C. At what age did it start? — Age in Years __ Does Not Apply __

23A. Have you ever had chronic bronchitis? — 1. Yes __ 2. No __

IF YES TO 23A:

B. Do you still have it? — 1. Yes __ 2. No __ 3. Does Not Apply __

C. Was it confirmed by a doctor? — 1. Yes __ 2. No __ 3. Does Not Apply __

D. At what age did it start? — Age in Years __ Does Not Apply __

24A. Have you ever had emphysema? 1. Yes __ 2. No __

IF YES TO 24A:

B. Do you still have it? 1. Yes __ 2. No __ 3. Does Not Apply __

C. Was it confirmed by a doctor? 1. Yes __ 2. No __ 3. Does Not Apply __

D. At what age did it start? Age in Years __ Does Not Apply __

25A. Have you ever had asthma? 1. Yes __ 2. No __

IF YES TO 25A:

B. Do you still have it? 1. Yes __ 2. No __ 3. Does Not Apply __

C. Was it confirmed by a doctor? 1. Yes __ 2. No __ 3. Does Not Apply __

D. At what age did it start? Age in Years __ Does Not Apply __

E. If you no longer have it, at what age did it stop? Age Stopped __ Does Not Apply __

26. Have you ever had:

A. Any other chest illness? 1. Yes __ 2. No __

If yes, please specify _____

B. Any chest operations? 1. Yes __ 2. No __

If yes, please specify _____

27A. Has a doctor ever told you that you had heart trouble? 1. Yes __ 2. No __

IF YES TO 27A:

B. Have you ever had treatment for heart trouble in the past 10 years? 1. Yes __ 2. No __ 3. Does Not Apply __

28A. Has a doctor ever told you that you had high blood pressure? 1. Yes __ 2. No __

IF YES TO 28A:

B. Have you had any treatment for high blood pressure (hypertension) in the past 10 years? 1. Yes __ 2. No __ 3. Does Not Apply __

29. When did you last have your chest x-rayed? (Year) __ __ __ __ (25 26 27 28)

30. Where did you last have your chest X-rayed (if known)? _____ What was the outcome? _____

FAMILY HISTORY

31. Were either of your natural parents ever told by a doctor that they had a chronic lung condition such as:

	FATHER 1. Yes	2. No	3. Don't Know	MOTHER 1. Yes	2. No	3. Don't Know
A. Chronic Bronchitis?	__	__	__	__	__	__
B. Emphysema?	__	__	__	__	__	__
C. Asthma?	__	__	__	__	__	__
D. Lung cancer?	__	__	__	__	__	__
E. Other chest conditions	__	__	__	__	__	__
F. Is parent currently alive?	__	__	__	__	__	__

G. Please Specify

FATHER: __ Age if Living; __ Age at Death; __ Don't Know

MOTHER: __ Age if Living; __ Age at Death; __ Don't Know

H. Please specify cause of death

_____

TAB H-4

TAB H-5

COUGH

32A. Do you usually have a cough? (Count a cough with first smoke or on first going out of doors. Exclude clearing of throat.) (If no, skip to question 32A.) 1. Yes __ 2. No __

B. Do you usually cough as much as 4 to 6 times a day 4 or more days out of the week? 1. Yes __ 2. No __

C. Do you usually cough at all on getting up or first thing in the morning? 1. Yes __ 2. No __

D. Do you usually cough at all during the rest of the day or at night? 1. Yes __ 2. No __

IF YES TO ANY OF ABOVE (32A, B, C, or D), ANSWER THE FOLLOWING. IF NO TO ALL, CHECK DOES NOT APPLY AND SKIP TO NEXT PAGE

E. Do you usually cough like this on most days for 3 consecutive months or more during the year? 1. Yes __ 2. No __ 3. Does Not Apply __

F. For how many years have you had the cough? Number of years __ Does Not Apply __

33A. Do you usually bring up phlegm from your chest?
(Count phlegm with the first smoke or on first going out of doors. Exclude phlegm from the nose. Count swallowed phlegm.)
(If no, skip to 33C) 1. Yes __ 2. No __

B. Do you usually bring up phlegm like this as much as twice a day 4 or more days out of the week? 1. Yes __ 2. No __

C. Do you usually bring up phlegm at all on getting up or first thing in the morning? 1. Yes __ 2. No __

D. Do you usually bring up phlegm at all during the rest of the day or at night? 1. Yes __ 2. No __

IF YES TO ANY OF THE ABOVE (33A, B, C, OR D), ANSWER THE FOLLOWING:
IF NO TO ALL, CHECK DOES NOT APPLY AND SKIP TO 34A.

E. Do you bring up phlegm like this on most days for 3 consecutive months or more during the year? 1. Yes __ 2. No __

F. For how many years have you had trouble with phlegm? Number of Years __ Does Not Apply __

EPISODES OF COUGH AND PHLEGM

34A. Have you had periods or episodes of (increased) cough and phlegm lasting for 3 weeks or more each year?
*(For persons who usually have cough and/or phlegm) 1. Yes __ 2. No __

IF YES TO 34A
B. For how long have you had at least 1 such episode per year? Number of years __ Does not apply __

WHEEZING

35A. Does your chest ever sound wheezy or whistling
1. When you have a cold? 1. Yes __ 2. No __
2. Occasionally apart from colds? 1. Yes __ 2. No __
3. Most days or nights? 1. Yes __ 2. No __

IF YES TO 1, 2, or 3 in 35A
B. For how many years has this been present? Number of years __ Does Not Apply __

36A. Have you ever had an attack of wheezing that has made you feel short of breath? 1. Yes __ 2. No __

IF YES TO 36A
B. How old were you when you had your first such attack? Age in years __ Does Not Apply __

C. Have you had 2 or more such episodes? 1. Yes __ 2. No __ 3. Does Not Apply __

D. Have you ever required medicine or treatment for the(se) attack(s)? 1. Yes __ 2. No __ 3. Does Not Apply __

BREATHLESSNESS

37. If disabled from walking by any condition other than heart or lung disease, please describe and proceed to question 39A.
Nature of condition(s) _____

38A. Are you troubled by shortness of breath when hurrying on the level or walking up a slight hill? 1. Yes __ 2. No __

IF YES TO 38A

B. Do you have to walk slower than people of your age on the level because of breathlessness? 1. Yes __ 2. No __ 3. Does Not Apply __

C. Do you ever have to stop for breath when walking at your own pace on the level? 1. Yes __ 2. No __ 3. Does Not Apply __

D. Do you ever have to stop for breath after walking about 100 yeards (or after a few minutes) on the level? 1. Yes __ 2. No __ 3. Does Not Apply __

E. Are you too breathless to leave the house or breathless on dressing or climbing one flight of stairs? 1. Yes __ 2. No __ 3. Does Not Apply __

TOBACCO SMOKING

39A. Have you ever smoked cigarettes? (No means less than 20 packs of cigarettes or 12 oz. of tobacco in a lifetime or less than 1 cigarette a day for 1 year.) 1. Yes __ 2. No __

IF YES TO 39A

B. Do you now smoke cigarettes (as of one one month ago) 1. Yes __ 2. No __ 3. Does Not Apply __

C. How old were you when you first started regular cigarette smoking? Age in years __ Does Not Apply __

D. If you have stopped smoking cigarettes completely, how old were you when you stopped? Age stopped __ Check if still smoking __ Does Not Apply __

E. How many cigarettes do you smoke per day now? Cigarettes per day __ Does Not Apply __

F. On the average of the entire time you smoked, how many cigarettes did you smoke per day? Cigarettes per day __ Does Not Apply __

G. Do or did you inhale the cigarette smoke? 1. Does Not Apply __ 2. Not at all __ 3. Slightly __ 4. Moderately __ 5. Deeply __

40A. Have you ever smoked a pipe regularly? (Yes means more than 12 oz. of tobacco in a lifetime.) 1. Yes __ 2. No __

IF YES TO 40A:

FOR PERSONS WHO HAVE EVER SMOKED A PIPE

B. 1. How old were you when you started to smoke a pipe regularly? Age __

2. If you have stopped smoking a pipe completely, how old were you when you stopped? Age stopped __ Check if still smoking pipe __ Does Not Apply __

C. On the average over the entire time you smoked a pipe, how much pipe tobacco did you smoke per week? oz. per week __ (a standard pouch of tobacco containing 1 1/2 oz.) Does Not Apply __

D. How much pipe tobacco are you smoking now? oz. per week __ Not currently smoking a pipe __

E. Do you or did you inhale the pipe smoke? 1. Never smoked __ 2. Not at all __ 3. Slightly __ 4. Moderately __ 5. Deeply __

41A. Have you ever smoked cigars regularly? (Yes means more than 1 cigar a week for a year.) 1. Yes __ 2. No __

IF YES TO 41A:

FOR PERSONS WHO HAVE EVER SMOKED CIGARS

B. 1. How old were you when you started smoking cigars regularly? Age __

2. If you have stopped smoking cigars completely, how old were you when you stopped. Age stopped __
Check if still smoking cigars __
Does Not Apply __

C. On the average over the entire time you smoked cigars, how many cigars did you smoke per week? Cigars per week __
Does Not Apply __

D. How many cigars are you smoking per week now? Cigars per week __
Check if not smoking cigars currently __

E. Do or did you inhale the cigar smoke?
1. Never smoked __
2. Not at all __
3. Slightly __
4. Moderately __
5. Deeply __

Signature _____ Date _____

TAB H-8

PART 2
PERIODIC MEDICAL QUESTIONNAIRE

1. NAME _____

2. SOCIAL SECURITY ___ ___ ___ ___ ___ ___ ___ ___ ___
(1 2 3 4 5 6 7 8 9)

3. CLOCK NUMBER ___ ___ ___ ___ ___ ___
(10 11 12 13 14 15)

4. PRESENT OCCUPATION _____

5. PLANT _____

6. ADDRESS _____

7. _____
(Zip Code)

8. TELEPHONE NUMBER _____

9. INTERVIEWER _____

10. DATE _____ ___ ___ ___ ___ ___ ___
(16 17 18 19 20 21)

11. What is your marital status?
1. Single ___
2. Married ___
3. Widowed ___
4. Separated/ Divorced ___

12. OCCUPATIONAL HISTORY

12A. In the past year, did you work full time (30 hours per week or more) for 6 months or more? 1. Yes __ 2. No __

IF YES TO 12A:

12B. In the past year, did you work in a dusty job? 1. Yes __ 2. No __ 3. Does Not Apply __

12C. Was dust exposure: 1. Mild ___ 2. Moderate ___ 3. Severe ___

12D. In the past year, were you exposed to gas or chemical fumes in your work? 1. Yes __ 2. No __

12E. Was exposure: 1. Mild ___ 2. Moderate ___ 3. Severe ___

12F. In the past year what was your:
1. Job/occupation? _____
2. Position/job title? _____

13. RECENT MEDICAL HISTORY

13A. Do you consider yourself to be in good health 1. Yes __ 2. No __

If NO, state reason _____

13B. In the past year, have you developed

	Yes	No
Epilepsy?	___	___
Rheumatic fever?	___	___
Kidney disease?	___	___
Bladder disease?	___	___
Diabetes?	___	___
Jaundice?	___	___
Cancer?	___	___

14. CHEST COLDS AND CHEST ILLNESSES

14A. If you get a cold, does it usually go to your chest? (Usually means more than 1/2 the time) 1. Yes __ 2. No __ 3. Don't get colds__

15A. During the past year, have you had any chest illnesses that have kept you off work, indoors at home, or in bed? 1. Yes __ 2. No __

IF YES TO 15A:

15B. Did you produce phlem with any of these chest illnesses? 1. Yes __ 2. No __ 3. Does No. Apply __

15C. In the past year, how many such illnesses with (increased) phlegm did you have which lasted a week or more? Number of illnesses __ No such illnesses __

16. RESPIRATORY SYSTEM

In the past year have you had:

	Yes or No	Further Comment on Positive Answers
Asthma	_____	
Bronchitis	_____	
Hay Fever	_____	
Other Allergies	_____	
Pneumonia	_____	
Tuberculosis	_____	
Chest Surgery	_____	
Other Lung Problems	_____	
Heart Disease	_____	

Do you have:

	Yes or No	Further Comment on Positive Answers
Frequent colds	_____	
Chronic cough	_____	
Shortness of breath when walking or climbing one flight of stairs	_____	

Do you:

Wheeze	_____	
Cough up phlegm	_____	
Smoke cigarettes	_____	Packs per day __ How many years __

Date _____ Signature _____

TAB I

RESPIRATORY PROTECTION PROGRAM

1. Introduction: This program is designed to ensure the proper selection, use, care, and maintenance of respirators used during performance of tasks associated with asbestos and the Operations and Maintenance (O&M) Program. The guidelines set forth are in support of requirements outlined in 29 CFR 1910.134 and the ANSI Standard Z88-2-1980, Standard Practice for Respiratory Protection. The program requirements apply to the Government (Fort Belvoir) as well as contractors engaged in applicable work for the Government at Fort Belvoir. Government employees will also comply with Federal Regulation 385-2 Chapter 6 Respiratory Protection.

It shall be the Employer's responsibility to provide respirators when such equipment is necessary to protect the health of the employee. The employer shall provide the respirators which are applicable and suitable for the intended purpose. The employer shall be responsible for the establishment and maintenance of a respiratory protection program. Contractors shall submit a copy of their respiratory program for approval by the Asbestos Program Manager as a condition of their contract with the government.

It shall be the employees' responsibility to use the provided respiratory protection in accordance with instructions and training received.

2. Requirements: A minimally acceptable program includes the following requirements:

- Written Standard Operating Procedures governing the selection and use of respirators shall be established. Possible emergency and routine use of respirators should be anticipated and planned.
- Respirators shall be selected on the basis of hazards to which the worker is exposed.
- The user shall be instructed and trained in the proper use of respirators and their limitations.
- Respirators shall be regularly cleaned and disinfected. Those used by more than one worker shall be thoroughly cleaned and disinfected after each use.
- Respirators shall be stored in a convenient, clean, and sanitary location.
- Respirators used routinely shall be inspected during cleaning. Worn or deteriorated parts shall be replaced.
- Appropriate surveillance of work area conditions and degree of employee exposure or stress shall be maintained.

- There shall be regular inspection and evaluation to determine the continued effectiveness of the program.

- Persons should not be assigned to tasks requiring use of respirators unless it has been determined that they are physically able to perform the work and use the equipment. A local physician shall determine what health and physical conditions are pertinent.

- NIOSH approved or accepted respirators shall be used. The respirator furnished shall provide adequate respiratory protection against the particular hazard for which it is designed in accordance with standards established by competent authorities. Respirator filters should be NIOSH approved for asbestos if air purifying type.

The correct respirator will be specified for each job. The respirator type is usually specified in the work procedures by a qualified individual supervising the respiratory protection program. The individual issuing them shall be adequately instructed to insure that the correct respirator is issued.

Written procedures shall be prepared covering safe use of respirators in dangerous atmospheres that might be encountered in normal operations or in emergencies. Personnel shall be familiar with these procedures and the available respirators.

In areas such as confined spaces, where the wearer, with failure of the respirator, could be overcome by a toxic or oxygen-deficient atmosphere at least one additional worker shall be present. Communications (visual, voice, or signal line) shall be maintained between both or all individuals present. Planning shall be such that one individual will be unaffected by any likely incident and have the proper rescue equipment to be able to assist the other(s) in case of emergency. All work in confined spaces shall be accomplished in accordance with 29 CFR 1910.146.

Respiratory protection is no better than the respirator in use, even though it is worn conscientiously. Frequent random inspections shall be conducted by a qualified individual to ensure that respirators are properly selected, used, cleaned, and maintained.

For safe use of any respirator, it is essential that the user be properly instructed in its selection, use, and maintenance. Both supervisors and workers shall be so instructed by competent persons. Training shall provide the individual an opportunity to handle the respirator, have it fitted properly, test its face-piece-to-face seal, wear it in normal air for a long familiarity period and, finally, to wear it in a test atmosphere.

Every respirator wearer shall receive fitting instructions including demonstrations and practice in how the respirator should be worn, how to adjust it, and how to determine if it fits properly. Respirators shall not be worn when conditions prevent a good face seal. Such conditions may be a growth of beard, sideburns, a skull cap that projects under the facepiece, or temple pieces on glasses. Also, the absence of one or both dentures can seriously affect the fit of the facepiece. The worker's diligence

in observing these factors shall be evaluated by periodic check. To assure proper protection, the facepiece fit shall be checked each time the wearer puts on the respirator. This may be done by following the manufacturer's facepiece fitting instructions.

Providing respiratory protection for individuals wearing corrective glasses is a serious problem. A proper seal cannot be established if the temple bars of eye glasses extend through the sealing edge of the full facepiece. As a temporary measure, glasses with short temple bars or without temple bars may be taped on the wearer's head. Wearing contact lenses in contaminated atmospheres with a respirator shall not be allowed. Systems have been developed for mounting corrective lenses inside full facepieces. When a worker must wear corrective lenses as part of the facepiece, the facepiece and lenses shall be fitted by qualified individuals to provide good vision, comfort, and a gas-tight seal.

If corrective spectacles or goggles are required, they shall be worn so as to not affect the fit of the facepiece. Proper selection of equipment will minimize or avoid this problem.

3. Maintenance and Care of Respirators: A program for maintenance and care of respirators shall be adjusted to the type of building, working conditions and hazards involved, and shall include the following basic services to maintain the equipment at original performance effectiveness.

- All respirators shall be inspected routinely before and after each use. A respirator that is not routinely used but is kept ready for emergency use shall be inspected after each use and at least monthly to assure that it is in satisfactory working condition.

- Respirator inspection shall include a check of the tightness of connections and the condition of the facepiece, headbands, valves, connecting tube, and canisters. Rubber or elastomer parts shall be inspected for pliability and signs of deterioration. Stretching and manipulating rubber or elastomer parts with a massaging action will keep them pliable and flexible and prevent them from taking a set during storage.

- A record shall be kept of inspection dates and findings for respirators maintained for emergency use.

- Routinely used respirators shall be collected, cleaned and disinfected as frequently as necessary to insure that proper protection is provided for the wearer. Respirators maintained for emergency use shall be cleaned and disinfected after each use.

- Replacement or repairs shall be done only by competent persons. To make adjustments or repairs beyond the manufacturer's recommendations is strictly prohibited. Reducing or admissions valves or regulators shall be returned to the manufacturer or to a trained technician for adjustment or repair.

- After inspection, cleaning, and necessary repair, respirators shall be stored to protect against dust, sunlight, heat, extreme cold, excessive moisture, or damaging chemicals. Respirators placed at stations and work areas for emergency use should be quickly accessible at all times and should be stored in compartments built for the purpose. The compartments should be clearly marked. Routinely used respirators, such as dust respirators, may be placed in plastic bags.

- Respirators should not be stored in such places as lockers or tool boxed unless they are in carrying cases or cartons.

- Respirators should be packed or stored so that the facepiece and exhalation valve will rest in a normal position and function will not be impaired by the elastomer setting in an abnormal position.

4. Standard Written Plan or Standard Operating Procedure: Following is a condensed individual user's standard operating procedure (SOP) for the use, care, and maintenance of assigned respirators. The content of the SOP shall be provided with formal training, fit-testing, and hands-on demonstration of care and maintenance prior to issuance of respirators to individuals.

Individual User's Respiratory Protection
Standard Operating Procedures (SOP)

This SOP contains information and guidance for proper respirator selection, use, care, and maintenance. Reference directives include 29 CFR 1910.134, Respiratory Protection Program, and applicable manufacturer's literature.

1. General: Each individual required to use a respirator will be fit tested and trained. They must be fit tested with the particular brand name respirator they will use.

2. Issued Respirator Description and Authorized Use:

TYPE RESPIRATOR
TC(APPROVAL STICKER)
OPERATION/USE

3. Usage: Before each use of an approved respirator, the wearer shall perform the following procedures:

a. Inspection

(1) Check all parts for wear or defects.

(2) Check approval sticker (TC#) on filters, canisters, or cartridges to assure it is appropriate for the intended use..

(3) Replace filters, canisters, or cartridges if necessary.

b. Leakage Test

(1) Positive Pressure Test: Close the exhaust valve and exhale gently into the facepiece. The respirator and fit is considered satisfactory if a slight positive pressure can be built up inside the facepiece without any evidence of outward leakage of air at the seals. For some respirators, this method will require the wearer to first remove the exhaust valve cover and then carefully replace it after the test.

(2) Negative Pressure Test: Close off the inlet opening of the filters, canisters, or cartridges be covering with the palm of the hand. Inhale gently so that the facepiece collapses slightly and hold breath for ten seconds. If the facepiece remains in a slightly collapsed condition and

no inward leakage of air is detected, the respirator and fit is considered satisfactory.

4. Filters, Canisters, or Cartridges Replacement: The user will recognize the end of the filters, canisters, or cartridges' service life by three methods:

a. Check the manufacturer's recommended shelf life.

b. When the wearer detects a resistance in breathing or an extra effort is needed to inhale.

c. When the wearer detects an odor or smells the chemicals being used.

In all cases, regardless of how the wearer has detected the end of the service life of the filters, canisters, or cartridges, they should immediately exit the operating area, correct the problem, and perform all the necessary checks prior to entry/reentry.

5. Cleaning and Maintenance Requirements:

a. Individual Use Respirators. The individual user is responsible for care and maintenance.

b. Collective Use Respirators. The supervisor is responsible for establishing a maintenance and cleaning program.

(1) The maintenance and cleaning program must ensure the requirements provided in 29 CFR 1910.134 are adhered to as a minimum acceptable program.

(2) The actual cleaning and maintenance of a collective use respirator may be performed by the individual using the respirator or the task may be assigned to the section responsible for the storage and issuing of collective use respirators.

c. All respirators must be inspected before and after each use or at least monthly.

d. Inspect the head band, mask, valves, connecting type (if applicable), and cartridges for deterioration. Rubber parts should be checked for elasticity and cracks. Stretching and manipulating rubber parts when stored for several weeks will help prevent deterioration. The valves should be inspected for tears and any obstructions to proper sealing. Cartridges or canisters which are cracked or broken should be replaced.

e. When a mask is used only for emergencies, a record of monthly inspections with dates, findings, and corrective actions shall be maintained buy the owning agency.

6. Cleaning and Disinfection Procedure:

a. Individually issued respirators shall be cleaned and disinfected by the user on a frequent basis to eliminate build-up of skin oil and grime.

b. Respirators maintained for emergency use should be cleaned and disinfected after each use.

c. Procedures for cleaning:

(1) Remove filters, cartridges, or canisters.

(2) Wash thoroughly with a detergent and warm water (120°F to 140°F), scrubbing with a soft brush.

(3) Rinse thoroughly in clean, warm water (120°F to 140°F), to remove all traces of detergent. Place respirator in a clean area to dry.

(4) Air dry in a clean area.

(5) Clean other respirator parts as recommended by the manufacturer.

(6) Replace defective parts if necessary.

(7) Place in plastic bag for storage.

d. Sanitizing. When disinfecting respirators, they should be washed (as outlined above), then dipped into a disinfecting solution, then rinsed and dried, (as outlined above). Rinsing is extremely important to prevent dermatitis.

7. Repairs and Replacement of Parts:

a. Only experienced personnel shall replace parts.

b. Only manufacturer's parts designed for that use shall be used.

c. Filters, cartridges, valves, and head straps shall be replaced when defective.

d. Replace respirator if facepiece is defective.

8. Storage:

a. Do not store respirators and parts in:

(1) dusty areas

(2) direct sunlight

(3) temperature extremes

(4) a high humidity area

(5) toxic chemicals

b. Store in such a manner/area as to prevent the facepiece from being deformed.

TAB J

PERMIT APPLICATION FOR MAINTENANCE/RENOVATION WORK

PERMIT APPLICATION FOR MAINTENANCE/RENOVATION WORK

1. Exact location of area involved: Bldg No._____Rm. No._____
   Description:_____

2. Scheduled Start Date:_____ Scheduled Completion Date:_____

3. Description of work involved:_____

4. *Approximate amount of asbestos present (linear feet, square feet, size of tank, etc.):

5. *Asbestos control methods to be used (i.e., glove bag, HEPA vacuum, wet methods, etc.)

6. *Protective equipment to be used (respirator, coveralls, etc.)_____

7. *Name, organization, and telephone number of abatement project manager:

* These items must be verified and/or completed by the Asbestos Program Manager.

PERMIT APPROVED: _____NO ASBESTOS IDENTIFIED
_____RESPONSE ACTIONS COMPLETE

Signed:_____ Date:_____ Permit No._____

Submit this form to: Directorate of Public Works, Environmental and Natural Resources Division, Fort Belvoir, VA 22060

OPERATIONS AND MAINTENANCE PROCEDURES FOR ASBESTOS CONTAINING MATERIALS BY MATERIAL TYPE

ACM Acoustic Ceiling Tile: When in good and undamaged condition, acoustic ceiling tiles pose no immediate threat to health; however, ceiling tiles are easily damaged and made friable by physical or water damage. When the interior of the tiles becomes exposed, the potential for a fiber release from the tile is enhanced resulting in contamination of the surrounding area. Asbestos-containing ceiling tiles are to be identified to all concerned, kept protected from damage, and their condition kept under periodic surveillance until removed. The use of power or hand tools to penetrate the tiles is to be prohibited unless equipment specially equipped with high velocity, low volume HEPA-filtered exhaust is used. When replacing single tiles or performing work in the area of these tiles, proper preparatory and work precautions shall be used; cleaning and preparation of the work area to control contamination; use of full body protective clothing, and a minimum of negative air pressure respiratory protection employing appropriate HEPA filtration against asbestos. Friable tiles require considerably more care in handling, removal, and subsequent decontamination of surfaces. Access to work areas must be restricted, air handling/supply units turned off and sealed and the area properly contained to stop any spread of contamination. Place removed or damaged tiles into six-mil polyethylene asbestos waste disposal bags, seal properly, and dispose as asbestos waste in accordance with applicable Federal and State laws and regulations.

ACM Thermal System Insulation: Thermal system insulation is susceptible to disturbances from physical contact, water, vibration, and air erosion. The insulation may be a soft and friable such as magnesium type or air cell insulation or hard insulation coatings often used on pipe joints or tanks. Whether friable or intact these systems are especially subject to physical damage and deterioration because they are sometimes unwrapped or merely encapsulated in paint. Protect these systems and perform preventive measures that stop direct physical contact, water damage, vibration, or air erosion of the material. Do not hang or store items on or in direct contact with these systems or their components such as valves, tees, elbows, or straight sections of insulation. Do not allow maintenance on the system, components, or underlying parts of the insulation wrap without consulting the Asbestos Program Manager. Maintain all thermal system components in an intact and undamaged condition. Promptly report any evidence of damage (e.g., visible debris or dust on horizontal surfaces directly under piping, elbows, or other system components) or accidental damage which exposes asbestos fibers to the air. Report damage to this material as a major or minor fiber release episode (as appropriate) to the Asbestos Program Manager or other designated person for action, and treat it accordingly. Ensure repair of all damage is accomplished in a "timely fashion." Use respiratory protection and personal protective equipment when performing small spot repairs.

Clean the area using wet methods and/or High Efficiency Particulate Absolute (HEPA) vacuums. Annual cleaning is to be performed, including spraying any debris found near asbestos-containing insulation with amended water and placing the debris in a properly marked 6-mil plastic disposal bag using a dustpan. Clean the dust pan with water in a utility sink. HEPA vacuum all carpets in rooms with asbestos-containing insulation; wet mop all other floors and dust all other horizontal surfaces with damp cloths in rooms with asbestos-containing insulation; seal all debris, vacuum bags, vacuum filters, cloths, and mop heads in properly marked six-mil plastic disposal bags for disposal according to EPA regulations for asbestos waste.

ACM Resilient Floor Covering - Floor Tile and Sheet Flooring: Asbestos has been identified in vinyl floor tile and sheet flooring and/or in their adhesives. The asbestos in these substances however, is normally non-friable unless severe damage has occurred, or if the flooring has been disturbed by maintenance activity such as sanding, drilling, sanding, or abrasive buffing.

Regularly scheduled maintenance activities such as washing and waxing floors are the best way to ensure that asbestos fibers are not released. In addition, do not sand, drill, gouge, etc., resilient floors. If a piece of resilient flooring is damaged, an employee with Level 2 training, wearing protective equipment, should 1) wet the area with amended water, 2) put the piece(s) in a six-mil asbestos waste bag, and 3) HEPA vacuum the area. Repair the damaged area so adjoining tiles do not become dislodged.

If the damaged area was assumed to be ACM, and the area can be sealed for some time, a sample should be extracted by an employee with Level 2 training. The sample should be submitted to an accredited EPA laboratory for analysis to confirm the presence of asbestos. Depending on the result of the analysis, work shall proceed accordingly.

Transite Panels: Transite panels include interior panels, as well as exterior siding, corrugated roof panels and shingles. When in a good and undamaged condition, transite panels pose no immediate threat to health and are not usually considered a friable material; however, these panels may become friable when physically or water damaged. Once broken, the interior of the panel is exposed, where the asbestos fibers are more easily released. Further damage will create debris and a fiber release causing contamination of the surrounding area. Asbestos-containing transite panels are to be identified to all concerned and kept protected from damage and their condition kept under periodic surveillance until removed. The use of power or hand tools to penetrate the panels is to be avoided unless equipment specially equipped with high velocity, low volume HEPA-filtered exhaust is used.

When replacing transite panels or performing work in near proximity of these panels, proper preparatory and work precautions shall be used; cleaning and preparation of the work area to control contamination; use of full body protective clothing, and a minimum of negative pressure respiratory protection employing appropriate HEPA filtration against asbestos. Friable transite panels require considerably more care in handling, removal, and subsequent decontamination of surfaces. Access to work areas must be restricted, air-handling/supply units turned off and sealed, and the area

properly contained to stop any spread of contamination. See also the O&M Program Document recommendations for fiber release episodes, related cleaning activities, personal protective equipment, and asbestos waste material. Place removed or damaged panels into six-mil polyethylene asbestos waste disposal bags, seal properly, and dispose as asbestos waste in accordance with applicable Federal and State laws and regulations.

ACM Fire Doors: Ensure that fire doors are not penetrated with tools, and temporary door removal is achieved by loosening the hinges from the door frame. Fire doors, fully and safely enclosing or encapsulating ACM within it, present no hazard to the building occupants. Upon renovation, demolition, or other major repair actions undertaken within the building, precautions must be taken to ensure the integrity of all fire doors is fully maintained. Fire doors have been identified and their condition generally assessed as part of the initial survey. Their condition shall be monitored under the surveillance program. Promptly report damage, penetrations, or vandalism, to the Asbestos Program Manager. Subsequent treatment as a fiber release episode will be initiated, along with fire door replacement. Due to the large size of the doors, special care shall be taken to wrap damaged ACM doors in two layers of six-mil polyethylene plastic in lieu of disposal bags.

ACM Wall Mastic - Wall Coating: Asbestos was identified in wall mastic and other adhesives. However, the asbestos in these substances is normally non-friable unless severe damage has occurred to the materials or if some maintenance activity has occurred (e.g., sanding, drilling).

Regularly scheduled maintenance activities such as patching and repair of the materials are the best way to ensure that asbestos fibers are not released. In addition, do not sand, drill, gouge, etc. these materials. If an area of mastic is damaged, an employee with Level 2 training wearing protective equipment should 1) wet the area with amended water, 2) put the piece (s) in a six-mil asbestos waste bag, and 3) HEPA vacuum the area. The damaged area shall be repaired so surrounding areas do not become damaged.

ACM Debris: If ACM debris is identified in an area, access should immediately be restricted to Level 2 trained personnel wearing personal respiratory protection and clothing. The area should be sealed and warning signs posted to prevent access by unauthorized personnel.

Spray the debris and surrounding area with amended water. Place the debris in an asbestos labeled six-mil waste bag using a dust pan. HEPA vacuum the dust pan in a utility sink. Report the location of debris to the Asbestos Program Manager.

CAUTION: *DO NOT SWEEP ASBESTOS DEBRIS, THOROUGHLY WET IT, PICK UP LARGE PIECES, AND HEPA VACUUM THE RESIDUAL PIECES.*

- HEPA vacuum and steam clean all effected carpets.
- Wet mop all other floors and wipe all other horizontal surfaces with damp cloths.

- Dispose of all debris, filters, mop heads and cloths in labeled six-mil plastic bags in accordance with local regulations for disposal of asbestos waste.

ACM Flexible Duct Connector: As a first measure, maintenance or building employees shall restrict activity that may damage the flexible duct connectors. For example:

- Do not cut or drill holes in the flexible duct connector.
- Do not damage intact material.
- Do not use an ordinary vacuum or dry sweeping to clean any debris that have accumulated.

If the flexible duct connector is damaged, or if required for periodic maintenance, replace the connector with a non-asbestos flexible duct connector. To remove and replace the flexible duct connector:

- Shut down the ventilation system, if applicable.
- Isolate air duct section, if applicable.
- Thoroughly wet exposed material with amended water using a spray bottle.
- Loosen bolts on flanges holding material in place.
- Carefully remove all material, periodically wetting with amended water from a spray bottle.
- Thoroughly clean entire area in accordance with the specialized cleaning procedures included in this O&M program.
- Dispose of all material in accordance with applicable rules and regulations.

ACM Gasket Material: As a first measure, restrict activities that may damage the gasket material. For example:

- Do not cut or drill holes in the gasket material.
- Do not damage intact gasket material.
- Do not use an ordinary vacuum or dry sweeping to clean any debris that may have accumulated.

If the gasket material is damaged, or if required for periodic maintenance, replace the gasket with a non-asbestos gasket. To remove and replace the gasket material:

- Shut down the ventilation system, if applicable.
- Isolate air duct section, if applicable.
- Thoroughly wet exposed material using a spray bottle.
- Loosen bolts on flanges holding material in place.
- Carefully remove all material, periodically wetting with water from a spray bottle.
- Thoroughly clean entire area in accordance with the specialized cleaning procedures included in this O&M program.
- Dispose of all material in accordance with applicable rules and regulations.

TAB L

FIBER RELEASE EPISODE REPORT

FIBER RELEASE EPISODE REPORT

1. Building, and room number(s) (or description of area) where episode occurred:

   _____

   _____

   _____

2. The release episode was reported by _____ on _____ (Date)

3. Describe the episode: _____

   _____

   _____

   _____

   _____

   _____

   _____

   _____

   _____

   _____

4. The asbestos-containing material was/was not cleaned up according to approved procedures. Describe the response action: _____

   _____

   _____

   _____

   _____

   _____

   _____

   _____

   _____

   _____

   _____

Signed: _____ Date: _____
(Asbestos Program Manager)

TAB M_____

REASSESSMENT OF ASBESTOS CONTAINING MATERIALS

REASSESSMENT OF ASBESTOS CONTAINING MATERIALS

Location of asbestos containing material(s) (address, building number, room number, or general description:_____

_____

Type of asbestos containing material(s)

Sprayed or troweled-on ceilings or walls:_____
Sprayed or troweled-on structural members:_____
Insulation on pipes, tanks, or boilers:_____

Abatement Status:

The material has been: Encapsulated_____Enclosed_____ Neither_____

Assessment:

Evidence of physical damage:_____

_____

Evidence of water damage:_____

_____

Evidence of delamination or other deterioration:_____

_____

Degree of accessibility of the material:_____

_____

Degree of activity near the material:_____

_____

Location in an air plenum, air shaft, or air stream:_____

_____

Other observations (including the condition of the encapsulant or enclosure, if any):

_____

_____

Signed:_____Date:_____
(Inspector/evaluator)

OPERATIONS AND MAINTENANCE PROGRAM EQUIPMENT

A. Recommended Personal Protective Equipment:

Category/Equipment	Unit	Quantity	Approximate Unit Cost
First Aid Kit	each	3	50.00
Rubber Boots	pair	5	25.00
Tyvek Booties	case of 25 pr	1	30.00
Tyvek Suits (Full-body)	case of 25	2	100.00
Latex Gloves	box of 100	1	10.00
Hard Hats	each	5	10.00
Safety Shoes	pair	5	85.00
Ear Plugs	box 200 pr	1	30.00
Eye Protection (Goggles)	each	5	5.00
½ Face Respirators	each	5	25.00
PAPRs (Respirators)	each	2	700.00
Respirator Bags	box	1	4.50
Respirator Cartridges	box of 10	1	50.00
Respirator Cleaner	gallon	1	21.00
Resp. Disinfect. Wipes	pack	2	12.00
Fit Test Tent	each	1	50.00
Smoke Tubes	box	1	35.00

B. Recommended Monitoring and Workplace Assessment Equipment:

Category/Equipment	Unit	Quantity	Approximate Unit Cost
Personal Air Samplers	5/kit	1	2,000.00
High Volume Samplers	each	3	600.00
Calibrator (with stand)	each	1	100.00
Stop Watch	each	1	15.00
Tygon Tubings	roll	2	13.50
Air Sampling Cassettes	box	2	60.00
Heat Stress Monitor	each	1	50.00

C. Recommended General Supplies:

Category/Equipment	Unit	Quantity	Approximate Unit Cost
Aluminum Tape	roll	7	6.00
Duct Tape	case	1	92.00
Camera	each	2	100.00
Film	roll	10	3.50
Baby Wipes	tub	7	3.00
Buckets	each	5	9.00
Disposal Bags (Asbestos)	case of 75	1	81.00
Glove Bags	case of 25	1	180.00
Gallon Storage Bags	carton of 5		2.00
Plastic Sheeting(12x100)	roll	1	37.00
Spray Bottle (24 oz)	each	5	2.20
Spray Bottle (32 oz)	each	5	2.50
Wetting Agent (Surfactant)	5 gal		115.00
Encapsulant	5 gal	1	134.00
Coin Tubes	case	1	60.00
Measuring Devices	each	5	10.00
Print-Out Labels	box	2	3.00
Fire Door Labels	box	1	112.86
Spackling Compound	tub	5	5.00
Utility Knife	each	5	3.55
Chisels	each	5	6.00
Pliers	each	5	4.00
Screwdrivers	each	5	1.50
Hammers	each	5	6.00
Electrical Tape	roll	5	1.69
Flashlight	each	5	10.00
Batteries	each	10	1.50
Paper Towels	roll	5	1.00
Putty Knives	each	5	1.50
Clipboards	each	5	14.40
Pens	dozen	1	10.00
Highlighter Pens	pack	5	4.00
Forms	copy	50	0.10
Extension Cords	each	5	25.00
Multi-Plug Adapters	each	5	4.00

Category/Equipment	Unit	Quantity	Approximate Unit Cost
HEPA Vacuum (6 gallon)	each	2	900.00
Ladders, 8-foot step	each	2	61.00
Scaffolding	Renting is more cost effective		

D. Recommended Containment Construction Equipment:

Category/Equipment	Unit	Quantity	Approximate Unit Cost
HEPA Exhaust Units	each	1	2800.00
Pre-filters	box	1	50.00
Secondary Filters	each	2	130.00
Ground Fault Interrupter Receptacle	each	5	15.00
Exhaust Ducting	length	2	45.00
Manometer	each	2	800.00
Velometer	each	1	700.00
Smoke Tubes	box	2	30.00
6-mil Polyethylene Sheeting	roll	2	37.00
2" x 4" Boards	8 foot	5	2.00
4' x 8' Plywood Sheeting	sheet	5	16.00
Portable Shower Facility with Drain Filters	each	1	900.00
Barricade Tape	roll	5	15.00
Appropriate Asbestos Warning Signs	pack	1	36.00
Water Hoses	each	5	20.00
Submersible Water Pump and 3 Stage Water Filters	each	1	500.00
10 Gallon Water Heater	each	1	150.00
Shower Fixtures	each	2	15.00
Pan	each	3	5.00
Stanchions or Barricades	each	5	25.00
Absorbent Material	bale	3	12.00
Spray Adhesive	case	1	30.00

SECTION IV

OPERATIONS & MAINTENANCE PROGRAM

1. Introduction: Identification and assessment of Asbestos Containing Materials (ACMs) is the first step in preventing occupant exposure to asbestos fibers. While damaged or deteriorated ACM should be repaired or removed from a facility, a full scale abatement is usually not practical or cost effective. The U.S. EPA recommends the establishment of an in-place Operations and Maintenance (O&M)Program whenever asbestos is discovered. A conscientious in-place O&M Program provides the means to greatly reduce the potential for fiber releases, particularly when the materials are not significantly damaged and are not likely to be disturbed. Day-to-day operation of the building should be conducted in a manner that will prevent or minimize the release of asbestos fibers into the air. Application of specialized work procedures and controls will ensure that when asbestos fibers are released, either accidentally or intentionally, proper management and clean up procedures are promptly implemented.

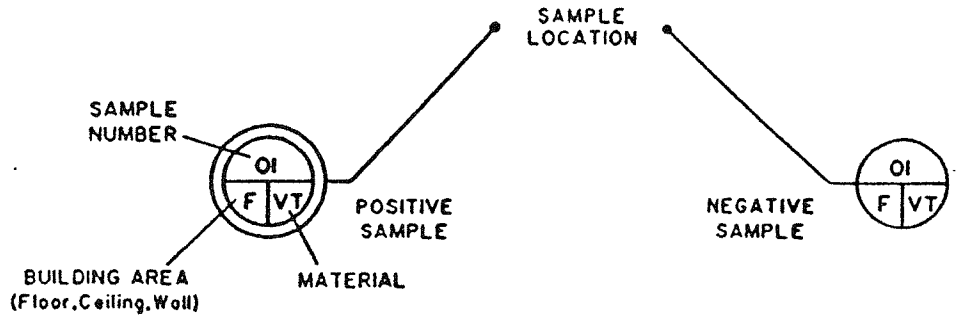
The O&M Program is a set of specific procedures and practices applied to building cleaning, maintenance, renovation and general operation to maintain the building as free of asbestos contamination as possible. The O&M Program draws heavily on information generated during the building surveys and is a key component of the management plan. The O&M Program should remain in effect until all ACM is removed from the facility.

A major concern of the EPA and other Federal, State, and local agencies which regulate asbestos is to ensure proper worker training and protection. These topics are also addressed under this O&M Program. Additionally, an in-place O&M Program includes notification to building occupants of the existence of asbestos in their buildings, periodic surveillance of the material, and proper record keeping.

While the management costs of all the above activities will depend upon the amount, condition, and location of the materials, such a program need not be expensive. In many instances, an in-place O&M Program may be all that is necessary to control the release of asbestos fibers, until the ACM in a building is scheduled for removal because of renovation or demolition activities. It provides a sound alternative to a costly large scale abatement project.

This O&M Program has been prepared specifically for use at Fort Belvoir and represents a practical approach to managing ACMs in place.

LEGEND TO BUILDING SKETCHES



———	EXTERIOR WALL	- - - - - - - - - - - - - - - -	MEZZANINE/LOFT
———	INTERIOR WALL	L_	PIPE ELBOW
———	WINDOW	•	PIPE RISER
——— ———	DOOR	△	FIRE DOOR
FENCE ———	MISCELLANEOUS	▲	FIRE DOOR NO ACM
- - - - - - - - - - - - - - - -	PIPE	XXXXX	ASBESTOS CONTAINED IN WALL
-·-·-·-·-·-·-·-·-·-·-·-·-·-	DUCT	^^^	ASBESTOS CONTAINED IN FLASHING
	ASBESTOS CONTAINED IN FLOOR	PIH	POTENTIAL IMMEDIATE HAZARD
	ASBESTOS CONTAINED IN CEILING		FLEXIBLE DUCT CONNECTOR
			FLEXIBLE DUCT CONNECTOR NO ACM
	ASBESTOS CONTAINED IN FLOOR AND CEILING		LIGHT FIXTURE PAPER
		NA	NO ACCESS
	ASBESTOS CONTAINED IN DEBRIS	NAC	NO ACCESS ABOVE CEILING
		NAUC	NO ACCESS UNDER CARPET
	ASBESTOS CONTAINED IN ROOF		

Abbreviation Key

BUILDING AREAS

A	Attic	M	Miscellaneous
B	Basement	R	Roof
C	Ceiling	S	Crawl Space
D	Door	W	Wall
E	Exterior	X	Undetermined
F	Floor	Z	Mezzanine
I	Insulation		

HOMOGENEOUS AREAS

M	Miscellaneous
S	Surfacing
T	Thermal System

OTHER

NA	No Access
NAC	No Access Above Ceiling
NAUC	No Access Under Carpet

BUILDING MATERIALS

AF	Access Flooring
AP	Acoustic Panel
AS	Asphalt Shingle
AT	Acoustic Tile
BI	Blown-In Insulation
BJ	Boiler Jacket
BU	Built-Up Roof
BR	Brick
CB	Concrete Block
CD	Classroom Divider
CG	Coating
CN	Fire Curtain
CO	Concrete
CP	Corrugated Paper
CT	Carpet
DE	Debris
DT	Duct
EA	Each
EI	Electrical Insulator
ER	Earth
FB	Fiber Board
FC	Flex Connector
FD	Fire Door
FH	Fire Hose
FL	Flashing
FP	Fixture Paper
FR	Fire Brick
FS	Firestop
GA	Gasket
GB	Gypsum Board
GM	Glue/Mastic
II	Incinerator Insulation
IN	Insulation
IP	Insulation Panels
IW	Insulation Wrap
JF	Joint Filler
MA	Mastic
PB	Particle/Composition Board
PC	Pipe Covering
PD	Pad
PG	Peg Board
PJ	Pipe Joint
PL	Plaster
PM	Patching Material
PR	Paper
PS	Spray-On Plaster
PT	Paint
PW	Pipe Wrap
QT	Quarry Tile
RO	Rope Insulation
RR	Rolled Roofing
RS	Resilient Sheet
SF	Spray-On Fireproofing
SI	Spray-On Insulation
SK	Stack Breeching
SL	Slate
SO	Spray-On Finish Material
SP	Straight Pipe
ST	Stair Tread
TA	Tar
TB	Transite Board
TD	Transite Duct
TK	Tank
TP	Transite Pipe
TR	Tar Paper
TW	Tar Wrap
UL	Underlayment
VB	Vinyl Base
VE	Vinyl Exterior
VS	Vinyl Sheet
VT	Vinyl Tile
VW	Vinyl Wall Covering
WD	Wood
WP	Wood Paneling
WR	Wrap
XX	Undetermined

2. Objectives of an Operation and Maintenance Program: There are three primary objectives of the O&M Program: 1) to clean up existing contamination; 2) to minimize future fiber release by controlling access to ACM; and 3) to maintain ACM in good condition until it is eventually removed. This program will serve as the means by which Fort Belvoir can track known ACMs and prevent or respond quickly to unintentional fiber releases.

Since by law all but certain specified categories of ACM must be removed from buildings before demolition, the O&M Program is not a permanent solution. It is implemented as part of an overall asbestos management plan that has as its goal the elimination of asbestos exposure within the facility. The O&M Program likewise is not a means by which full-scale asbestos abatement is accomplished. Rather, intentional disruption of ACM should be limited to repair or removal of small areas of significantly damaged ACM, or small areas where removal is necessary to facilitate maintenance or small renovation activities. Large scale abatement projects that require extensive planning and technical expertise are beyond the scope of most O&M Programs. On the other hand, limited encapsulation and enclosure may be used to enhance an O&M Program, e.g., by reducing the likelihood for contact with this ACM. CFR 1926.1101 defines the following classes of asbestos work:

- Class I asbestos work means activities involving the removal of thermal system insulation (TSI) and surfacing ACM and Presumed Asbestos Containing Materials (PACM).

- Class II asbestos work means activities involving the removal of ACM which is not TSI or surfacing material. This includes, but is not limited to, the removal of asbestos containing wallboard, floor tile and sheeting, roofing and siding shingles, and construction mastic.

- Class III asbestos work means repair and maintenance operations, where ACM, including TSI and surfacing material, is likely to be disturbed.

- Class IV asbestos work means maintenance and custodial activities during which employees contact ACM and PACM and activities to clean up waste and debris containing ACM and PACM.

Key to a successful O&M Program is the appointment of an Asbestos Program Manager. This position serves as the focal point for implementation of the program from standard procedures to emergency response actions.

3. Elements of the O&M Program: The specific features of this O&M Program have been designed to match the requirements and resources of Fort Belvoir. However, as are most O&M Programs, it is built on the following elements:

- Asbestos Program Manager
- Notification and Labeling
- Training (on several levels)
- Medical Surveillance and Employee Protection Programs
- Specialized Cleaning Procedures
- Maintenance/Renovation Permit System
- Special Work Practices
- Emergency Response Procedures
- Periodic ACM Surveillance
- Record Keeping

4. Asbestos Program Manager: The Asbestos Program Manager should be a part of the Directorate of Public Works, Environmental and Natural Resources Division. The individual appointed to this position should have the authority to implement the O&M Program installation-wide. The program manager should be qualified by training and experience to coordinate the O&M Program with facility maintenance, repair, renovation and demolition activities. This individual should receive formal training dealing with asbestos issues and work practices. An EPA approved Inspector/Management Planner or Contractor/ Supervisor course is recommended.

The Asbestos Program Manager will be responsible for all aspects of the O&M Program including notification, training, employee protection, maintenance and renovation activities, work practices, response actions, and record keeping. The ultimate success of the O&M Program is contingent upon the commitment of key personnel to the program and to its effective implementation.

5. Notification and Labeling: Once the presence of asbestos-containing materials has been established in a facility, a notification and labeling program should be initiated. The notification and labeling program serves two purposes: (1) it alerts affected parties to a potential hazard in the building; and (2) it provides basic information on avoiding the hazard. Building occupants, employees and others who are aware of the presence of ACM are less likely to disturb the material and cause fiber release.

Building occupants in each building in which ACM has been identified should be notified of its presence, its location and its condition in order to reduce the possibility of inadvertent disturbance of the material. This awareness will encourage employees to be cautious when working near asbestos such as in storage rooms where supplies may be piled near ACM pipe elbows.

Notification of building occupants and other affected individuals can be accomplished several ways. Seven techniques applicable at Fort Belvoir are:

- Chain of Command
- Environmental Quality Control Committee (EQCC)
- Building Monitors
- Articles in the installation newspaper
- Distribution of notices
- Holding awareness or informational seminars
- Contracting Officer's Representatives (COR)

The distribution of notices in on-post publications is an effective means of alerting building occupants about the presence of asbestos. Memos or letters can be tailored to specific buildings or organizations, and verification that notification was received is easily accomplished. For example, in a large multi-tenant building, the asbestos program manager can send detailed reports to the management of individual organizations, while distributing similar, condensed informational memos to the building occupants.

Awareness or informational seminars can be designed to follow written notification. They serve to expand on relevant information while allowing attendants to raise questions. These seminars may be given in conjunction with other training programs or assemblies and may be designed within a one- to two-hour schedule.

The Maintenance/Renovation Permit System will identify work which has a potential for disturbing ACM. All contractors working in Fort Belvoir facilities are to be notified of the presence of asbestos at their assigned work sites. They shall have ready access to ACM information through their Contracting Officer's Representative (COR).

Regardless of the notification format chosen, affected individuals should be provided with the following information:

- Name, organization symbol and telephone number of the Asbestos Program Manager
- What asbestos is and how it is typically used
- Health effects associated with exposure
- What type(s) of ACM are present in the facility
- The exact location(s) of these materials
- How individuals can avoid disturbing ACM
- How to recognize and report damage
- How custodial and maintenance personnel are dealing with materials to prevent fiber release
- What will be done periodically and over the long run to protect the health and safety of building occupants

Labeling, as opposed to notification, is not intended as general information. It serves as a final line of defense to prevent unprotected individuals from disturbing ACM, or entering areas where repair or renovation activities involving ACM are underway. Labeling is usually in the form of posted signs or notices, which are either directly attached to ACM or at entrances to areas where ACM is prevalent (e.g., boiler rooms or abatement projects).

Fort Belvoir should use the AHERA model for labeling and identification of ACM. Under AHERA, the posting of warning signs is mandatory adjacent to any friable and non-friable ACM and suspected ACM in routine maintenance areas (such as boiler rooms) in each building. In addition, ACM which is easily accessible to the general public, such as a pipe riser in an office area or corridor, should be identified with a caution label to prevent inadvertent disturbance of the material.

Warning signs used in conjunction with small renovation or repair that involves the disruption of ACM should be posted at entrances and around the perimeter of the project and in accordance with the OSHA Asbestos Standards for the Construction Industry (29 CFR 1926.58). Signs used to demarcate the regulated areas should contain the following information:

DANGER
ASBESTOS
CANCER AND LUNG DISEASE HAZARD
AUTHORIZED PERSONNEL ONLY
RESPIRATORS AND PROTECTIVE CLOTHING
ARE REQUIRED IN THIS AREA

Labels affixed to asbestos products where ACM is prevalent, or contaminated waste according to 29 CFR 1926.58, shall contain the following information:

DANGER
CONTAINS ASBESTOS FIBERS
AVOID CREATING DUST
CANCER AND LUNG DISEASE HAZARD

Specific warning sign language in areas where no regulatory requirement prevails is a matter of extreme importance. A warning that is vaguely worded may not effectively express the potential danger involved. Warning or danger signs that come across too alarmist may create undue concern by building occupants. Also, the manner in which a warning sign is worded can affect the owner's liability. Labels with the following wording are appropriate for non-regulated areas where identification is needed to prevent inadvertent disturbance of ACM.

CAUTION: ASBESTOS HAZARD
DO NOT DISTURB WITHOUT PROPER
TRAINING AND EQUIPMENT

Signs and labels for all of the above applications are commercially available.

6. Training: The Fort Belvoir O&M Program requires that each custodial, maintenance, or other worker who, in the course of their routine duties, may come into contact with asbestos containing materials, receive training to prevent the inadvertent release of asbestos fibers. The objective of the training is to establish proper awareness and understanding of work practices based on the duties of the various employees. Training should generally include information on the health effects of asbestos as well as the recognition, proper handling and maintenance of ACM so as not to inadvertently disturb the material which could result in the release of asbestos fibers into the building. To meet these varying requirements, three levels of training are recommended for government or contractor personnel. The level of training to be provided is determined by the job duties of the employee and the likelihood that the employee will come in contact with asbestos containing materials in the routine course of their duties.

Since most custodial and maintenance work at Fort Belvoir is accomplished by outside contractors, the requirement for asbestos training must be included in the scope of services for each contractor. Each contractor should be familiar with the O&M Program and have the training and experience to work around ACM. Each contractor should provide written documentation that the training has been accomplished to the Asbestos Program Manager. A suggested Standing Operating Procedure (SOP) for all asbestos related O&M work is at **TAB G** of this section.

Recommended levels of training consist of the following:

- **Level 1: General Service/Custodial Workers.** Awareness training is recommended for general service and custodial personnel involved in cleaning and other simple maintenance tasks where asbestos containing material may be accidentally disturbed. The training should include all the information outlined in the section on notification. The focus of the training should be on how to avoid disturbing ACM. Level 1 training should last a minimum of two hours. It may be taught by the Asbestos Program Manager, or another individual with at least 32-hours training in an EPA accredited asbestos course.

- **Level 2: Specialized Service/Custodial Workers.** One of the main objectives of the O&M Program is to clean the facility of existing asbestos contamination. Specialized service and custodial personnel who conduct cleaning or other activities that result in the disturbance of ACM must receive the two-hours of general awareness training plus 14-hours of additional instruction. Information to be presented in this training session should include proper cleaning techniques (HEPA vacuuming and wet methods), appropriate practices for handling ACM, proper disposal methods, and use of respirators and other protective equipment, including hands-on training. The Level 2 training should be taught by an EPA accredited training agency or, taught in-house by the Asbestos Program Manager or another individual with at least 32-hours training in an EPA certified asbestos course.

- **Level 3: Maintenance and Asbestos Workers:** If routine or even infrequent maintenance involves the possibility of significant disturbance of ACM, workers should be involved in a more extensive training program. Maintenance personnel, who in the course of their duties will perform small-scale short duration removal, repair, encapsulation, or cleaning of ACM debris, should receive the EPA accredited

Asbestos Workers Course. This includes as a minimum, a three-day training course and an annual one-day refresher course taught by an EPA accredited training agency. Training should include local isolation of HVAC systems, isolation of the work area from non-work area (through the use of barriers and warning signs, etc.), HEPA vacuuming, the use of methods to reduce fiber release, HEPA and glove bag techniques for working around pipe insulation, clean-up and decontamination procedures, and ACM disposal procedures. The course should provide hands on training in these areas.

Personnel who receive Level 2 and 3 training as well as anyone required to wear a respirator, must be included in a respiratory protection and medical surveillance program.

In addition to the Asbestos Program Manager, formal EPA certified training is required for people with the following responsibilities:

Abatement Project Designer	EPA Project Designers Course Three-day Initial Training Annual One-Day Refresher Course
Project Supervisors and recommended for **Contracting Officer's Representative**	EPA Contractor/Supervisor Course Four-day Initial Training and Annual One-day Refresher Course
Inspector	EPA Inspector Course Three-day Initial Training Annual One-day Refresher Course
Management Planner	EPA Management Planner Course Three-day Inspector Initial Training Two-day Management Planner Initial Training Annual One-day Refresher Course

7. Medical Surveillance and Employee Protection Programs: According to the OSHA Asbestos Standard for the Construction Industry (29 CFR 1926.1101), the OSHA Asbestos Standard for General Industry (29 CFR 1910.1001) and the U.S. EPA Worker Protection Rule (40 CFR 763.120), any employee who, for a combined total of 30 or more days per year are engaged in Class I,II, and III work, or are exposed at or above the permissible exposure limit (PEL) - 0.1 f/cc of asbestos in an 8-hour time weighted average (TWA) - or the excursion limit - 1.0 f/cc over a sampling period of 30-minutes, or who wears a negative pressure respirator as part of his job must be included in a respiratory protection program. In the Fort Belvoir O&M Program, the use of negative pressure respirators will dictate involvement in the medical surveillance program for most specialized service/custodial and maintenance workers. Although fiber levels may not be high enough to require a respiratory protection program, establishing such a program is recommended.

The purpose of the medical surveillance program is to establish an employee's fitness to wear a respirator, and to detect any changes in the gastrointestinal and cardiopulmonary systems as a result of working in asbestos contaminated areas. Such changes may indicate the onset of an asbestos-related disease.

The main requirements of the medical surveillance program are initial and periodic examinations. The initial examination can be omitted if the employee had an equivalent exam within the last twelve-months. Periodic examinations are required at least annually, and must be performed before the employee is issued a negative pressure respirator.

Each examination must include, at a minimum:

- A medical and work history with special emphasis directed to the pulmonary, cardiovascular, and gastrointestinal systems.

- Completion of the mandatory medical questionnaires. There is one each for the initial and periodic examinations. These questionnaires also include sections on work history. Sample questionnaires are included at **TAB H** of this section.

- A physical examination, with emphasis on the cardiovascular and gastrointestinal systems; and

- A pulmonary function test, which includes the forced vital capacity (FVC) and the forced expiratory volume (FEV) in one-second.

The examining physician may also require other tests as part of the medical examination. The chest x-ray is now optional and is administered at the discretion of the physician. However it is recommended that an initial chest x-ray be used in order to establish baseline conditions for the employee.

Following the examination, the physician must provide the employer with the following:

- A written opinion as to whether the employee has any detected medical conditions that would place the employee at increased risk of health impairment from exposure to asbestos.

- Any recommended limitations on the employee or on the use of personal protective equipment, such as respirators.

- A statement that the employee has been informed by the physician of the results of the medical examination, and of any medical conditions that may result from asbestos exposure.

The physician is not to reveal in the written opinion given to the employer any specific findings unrelated to asbestos exposure. Also, the employer must provide a copy of the physician's written statement to the employee within 30-days of receipt.

The employer must provide the examining physician with the following:

- A copy of the OSHA Asbestos Standard.
- A description of the employee's duties as they relate to asbestos.
- The employee's actual or anticipated level of exposure.
- A description of any personal protective and respiratory equipment used or to be used.
- Information from previous medical examinations of the employee that is not otherwise available to the examining physician.

Finally, the employer must maintain medical records for at least 30-years following termination of employment. If the employer goes out of business without a successor, OSHA must be notified at least 90-days prior to termination of business and provide for transfer of records to the secretary of OSHA, if requested.

The elements of a comprehensive Respiratory Protection Program and Individual User's Respiratory Protection SOP are included at **TAB I** of this section.

8. Specialized Cleaning Procedures: Cleaning up existing asbestos contamination within a facility is one of the primary objectives of the O&M Program. Dry brooms, mops, dust cloths and standard vacuum cleaners simply re-suspend asbestos fibers into the air. Therefore, it is essential that specialized cleaning procedures be implemented.

Where asbestos contamination has been identified, restrict access to the area and conduct a thorough initial cleaning by specially trained and properly equipped custodial workers. This action is to be taken as soon as possible and before the initiation of any response action. These workers should be equipped with high efficiency air purifying(HEPA) respirators, at a minimum. A combination of wet mopping/wiping and HEPA vacuuming should be used to clean all surfaces within the area. Irregular surfaces, such as curtains, books, furniture and carpeting should be cleaned using HEPA-equipped vacuum cleaners. Many manufacturers offer several "nozzles" to make HEPA vacuuming of irregular surfaces less difficult. In some cases, carpeting may be cleaned using steam cleaners. When this method is used, care must be taken to ensure that the liquid waste generated during steam cleaning is properly filtered and disposed of as asbestos contaminated waste. In cases of severe contamination, the Asbestos Program Manager may determine that the carpet or other material is to be removed and disposed of as contaminated waste.

Other surfaces, such as walls, non-carpeted floors, light fixtures, equipment housings, the exterior of air handling ducts, and file cabinets should be cleaned using mops and/or dust cloths and rags that are wetted with amended water. Amended water is a mixture of water and a non-sudsing surfactant. A dust suppressant should also be used on mops.

9. Maintenance/Renovation Permit System: Minimizing inadvertent disruption of ACM during maintenance and renovation operations is often one of the most difficult tasks faced by the Asbestos Program Manager. The initiation of a permit system, where all work orders or requests are funnelled through the Asbestos Program Manager, is a simple yet effective way of controlling disruption of ACM during these activities.

In the permit system, all requests for maintenance/renovation activities are routed through the Asbestos Program Manager prior to the issuance of a work order to proceed. An example permit request form is included at **Tab J** of this section.

The Asbestos Program Manager then checks the building's asbestos records (survey report or computerized database) for information about the presence of ACM where work is to be performed. The manager should also physically inspect the area in question to ensure records reflect actual conditions. If no asbestos is present, the permit is marked appropriately and the planned actions can proceed. If ACM is found to be present in the area, the Asbestos Program Manager will identify the appropriate response actions to be taken. Properly trained maintenance/renovation workers will be assigned or contracted to complete the appropriate response actions with the ACM.

In worst-case situations (e.g., large amounts of ACM), non-critical maintenance/renovation work should be deferred until the ACM in the area can be abated by an abatement contractor. When asbestos response actions are complete, the Asbestos Program Manager shall reinspect the work area. If the response actions are approved, the permit shall be marked appropriately and the project allowed to proceed.

10. EPA/State Notification: EPA notification requirements for asbestos work are detailed in 40 CFR 61, National Emission Standards for Hazardous Air Pollutants (NESHAP), Subpart M, Asbestos. The notification requirement is determined by the amount of asbestos-containing material and the nature of the activity. Additional notification requirements are proscribed by Virginia and Fairfax County. The Asbestos Program Manager shall refer to the applicable Federal, State, and local regulations to determine the notification requirements for each abatement action.

EPA notification is required for all demolition projects which contain regulated ACMs. Notification is required for renovation projects that exceed the NESHAP threshold for regulated ACMs of 260-linear feet on pipes, or 160-square feet on other facility components. Where the amount of ACM cannot be measured before removal, the threshold is 35-cubic feet of ACM. The EPA must also be notified of changes of start dates or changes in the amount of asbestos by twenty percent or more . Where planned renovations will involve individual non-scheduled asbestos abatement actions which will, in total, exceed the NESHAP threshold amounts, EPA notification is required ten-days prior to the beginning of the calendar year of the planned renovations.

Notifications for emergency work or work required as a result of a demolition ordered by a State or local government agency shall be as early as possible but not later than one-day after work has begun.

The notifications must be postmarked or delivered at least ten- working days before asbestos removal or other abatement actions begin. EPA notifications shall be sent to each of the following:

U.S. Environmental Protection Agency
Region 3, Air Enforcement Section (38W12)
841 Chestnut Street
Philadelphia, Pennsylvania 19017

Asbestos Program Support Technician
Department of Labor & Industry
Powers-Taylor Building
13 South Thirteenth St.
Richmond, VA 23219

11. Special Work Practices: Special work practices are designed to minimize and/or contain asbestos fibers during routine maintenance and custodial activities. Workers shall avoid certain activities, such as sawing, sanding or grinding ACM. When working around asbestos materials, the ACM must be protected from damage. Maintenance and custodial activities can be divided into three categories with regard to their potential for disturbing ACM:

- Those which are unlikely to involve any direct disturbance of ACM; for example, regular vacuuming of carpeting which has been installed over ACM floor tile.

- Those which may cause accidental disturbance of ACM; for example, maintenance activities adjacent to friable ACM.

- Those which involve small scale manipulation or disturbance of ACM; for example, small scale repair and/or glove bag removal of damaged pipe elbow insulation.

12. Special Work Practices For Maintenance Activities: Normal maintenance activities can disturb ACM and raise levels of airborne asbestos. Maintenance workers are to be cautioned against conducting any maintenance work in a manner that may disturb ACM. This O&M program includes provisions for the various types of ACM that have been identified at Fort Belvoir. O&M procedures for specific types or ACM materials is at **TAB K** of this section.

The nature and extent of special work practices are tailored to reflect the likelihood that the ACM will be disturbed and that fibers will be released. The following sections on surfacing materials, thermal system insulation, and miscellaneous ACM describe these work practices in detail. For each material, three categories of potential disturbance are defined:

- Contact with the ACM is very unlikely
- Accidental disturbance is possible
- Disturbance of ACM intended or likely. Small amounts of ACM (less than three-square feet or three-linear feet) and large amounts will be discussed.

13. Surfacing Materials: Maintenance activities affecting surfacing materials generally involve penetrations through plaster walls and ceilings, or modifications to a structure coated with ACM fireproofing.

Contact with ACM Unlikely: In some buildings with ACM, many routine maintenance activities can be conducted without contacting the ACM. For example, changing light bulbs in a fixture on a ceiling with asbestos-containing acoustical plaster can usually be performed without jarring the fixture or otherwise disturbing the ACM. The top of the fixture should have been wet-cleaned previously to remove settled fibers. In these situations, few precautions other than normal care are needed. The only precaution is to assure the availability of respirators and a HEPA vacuum if needed. These do not have to be taken to the site, but shall be available at a known location in the building. Where maintenance is performed in parts of the building free of ACM, no special precautions are usually necessary. An exception would be work causing vibrations at a distant location where ACM may be present.

Accidental Disturbance of ACM Possible: Routine maintenance and repair includes work on light fixtures, plumbing fixtures and pipes, air registers, HVAC ducts, and other accessible parts of building utility systems. Where these fixtures or system parts are near friable ACM, maintenance work may unintentionally disturb the ACM and release asbestos fibers. For example, maintenance work on ventilation ducts in an air-handling room where asbestos fire-proofing is present only on structural beams could probably be conducted without contacting the ACM. However, the fire-proofing could be disturbed accidentally during the course of the work.

Small Disturbances: The following precautions and procedures are appropriate for maintenance activities which involve small scale (less than three-square feet) removal of surfacing ACM or when accidental disturbance of ACM (or dust and debris containing asbestos fibers) is possible:

- Approval shall be obtained from the Asbestos Program Manager before beginning work. The Asbestos Program Manager or supervisor should make an initial visit to the work site.

- The work should be scheduled after normal working hours (nights or weekends), or access to the work area should be controlled: doors should be locked from the inside and signs posted to prevent unauthorized persons from entering the work area (e.g., "MAINTENANCE WORK IN PROGRESS, DO NOT ENTER", or, if asbestos levels are, or are anticipated to be high enough to trigger the OSHA Rule (the PEL or higher), "DANGER-ASBESTOS: CANCER AND LUNG DISEASE HAZARD: AUTHORIZED PERSONNEL ONLY: RESPIRATORS AND PROTECTIVE CLOTHING ARE REQUIRED IN THIS AREA"). Keep emergency exits operational.

- The air-handling system is to be cut off or temporarily modified to prevent the distribution of any released fibers to areas outside the work site.

- Workers are to wear at least a half-face negative pressure air-purifying respirator with HEPA filters and protective clothing including a body suit and hood.

- A rectangular enclosure constructed of six-mil plastic on a frame can be positioned underneath the maintenance area to inhibit the spread of fibers from fallen ACM. (Mobile enclosures of this type are available commercially.) Alternatively, six-mil polyethylene plastic drop cloth should be placed underneath the location of the maintenance work, extending at least ten-feet beyond all sides of the work site.

- The ACM in the vicinity of the maintenance work shall be misted lightly with amended water. Use a mister that produces a very fine spray. Be sure that the electrical system is shut off before spraying around any electrical conduits or fixtures.

- After the maintenance work is completed, the fixture, register, or other component, and all tools, ladders and other equipment shall be HEPA-vacuumed or wiped with a damp cloth.

- If any debris is apparent on the floor or elsewhere, it shall be HEPA-vacuumed.

- The plastic drop cloth (or enclosure) shall be wet wiped, carefully folded, and discarded as asbestos waste.

- All cloths, vacuum bags/filters, and other disposable materials shall be discarded in sealed and labeled plastic bags as asbestos waste.

- Workers shall vacuum their disposable suits and remove and dispose of them before leaving the work site. As an alternative, workers may put on a second clean disposable suit, proceed to a remote shower room, remove both suits, shower with their respirators on, and clean their respirators while in the shower.

Disturbance of ACM Intended or Likely: Some maintenance and repair activities will, unavoidably disturb the ACM. For example, installing new sprinkler or piping systems will necessitate hanging pipes from structural members or the ceiling. If the beams or ceilings are insulated with ACM, the ACM will be scraped away to install hangers. Likewise, pulling cables or wires through spaces with ACM or ACM debris is likely to dislodge pieces of the

ACM or disturb ACM debris and dust. Furthermore, anytime tiles are removed to enter the space above a suspended ceiling, settled dust on top of the tiles will be re-suspended. If the beams or decking above the ceiling are covered with ACM, the dust is likely to contain asbestos fibers. All of these examples involve disturbance of ACM or asbestos dust and debris, and will likely result in elevated levels of airborne asbestos fibers.

Small Disturbances: The following procedures are appropriate for maintenance activities which involve small-scale (less than three-square feet) removal of surfacing ACM or when disturbance of ACM dust and debris or unintentional contact with the ACM is likely.

- Approval shall be obtained from the Asbestos Program Manager before beginning work, and the work should be supervised.

- The work shall be scheduled after normal working hours (nights or weekends), if possible, or access to the work area should be controlled: unauthorized persons from entering the work ares (e.g., "MAINTENANCE WORK IN PROGRESS, DO NOT ENTER", or, if the asbestos levels are high enough to trigger the OSHA Rule (the PEL or higher), "DANGER-ASBESTOS: CANCER AND LUNG DISEASE HAZARD: AUTHORIZED PERSONNEL ONLY: RESPIRATORS AND PROTECTIVE CLOTHING ARE REQUIRED IN THIS AREA"). Note, emergency exits must remain in operation.

- The air-handling system is to be cut off or temporarily modified to prevent the distribution of any released fibers to areas outside the work site.

- Workers are to wear at least a half-face negative pressure air-purifying respirator with HEPA filters and protective clothing including a body suit and hood.

- A rectangular enclosure constructed of six-mil plastic on a frame can be positioned underneath the maintenance area to inhibit the spread of fibers from fallen ACM. (Mobile enclosures of this type are available commercially.) Alternatively, six-mil polyethylene plastic drop cloth should be placed underneath the location of the maintenance work, extending at least ten-feet beyond all sides of the work site.

- If entry to the space above a suspended ceiling is necessary, the entry tile(s) should be removed carefully with as little jarring as possible. The air above the opening, the top of the removed tile, all tiles surrounding the opening, and the ACM likely to be disturbed should be misted with amended water. Use a mister with a very fine spray. A thorough misting in the air helps fibers to settle more quickly. Cleaning ceiling tiles with a HEPA vacuum cleaner is

also effective as long as care is taken not to vibrate tiles and disturb the ACM.

- Selected workers must wear personal air sampling equipment as required by OSHA unless previous experience with the same ACM and similar operations indicated that fiber levels are likely to be less than the PEL.

- During the course of the work, any ACM which is removed shall be collected by the HEPA-vacuum. This is best accomplished by placing the vacuum hose just below the ACM being removed.

- Upon completion of the work, any visible debris on the top of the suspended ceiling, on the drop cloth, on the floor, or anywhere else shall be collected by cleaning with a HEPA vacuum.

- All equipment and tools are to be wiped with a damp cloth or HEPA vacuumed.

- The plastic sheet shall be wet wiped, folded, and discarded as asbestos waste.

- All debris, cloths, and vacuum bags/filters are to be discarded in sealed and labeled plastic bags as asbestos waste.

- Workers shall vacuum their disposable suits and remove and dispose of them before leaving the work site. As an alternative, workers may put on a second clean disposable suit, proceed to a remote shower room, remove both suits, shower with their respirators on, and clean their respirators while in the shower.

Large Disturbances: Any maintenance work which involves removal of three-or more square feet of surfacing material (or three-linear feet of thermal system insulation) shall be considered a large-scale disturbance of ACM. Moreover, if the maintenance work is part of general building renovation, NESHAPs requires prior removal of ACM if more than 160-square feet of friable surfacing ACM, 260-linear feet of ACM thermal system insulation, or 35-cubic feet of ACM would be disturbed or made inaccessible for subsequent removal as a result of the work. Even if NESHAPs does not strictly apply, the Asbestos Program Manager should consider removing all ACM from that part of the building where the maintenance or renovation work is planned. Typically, an outside licensed abatement contractor would be hired for the removal project before the work would begin. If this approach is not deemed necessary or desirable, the maintenance workers should be fully trained in asbestos removal and the work should proceed as follows:

- All of the procedures for asbestos removal shall be followed--construction of containment barriers and decontamination facilities; use of a negative pressure ventilation system; use of protective clothing and "type C" respirators by workers; proper disposal of asbestos debris; and proper clean-up of the work

site followed by air testing. (See Chapter 5 and 6 of the EPA's Guidance for Controlling Asbestos-Containing Materials in Buildings, the "Purple Book", and the OSHA Rule for the construction industry for a detailed discussion of these steps.) Personnel air monitoring is also required by OSHA unless SCBA or "type C" respirators are used.

- Once the work site has been adequately isolated and all precautionary measures have been taken, the maintenance work may begin. If the work involves cutting, drilling, grinding, or sanding the ACM, special tools equipped with HEPA vacuum attachments must be used (OSHA requirement). Where the ACM is simply scraped off the substrate, the hose from a HEPA vacuum cleaner shall be placed just below the removal site to catch the ACM. Upon completion of the work, the vacuum bags and filters shall be discarded as asbestos waste.

- Prior to the removal of containment barriers, the air shall be tested for asbestos fibers. Testing should follow guidelines in Chapter 6 of the Purple Book and Chapter 4 of the Silver Book. Generally, the air is to be sampled at the specified number of locations and analyzed by either phase contrast microscopy (PCM) or transmission electron microscopy (TEM). The type of analysis selected will depend on the requirements for a given project. The Asbestos Program Manager shall make the final approval on the type of analysis used.

- Where the ACM was disturbed as part of the maintenance activity, it shall be repaired with non-asbestos plaster or spackling compound or sprayed/painted with an encapsulant or latex paint (see section 5.1.3 of the EPA Purple Book for specifications). This shall be done before final cleanup of the work site.

14. Thermal System Insulation: Maintenance activities affecting asbestos-containing thermal system insulation generally involve plumbing-type repairs, or repairs to the heating, ventilation and air conditioning (HVAC) system. Frequently, the ACM must be removed to provide access to the valve, flange, duct, or related system part needing maintenance.

Contact With ACM Unlikely: Maintenance activities or repairs which can be performed without contacting or disturbing thermal ACM require little more than normal care and good workmanship. For example, valves which are either bare or covered with non-asbestos insulation can be repacked or repaired without disturbing asbestos insulation on nearby pipes. As with surfacing ACM, the only precautions necessary are to make sure that a HEPA vacuum cleaner and air-purifying respirators are available if needed.

Accidental Disturbance of ACM Possible: Even maintenance tasks that involve no direct contact with ACM may cause accidental disturbance. For example, vibrations created by maintenance activities in one part of piping network will be transmitted to other parts. Vibrations could then cause fibers to be released from insulation which is exposed (not covered with a protective jacket) or not in good condition. If in doubt about the possibility of fiber release, thoroughly inspect the thermal system insulation before undertaking the maintenance or repair work. Then, either correct the problem before starting, or assume that the maintenance work may cause accidental disturbance and fiber release. In this case, the following procedures should be used:

- Work approval and site preparation procedures as described under Surfacing Material shall be followed.

- Cut and tape six-mil polyethylene plastic sheets around any insulation which might be accidentally disturbed. The ACM insulation and plastic sheets shall be misted with amended water before they are taped shut. If the locations where insulation could be disturbed are too numerous for isolation with plastic, workers are to perform the maintenance work wearing air-purifying negative air pressure respirators, at a minimum, and protective clothing, including disposable suits and hoods.

- Cleanup procedures, as described under Surfacing Material, are to be followed. Special care shall be taken when removing the plastic from the insulation to minimize disturbance of any ACM dust or debris that may have fallen from the insulation.

Disturbance of ACM Intended or Likely: Where asbestos-containing thermal insulation must be removed to maintain or repair the thermal system, the ACM will obviously be disturbed. As with surfacing ACM, the amount to be removed or manipulated will determine the procedures to be used.

Small Disturbances:

- Work approval and site preparation procedures as described for surfacing ACM shall be followed.

- Maintenance workers are to wear at least air-purifying negative pressure respirators with HEPA filters and protective clothing (suit, hood, and boots) in case of a fiber release accident.

- The asbestos-containing insulation is to be removed as necessary for the repairs, and the repairs made using standard glove bag techniques, where possible, (see the EPA publication: "Asbestos-in-Buildings Technical Bulletin:

Abatement of Asbestos-Containing Pipe Insulation," 1986-2 and the OSHA construction industry rule). Glove bags are fastened around the part to be repaired, the insulation is removed with knives and saws to make the part accessible, and the repairs are made using tools contained in the glove bag tool pouch. The open faces of the remaining asbestos-containing insulation are then sealed with an encapsulant or latex paint, all surfaces are wet-wiped or HEPA vacuumed, and all debris is sealed in the glove bag and removed, together with the bag.

- If a bag is ruptured during the course of repairs, work should stop, the area shall be sealed off, and all procedures recommended for large-scale asbestos removal are to be followed. Thorough clean-up of the work site, followed by air testing is, especially important to assure that fibers which may have escaped are removed. Sealing tape applied quickly to a small puncture could prevent significant release of fibers to the room, provided the ACM inside the bag was thoroughly wet. In this case, sealing off the area followed by cleaning and air testing is probably not necessary.

- At the conclusion of the work, maintenance workers shall vacuum their disposable suits and remove and dispose of them before leaving the work site. As an alternative, workers may put on a second clean disposable suit, proceed to a remote shower room, remove both suits, shower with their respirators on, and clean their respirators while in the shower.

- All glove bags and any other used materials (including disposable clothing) shall be discarded as asbestos waste.

- Non-asbestos insulating materials can be installed, as necessary, to replace insulation which was removed.

Large Disturbances: Maintenance activities which involve removal of three or more square or linear feet, of asbestos-containing insulation (e.g., several valves need attention in a utility room or block insulation needs to be removed for boiler repair) are considered large-scale disturbances. In some situations, glove bag techniques may be appropriate and the procedures described above under "small disturbances" may be followed. When glove bags are not feasible, the maintenance activities shall be conducted using all the procedures recommended for large-scale asbestos removal. ACM removal is typically conducted by abatement contractors. If maintenance personnel are authorized to conduct the removal, they must be thoroughly trained in removal techniques (OSHA requirement).

The choice between conducting multiple glove bag operations and isolating the entire work site is dependent on the total quantity of ACM to be removed. If the maintenance activities are likely to cause disturbance of ACM on pipes, boilers, or ducts at sites other than just those

undergoing repair (due to vibration, for example), then the entire room or area shall be isolated and large-scale asbestos removal procedures employed. NESHAP regulations require that friable asbestos-containing materials be removed prior to building renovation or demolition if 160-square feet, 260-linear feet or 35-cubic feet of ACM would be broken up or made inaccessible for subsequent removal prior to demolition.

15. Miscellaneous ACM: Miscellaneous ACM includes vinyl asbestos floor covering, asbestos ceiling tiles, transite wall board and counter tops, asbestos roofing, exterior transite siding and shingles, and various textile products such as stage curtains. Disturbance of these materials should be avoided. Where this is not possible, the applicable procedures should be used as described above for small or large-scale removal of ACM. NESHAP (40 CFR 61 Subpart M) defines certain materials, such as vinyl asbestos floor tiles or asphalt roofing materials, as category I and category II non-friable ACM. These materials are not regulated unless they have become friable, or will be made friable in the course of renovation or demolition work. Cutting, drilling, grinding, or sanding of ACM will make it friable and must be performed with tools equipped with HEPA-filtered vacuum systems (OSHA requirement).

Whenever friable ACM is present in a building, special procedures should be followed when changing filters in the HVAC system. The filters shall be misted with amended water as they are removed, placed in plastic bags, sealed, and discarded as asbestos waste. Workers shall wear at least an air-purifying negative pressure respirator.

16. Special Work Practices for Renovation and Remodeling: Clearance for all renovation and remodeling projects must be obtained from the Asbestos Program Manager before serious project planning is begun.

Renovation: Building renovation or building system replacement can cause major disturbance of ACM. Moving walls, adding wings, and replacing heating or air conditioning systems involve breaking, cutting, or otherwise disturbing ACM that may be present. Prior removal of ACM is highly recommended in these situations, and is required by NESHAP if the amount of ACM likely to be disturbed is greater than the threshold amounts (160-square feet, 260-linear feet or 35-cubic feet of ACM). If prior removal is not undertaken, the renovation project should be considered equivalent to an asbestos removal project. All the procedures and precautions for asbestos removal recommended by EPA and required by OSHA as previously discussed must be employed. A key step in considering a renovation project is checking on the location and type of ACM that may be affected.

Remodeling: Remodeling or redecorating implies less dramatic structural alteration. However, disturbances of ACM or materials contaminated with asbestos fibers is still possible. Where the remodeling involves direct contact with ACM (e.g., painting or wallpapering over ACM), all of the procedures and precautions recommended by EPA and required by OSHA for asbestos removal shall be followed.

If "miscellaneous" types of ACM have to be removed as part of the renovation project, the removal is to be accomplished with care to avoid breaking the material. For example, small sections of asbestos-containing floor tiles can be removed by applying dry ice or heat from a portable heater to the tops of the tiles and then prying them up. Glued carpet may require a mechanical chipper to separate the carpet form the floor. Before a chipper is employed, test the carpet adhesive for asbestos.

17. Enclosure and Encapsulation:

Enclosure: Enclosure is the construction of an permanent seal around the asbestos material. This abatement method should be used only where removal or encapsulation of the ACM is not practical. The enclosure should provide protection against physical damage and completely prevent air circulation between the enclosed space and other spaces.

Prior to building the enclosure, remove all loose ACM debris, and apply lockdown encapsulant to the remaining material. A containment may be required for this preliminary work. The enclosure should be airtight, the construction material providing a continuous impermeable surface. Plaster, gypsum board which is taped and spackled, masonry construction and tongue-and-groove boards, are examples of acceptable enclosure materials. Sealant should be applied to all joints between dissimilar materials and between wall, floor and ceiling surfaces.

The use of enclosures should be noted in building records and the asbestos database. The enclosure should be labeled in accordance with the Notification and Labeling section of this O&M Program.

Encapsulation: Encapsulation is an abatement method in which the ACM is treated with a sealant to prevent the release of asbestos fibers. It should be used as a part of the O&M Program as a means to repair damaged ACM, to prevent future damage, or to seal ACM exposed by small-scale removal work. Encapsulants act by penetrating the ACM (penetrating encapsulant) or as a surface coating (bridging encapsulant). They are applied directly to the ACM and bind the asbestos fibers together. Surface coatings also provide some resistance to impact damage since the surface to be treated must be in good condition, this method is not appropriate for materials which are damaged, delaminating or separating from the substrate. When used on ACM fireproofing, the encapsulant must not degrade the fire rating or add weight which will cause it to separate from the substrate.

The EPA has evaluated encapsulating materials using five criteria: 1) impact resistance, 2) flame spread, 3)smoke generation, 4)toxic gas release during combustion, and 5) adhesive/cohesive strength. The most widely used products are penetrating encapsulants, bridging encapsulants, trowelable coatings and fabric wraps. Penetrating and bridging encapsulants are normally used where a large surface area must be covered such as an ACM acoustic plaster ceiling. They are applied with airless spray equipment. Trowelable coatings

and fabric wraps are more appropriate for smaller applications such as boilers or pipe insulation. As with enclosures, the use of encapsulants should be noted in building records and the asbestos database. The encapsulated ACM should be labeled in accordance with the Notification and Labeling section of this O&M Program.

18. Emergency Response Procedures: As long as ACM remains in the building, there is the possibility that a fiber release episode could occur. ACM can be disturbed during the course of day-to-day operations by physical damage to the material or water damage due to pipe or roof leaks. The Asbestos Program Manager shall be notified immediately of the presence of debris on the floor, any physical damage to the ACM, or any other evidence of possible fiber release.

Fiber release episodes can also occur during maintenance or renovation projects. The Maintenance/Renovation Permit System will alert work crews to the presence of known asbestos, however, abandoned pipes with ACM insulation or other materials may be hidden in walls. In addition, known ACMs may inadvertently be disturbed by work crews.

Special procedures are generally needed to minimize the spread of fibers throughout the building after asbestos fiber releases occur. The proper response is guided by the size of the fiber release. A minor fiber release episode is defined as less than three-square or linear feet of ACM disturbed. Minor episodes can generally be handled with standard wet cleaning and HEPA-vacuuming techniques. A major release episode, defined as equal to or greater than three-square or linear feet of ACM, requires action similar in scope to a large-scale abatement project. EPA and/or state notification is required for emergency response actions based on the quantity of asbestos-containing material involved. Detailed notification requirements are provided in the section titled "EPA/State Notification." Detailed instructions for both types of release episodes are listed below:

Minor Episodes: Minor episodes, such as small section of insulation (less than three-linear feet) falling from a pipe or a worker bumping into a beam and dislodging a small amount of fire-proofing ACM (less than three square feet) are defined as such in the AHERA Rule. They can be treated with standard wet cleaning and HEPA-vacuum techniques:

- The area is to be isolated as soon as possible after the ACM debris is discovered. Where the area can be sealed by doors, they shall be locked from the inside (escape corridors must remain in operation) and signs posted to prevent unauthorized personnel from entering the work area:

  DANGER-ASBESTOS; CANCER AND LUNG DISEASE HAZARD; AUTHORIZED PERSONNEL ONLY; RESPIRATORS AND PROTECTIVE CLOTHING ARE REQUIRED IN THIS AREA.

- Workers shall wear half-face negative pressure air-purifying respirators with HEPA filters and protective clothing including a body suit and hood, at a minimum.

- Workers must thoroughly saturate the debris with amended water using a mister with a very fine spray. The debris then is to be placed in a labeled, six-mil plastic bag for disposal and the floors cleaned with damp cloths or a mop. Alternatively, the debris can be collected with a HEPA vacuum cleaner.

- All debris and materials used in the cleanup are to be discarded as asbestos waste.

- The damaged ACM should be repaired with asbestos-free spackling, plaster, cement, or insulation, or sealed with latex paint or an encapsulant.

- Workers shall vacuum their disposable suits and remove and dispose of them before leaving the work site (or put on a second clean disposable suit), proceed to a shower room, shower with their respirator on, and clean their respirator while in the shower.

Major Episodes: Major fiber release episodes are very serious events. Large amounts of ACM falling from heights of several feet may contaminate an entire building with asbestos fibers. If three-square feet or more of surfacing ACM or three-linear feet or more of thermal system insulation delaminate or is dislodged from its substrate, the episode is considered major. A large breach in a containment barrier for a maintenance or abatement project is also considered a major episode. AHERA requires that the response action for any major fiber release episode must be designed and conducted by accredited Project Designers. However, the following response procedures form the basis for response actions.

- The area is to be isolated as soon as possible after the ACM debris is discovered. Where the area can be sealed by doors, they shall be locked from the inside (escape corridors must remain in operation) and signs posted to prevent unauthorized personnel from entering the work area:

  DANGER-ASBESTOS; CANCER AND LUNG DISEASE HAZARD; AUTHORIZED PERSONNEL ONLY; RESPIRATORS AND PROTECTIVE CLOTHING ARE REQUIRED IN THIS AREA.

- The air-handling system shall be shut off or temporarily modified to prevent the distribution of fibers from the work site to other areas of the building. If applicable, doors, windows, and air registers are to be sealed with six-mil plastic sheets and tape.

- All the procedures recommended by EPA and required by OSHA for large-scale removal of ACM shall be followed. These include containment barrier, negative pressure ventilation, personal respiratory protection and protective clothing, decontaminate facilities, and air testing.

- Workers shall wear an air-purifying negative pressure respirator and protective clothing, including a body suit, hood, boots and gloves. Personal air monitoring may be conducted on representative workers, but is not required by OSHA when SCBA or "type C" respirators are used.

- Fallen debris shall be sprayed with amended water and placed in plastic bags for disposal. Shovels are useful for collecting the debris. The floor is to be thoroughly cleaned with a HEPA vacuum cleaner.

- Walls, ceilings, pipes, boilers, or other surfaces where ACM was damaged or delaminated shall be repaired temporarily. This might involve replastering with asbestos-free material, spraying with an encapsulant, or taping with duct tape. In some cases, ACM beyond the immediate area of damage may need to be removed to prevent additional episodes.

- The air shall be tested for asbestos fibers before the plastic barriers are removed and the area reoccupied. Testing should follow guidelines in Chapter 6 of the Purple Book and Chapter 4 of the Silver Book. Generally, the air is to be sampled at the specified number of locations and analyzed by either phase contrast microscopy (PCM) or transmission electron microscopy (TEM). The type of analysis selected will depend on the requirements for a given project. The asbestos program manager shall make the final approval of the type of analysis used.

- After the barriers have been taken down, a decontamination of the entire building or a portion of it should be considered. The need for this will depend on how rapidly the response team reacted to the episode and, in particular, how quickly the HVAC system was turned off. A thorough decontamination includes HEPA-vacuuming and/or wet wiping all carpets, furniture, and other surfaces. Decontamination of the HVAC system would involve disassembling and cleaning (HEPA-vacuuming or wet wiping) ducts, ventilators, registers, and other system parts. System filters should also be removed and replaced.

- All equipment used in the cleanup operation shall be washed or wiped with damp cloths. All disposable materials (e.g., cloths, mop heads, filters, coveralls) are to be discarded as asbestos waste.

Each fiber release episode should be documented. A sample report format is provided at **TAB L** of this section. These procedures shall be employed whether the building owner used in-house staff or an outside asbestos abatement contractor. If an outside contractor is used, the procedures should be thoroughly discussed and proper training of the contractor's crew assured before signing the contract.

Response actions to fiber release episodes shall be developed by an accredited Project Designer. At a minimum, the Asbestos Program Manager should have a Project Designer or Certified Industrial Hygienist (CIH) review and approve the response procedures for each event.

19. Asbestos Waste Storage and Disposal: All asbestos and asbestos-contaminated waste generated by private contractors working on Fort Belvoir shall be removed from the site and properly disposed of by the Contractor.

20. Periodic ACM Surveillance: A periodic review of the O&M program is essential to insure that the program objectives are being met. A key feature of the review is reinspection of all ACM in each building. Combined with ongoing reports of changes in the condition of the ACM made by services workers, the reinspection will insure that any damage or deterioration of the ACM will be detected and corrective action taken. Reinspection should be conducted at least annually; more frequently if necessary. Documentation of subsequent inspections is to be maintained by the Asbestos Program Manager.

The following assessment factors are used to evaluate each homogeneous area of ACM surfacing material thermal system insulation:

- ACM condition (deterioration, physical damage, and water damage)
- Potential for disturbance (frequency of potential contact, sources of vibration near the ACM, and potential for air erosion).

Inspections should be conducted by the Asbestos Program Manager, or personnel who have received at least Level 2 training. The results should be documented on new Field Assessment Forms and placed in the permanent asbestos file. A sample Field Assessment Form is provided at **TAB M** of this section.

If asbestos contamination is suspected, the Asbestos Program Manager may require air monitoring to supplement the physical inspection. If air monitoring is conducted, transmission electron microscopy (TEM), not phase contrast microscopy (PCM), shall be used to count and identify the airborne fibers. Only TEM can detect the small asbestos fibers typically found in buildings with ACM. (Large-scale disturbance of ACM will release both small and large fibers.) Since analysis by TEM is expensive, air monitoring which employs TEM is typically used on a one-time basis and

provide only a "snap-shot" view of building conditions. Such a one-time view can be very misleading because airborne asbestos levels vary from day-to-day and from room-to-room. Therefore, low readings are possible even when the ACM is in poor condition. For this reason, EPA does not recommend air monitoring for the initial assessment of exposure potential (see Chapter 4 of the EPA Purple Book). However, if the ACM is currently in good condition, increases in airborne asbestos levels may provide an early warning of deterioration or disturbance of the ACM.

To use air monitoring in an "early warning" context, a baseline asbestos level should be established soon after the O&M Program is initiated. Periodic air monitoring (perhaps conducted simultaneously with the reinspections) would then be used to determine if asbestos levels have changed relative to the baseline. Although this use of air monitoring is appropriate and useful in concept, it is expensive and not considered a standard course of action of this O&M Program.

If the air monitoring is used in specific cases as a component of the O&M Program, the air sampling and sample analysis procedures described in EPA's Silver Book (Measuring Airborne Asbestos Following Abatement Action, EPA 560) should be employed. For most conditions, at least five samples should be collected to establish a baseline, followed by at least five additional samples during each semi-annual reinspection of the ACM. Sequential sets of five samples can be averaged and the averages compared statistically (as described in Chapters 3 and 4 of the Silver Book for clearance monitoring) to determine whether asbestos concentrations are increasing. Note that aggressive sampling should NOT be used in any area where ACM is present. In some cases, such as ACM located in a small enclosed space, fewer samples may be necessary. The Asbestos Program Manager should consider the amount, type and location of ACM. Special training or expert advice is recommended to design and operate an air-monitoring program.

21. Record Keeping: All written records discussed in this section should be maintained as part of a thorough record keeping process. To review, these include:

- The written O&M Program itself, including work practices
- Building plans and diagrams
- Survey data
- Copies of notification and warning program
- Attendance list, descriptions, times, and dates, of training programs
- Written respiratory protection program
- Medical surveillance records
- Copies of all permits and documentation of custodial, maintenance, renovation, and emergency response actions performed
- Periodic ACM surveillance records
- Reports of all abatement activities conducted and results of monitoring and clearance sampling performed

OSHA requires that each employee's record of exposure and medical surveillance be made available to the employee. EPA recommends that all written elements of the O&M Program similarly be made available for inspection.

22. Equipment and Supplies: The Operations & Maintenance Program Equipment List provided at **TAB N** identifies the personal protective and monitoring equipment and general supplies required to support a team of five people with a minimum of Level 2 training. The amount of equipment and supplies is based on maintaining three routine O&M kits, two emergency response kits plus general supplies to ensure adequate bench stock.

SECTION V

DATABASE USERS GUIDE

When the Fort Belvoir Asbestos Management Database is brought on line **(C:\BELVOIR "ENTER"),** the first screen gives the user the opportunity to work in an existing survey area or to create a new one:

EDIT SURVEY AREA — Work with an existing database in a specified survey area.

ADD NEW SURVEY AREA — Create a database for a new survey area. The screen will ask for a "new client" and a subdirectory name for the new survey area. (See Figure 1.) The name for the new client should be descriptive of the new survey area, it is the title that will appear on the screen in the Survey Area menus. The sub directory name is limited to eight characters and is used within the database to organize the data stored for each Survey Area. When the information is entered you will be returned to initial screen.

DELETE EXISTING SURVEY AREA — This will delete all data from a Survey Area. To select the Survey area to be deleted highlight the selection and press "Enter." Two safeguards are provided to prevent the inadvertent loss of data.

> "Are you sure you want to delete all databases?..."
>
> Are You sure (Y/N)?

Both questions must be answered "Y" before the data will be deleted.

ESCAPE TO DOS — Leave the Asbestos Management Database and return to the DOS prompt.

ASBESTOS MANAGEMENT DATABASE

EDIT SURVEY AREA

ADD NEW SURVEY AREA

DELETE EXISTING SURVEY AREA

ESCAPE TO DOS

FIGURE 1.

When "Edit Survey Area" is selected, the screen shown in Figure 2 will appear:

ASBESTOS MANAGEMENT DATABASE

EDIT SURVEY AREA

ESCAPE TO PREVIOUS MENU

FORT BELVOIR

FIGURE 2.

Survey Areas are listed in the order in which they were entered. The escape selection will remain at the top of the screen as new survey areas are entered. To add to or edit data in an existing survey area, highlight the desired selection and press "Enter."

EDIT SURVEY AREA

ESCAPE TO PREVIOUS MENU	Return to Screen 1.
FORT BELVOIR	Open database files for Fort Belvoir.

When the Survey Area is selected, the screen shown in Figure 3 will appear:

ASBESTOS SURVEY MASTER MENU
FORT BELVOIR

1. ADD/EDIT BUILDING MASTER DATA
2. ADD/EDIT AREA DESCRIPTIONS
3. ADD/EDIT MATERIAL DESCRIPTIONS
4. ADD/EDIT LAB RESULTS
5. ADD/EDIT MATERIAL ASSESSMENTS
6. BROWSE DATABASES
7. CALCULATE ESTIMATES AND RISK INDEX
8. REPORTS
9. BACKUP ALL DATABASE FILES
0. RETURN TO PREVIOUS MENU

FIGURE 3.

ASBESTOS SURVEY MASTER MENU

1. Add/Edit Building Master Data	Add to or edit information for a particular building from the Initial Walk Through/Building Info Summary form. The Building Master Data is built and stored separately from the individual sample data. When data entry is complete, press "page down" to add the information to the database and bring up a screen to add another building. See Figure 4.
2. Add/Edit Area Descriptions	Add to or edit information describing the location where

	a sample was taken. Initially recorded on the Field Assessment form. See Figure 5.
3. Add/Edit Material Descriptions	Add to or edit information describing the characteristics of the material sampled. Initially recorded on the Field Assessment form. See Figure 6.
4. Add/Edit Lab Results	Add to or edit a summary of the Laboratory Report including percentage and type of ACM. See Figure 7.
5. Add/Edit Material Assessments	Add to or edit the Exposure Assessment data which is used to compute the Risk Index. See Figure 8.
6. Browse Databases	Pulls up a sub-menu which allows the user to scan all data in the Building Master file or the Sample data file. The Browse also allows the viewer to add to or update Costing Data used to develop the preliminary estimates.
7. Calculate Estimates and Risk Index	Runs the algorithm described in the Risk Assessment section. The algorithm used the exposure assessment data to determine the Risk Index for each sample and a composite Risk Index for each building.
8. Reports	See Reports menu.
9. Backup all Database Files	Save all database files to a floppy disk.
0. Return to Previous Menu	Return to the Edit Survey Area Menu. The number of high density 5-1/4" floppy disks required will be shown on the screen. Insert the disk and press "Y" to begin backup.

FORT BELVOIR ASBESTOS SURVEY
BUILDING MASTER DATA
DATA ENTRY FORM

BUILD. ID. (PREFIX-BLDG. NO.-SUFFIX..... - 303 -
BUILDING NAME:.....
DATE OF INSPECTION; .....(MM/DD/YY)..... / /
INSPECTOR:.....(INITIALS).....

BUILDING INFORMATION:
SQUARE FOOTAGE:.....
YEAR OF CONSTRUCTION:.....
BUILDING USE/TYPE:.....
OCCUPANCY.:.....
DURATION:.....

COMMENT:
UP ARROW TO CORRECT, PGDN IF FINISHED, X TO EXIT

FIGURE 4.

FORT BELVOIR ASBESTOS SURVEY
AREA DESCRIPTION
DATA ENTRY FORM

BLDG. ID. (PREFIX-BLDG. NO. - SUFFIX)
BLDG ID: - 0-
(PREFIX-NUMBER-SUFFIX)
SAMPLE ID: - 0-

CADD LOCATION
ROOM USE
FLOOR NO.
ROOM NO.
COMMENT

UP ARROW TO CORRECT, PGDN IF FINISHED, X TO EXIT
ENTER BUILDING INFO AND SAMPLE NO.

FIGURE 5.

FORT BELVOIR ASBESTOS SURVEY
MATERIAL DESCRIPTION
DATA ENTRY FORM

BLDG. ID (PREFIX-BLDG. NO.-SUFFIX) - 0-
SAMPLE ID. (PREFIX-NUMBER-SUFFIX) - 0-

CADD LOCATION.....
HOMOGENEOUS ID .....

MATERIAL TYPE..... :
MATERIAL SIZE/DIMENSIONS.
QUANTITY:
SQUARE FEET.....
LINEAR FEET.....
EACH.....

UP ARROW TO CORRECT, PGDN IF FINISHED, X TO EXIT
ENTER BUILDING INFO AND SAMPLE NO.

FIGURE 6.

FORT BELVOIR ASBESTOS SURVEY
LAB RESULTS
DATA ENTRY FORM

BLDG. ID. (PREFIX-BLDG. NO.- SUFFIX): - 0-
SAMPLE ID. (PREFIX-NUMBER-SUFFIX): - 0-
DATE ANALYZED (MM/DD/YY):

LAB ID#.....
GROSS SAMPLE APPEARANCE (1 = FIBROUS 2 = NON FIBROUS):.....( )
PREDOMINANT COLORS :.....

PERCENT ASBESTOS PRESENT:..... / / %
COMMENTS :

FIGURE 7.

FORT BELVOIR ASBESTOS SURVEY
MATERIAL ASSESSMENT DATA ENTRY FORM

BLDG ID. (PREFIX-BLDG NO. -SUFFIX) - 0-
SAMPLE ID. (PREFIX-BLDG NO. -SUFFIX) - 0-

1 - MATERIAL DETERIORATION/DAMAGE
1.1 BUILDING AGE
1.2 MATERIAL TYPE
2 - WATER DAMAGE
2.1 ROOF TYPE
3 - EXPOSED SURFACE AREA
3.1 CEILING
4 - ACCESSIBILITY
4.1 MATERIAL HEIGHT
4.2 FREQ. OF OCCUPANCY
5 - BUILDING ACTIVITY/MOVEMENT
5.1 AREA ACTIVITY LEVEL
5.2 AREA VIBRATION LEVEL
6 - AIR PLENUM & MOVEMENT
6.1 VELOCITY
7 - FRIABILITY

PRELIMINARY RECOMMENDATIONS

HAZARD ASSESSMENT
IMMEDIATE HAZARD?
AIR SAMPLING REQUIRED?
PHOTO TAKEN?

UP ARROW TO CORRECT, PGDN IF FINISHED, X TO EXIT
ENTER BUILDING INFO AND SAMPLE NO.

FIGURE 8.

BROWSE DATABASES MENU

1. Browse Building Master Data	View all Building Master data. An entry may be changed by pressing "Enter" to activate the cursor. Enter the new information and press "Enter" again or move the curser to complete the entry. To delete a line of data, enter a "Y" in the Delete column on the line to be deleted. When you escape (press ESC) from the browse mode the database will prompt "Some items are marked to be deleted. Continue (Y/N)?" Press Y to delete and exit or N to return to the browse mode.
2. Browse Sample Data	View all Sample Data. Data may be modified or deleted as described above.
3. Update Costing Data	Costs may be updated in the same manner as making changes in the browse mode. Press enter to activate the cursor, make edits, and press enter or move the cursor to complete the entry. New items may be added at the bottom of the existing file and will be automatically alphabetized by Material Code. Press ESC to escape to the Browse Databases Menu. This table also serves to define the Material Code used throughout the database. See Figure 9.
4. Return to Previous Menu	Return to the Reports Menu.

BROWSE DATABASES MENU

1. BROWSE BUILDING MASTER DATA
2. BROWSE SAMPLE DATA
3. UPDATE COSTING
0. RETURN TO PREVIOUS MENU

FIGURE 9.

For all reports, first select screen display (D) or hard copy print (P) at the prompt. See figure 10.

REPORTS MENU

1. Summary report for selected group of buildings	Prints Summary Reports for up to 16 buildings. Enter the building numbers including Prefix, Number, and Suffix as applicable. When the desired buildings have been entered, enter "Q" in the prefix cell on the following line. When the report is displayed, press ESC to advance to the next building report. the next building to be displayed will be shown on the screen as "Printing Bldg. no. AA-0000-BB. Press "Enter" to move the cursor through the Number and Suffix columns to begin printing.