

Asbestos and Hazardous Materials Inspection

for

Lincoln Intermediate at Belmar

**7109 Hermitage Street
Pittsburgh, Pennsylvania**

Prepared for:

Pittsburgh Public Schools

Pittsburgh, Pennsylvania

Prepared by:

L. Robert Kimball & Associates, Inc.

**415 Moon-Clinton Road
Coraopolis, PA 15108**

March 2007

Prepared By: _____
Richard C. Mance, PG

Reviewed By: _____
Daniel J. Davis, Project Manager

Reviewed By: _____
Steven D. Stockton, CIH

Table of Contents

EXECUTIVE SUMMARY	1
Asbestos-Containing Materials.....	1
Lead Based Paint (LBP)	2
Hazardous Materials	3
1.0 INTRODUCTION.....	4
2.0 ASBESTOS INSPECTION.....	4
3.0 LEAD-BASED PAINT	5
4.0 HAZARDOUS MATERIALS.....	6
5.0 SUMMARY	7

TABLES

Table 1 - Cost Estimate Asbestos-Containing Materials
Table 2 - Cost Estimate Hazardous Materials

APPENDICES

Appendix A - Inspection Reports
Appendix B - Photographs
Appendix C - Asbestos Laboratory Bulk Sample Results/ Chain of Custody Forms
Appendix D - Lead-Based Paint Chip Laboratory Sample Results/ Chain of Custody Forms
Appendix E - Inspector Accreditations

EXECUTIVE SUMMARY

Pittsburgh Public Schools retained L. Robert Kimball & Associates, Inc. (Kimball) to conduct a partial inspection of Lincoln Intermediate at Belmar in Pittsburgh, Pennsylvania, to identify and quantify Asbestos-Containing Materials (ACM) and to assess other environmental concerns that may be impacted during planned renovation activities. This building survey covers only the portions of the building to be renovated. Other suspected asbestos, lead and hazardous materials may exist within the building. Refer to the school district's Operations and Maintenance plan for a complete listing of asbestos containing materials present in the building.

Asbestos-Containing Materials

The inspection was conducted to identify, locate, and quantify ACM within the planned renovation areas. National Emission Standards for Hazardous Air Pollutants (NESHAP) and Allegheny County Article XXI require that all impacted ACM be removed prior to renovation.

Kimball identified the following materials as testing positive for ACM:

Friable ACM

- Magnesia Block Pipe Insulation on Heating Lines
- Mudded Pipe Fitting Insulation on Magnesia Block Insulated Heating Lines
- Mudded Pipe fitting Insulation on Fiber Glass Insulated Heating Lines

Non Friable ACM

- 9"x 9" Floor Tile – Gray/Pink with Cream and Brown Streaks, and Associated Mastic
- 9"x 9" Floor Tile – Gray with White and Black Streaks, and Associated Mastic
- Stair Tread – Tan
- Mastic below Carpeting and Plywood

The following materials have been assumed to be ACM. These materials were not sampled due to inaccessibility, or because sampling would have damaged the function of the component associated with that material:

- Older Window Caulking under the Existing Windows
- Fire Door Insulation
- Chalkboard/Tackboard Mastic

Roofing consisted of rubber roofing on flat roofs, and shingles on pitched roofs. Both roofing systems appeared to be newer construction.

The estimated cost to remove and dispose of the above-referenced ACM in the renovation areas is **\$20,650.00**. See Table 1 for line item cost estimates.

Table 1
Cost Estimate
Asbestos-Containing Materials
Lincoln Intermediate at Belmar

ACM	LOCATION	APPROXIMATE QUANTITY	COST ESTIMATE
Pipe Insulation on Heating Lines	First Floor Main Corridor, Main Entrance Corridor, and Main Office	200 L.F.	\$4,000.00
Mudded Pipe Fitting Insulation on Heating Lines	First Floor Main Corridor, Main Entrance Corridor, and Main Office	25 Fittings	\$500.00
Mudded Pipe Fitting Insulation on Fiber Glass Insulated Heating Lines	Basement at Room B-15 and Boiler Room	8 Fittings	\$200.00
9"x 9" Floor Tile – Gray/Pink with Cream and Brown Streaks, and Associated Mastic	Room B-15	575 S.F.	\$1,450.00
9"x 9" Floor Tile – Gray with White and Black Streaks, and Associated Mastic	Rooms 114 and 214	800 S.F.	\$2,000.00
Stair Tread – Tan	Gymnasium Stage	10 S.F.	\$100.00
Mastic below Carpeting and Plywood	Room 112 and Main Office	1,080 S.F.	\$3,500.00
Older Window Caulking	Windows	15 Windows	\$1,500.00
Fire Door Insulation	Rooms, Corridors and Stairwells	20 Doors	\$2,000.00
Chalkboard/Tackboard Mastic	Rooms B15, 114, 212, 214	18 Boards	\$5,400.00
		TOTAL	\$20,650.00

Note: Cost estimates reflect unit pricing averages from select Pittsburgh-based asbestos abatement firms. Cost may vary based on the magnitude of material removed and on bidding used.

Lead Based Paint (LBP)

Six (6) paint systems were sampled area to be renovation. All paint samples showed concentrations of total lead greater than the laboratory limit of detection, and are therefore considered regulated under the Occupational Safety and Health Administration (OSHA).

The OSHA Lead in Construction Standard (29 CFR 1926.62) requires all contractors performing demolition or renovation activities to notify and provide training for their employees involved in the alteration and/or repair of lead-containing building components. The paint chip sampling form and the laboratory analysis are found in **Appendix D – Lead-Based Paint Sample Results**.

Hazardous Materials

Kimball performed an inspection for hazardous materials in areas to be renovated within the building. Kimball's inspection identified florescent light tubes in each of the areas. Several light fixtures were dismantled and inspected for light ballasts suspected on containing PCBs. All ballasts inspected were newer Sylvania Quicktronic ballasts labeled as "No PCBs". Household type air conditioners, refrigerators, freezers, and vending machines were not included. Miscellaneous office and cleaning supplies such as printer toner, ink cartages, spray cleaners, and art supplies were not included.

Remediation of lead paint is not generally required for building renovation or demolition, therefore cost estimates are not provided.

All impacted hazardous materials should be handled by properly trained personnel and the materials disposed of in accordance with USEPA and Commonwealth of Pennsylvania hazardous waste regulations and guidelines.

The estimated cost to remove and dispose the above-mentioned hazardous materials is **\$315.00**. See Table 2 for line item cost estimates.

Table 2
Cost Estimate
Hazardous Materials
Lincoln Intermediate at Belmar

ITEM	LOCATION	APPROXIMATE QUANTITY	DISPOSAL COST ESTIMATE	RECYCLING COST ESTIMATE
Fluorescent Lamps	Areas to be Renovated	210	\$315.00	\$100.00
		TOTAL	\$315.00	\$100.00

Notes

Cost estimates reflect unit pricing averages gained from select Pittsburgh based hazardous remediation firms.

1.0 INTRODUCTION

Pittsburgh Public Schools retained Kimball to conduct an inspection for ACM, LBP and other hazardous materials in planned renovation areas within Lincoln Intermediate at Belmar, located on 7109 Hermitage Street in Pittsburgh, Pennsylvania. Within areas impacted by renovation activities, Kimball identified and quantified ACM, identified levels of lead on painted surfaces, and identified other possible hazardous materials. For the purpose of this report, hazardous materials refer to equipment which potentially contains contaminants such as NiCAD, PCBs, CFCs, or mercury.

2.0 ASBESTOS INSPECTION

Kimball performed asbestos inspections on February 21-22, 2007. The inspections were performed by Mr. Richard Mance (PA Building Inspector Certification # 006311) and Ms. Shelly Wilson (PA Building Inspector Certification # 028580). Kimball visually inspected all areas scheduled for renovation within the building; quantified each material and collected bulk samples.

Suspect ACM was classified into homogeneous areas and bulk samples of each homogeneous area were collected based on the United States Environmental Protection Agency (EPA) random sampling protocol. All bulk samples were sealed in plastic vials, given distinct sample numbers, and logged with an appropriate chain of custody documentation. Samples were courier delivered to International Asbestos Testing Laboratories (IATL) of Mt. Laurel, New Jersey for analysis using Polarized Light Microscopy (PLM) with dispersion staining, as specified by the EPA. Bulk samples with asbestos content of less than 10% were also analyzed by PLM point counting methods. PLM point count analysis is a more definitive method in determining the percentage of asbestos in materials containing low levels of asbestos.

The following materials have been sampled and found to be ACM:

Friable ACM

- Magnesia Block Pipe Insulation on Heating Lines
- Mudded Pipe Fitting Insulation on Magnesia Block Insulated Heating Lines
- Mudded Pipe fitting Insulation on Fiber Glass Insulated Heating Lines

Non Friable ACM

- 9"x 9" Floor Tile – Gray/Pink with Cream and Brown Streaks, and Associated Mastic
- 9"x 9" Floor Tile – Gray with White and Black Streaks, and Associated Mastic
- Stair Tread – Tan
- Mastic below Carpeting and Plywood

The following materials have been assumed to be ACM. These materials were not sampled due to inaccessibility, or because sampling would have damaged the function of the component associated with that material:

- Older Window Caulking Under Existing Windows

- Fire Door Insulation
- Chalkboard/Tackboard Mastic

Roofing consisted of rubber roofing on flat roofs, and shingles on pitched roofs. Both roofing systems appeared to be newer construction.

The estimated cost to remove and dispose of the above-referenced ACM in the renovation areas is **\$20,650.00**. See Table 1 for line item cost estimates.

Table 1
Cost Estimate
Asbestos-Containing Materials
Lincoln Intermediate at Belmar

ACM	LOCATION	APPROXIMATE QUANTITY	COST ESTIMATE
Pipe Insulation on Heating Lines	First Floor Main Corridor, Main Entrance Corridor, and Main Office	200 L.F.	\$4,000.00
Mudded Pipe Fitting Insulation on Heating Lines	First Floor Main Corridor, Main Entrance Corridor, and Main Office	25 Fittings	\$500.00
Mudded Pipe Fitting Insulation on Fiber Glass Insulated Heating Lines	Basement at Room B-15 and Boiler Room	8 Fittings	\$200.00
9"x 9" Floor Tile – Gray/Pink with Cream and Brown Streaks, and Associated Mastic	Room B-15	575 S.F.	\$1,450.00
9"x 9" Floor Tile – Gray with White and Black Streaks, and Associated Mastic	Rooms 114 and 214	800 S.F.	\$2,000.00
Stair Tread – Tan	Gymnasium Stage	10 S.F.	\$100.00
Mastic below Carpeting and Plywood	Room 112 and Main Office	1,080 S.F.	\$3,500.00
Older Window Caulking	Windows	15 Windows	\$1,500.00
Fire Door Insulation	Rooms, Corridors and Stairwells	20 Doors	\$2,000.00
Chalkboard/Tackboard Mastic	Rooms B15, 114, 212, 214	18 Boards	\$5,400.00
		TOTAL	\$20,650.00

Note: Cost estimates reflect unit pricing averages from select Pittsburgh-based asbestos abatement firms. Cost may vary based on the magnitude of material removed and on bidding used.

3.0 LEAD-BASED PAINT

Six (6) paint systems sampled in renovation areas were found to contain between 0.0078% and 16% lead by weight based on laboratory analysis. All paint samples showed concentrations of total lead greater than the laboratory limit of detection, and are therefore considered regulated under the Occupational Safety and Health Administration (OSHA).

The OSHA Lead in Construction Standard (29 CFR 1926.62) requires all contractors performing demolition or renovation activities to notify and provide training for their employees involved in the alteration and/or repair of lead-containing building components. The contractor is also required to conduct an initial Employee Exposure Assessment. There are no requirements for removing lead based paint during renovation or demolition of buildings however means of minimizing the migration of lead dust must be implemented. In addition, waste stream sampling of renovation/demolition materials is required under the Resource Conservation and Recovery Act (RCRA).

Paint samples were analyzed by International Asbestos Testing Laboratories, Inc. of Mt. Laurel, New Jersey, using ASTM D3335-85A Atomic Absorption Spectrophotometry (AAS). IATL is accredited by the American Industrial Hygiene Association (AIHI) for metals analysis. The paint chip sampling form and the laboratory analysis are found in **Appendix D – Lead-Based Paint Sample Results**.

4.0 HAZARDOUS MATERIALS

Kimball performed an inspection for hazardous materials in areas to be renovated within the building. Kimball’s inspection identified florescent light tubes in each of the areas. Several light fixtures were dismantled and inspected for light ballasts suspected on containing PCBs. All ballasts inspected were newer Sylvania Quicktronic ballasts labeled as “No PCBs”. Miscellaneous office and cleaning supplies such as printer toner, ink cartages, spray cleaners, and art supplies were not included. Remediation of lead paint is not generally required for building renovation or demolition, therefore cost estimates are not provided.

The Contractor should verify the presence of any hazardous materials within the renovation area, prior to beginning renovation activities. All impacted hazardous materials should be handled by properly trained personnel and the materials disposed of in accordance with USEPA and Commonwealth of Pennsylvania hazardous waste regulations and guidelines.

The estimated cost to remove and dispose the above-mentioned hazardous materials is **\$315.00**. See Table 2 for line item cost estimates.

Table 2
Cost Estimate
Hazardous Materials
Lincoln Intermediate at Belmar

ITEM	LOCATION	APPROXIMATE QUANTITY	DISPOSAL COST ESTIMATE	RECYCLING COST ESTIMATE
Fluorescent Lamps	Areas to be Renovated	210	\$315.00	\$100.00
		TOTAL	\$315.00	\$100.00

Notes: Cost estimates reflect unit pricing averages gained from select Pittsburgh based hazardous remediation firms

5.0 SUMMARY

Kimball performed an inspection for asbestos and hazardous materials in areas scheduled for renovation at Lincoln Intermediate at Belmar in Pittsburgh, Pennsylvania. Kimball's inspection identified ACM, LBP, and fluorescent light tubes. Although renovation plans have not been finalized, Kimball recommends the following for all impacted areas:

1. All impacted ACM should be removed and disposed of as ACM waste by EPA trained, Pennsylvania certified personnel and Allegheny County licensed asbestos abatement firms
2. Painted materials in the school contain, or should be assumed to contain, lead, based on samples collected. Contractors performing renovation activities are required to comply with the OSHA Lead in Construction standard (29 CFR 1926.62).
3. All impacted hazardous materials should be handled by properly trained personnel and disposed of in accordance with USEPA and Commonwealth of Pennsylvania hazardous waste regulations and guidelines.

BUILDING SUMMARY FORM

BUILDING IDENTIFICATION

OWNER/CLIENT: Pittsburgh Public School BLDG. NAME: Belmar Elementary School
 ADDRESS: 7109 Hermitage Street PHONE: 412-247-7880

PHYSICAL DESCRIPTION

BUILDING USE: School # OF FLOORS: 3
 SQ. FOOTAGE: N/A BUILDING EXTERIOR: Brick
 ATTIC: Yes BASEMENT: Yes
 CEILING HEIGHT: 10 - 15 ft FRAME: Block/ Brick

FLOOR:

TILE: CARPET: CONCRETE: WOOD: CERAMIC: SOIL: LINOLEUM: METAL:

CEILING:

PLASTER: CONCRETE: FIBERGLASS: SUSPENDED: DRYWALL: WOOD:

ASBESTOS MATERIALS RECORDS (SURFACING)

MATERIAL	LOCATION	SAMPLE #	SAMPLE #	SAMPLE #	QUANTITY	%ASBESTOS

ASBESTOS MATERIALS RECORDS (THERMAL)

MATERIAL	LOCATION	SAMPLE #	SAMPLE #	SAMPLE #	QUANTITY	%ASBESTOS
Pipe Fittings	Basement level of stairwells	Assumed	Assumed	Assumed	9	Assumed

ASBESTOS MATERIALS RECORDS (MISCELLANEOUS)

MATERIAL	LOCATION	SAMPLE #	SAMPLE #	SAMPLE #	QUANTITY	%ASBESTOS
12 X 12 Beige Floor Tile	1 st Floor Storage Room & Room 209 - Closet	001A	002A	003A	Abated	1.3% Chrysotile
12 X 12 Beige Floor Tile Mastic	1 st Floor Storage Room & Room 209 - Closet	001B	002B	003B	Abated	6.6% Chrysotile
9 X 9 Gray Floor Tile Mastic	Throughout	Assumed	Assumed	Assumed	Abated	Assumed

SUMMARY PREPARED BY: _____

PEER REVIEWED BY: _____

SUSPECT ASBESTOS BULK SAMPLING FORM

BUILDING NAME: Belmar Elementary School

ADDRESS: 7109 Hermitage Street, Pittsburgh, PA 15208

SAMPLED BY: William Nicastro, Adam Pickersgill and Patrick Graham

DATE: July 14, 2004 and September 27, 2004

SAMPLE NUMBER	MATERIAL	HA #	LOCATION	% ASBESTOS
001A	12 x 12 Beige Floor Tile	01	First Floor Entrance – Storage Room	1.3 % Chrysotile
002A	12 x 12 Beige Floor Tile	01	First Floor Entrance – Storage Room	*
003A	12 x 12 Beige Floor Tile	01	Room 209 - Closet	*
001B	12 x 12 Beige Floor Tile Mastic	02	First Floor Entrance – Storage Room	6.6 % Chrysotile
002B	12 x 12 Beige Floor Tile Mastic	02	First Floor Entrance – Storage Room	*
003B	12 x 12 Beige Floor Tile Mastic	02	Room 209 - Closet	*
004A	Kick Strip	03	First Floor Entrance Storage Room	0%
005A	Kick Strip	03	First Floor Entrance Storage Room	0%
006A	Kick Strip	03	First Floor Entrance Storage Room	0%
004B	Kick Strip Mastic	04	First Floor Entrance Storage Room	0%
005B	Kick Strip Mastic	04	First Floor Entrance Storage Room	0%
006B	Kick Strip Mastic	04	First Floor Entrance Storage Room	0%
007A	High Black Kick Strip	05	First Floor - East Stairwell to Corridor	0%
008A	High Black Kick Strip	05	First Floor - East Stairwell to Corridor	0%
009A	High Black Kick Strip	05	First Floor - East Stairwell to Corridor	0%
007B	High Black Kick Strip Mastic	06	First Floor - East Stairwell to Corridor	0%
008B	High Black Kick Strip Mastic	06	First Floor - East Stairwell to Corridor	0%
009B	High Black Kick Strip Mastic	06	First Floor - East Stairwell to Corridor	0%
010	Roof Tar	07	Roof Over East Stairwell Exit	0%
011	Roof Tar	07	Roof Over East Stairwell Exit	0%
012	Roof Tar	07	Roof Over East Stairwell Exit	0%

*If first or any sample in a supplied group is positive, then all are assumed positive



SUSPECT ASBESTOS BULK SAMPLING FORM

BUILDING NAME: Belmar Elementary School

ADDRESS: 7109 Hermitage Street, Pittsburgh, PA 15208

SAMPLED BY: William Nicastro, Adam Pickersgill and Patrick Graham

DATE: July 14, 2004 and September 27, 2004

SAMPLE NUMBER	MATERIAL	HA #	LOCATION	% ASBESTOS
013A	Black Kickstrip	08	Service Room at Base of East Stairwell	0%
014A	Black Kickstrip	08	Service Room at Base of East Stairwell	0%
015A	Black Kickstrip	08	Service Room at Base of East Stairwell	0%
013B	Black Kickstrip Mastic	09	Service Room at Base of East Stairwell	0%
014B	Black Kickstrip Mastic	09	Service Room at Base of East Stairwell	0%
015B	Black Kickstrip Mastic	09	Service Room at Base of East Stairwell	0%

*If first or any sample in a supplied group is positive, then all are assumed positive

LIST OF HOMOGENEOUS AREAS

BUILDING NAME: Belmar Elementary School LOCATION: Pittsburgh, PA

Table with 7 columns: HA#, MATERIAL, CONTAIN ASBESTOS? (YES, NO, ASSUMED), QUANTITY (STANDARD, METRIC). Rows include materials like 12 x 12 Beige Floor Tile, Kick Strip, Roof Tar, and Pipe Insulation.

