



June 26, 2014

Mr. Dennis Walsh
Klein, Thorpe & Jenkins Limited
Suite 1600
20 North Wacker Drive
Chicago, Illinois, 60606

**Subject: Quantification of Asbestos Containing Materials and Lead-Based Paint
Former Illinois State Mental Institution (Tinley Park Mental Health Center),
7600 West 183rd Street, Tinley Park, Illinois 60477
Project No. 103P3304**

Dear Mr. Walsh

Tetra Tech, Inc. is pleased to submit the enclosed Quantification of Asbestos Containing Materials and Lead-Based Paint Report regarding the Former Illinois State Mental Institution (Tinley Park Mental Health Center), at 7600 West 183rd Street, Tinley Park, Illinois.

Tetra Tech will use the quantification report to obtain preliminary cost estimates for pre-construction demolition.

If you have any questions or comments regarding this submittal, please call me at (312) 201-7474.

Sincerely,

A handwritten signature in black ink, appearing to read 'Tom Hahne', written over a horizontal line.

Tom Hahne
Project Manager

cc. File

**QUANTIFICATION OF ASBESTOS CONTAINING MATERIALS
AND LEAD-BASED PAINT**

**FORMER TINLEY PARK MENTAL HEALTH FACILITY
TINLEY PARK, ILLINOIS**

Prepared for:

Klein, Thorpe & Jenkins Limited
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20 North Wacker Drive
Chicago, Illinois, 60606

Prepared by:

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June 2014

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1.0 INTRODUCTION

Tetra Tech, Inc. (Tetra Tech) was tasked by Klein, Thorpe & Jenkins Limited to conduct a site assessment to quantify asbestos containing materials (ACM) and lead-based paint (LBP) at 47 buildings and underground tunnels at the Former Illinois State Mental Institution (Tinley Park Mental Health Center), at 7600 West 183rd Street, Tinley Park, Illinois (the subject property). The subject property buildings are no longer occupied. The primary purpose of the survey was to conduct an assessment of ACM and LBP quantities based on the review of previous asbestos and LBP survey reports, including asbestos management plans, and site inspection of all of the 47 buildings and underground tunnels at the subject property. Figure 1 shows the site layout and existing buildings.

Tetra Tech conducted the site survey between June 2 and 5, 2014. Tetra Tech's Project Manager for the survey was Mr. Tom Hahne. The survey team included Mr. Jeffrey Mitchell, a certified U.S. Environmental Protection Agency (EPA) asbestos and LBP inspector, and Ms. Kaitlyn Bahr, a licensed EPA asbestos inspector. Inspector certifications are in Appendix A. Three reports documenting previous surveys were provided, the National Emission Standards for Hazardous Air Pollutants (NESHAP) Pre-Demolition Asbestos Inspection (Environmental Consulting Group, Inc. [ECG] 2013a), the Lead-Based Paint Screening Inspection (ECG 2013b), and the Asbestos Management Plan Report (Fox & Fox Architects & Engineers [Fox] 1994). Because of limitations on destructive site investigation methods and on accessibility, it was not possible to verify the presence of all materials identified in these previous survey reports. The previous survey reports and Asbestos Management Plan Reports also refer to certain materials as assumed ACM because many of these materials were inaccessible during the original surveys. During Tetra Tech's survey in early June 2014, many of these materials remained inaccessible, and therefore Tetra Tech was not able to verify the presence of these materials. For purposes of this report, these materials are assumed present and considered ACM until otherwise proven to be non-ACM or not present.

Multiple asbestos abatement activities have been completed since development of the Asbestos Management Plan. Tetra Tech reviewed the available asbestos abatement reports, provided by the Site Engineer, to aid its effort to determine the quantities of ACM currently present in each building. Importantly, despite completion of multiple surveys at the subject property, ACM may also still be present within walls, voids, or other concealed areas not accessible during the survey.

Tetra Tech prepared this report in accordance with generally accepted industrial hygiene practices and procedures. This report does not cover structural areas that were not visibly assessed. The data

evaluation and assessment stated herein constitute a professional opinion; no other warranty is expressed or implied. Tetra Tech did not collect samples for asbestos analysis and relied upon the analytical data provided from prior surveys.

Tetra Tech provided these services consistent with the level and skill ordinarily exercised by members of the profession currently practicing under similar conditions. This statement is in lieu of other statements either expressed or implied. The scope of services performed in execution of this evaluation may not be appropriate to satisfy the needs of other users, and use or re-use of this document, the findings, conclusions, or recommendations is at the risk of said user. This survey report does not warrant against future operations or conditions that may not be consistent with its recommendations. Moreover, because of some limitations on destructive site investigation during the survey, completion of the survey does not guarantee identification of all ACMs and LBPs—hazardous materials may be present in voids of walls or ceilings.

2.0 SUBJECT PROPERTY STRUCTURES

Table 1 below lists the 47 buildings, their CDB (Capital Development Board) numbers and their common names within the subject property that Tetra Tech investigated as part of this project.

**TABLE 1
LIST OF SUBJECT PROPERTY BUILDINGS**

Number	CDB Building Number	Building Name
1	B4001	Social Hab-Pt Building
2	B4100	Neighborhood House 100
3	B4101-B4104	Residential Units 101-104
4	B4105-B4107	Residential Units 105-107
5	B4108-B4110	Residential Units 108-110
6	B4200	Neighborhood House 200
7	B4201-B4204	Residential Units 201-204
8	B4205-B4207	Residential Units 205-207
9	B4208-B4210	Residential Units 208-210
10	B4300	Neighborhood House 300
11	B4301-B4304	Residential Units 301-304
12	B4305-B4307	Residential Units 305-307
13	B4308-B4310	Residential Units 308-310
14	B4400	Neighborhood House 400
15	B4401-B4404	Residential Units 401-404
16	B4405-B4407	Residential Units 405-407
17	B4408-B4410	Residential Units 408-410
18	B4500	Neighborhood House 500
19	B4501-B4504	Residential Units 501-504
20	B4505-B4507	Residential Units 505-507
21	B4508-B4510	Residential Units 508-510
22	B4002	Personnel Building #2
23	B4003	Administration Building #3
24	BB001	Pump House #1
25	BB002	Pump House #2
26	BB003	Pump House #3
27	BB019	Willow Hall
28	B4031	Pine Hall
29	BB006	Water Treatment Plant #6
30	BB008	Power Plant #8
31	BB020	Oak Hall #20
32	BB021	Hickory Hall #21
33	BB022	Sycamore Hall #22
34	BB025	Garage Building #25
35	BB026	Maple Hall #26
36	BB027	Administration Building #27
37	BB028	Spruce Hall #28
38	BB029	Mimosa Hall #29
39	BB030	Gen Mech Store/Shop
40	BB032	Cedar Hall #32
41	B4114	Cottage #1 – Building #24

Number	CDB Building Number	Building Name
42	B4214	Cottage #2 – Building #44
43	B4314	Cottage #3 – Building #45
44	B4414	Cottage #4 – Building #42
45	B4514	Cottage #5 – Building #43
46	B4614	Cottage #6 – Building #40
47	B4714	Cottage #7 – Building #41
Not applicable (NA)	NA	Tunnels

Note: CDB = Capital Development Board

3.0 SITE ASBESTOS QUANTITY VERIFICATION SUMMARY OF FINDINGS

The site asbestos quantity verification included all accessible areas throughout each building on the subject property. Below is a summary of the findings for each of the 47 buildings and the underground tunnels surveyed. Appendix B includes a table with further detail and estimated quantities of the ACM and LBP verified in each building.

3.1 HOWE DEVELOPMENT CENTER BUILDINGS

The following 23 buildings (a recreation center, administrative buildings, and housing units) are part of the Howe Development Center on the southwest part of the subject property:

CDB Building # B4001 – Social Hab-Pt Building

The following ACMs were identified: 1 foot (') x 1' white floor tile and mastic, wood fire doors, fire damper insulation, exhaust backdraft insulation, mastic underneath wood floor, under floor duct pipe and Transite[®], rooftop ductwork insulation (black tar covering ductwork), and Transite[®] light covers. The floor tile with associated mastic and rooftop ductwork insulation were sampled and confirmed as ACMs during the NESHAP Pre-Demolition Asbestos Inspection (ECG 2013a). According to the Asbestos Management Plan Report (Fox 1994), the remaining ACMs were not sampled, but assumed present. No LBP was identified in the previous LBP inspection.

CDB Building # B4100 – Neighborhood House 100

The following ACMs were identified: 1' x 1' white floor tile and mastic, fire damper insulation, exhaust backdraft insulation, and Transite[®] floor duct. The floor tile with associated mastic was sampled and confirmed as ACM during the NESHAP Pre-Demolition Asbestos Inspection (ECG 2013a). According to the Asbestos Management Plan Report (Fox 1994), the remaining ACMs were not sampled but assumed present. No LBP was identified in the previous LBP inspection.

CDB Building # B4101- #B4104 – Residential Units 101-104

The following ACMs were identified: 1' x 1' white floor tile and mastic, wood and metal fire doors, fire damper insulation, exhaust backdraft insulation, under floor duct pipe Transite[®], and Transite[®] light covers. According to the Asbestos Management Plan Report (Fox 1994), all ACMs were not sampled but assumed present. No LBP was identified in the previous LBP inspection.

CDB Building # B4105- #B4107 – Residential Units 105-107

The following ACMs were identified: 1' x 1' white floor tile and mastic, wood and metal fire doors, fire damper insulation, exhaust backdraft insulation, under floor duct pipe Transite[®], and Transite[®] light covers. According to the Asbestos Management Plan Report (Fox 1994), all ACMs were not sampled but assumed present. No LBP was identified in the previous LBP inspection.

CDB Building # B4108- #B4110 – Residential Units 108-110

The following ACMs were identified: 1' x 1' white floor tile and mastic, wood and metal fire doors, fire damper insulation, exhaust backdraft insulation, under floor duct pipe Transite[®], and Transite[®] light covers. According to the Asbestos Management Plan Report (Fox 1994), all ACMs were not sampled but assumed present. No LBP was identified in the previous LBP inspection.

CDB Building # B4200 – Neighborhood House 200

The following ACMs were identified: 1' x 1' white floor tile and mastic, fire damper insulation, exhaust backdraft insulation, exterior window caulk, and Transite[®] floor duct. The exterior window caulk was sampled and confirmed as ACM during the NESHAP Pre-Demolition Asbestos Inspection (ECG 2013a). According to the Asbestos Management Plan Report (Fox 1994), the remaining ACMs were not sampled but assumed present. No LBP was identified in the previous LBP inspection.

CDB Building # B4202- #B4204 – Residential Units 201-204

The following ACMs were identified: 1' x 1' white floor tile and mastic, wood fire and metal doors, fire damper insulation, exhaust backdraft insulation, built-up roof and flashing, under floor duct pipe Transite[®], and Transite[®] light covers. The floor tile with associated mastic was sampled and confirmed as ACM during the NESHAP Pre-Demolition Asbestos Inspection (ECG 2013a). According to the Asbestos Management Plan Report (Fox 1994), the remaining ACMs were not sampled but assumed present. No LBP was identified in the previous LBP inspection.

CDB Building # B4205- #B4207 – Residential Units 205-207

The following ACMs were identified: 1' x 1' white floor tile and mastic, wood fire and metal doors, fire damper insulation, exhaust backdraft insulation, built-up roof and flashing, under floor duct pipe Transite[®], and Transite[®] light covers. According to the Asbestos Management Plan Report (Fox 1994), all ACMs were not sampled but assumed present. No LBP was identified in the previous LBP inspection.

CDB Building # B4208- #B4210 – Residential Units 208-210

The following ACMs were identified: 1' x 1' white floor tile and mastic, wood fire and metal doors, fire damper insulation, exhaust backdraft insulation, built-up roof and flashing, under floor duct pipe Transite[®], and Transite[®] light covers. According to the Asbestos Management Plan Report (Fox 1994), all ACMs were not sampled but assumed present. No LBP was identified in the previous LBP inspection.

CDB Building # B4300 – Neighborhood House 300

The following ACMs were identified: 1' x 1' white floor tile and mastic, fire damper insulation, exhaust backdraft insulation, and Transite[®] floor duct. According to the Asbestos Management Plan Report (Fox 1994), all ACMs were not sampled but assumed present. No LBP was identified in the previous LBP inspection.

CDB Building # B4301- #B4304 – Residential Units 301-304

The following ACMs were identified: 1' x 1' white floor tile and mastic, wood fire and metal doors, fire damper insulation, exhaust backdraft insulation, under floor duct pipe Transite[®], and Transite[®] light covers. According to the Asbestos Management Plan Report (Fox 1994), all ACMs were not sampled but assumed present. No LBP was identified in the previous LBP inspection.

CDB Building # B4305- #B4307 – Residential Units 305-307

The following ACMs were identified: 1' x 1' white floor tile and mastic, wood fire and metal doors, fire damper insulation, exhaust backdraft insulation, under floor duct pipe Transite[®], and Transite[®] light covers. According to the Asbestos Management Plan Report (Fox 1994), all ACMs were not sampled but assumed present. No LBP was identified in the previous LBP inspection.

CDB Building # B4308- #B4310 – Residential Units 308-310

The following ACMs were identified: 1' x 1' white floor tile and mastic, wood fire and metal doors, fire damper insulation, exhaust backdraft insulation, under floor duct pipe Transite[®], and Transite[®] light covers. According to the Asbestos Management Plan Report (Fox 1994), all ACMs were not sampled but assumed present. No LBP was identified in the previous LBP inspection.

CDB Building # B4400 – Neighborhood House 400

The following ACMs were identified: 1' x 1' white floor tile and mastic, fire damper insulation, exhaust backdraft insulation, and Transite[®] floor duct. According to the Asbestos Management Plan Report (Fox 1994), all ACMs were not sampled but assumed present. No LBP was identified in the previous LBP inspection.

CDB Building # B4401- #B4404 – Residential Units 401-404

The following ACMs were identified: 1' x 1' white floor tile and mastic, wood and metal fire doors, fire damper insulation, exhaust backdraft insulation, under floor duct pipe Transite[®], built-up roof and flashing, and Transite[®] light covers. According to the Asbestos Management Plan Report (Fox 1994), all ACMs were not sampled but assumed present. No LBP was identified in the previous LBP inspection.

CDB Building # B4405- #B4407 – Residential Units 405-407

The following ACMs were identified: 1' x 1' white floor tile and mastic, wood and metal fire doors, fire damper insulation, exhaust backdraft insulation, under floor duct pipe Transite[®], built-up roof and flashing, and Transite[®] light covers. According to the Asbestos Management Plan Report (Fox 1994), all ACMs were not sampled but assumed present. No LBP was identified in the previous LBP inspection.

CDB Building # B4408- #B44010 – Residential Units 408-410

The following ACMs were identified: 1' x 1' white floor tile and mastic, wood and metal fire doors, fire damper insulation, exhaust backdraft insulation, and built-up roof and flashing. According to the Asbestos Management Plan Report (Fox 1994), all ACMs were not sampled but assumed present. No LBP was identified in the previous LBP inspection.

CDB Building # B4500 – Neighborhood House 500

The following ACMs were identified: 1' x 1' white floor tile and mastic, fire damper insulation, exhaust backdraft insulation, and Transite[®] floor duct. According to the Asbestos Management Plan Report (Fox 1994), all ACMs were not sampled but assumed present. No LBP was identified in the previous LBP inspection.

CDB Building # B4501- #B4504 – Residential Units 501-504

The following ACMs were identified: 1' x 1' white floor tile and mastic, wood and metal fire doors, fire damper insulation, exhaust backdraft insulation, under floor duct pipe Transite[®], built-up roof and flashing, and Transite[®] light covers. According to the Asbestos Management Plan Report (Fox 1994), all ACMs were not sampled but assumed present. No LBP was identified in the previous LBP inspection.

CDB Building # B4505- #B4507 – Residential Units 505-507

The following ACMs were identified: 1' x 1' white floor tile and mastic, wood and metal fire doors, fire damper insulation, exhaust backdraft insulation, under floor duct pipe Transite[®], built-up roof and flashing, and Transite[®] light covers. According to the Asbestos Management Plan Report (Fox 1994), all ACMs were not sampled but assumed present. No LBP was identified in the previous LBP inspection.

CDB Building # B4508- #B4510 – Residential Units 508-510

The following ACMs were identified: 1' x 1' white floor tile and mastic, wood and metal fire doors, fire damper insulation, exhaust backdraft insulation, under floor duct pipe Transite[®], built-up roof and flashing, and Transite[®] light covers. According to the Asbestos Management Plan Report (Fox 1994), all ACMs were not sampled but assumed present. No LBP was identified in the previous LBP inspection.

CDB Building # B4002 – Personnel Building #2

The following ACMs were identified: 1' x 1' white floor tile and mastic, fire damper insulation, exhaust backdraft insulation, under floor duct pipe Transite[®], built-up roof and flashing, and carpet adhesive. According to the Asbestos Management Plan Report (Fox 1994), all ACMs were not sampled but assumed present. No LBP was identified in the previous LBP inspection.

CDB Building # B4003 – Administration Building #3

The following ACMs were identified: 1' x 1' white floor tile and mastic, fire damper insulation, exhaust backdraft insulation, under floor duct pipe Transite[®], built-up roof and flashing, and carpet adhesive. According to the Asbestos Management Plan Report (Fox 1994), all ACMs were not sampled but assumed present. No LBP was identified in the previous LBP inspection.

Note: Little to no information is available regarding suspected ACMs on the roofs of the 23 buildings associated with the Howe Development Center (Numbers 1 through 23 in Table 1) and discussed above. The NESHAP Pre-Demolition Asbestos Inspection sampled built-up roofing materials and flashing on the CDB Building # B4001, Social Hab-Pt Building (Rec Center); the sample results showed non-detect for asbestos (ECG 2013a). The roofs of the remaining buildings should be inspected or presumed to be ACM.

3.2 OTHER SITE BUILDINGS AND STRUCTURES

The findings for the other site buildings are discussed below.

CDB Building # BB001 – Pump House #1

The following ACMs were identified: cementitious fittings on cementitious insulation, cementitious pipe insulation, air cell pipe insulation, cementitious insulation on electrical conduit, and built-up roof and flashing. According to the Asbestos Management Plan Report (Fox 1994), all these ACMs were sampled and confirmed to be ACMs except for the built-up roof and flashing, which was assumed to be ACM. No LBP was identified in the previous LBP inspection.

CDB Building # BB002 – Pump House #2

The following ACMs were identified: cementitious pipe wrap and built-up roof. According to the Asbestos Management Plan Report (Fox 1994), the cementitious pipe wrap was sampled and confirmed to be ACM, but the built-up roof was not sampled and was assumed to be ACM. No LBP was identified in the previous LBP inspection.

CDB Building # BB003 – Pump House #3

The following ACMs were identified: cementitious pipe wrap and built-up roof. According to the Asbestos Management Plan Report (Fox 1994), the cementitious pipe wrap was sampled and confirmed to be ACM, but the built-up roof was not sampled and was assumed to be ACM. No LBP was identified in the previous LBP inspection.

CDB Building # BB019 – Willow Hall

The following ACMs were identified: sprayed-on speckled plaster ceiling, insulation on ventilation duct, flue insulation mag block, cementitious pipe insulation fittings, cementitious fittings on fiberglass or air

cell pipe, cementitious pipe insulation, air cell pipe insulation, exterior wall paneling, and stockpiled insulation mag block. According to the NESHAP Pre-Demolition Asbestos Inspection (ECG 2013a) and the Asbestos Management Plan Report (Fox 1994), all these ACMs were sampled and confirmed to be ACMs. No LBP was identified in the previous LBP inspection.

CDB Building # B4031 – Pine Hall

The following ACMs were identified: insulation on ventilation duct, cementitious pipe insulation fittings, cementitious fittings on fiberglass or air cell pipe, cementitious pipe insulation, air cell pipe insulation, flash tank cementitious insulation, 9 inch (") x 9" floor tile with associated mastic, 12" x 12" white floor tile with associated mastic, and fire doors. According to the NESHAP Pre-Demolition Asbestos Inspection (ECG 2013a) and the Asbestos Management Plan Report (Fox 1994), all these ACMs were sampled and confirmed to be ACMs, except for the fire doors, which were not sampled and were assumed to be ACM. No LBP was identified in the previous LBP inspection.

CDB Building # BB006 – Water Treatment Plant #6

The following ACMs were identified: cementitious boiler insulation, boiler flue insulation, cementitious fitting insulation on air cell pipe, cementitious fitting insulation on cementitious insulation, air cell pipe insulation, cementitious pipe insulation, cementitious insulation on electrical conduit, cementitious tank insulation, brick base, boiler gasket insulation rope, metal fire doors, built-up roof, exhaust backdraft damper insulation, asbestos stockpile, boiler door insulation, interior window glaze, and cementitious fittings on fiberglass insulation. According to the NESHAP Pre-Demolition Asbestos Inspection (ECG 2013a) and the Asbestos Management Plan Report (Fox 1994), all these ACMs were sampled and confirmed to be ACMs, except for the fire doors, built-up roofing, exhaust backdraft damper insulation, asbestos stockpile, and cementitious fittings on fiberglass insulation, which were not sampled and were assumed to be ACMs. LBP was identified in the previous LBP inspection report and is detailed in Appendix B.

CDB Building # BB008 – Power Plant #8

The following ACMs were identified: boiler insulation, flue insulation, cementitious fitting on electrical conduit, cementitious pipe fitting, cementitious fitting on fiberglass insulation, air cell pipe fitting, cementitious pipe insulation, air cell pipe insulation, cementitious insulation on water softener tank, cementitious insulation on holding tank, cementitious insulation on hot water tank, cementitious insulation on condensate tanks, cementitious insulation on oil heating convert, feed water tank, boiler gaskets, 9" x

9” vinyl tile with associated mastic, exhaust backdraft damper insulation, and asbestos stockpile. According to the NESHAP Pre-Demolition Asbestos Inspection (ECG 2013a) and the Asbestos Management Plan Report (Fox 1994), all these ACMs were sampled and confirmed to be ACMs except for the exhaust backdraft damper insulation, asbestos stockpile, and 9” x 9” vinyl tile with associated mastic, which were not sampled and were assumed to be ACMs. LBP was identified in the previous LBP inspection report and is detailed in Appendix B.

CDB Building # BB020 – Oak Hall #20

The following ACMs were identified: cementitious insulation on ducts, cementitious pipe fitting, fitting on air cell pipe, cementitious pipe insulation, air cell pipe insulation, cementitious insulation on electrical conduit, cementitious material on booster pump, 12” x 12” vinyl floor tile with associated mastic, wood and metal fire doors, vibration damper insulation, fire damper insulation, exhaust backdraft damper insulation, Transite[®] pipe, and asbestos stockpile. According to the NESHAP Pre-Demolition Asbestos Inspection (ECG 2013a) and the Asbestos Management Plan Report (Fox 1994), all these ACMs were sampled and confirmed to be ACMs, except for the fire doors, which were not sampled and were assumed to be ACM. No LBP was identified in the previous LBP inspection.

CDB Building # BB021 – Hickory Hall #21

The following ACMs were identified: cementitious pipe fittings, cementitious pipe fitting on air cell pipe, cementitious pipe fitting on fiberglass pipe, cementitious pipe insulation, air cell pipe insulation, cementitious insulation on electrical conduit, booster tank insulation, vinyl floor sheeting with mastic, 9” x 9” floor tile with associated mastic, 1’ x 1’ floor tile with associated mastic, metal fire doors, built-up roof and flashing, cementitious backdraft damper insulation, fire damper insulation, mastic under carpet, and mastic under rubberized floor. According to the Asbestos Management Plan Report (Fox 1994), all these ACMs were sampled and confirmed to be ACMs, except for the vinyl floor sheeting with mastic, 9” x 9” floor tile with associated mastic, 1’ x 1’ floor tile with associated mastic, metal fire doors, built-up roof and flashing, cementitious backdraft damper insulation, fire damper insulation, mastic under carpet, and mastic under rubberized floor, which were not sampled and were assumed to be ACM.. No LBP was identified in the previous LBP inspection.

CDB Building # BB022 – Sycamore Hall # 22

The following ACMs were identified: cementitious fitting on hot water heating pipe, cementitious fitting on air cell pipe, cementitious fitting on fiberglass, cementitious insulation on hot water heating pipe, air

cell pipe insulation, cementitious insulation on electrical conduit, booster tank insulation, 9" x 9" floor tile with associated mastic, 1' x 2' floor tile with associated mastic, 1' x 1' floor tile with associated mastic, wood and metal fire doors, mastic under vinyl floor, exterior window caulk and glazing, and interior window glazing. According to the NESHAP Pre-Demolition Asbestos Inspection (ECG 2013a) and the Asbestos Management Plan Report (Fox 1994), all these ACMs were sampled and confirmed to be ACMs except for the 9" x 9" floor tile with associated mastic, 1' x 2' floor tile with associated mastic, 1' x 1' floor tile with associated mastic, wood and metal fire doors, and mastic under vinyl floor, which were not sampled and were assumed to be ACMs. No LBP was identified in the previous LBP inspection.

CDB Building # BB025 – Garage Building # 25

The following ACMs were identified: cementitious tank insulation, cementitious insulation on water tank #2, 9" x 9" floor tile with associated mastic, fire damper insulation, metal fire door, insulation on exhaust backdraft dampers, cementitious pipe fitting insulation on cementitious insulation, cementitious pipe insulation on air cell, cementitious pipe fitting on fiberglass pipe, cementitious insulation, air cell insulation, cementitious insulation on electrical conduit, and window caulking. According to the NESHAP Pre-Demolition Asbestos Inspection (ECG 2013a) and the Asbestos Management Plan Report (Fox 1994), all these ACMs were sampled and confirmed to be ACMs except for the 9" x 9" floor tile with associated mastic, fire damper insulation, metal fire doors, and insulation in exhaust backdraft damper, which were not sampled and were assumed to be ACMs. No LBP was identified in the previous LBP inspection.

CDB Building # BB026 – Maple Hall #26

The following ACMs were identified: cementitious insulation on ducts, cementitious fittings, cementitious fitting on fiberglass pipe, cementitious pipe insulation, cementitious material on booster pump, rope insulation around access panel, 9" x 9" light brown floor tile with associated mastic, 12" x 12" white and beige with brown floor tile with associated mastic, metal and wood fire doors, fire damper insulation, exhaust backdraft dampers, vibration damper insulation, carpet and mastic door, Transite[®] duct under door, and Transite[®] louvers. According to the NESHAP Pre-Demolition Asbestos Inspection (ECG 2013a) and the Asbestos Management Plan Report (Fox 1994), all these ACMs were sampled and confirmed to be ACMs except for the wood and metal fire doors, fire damper insulation, exhaust backdraft dampers, vibration damper insulation, carpet and mastic door, Transite[®] duct under door, and Transite[®] louvers, which were not sampled and were assumed to be ACMs. No LBP was identified in the previous LBP inspection.

CDB Building # BB027 – Administration Building #27

The following ACMs were identified: cementitious fittings on pipe, cementitious pipe insulation, cementitious air cell pipe insulation, cementitious insulation on flash tank, cementitious insulation on hot water tank, Transite[®] siding around cooling tower, 9” x 9” floor tile with associated mastic, 1’ x 1’ floor tile with associated mastic, metal fire doors, and fire damper insulation. According to the NESHAP Pre-Demolition Asbestos Inspection (ECG 2013a) and the Asbestos Management Plan Report (Fox 1994), all these ACMs were sampled and confirmed to be ACMs except for the wood and metal fire doors, fire damper insulation, exhaust backdraft dampers, vibration damper insulation, carpet and mastic door, Transite[®] duct under door, and Transite[®] louvers, which were not sampled and were assumed to be ACMs. No LBP was identified in the previous LBP inspection.

CDB Building # BB028 – Spruce Hall #28

The following ACMs were identified: sprayed on plaster ceiling, cementitious fittings on fiberglass pipe insulation, cementitious fittings, cementitious fitting on air cell pipe, cementitious pipe insulation, air cell pipe insulation, cementitious insulation on conversion tank, 9” x 9” floor tile with associated mastic, metal fire doors, vibration damper, fire damper insulation, white linoleum flooring, and exhaust backdraft damper. According to the NESHAP Pre-Demolition Asbestos Inspection (ECG 2013a) and the Asbestos Management Plan Report (Fox 1994), all these ACMs were sampled and confirmed to be ACMs except for the 9” x 9” floor tile with associated mastic, metal fire doors, vibration damper, fire damper insulation, and exhaust backdraft damper, which were not sampled and were assumed to be ACMs. No LBP was identified in the previous LBP inspection.

CDB Building # BB029 – Mimosa Hall #29

The following ACMs were identified: fittings on air cell pipe, fittings on cementitious pipe, fitting on fiberglass pipe, air cell pipe insulation, cementitious pipe insulation, cementitious insulation on booster tank, insulation on chiller tank, 9” x 9” floor tile with associated mastic, 1’ x 1’ floor tile with associated mastic, mastic under wood floor, carpet mastic over vinyl tile, wood and metal fire doors, canvas vibration damper, fire damper insulation, Transite[®] at cooling tower, and exhaust backdraft damper. According to the Asbestos Management Plan Report (Fox 1994), all these ACMs were sampled and confirmed to be ACMs except for the 9” x 9” floor tile with associated mastic, 1’ x 1’ floor tile with associated mastic, mastic under wood floor, carpet mastic over vinyl tile, wood and metal fire doors, canvas vibration damper, fire damper insulation, Transite[®] at cooling tower, and exhaust backdraft

damper, which were not sampled and were assumed to be ACMs. No LBP was identified in the previous LBP inspection.

CDB Building # BB030 – Gen Mech Store/Shop #30

The following ACMs were identified: cementitious pipe fitting on air cell pipe, cementitious fittings on fiberglass pipe, cementitious pipe fitting on cementitious pipe, cementitious insulation on heat exchanger, air cell pipe insulation, cementitious pipe insulation, cementitious tank insulation, cooler door insulation, 9” x 9” floor tile with associated mastic, 1’ x 1’ floor tile with associated mastic, insulation inside fire damper access panel, metal fire doors, exhaust backdraft damper insulation, mastic sealant around conduit insulation, and asbestos stockpile. According to the Asbestos Management Plan Report (Fox 1994), all these ACMs were sampled and confirmed to be ACMs except for the cooler door insulation, 9” x 9” floor tile with associated mastic, 1’ x 1’ floor tile with associated mastic, insulation inside fire damper access panel, metal fire doors, exhaust backdraft damper insulation, mastic sealant around conduit insulation, and asbestos stockpile, which were not sampled and were assumed to be ACMs. LBP was identified in the previous LBP inspection report and is detailed in Appendix B.

CDB Building # BB032 – Cedar Hall #32

The following ACMs were identified: cementitious fittings on air cell pipe, cementitious fittings on fiberglass pipe, cementitious fittings on cementitious pipe, cementitious pipe insulation, 9” x 9” floor tile with associated mastic, 1’ x 1’ floor tile with associated mastic, sheet goods with mastic, metal fire doors, built-up roof, mastic under wood floor, exhaust backdraft damper, white linoleum flooring, and fire damper insulation. According to the NESHAP Pre-Demolition Asbestos Inspection (ECG 2013a) and the Asbestos Management Plan Report (Fox 1994), all these ACMs were sampled and confirmed to be ACMs except for the 9” x 9” floor tile with associated mastic, 1’ x 1’ floor tile with associated mastic, sheet goods with mastic, metal fire doors, built-up roof, mastic under wood floor, exhaust backdraft damper, and fire damper insulation, which were not sampled and were assumed to be ACMs. LBP was identified in the previous LBP inspection report and is detailed in Appendix B.

CDB Building # B4114 – Cottage #1 Building #24

The following ACMs were identified: 1’ x 1’ floor tile with associated mastic, metal fire doors, fire damper insulation, and exhaust backdraft damper insulation. According to the Asbestos Management Plan Report (Fox 1994), all these ACMs were not sampled and were assumed present as ACMs. No LBP was identified in the previous LBP inspection.

CDB Building # B4214 – Cottage #2 Building #44

The following ACMs were identified: 1' x 1' floor tile with associated mastic, metal fire doors, fire damper insulation, and exhaust backdraft damper insulation. According to the Asbestos Management Plan Report (Fox 1994), all these ACMs were not sampled and were assumed present as ACMs. No LBP was identified in the previous LBP inspection.

CDB Building # B4314 – Cottage #3 Building #45

The following ACMs were identified: 1' x 1' floor tile with associated mastic, metal fire doors, fire damper insulation, and exhaust backdraft damper insulation. According to the Asbestos Management Plan Report (Fox 1994), all these ACMs were not sampled and were assumed present as ACMs. LBP was identified in the previous LBP inspection report and is detailed in Appendix B.

CDB Building # B4414 – Cottage #4 Building #42

The following ACMs were identified: 1' x 1' floor tile with associated mastic, metal fire doors, fire damper insulation, and exhaust backdraft damper insulation. The floor tile with associated mastic was sampled, and the floor tile was confirmed to be ACM during the 2013 NESHAP Pre-Demolition Asbestos Inspection (ECG 2013a). According to the Asbestos Management Plan Report (Fox 1994), the remaining ACMs were not sampled and were assumed present as ACMs. No LBP was identified in the previous LBP inspection.

CDB Building # B4514 – Cottage #5 Building #43

The following ACMs were identified: metal fire doors, fire damper insulation, and exhaust backdraft damper insulation. According to the Asbestos Management Plan Report (Fox 1994), all these ACMs were not sampled and were assumed present as ACMs. No LBP was identified in the previous LBP inspection.

CDB Building # B4614 – Cottage #6 Building #40

The following ACMs were identified: 1' x 1' floor tile with associated mastic, metal fire doors, fire damper insulation, and exhaust backdraft damper insulation. According to the Asbestos Management Plan Report (Fox 1994), all these ACMs were not sampled and were assumed present as ACMs. No LBP was identified in the previous LBP inspection.

CDB Building # B4714 – Cottage #7 Building #41

The following ACMs were identified: metal fire doors, fire damper insulation, and exhaust backdraft damper insulation. According to the Asbestos Management Plan Report (Fox 1994), all these ACMs were not sampled and were assumed present as ACMs. No LBP was identified in the previous LBP inspection.

Tunnels

The following ACMs were identified: thermal systems insulation (TSI) of various pipe sizes and TSI joints. No previous survey reports or Asbestos Management Plans were available regarding the tunnels; therefore, due to the age of the material, all TSI was assumed to be ACM excluding the fiberglass insulation. No information on LBP sampling in the tunnels was provided; based on visual observation, minimal painted surfaces were present in the tunnels and LBP is not expected to be present.

4.0 SUMMARY AND CONCLUSION

Tetra Tech believes that sufficient information concerning the types and quantities of ACM and LBP is present to evaluate the costs associated with pre-demolition abatement. ACM will require significant abatement prior to demolition and LBP painted surfaces can be managed during demolition with little impact to demolition costs.

Abatement will require use of a licensed asbestos removal contractor and should include third party oversight and air monitoring by an Illinois licensed asbestos during abatement and clearance sampling prior to release for open demolition.

5.0 REFERENCES

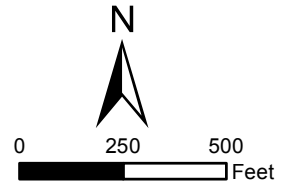
Environmental Consulting Group, Inc. (ECG). 2013a. NESHAP Pre-Demolition Asbestos Inspection. Tinley Park Mental Health Center and Howe Development Center. September 25

ECG. 2013b. Lead-Based Paint Screening Inspection Report. Tinley Park Mental Health Center and Howe Development Center. September 25

Fox and Fox Architects & Engineers (Fox). 1994. Asbestos Management Plan Report. Howe Mental Health Center, Department of Mental Health and Development Disabilities. October 10



- Legend**
- Approximate Tunnel Location
 - Approximate Outline of Suspected Fill Area
 - Approximate Site Boundary
 - Text** Building structure or significant site feature



KLEIN THORPE & JENKINS PROJECT
TINLEY PARK, ILLINOIS

FIGURE 1
SITE LAYOUT MAP



02/25/2014 G:\P\3304-Tinley Park\mxd\2014-06\Fig1-SiteLayout.mxd m_banb



APPENDIX A
INSPECTOR CERTIFICATIONS



M·E·T·A
Mayhew Environmental Training Associates
I N C O R P O R A T E D

Certificate # ME143934B6997C4D9

Jeffrey Mitchell

has on 12/5/2013 in Lawrence, KS
completed the requirements for asbestos accreditation under Section 206 of TSCA Title II, 15 USC 2646

4-hr. Asbestos Building Inspector Refresher

as approved by MO & the US EPA under 40 CFR 763 (AHERA) from 12/5/2013 to 12/5/2013
and
passed the associated exam on 12/5/2013 with a score of at least 70%

Thomas Mayhew
Instructor

Thomas Mayhew
President



P.O. Box 4693

SSN: XXX-XX-1403
Expiration: 12/5/2014

Lawrence, KS. 66047

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BAKER ENVIRONMENTAL CONSULTING, INC.

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Jeffrey Mitchell

has successfully completed an 8 hour professionally accredited training course and passed an end of course exam with a score of at least 70% (80% in Kansas)

LEAD-BASED PAINT INSPECTOR REFRESHER

Certificate #: LBPIR130621-05

Attendee's Listed Address: 415 Oak St., Kansas City, MO

Course Dates: June 21, 2013

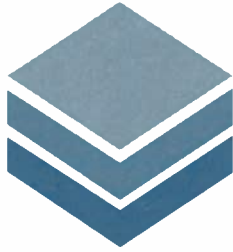
Exam Date: June 21, 2013

Unique Identifying Number: LBPIR941306140321




Training Course Manager
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M·E·T·A
 Mayhew Environmental Training Associates
 I N C O R P O R A T E D

Certificate # MEB15AF606B7934EB

Kaitlyn Bahr

has on 6/12/2014 in Lawrence, KS
 completed the requirements for asbestos accreditation under Section 206 of TSCA Title II, 15 USC 2646

4-hr. Asbestos Building Inspector Refresher

as approved by MO & the US EPA under 40 CFR 763 (AHERA) from 6/12/2014 to 6/12/2014
 and
 passed the associated exam on 6/12/2014 with a score of at least 70%



Robert J. Baer

Bob Baer
 Instructor

Thomas Mayhew

Thomas Mayhew
 President

SSN: XXX-XX-7582

Expiration: 6/12/2015

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APPENDIX B

QUANTITIES OF ACM AND LBP FOR EACH BUILDING

Appendix B

Quantifications of ACM and LBP for Each Building		
CDB Building # B4001 – Social Hab-Pt Building		
Material	Quantity	Notes
1' X 1' Floor Tile and Mastic	14,023 SF	None
Fire Doors - Wood	7 each	None
Fire Damper Insulation	20 SF	None
Exhaust Backdraft Damper Insulation	50 each	None
Mastic under Wood Floor	7,960 SF	None
Ductwork Insulation on Roof	300 SF	Black tar covering parts of the fiberglass insulation on ducts
Under floor duct pipe and transite	690 LF	Material is inaccessible, estimate is based on 1994 Fox OM Plan
Transite Light Covers	60 each	None
CDB Building # B4100 – Neighborhood House 100		
Material	Quantity	Notes
1' X 1' Floor Tile and Mastic	2,220 SF	None
Insulation on Fire Damper	15 each	None
Exhaust Backdraft Damper Insulation	15 each	None
Transite Floor Duct	300 LF	Material is inaccessible, estimate is based on 1994 Fox OM Plan
CDB Building # B4101- #B4104 – Residential Units 101-104		
Material	Quantity	Notes
1' X 1' Floor Tile and Mastic	32 SF	Abatement has removed most of this material
Fire Door - Metal	8 each	Only metal fire doors were present; no wood fire doors were identified
Insulation on Fire Damper	60 SF	None
Exhaust Backdraft Damper Insulation	60 each	None
Transite Floor Duct	1,200 LF	Material is inaccessible, estimate is based on 1994 Fox OM Plan
Light Covers	56 each	None
CDB Building # B4105- #B4107 – Residential Units 105-107		
Material	Quantity	Notes
1' X 1' Floor Tile and Mastic	24 SF	Abatement has removed most of this material
Fire Door - Wood	3 each	None
Fire Door - Metal	3 each	None
Insulation on Fire Damper	45 SF	None
Exhaust Backdraft Damper Insulation	45 each	None
Transite Floor Duct	900 LF	Material is inaccessible, estimate is based on 1994 Fox OM Plan
Light Covers	42 each	None

CDB Building # B4108- #B4110 – Residential Units 108-110		
Material	Quantity	Notes
1' X 1' Floor Tile and Mastic	24 SF	Abatement has removed most of this material
Fire Door - Wood	3 each	None
Fire Door - Metal	3 each	None
Insulation on Fire Damper	45 SF	None
Exhaust Backdraft Damper Insulation	45 each	None
Transite Floor Duct	900 LF	Material is inaccessible, estimate is based on 1994 Fox OM Plan
Light Covers	42 each	None
CDB Building # B4200 – Neighborhood House 200		
Material	Quantity	Notes
1' X 1' Floor Tile and Mastic	2,240 SF	None
Insulation on Fire Damper	15 SF	None
Exhaust Backdraft Damper Insulation	15 each	None
Transite Floor Duct	300 LF	Material is inaccessible, estimate is based on 1994 Fox OM Plan
Window Caulking	225 LF	None
CDB Building # B4201- #B4204 – Residential Units 201-204		
Material	Quantity	Notes
1' X 1' Floor Tile and Mastic	10,160 SF	None
Fire Door - Wood	4 each	None
Fire Door - Metal	4 each	None
Insulation on Fire Damper	60 SF	None
Exhaust Backdraft Damper Insulation	60 each	None
Transite Floor Duct	1,200 LF	Material is inaccessible, estimate is based on 1994 Fox OM Plan
Built-up Roof and Flashing	9,800 SF	None
Light Covers	56 each	None
CDB Building # B4205- #B4207 – Residential Units 205-207		
Material	Quantity	Notes
1' X 1' Floor Tile and Mastic	7,740 SF	None
Fire Door - Wood	6 each	None
Fire Door - Metal	3 each	None
Insulation on Fire Damper	45 SF	None
Exhaust Backdraft Damper Insulation	45 each	None
Transite Floor Duct	900 LF	Material is inaccessible, estimate is based on 1994 Fox OM Plan
Built-up Roof and Flashing	7,350 SF	None
Light Covers	39 each	None

CDB Building # B4208- #B4210 – Residential Units 208-210		
Material	Quantity	Notes
1' X 1' Floor Tile and Mastic	7,740 SF	None
Fire Door - Wood	3 each	None
Fire Door - Metal	3 each	None
Insulation on Fire Damper	45 SF	None
Exhaust Backdraft Damper Insulation	45 each	None
Transite Floor Duct	900 LF	Material is inaccessible, estimate is based on 1994 Fox OM Plan
Built-up Roof and Flashing	7,350 SF	None
Light Covers	45 each	None
CDB Building # B4300 – Neighborhood House 300		
Material	Quantity	Notes
1' X 1' Floor Tile and Mastic	2,150 SF	None
Insulation on Fire Damper	15 SF	None
Exhaust Backdraft Damper Insulation	15 each	None
Transite Floor Duct	300 LF	Material is inaccessible, estimate is based on 1994 Fox OM Plan
CDB Building # B4301- #B4304 – Residential Units 301-304		
Material	Quantity	Notes
Fire Door - Metal	4 each	Only metal fire doors were present; no wood fire doors were identified
Insulation on Fire Damper	60 SF	None
Exhaust Backdraft Damper Insulation	60 each	None
Transite Floor Duct	1,200 LF	Material is inaccessible, estimate is based on 1994 Fox OM Plan
Light Covers	49 each	None
CDB Building # B4305- #B4307 – Residential Units 305-307		
Material	Quantity	Notes
Fire Door - Metal	3 each	Only metal fire doors were present; no wood fire doors were identified
Insulation on Fire Damper	45 SF	None
Exhaust Backdraft Damper Insulation	45 each	None
Light Covers	39 each	None
CDB Building # B4308- #B4310 – Residential Units 308-310		
Material	Quantity	Notes
Fire Door - Metal	3 each	Only metal fire doors were present; no wood fire doors were identified
Insulation on Fire Damper	45 SF	None
Exhaust Backdraft Damper Insulation	45 each	None
Transite Floor Duct	900 LF	Material is inaccessible, estimate is based on 1994 Fox OM Plan
Light Covers	39 each	None
CDB Building # B4400 – Neighborhood House 400		
Material	Quantity	Notes
1' X 1' Floor Tile and Mastic	2,200 SF	None
Insulation on Fire Damper	15 SF	None
Exhaust Backdraft Damper Insulation	15 each	None
Transite Floor Duct	300 LF	Material is inaccessible, estimate is based on 1994 Fox OM Plan

CDB Building # B4401- #B4404 – Residential Units 401-404		
Material	Quantity	Notes
1' X 1' Floor Tile and Mastic	8,700 SF	None
Fire Door - Wood	8 each	None
Fire Door - Metal	4 each	None
Insulation on Fire Damper	60 SF	None
Exhaust Backdraft Damper Insulation	60 each	None
Transite Floor Duct	1,200 LF	Material is inaccessible, estimate is based on 1994 Fox OM Plan
Built-up Roof and Flashing	9,800 SF	None
Light Covers	60 each	None
CDB Building # B4405- #B4407 – Residential Units 405-407		
Material	Quantity	Notes
Fire Door - Wood	12 each	None
Fire Door - Metal	4 each	None
Insulation on Fire Damper	45 SF	None
Exhaust Backdraft Damper Insulation	45 each	None
Transite Floor Duct	900 LF	Material is inaccessible, estimate is based on 1994 Fox OM Plan
Built-up Roof and Flashing	7,350 SF	None
Light Covers	39 each	None
CDB Building # B4408- #B44010 – Residential Units 408-410		
Material	Quantity	Notes
Fire Door - Wood	12 each	None
Fire Door - Metal	3 each	None
Insulation on Fire Damper	45 SF	None
Exhaust Backdraft Damper Insulation	45 each	None
Built-up Roof and Flashing	7,350 SF	None
CDB Building # B4500 – Neighborhood House 500		
Material	Quantity	Notes
1' X 1' Floor Tile and Mastic	2,285 SF	None
Insulation on Fire Damper	15 SF	None
Exhaust Backdraft Damper Insulation	15 each	None
Transite Floor Duct	300 LF	Material is inaccessible, estimate is based on 1994 Fox OM Plan
CDB Building # B4501- #B4504 – Residential Units 501-504		
Material	Quantity	Notes
1' X 1' Floor Tile and Mastic	9,880 SF	Floor tile has been removed; only mastic remains
Fire Door - Wood	4 each	None
Fire Door - Metal	8 each	None
Insulation on Fire Damper	60 SF	None
Exhaust Backdraft Damper Insulation	60 each	None
Transite Floor Duct	1,200 LF	Material is inaccessible, estimate is based on 1994 Fox OM Plan
Built-up Roofing	9,800 SF	None
Light Covers	60 each	None

CDB Building # B4505- #B4507 – Residential Units 505-507		
Material	Quantity	Notes
1' X 1' Floor Tile and Mastic	26 SF - Floor Tile 7,410 SF - Mastic	Most of the floor tile has been abated, but the mastic was not
Fire Door - Metal	3 each	Only metal fire doors were present; no wood fire doors were identified
Insulation on Fire Damper	45 SF	None
Exhaust Backdraft Damper Insulation	45 each	None
Transite Floor Duct	900 LF	Material is inaccessible, estimate is based on 1994 Fox OM Plan
Light Covers	45 each	None
CDB Building # B4508- #B4510 – Residential Units 508-510		
Material	Quantity	Notes
1' X 1' Floor Tile and Mastic	7,410 SF	None
Fire Door - Metal	3 each	None
Insulation on Fire Damper	45 SF	None
Exhaust Backdraft Damper Insulation	45 each	None
Transite Floor Duct	900 LF	Material is inaccessible, estimate is based on 1994 Fox OM Plan
Built-up Roofing	7,350 SF	None
Light Covers	45 each	None
CDB Building # B4002 – Personnel Building #2		
Material	Quantity	Notes
1' X 1' Floor Tile and Mastic	4,240 SF	None
Fire Damper Insulation	20 each	None
Exhaust Backdraft Damper Insulation	50 each	None
Under Floor Duct Pipe and Transite	350 LF	Material is inaccessible, estimate is based on 1994 Fox OM Plan
Carpet Adhesive	988 SF	None
Built-up Roof	2,900 SF	None
CDB Building # B4003 – Administration Building #3		
Material	Quantity	Notes
1' X 1' Floor Tile and Mastic	4,655 SF	None
Fire Damper Insulation	20 each	None
Exhaust Backdraft Damper Insulation	20 each	None
Under Floor Duct Pipe and Transite	400 LF	Material is inaccessible, estimate is based on 1994 Fox OM Plan
Mastic under Carpeting	2,445 SF	None
Built-up Roof	5,200 SF	None
CDB Building # BB001 – Pump House #1		
Material	Quantity	Notes
TSI*	4 LF	None
Built-up Roof and Flashing	685 SF	None
CDB Building # BB002 – Pump House #2		
Material	Quantity	Notes
Built-up Roof and Flashing	360 SF	None

CDB Building # BB003 – Pump House #3		
Material	Quantity	Notes
Built-up Roof and Flashing	360 SF	None
Lead-Based Paint	120 SF**	Door
CDB Building # BB019 – Willow Hall		
Material	Quantity	Notes
TSI*	11,600 LF	None
Sprayed-on Speckled Plaster Ceiling	31,090 SF	None
Insulation on Ventilation Duct	10,000 SF	None
Flue Insulation Mag Block	300 SF	None
Exterior Transite Panels	13,900 SF	None
Stockpiled Insulation Mag Block	NA	Could not identify/verify - inaccessible crawl space
CDB Building # B4031 – Pine Hall		
Material	Quantity	Notes
TSI*	6,500LF	None
Flash Tank Insulation	150 SF	None
Insulation on Ventilation Duct	700 SF	None
Black Mastic with Flooring	38,054 SF	Multiple flooring has been removed and replaced, but asbestos containing black mastic is still present
Fire Door	22 each	None
CDB Building # BB006 – Water Treatment Plant #6		
Material	Quantity	Notes
Metal Fire Doors	1 each	Could not verify but likely door to electrical room
Built-up Roof	4,600 SF	None
Insulation Material on Exhaust Backdraft Damper	10 SF	None
Mortar and Brick Base	200 SF	Associated with Boiler in Basement
Boiler Gasket Insulation Rope	15 LF	None
Cementitious Material	NA	Could not identify/verify
TSI*	600 LF	None
Exterior Window Caulk	400 LF	None
Interior Window Glaze	1,900 LF	None
Boiler Flue Insulation	30 SF (visible)	None
Lead-Based Paint	600 SF**	Exterior white walls

CDB Building # BB008 – Power Plant #8		
Material	Quantity	Notes
TSI*	4,200 LF	Throughout building - various pipe runs and joints (all non fiberglass)
Boiler Insulation	9,200 SF	Boiler #1 and #2
Flue Insulation	590 SF	None
Flue Insulation #2	1,250 SF	None
Cementitious Fitting on Electrical Conduit	50 LF	None
Cementitious Insulation on Holding Tank	170 SF	None
Cementitious Insulation on Hot Water Tank #1 and #2	960 SF	None
Cementitious Insulation on Conditioning Tank #1 and #1	480 SF	One tank is no longer wrapped and the other is wrapped in dark blue insulation which appears to be fiberglass
Cementitious Insulation on Oil Heating Converter	100 SF	None
Feed Water Tank (TSI)	450 SF	None
Exhaust Backdraft Damper Insulation	15 each	None
Boiler Gaskets	15 each	None
Asbestos Stockpile	10 SF	None
Lead-Based Paint	1,500 SF**	Gray on boilers and white exterior walls
CDB Building # BB020 – Oak Hall #20		
Material	Quantity	Notes
TSI*	6,000 LF	None
Duct Insulation	195 SF	None
Booster Pump Insulation	500 SF	None
12" X 12" Vinyl Floor Tile and Mastic (non-white)	1,980 SF	None
Fire Door - Wood	2 each	None
Fire Door - Metal	12 each	None
Vibration Damper Insulation	8 SF	None
Fire Damper Insulation	3 SF	None
Exhaust Backdraft Damper	32 each	None
Transite Pipe	16 LF	None
CDB Building # BB021 – Hickory Hall #21		
Material	Quantity	Notes
TSI*	1,975 LF	None
Boiler Tank Insulation	50 SF	None
Vinyl Floor Sheeting and Mastic	4,235 SF	None
9" X 9" Floor Tile and Mastic	8,300 SF	None
1' X 1' Floor Tile and Mastic	11,200 SF	None
Built-up Roof and flashing	10,700 SF	None
Metal Fire Doors	14 each	None
Cementitious Backdraft damper insulation	10 each	None
Fire Damper Insulation	5 each	None
Carpet Mastic	17,800 SF	None
Mastic Under Rubberized Stair Tread	500 SF	None

CDB Building # BB022 – Sycamore Hall #22		
Material	Quantity	Notes
TSI*	1,200 LF	None
Booster Pump Insulation	12 SF	None
9" X 9" Floor Tile and Mastic	3,900 SF	None
1' X 2' Floor Tile and Mastic	100 SF	None
1' X 1' Floor Tile and Mastic	9,566 SF	None
Fire Door - Wood	9 each	None
Fire Door - Metal	11 each	None
Exterior Window Caulking	2,472 LF	None
Exterior Window Glaze	4,000 LF	None
Interior Window Glaze	4,000 LF	None
Mastic Under Vinyl Floor	216 SF	None
CDB Building # BB025 – Garage Building #25		
Material	Quantity	Notes
TSI*	1,950 LF	None
9" X 9" Floor Tile and Mastic	120 SF	None
Fire Damper Insulation	150 each	None
Metal Fire Doors	1 each	None
Insulation on Exhaust Backdraft Dampers	2 each	None
Window Caulking	300 LF	None
Roofing Material Felt and Flashing	16,950 SF	None
Lead-Based Paint	50 SF**	Blue garage door and green door frame
CDB Building # BB026 – Maple Hall #26		
Material	Quantity	Notes
TSI*	1,718 LF	Throughout on various pipe sizes (elbows and runs). This quantity is listed on the previous survey; very little was accessible and most appears to be fiberglass except for the joints.
Cementitious Insulation on Ducts	500 SF	None
Cementitious Material on Booster Pump	128 SF	None
Rope Insulation around Access Panel	3 LF	None
9" X 9" Floor Tile and Mastic	59,393 SF	None
1' X 1' Floor Tile and Mastic	4,474 SF	None
Fire Door - Wood	1	None
Fire Door - Metal	60	None
Vibration Damper Insulation	8 SF	None
Fire Damper Insulation	2 SF	None
Exhaust Backdraft Damper	18 each	None
Carpet and Mastic Door	NA	Could not identify/verify
Transite Duct under Door	NA	Could not identify/verify
Transite Louvers	NA	Could not identify/verify

CDB Building # BB027 – Administration Building #27		
Material	Quantity	Notes
TSI*	400 LF	None
Tank Insulation	260 SF	None
9" X 9" Floor Tile and Mastic	15,158 SF	Within some carpeted areas, the 9" X 9" floor tile has been removed but the mastic remains.
1' X 1' Floor Tile and Mastic	750 SF	None
Fire Door - Metal	7	None
Transite Siding around Cooling Tower	300 SF	None
Insulation on Fire Dampers	50 each	None
Liner Inside Cooling Tanks	NA	Could not identify/verify
CDB Building # BB028 – Spruce Hall #28		
Material	Quantity	Notes
Sprayed-on Plaster Ceiling	1,000 SF	None
9" X 9" Vinyl Floor Tile and Mastic	2,700 SF	None
Vinyl Sheet Good with Mastic	2,971 SF	None
Fire Doors - Metal	33	None
Fire Damper Insulation	124 SF	None
Exhaust Backdraft Damper	352 each	None
Vibration Damper Insulation	96 SF	None
Cementitious Insulation on Conversion Tank	100 SF	None
TSI*	1,400 LF	None
CDB Building # BB029 – Mimosa Hall #29		
Material	Quantity	Notes
TSI*	3,000 LF	Throughout various pipe sizes. Main level above the ceiling hot and cold water lines are wrapped, but due to limited access, could not verify how much of this material is fiberglass and how much is ACM
9" X 9" Floor Tile and Mastic	1,590 SF	None
1' X 1' Floor Tile and Mastic	2,704 SF	None
Fire Door - Wood	7	None
Fire Door - Metal	7	None
Mastic under Wood Floor	4,500 SF - Gym 792 SF - Auditorium Stage	None
Carpet Mastic over Vinyl Tile	2,679 SF	None
Fire Damper Insulation	32 SF	None
Exhaust Backdraft Damper Insulation	96 each	None
Canvas Vibration Damper	16 SF	None
Transite on Cooling Tower	350 SF	None

CDB Building # BB030 – Gen Mech Store/Shop #30		
Material	Quantity	Notes
TSI*	1,200 LF	None
9" X 9" Floor Tile and Mastic	2,352 SF	None
1' X 1' Floor Tile and Mastic	50 SF	None
Cooler Door Insulation	150 SF	None
Exhaust Backdraft Damper Insulation	15 each	None
Insulation inside fire damper access panel	5 SF	None
Mastic Sealant around Conduit	10 SF	None
Metal Fire Doors	2	None
Asbestos Stockpile	NA	Could not identify/verify
Lead-Based Paint	NA**	All material was in good condition
CDB Building # BB032 – Cedar Hall #32		
Material	Quantity	Notes
TSI*	888 LF	Mechanical room in basement is inaccessible due to flooding; therefore, the quantity estimate is based on 1994 Fox OM Plan
1' X 1' Floor Tile and Mastic	352 SF	None
9" X 9" Floor Tile and Mastic	2,560 SF	None
Sheet Goods with Mastic	18,738 SF	None
Fire Doors - Metal	8	None
Built-up Roofing	4,900 SF	None
Mastic under Wood Floor	3,750 SF	None
Fire Damper Insulation	4 SF	None
Exhaust Backdraft Damper Insulation	8 each	None
Lead-Based Paint	25 SF	Orange door/door frame
CDB Building # B4114 – Cottage #1 Building #24		
Material	Quantity	Notes
1' X 1' Floor Tile and Mastic	2,600 SF	None
Metal Fire Doors	6 each	None
Fire Damper Insulation	30 each	None
Exhaust Backdraft Damper Insulation	10 each	None
CDB Building # B4214 – Cottage #2 Building #44		
Material	Quantity	Notes
1' X 1' Floor Tile and Mastic	2,600 SF	None
Metal Fire Doors	6 each	None
Fire Damper Insulation	30 each	None
Exhaust Backdraft Damper Insulation	10 each	None
CDB Building # B4314 – Cottage #3 Building #45		
Material	Quantity	Notes
1' X 1' Floor Tile and Mastic	2,600 SF	None
Metal Fire Doors	6 each	None
Fire Damper Insulation	30 each	None
Exhaust Backdraft Damper Insulation	10 each	None
Lead-Based Paint	NA**	All material was in good condition

CDB Building # B4414 – Cottage #4 Building #42		
Material	Quantity	Notes
1' X 1' Floor Tile and Mastic	2,600 SF	None
Metal Fire Doors	6 each	None
Fire Damper Insulation	30 each	None
Exhaust Backdraft Damper Insulation	10 each	None
CDB Building # B4514 – Cottage #5 Building #43		
Material	Quantity	Notes
1' X 1' Floor Tile and Mastic	2,600 SF	None
Metal Fire Doors	6 each	None
Fire Damper Insulation	30 each	None
Exhaust Backdraft Damper Insulation	10 each	None
CDB Building # B4614 – Cottage #6 Building #40		
Material	Quantity	Notes
1' X 1' Floor Tile and Mastic	2,600 SF	None
Metal Fire Doors	6 each	None
Fire Damper Insulation	30 each	None
Exhaust Backdraft Damper Insulation	10 each	None
CDB Building # B4714 – Cottage #7 Building #41		
Material	Quantity	Notes
1' X 1' Floor Tile and Mastic	2,600 SF	None
Metal Fire Doors	6 each	None
Fire Damper Insulation	30 each	None
Exhaust Backdraft Damper Insulation	10 each	None
Building - Tunnel		
Material	Quantity	Notes
TSI*	18,400 LF	Various pipe sizes throughout. Tunnel running from Sycamore Hall toward the west appears to be fiberglass with only TSI joints; flooding prevented full access to this section of the tunnel. Other sections of the tunnel were also flooded, preventing access.

Notes:

ACM - Asbestos Containing Material

LBP - Lead Based Paint

CBD - Capital Development Board

LF - Linear Feet

OM Plan - Operations and Maintenance plan developed by Fox and Fox Architects in 1994

SF - Square Feet

TSI - Thermal systems insulation (pipe runs and joints)

* - OM Plans reference a multitude of TSI (as shown in the body of this report). In order to simplify the quantification, all types and pipe diameters of TSI (pipe runs and joints) were added together for a total LF per building. This, however, does not include TSI on tanks and ventilation ducting because these quantities are reported in SF. For purposes of calculating the linear footage of a joint, 1 joint equals 1 LF.

** - Only damaged areas of LBP were quantified.