

Hazardous Building Materials Inspection Report

Upper Harbor Terminal
Minneapolis, Minnesota

Prepared for

City of Minneapolis, CPED



Project B1506758.00
September 17, 2015

Braun Intertec Corporation

September 17, 2015

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Mr. Abdulkadir Jama
City of Minneapolis, CPED
Residential & Real Estate Development
105 5th Avenue South – Suite 200
Minneapolis, MN 55401-2534

Re: Hazardous Building Materials Inspection Report
City of Minneapolis Upper Harbor Terminal
Minneapolis, Minnesota

Dear Mr. Jama:

The enclosed report provides the results of the hazardous building materials inspection conducted on August 25 – 26, 2015 at the Upper Harbor Terminal located in an area north of 33rd Avenue North and west of the Mississippi River in Minneapolis, Minnesota (site). Braun Intertec Corporation was authorized to provide a hazardous building material inspection in accordance with our Third Revision Proposal QTB017375 dated June 23, 2015, Master Contract No C-37836 and Scope No. 37.

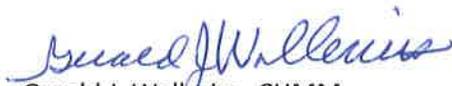
The following outline provides the structure of the report.

- Scope of Services
- Site Description
- Results
- Discussion
- Limitations

If you have any questions or need further assistance, please call Bob Rykken at 952.995.2672.

Sincerely,

BRAUN INTERTEC CORPORATION



Gerald J. Wallerius, CHMM
Project Scientist



Derek M. Schilling, PG, CHMM
Associate Principal – Senior Scientist

Attachment:
Hazardous Building Materials Inspection Report

AA/EOE

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A. Scope of Services

The scope of our services was limited to:

- Visually examine accessible areas and identify the locations of suspect asbestos-containing materials (ACM), lead, poly-chlorinated biphenyls (PCBs), mercury, and other miscellaneous hazardous materials.
- Collect and analyze representative bulk samples of materials suspected of containing asbestos.
- Conduct limited lead-based paint testing of potential re-useable components with painted surfaces suspected of containing lead. Testing will be accomplished using a Niton X-ray fluorescence (XRF) spectrum analyzer.
- Assign a hazard rating based on asbestos content with respect to the materials condition, friability, accessibility, and hazard potential.
- Document the various materials locations current conditions.
- Generate a final report, documenting the sample locations, analysis results, and conditions.

B. Site Description

The subject Site included the buildings, structures, and components at the Upper Harbor Terminal located in Minneapolis, Minnesota. The areas included in the inspection are indicated on the attached Figure 1 – Site Key map located in Appendix F.

C. Results

C.1. Asbestos

A total of 70 bulk samples were collected on August 25 - 26, 2015 and submitted to EMSL Analytical, Inc. for Polarized Light Microscopy (PLM) analysis.

C.1.a. Asbestos-Containing Materials

The following is a summary of materials found or assumed to contain greater than one percent asbestos (ACMs by regulatory definition).

54 Warehouse

- 1" – 6" pipe fitting insulation on fiberglass insulated piping contains 2 percent amosite (asbestos).
- 9" x 9" floor tile (cream, brown, tan) contains 3 percent chrysotile (asbestos) with associated floor tile mastic (black) contains 5 percent chrysotile.
- Asphalt roof flashing contains 20 percent chrysotile.
- Asphalt base roofing material – assumed.
- Roof seam sealer (gray) contains 12 percent chrysotile.
- Interior office window glazing (gray) contains 4 percent chrysotile.
- Interior office wall panel adhesive – assumed.
- Maintenance shop gaskets – assumed.

58 Rail Dump

- Transite (walls and roofing panels, and debris) contains 15 percent chrysotile.

61 Control Building

- 12" x 12" floor tile (brown) with associated mastic (black) contains 5 percent chrysotile.
- Asphalt base roofing and flashing material – assumed.

44 Office Building

- 2' x 4' ceiling panels – wobble fissured (salmon back) contains 2 percent chrysotile.
- 7" – 12" roof drain pipe fitting insulation contains 5 percent chrysotile and 2 percent amosite.
- Debris from the 7" – 12" roof drain pipe fitting insulation contains 5 percent chrysotile and 2 percent amosite.

- 1" – 6" pipe fitting insulation on fiberglass insulated piping 5 percent chrysotile and 2 percent amosite.
- Furnace expansion cloth (gray) woven contains 90 percent chrysotile.
- Sheetrock/joint compound contains 4 percent chrysotile.
- Transite ducting located under the floor slab – assumed.
- Interior and exterior door and window frame caulking (gray) contains 3 percent chrysotile.
- Asphalt base roofing and flashing material – assumed.

45 North Scale House

- 9" x 9" floor tile (tan) contains 3 percent chrysotile.
- Black floor tile mastic contains 5 percent chrysotile.
- Asphalt base roofing and flashing material – assumed.

C.1.b. Non-Asbestos-Containing Materials

The following is a summary of building materials found to contain no asbestos or materials that contain one percent or less asbestos (non-ACMs by regulatory definition).

54 Warehouse

- Vinyl baseboard (brown and bark brown) with adhesive
- Sheetrock/joint compound
- Interior window caulking (gray)
- 2' x 4' ceiling panels – fissured
- Exterior expansion joint caulking (gray)

58 Rail Dump

- Cellulose insulation

55 Shipping and Receiving

- 12" x 12" floor tile (wood pattern) with adhesive
- 2' x 4' ceiling panels – pitted
- Asphalt shingles (brown) with adhesive

65 -66 dome

- Interior concrete walls/ceilings
- Exterior foam (orange and tan)

61 Control Building

- 2' x 4' ceiling panels – fissured, pitted
- Sheetrock joint compound
- Vinyl baseboard (brown) with adhesive

56 Base Shed

- Asphalt roofing – rolled

64 Dome

- Interior concrete walls/ceilings
- Interior canvas
- Exterior foam (orange and tan) with synthetic wrap

49 North Mooring Cell

- 12" foil back with fiberglass insulation

63 dome

- Interior concrete walls/ceilings
- Exterior foam (orange and tan)

44 Office Building

- 6" ceramic floor tile (tan) with grout
- 1" – 6" fiberglass pipe insulation with tarry adhesive
- Carpet glue (tan) with leveler
- Wall panel adhesive (black)
- Exterior brick and mortar

72 Boiler Shed

- Sheetrock panels
- 12" – 18" valve insulation
- 12" – 18" fiberglass pipe insulation with foil

47 South Scale House

- 2' x 4' ceiling panels – pitted
- Linoleum flooring – tan
- Asphalt shingles (gray) with tar paper

45 North Scale House

- 2' x 4' ceiling panels - pitted, fissured
- Vinyl baseboard (brown) with adhesive
- Window and door frame caulking (gray)
- Exterior caulking at metal soffits (gray)

Refer to Table I in Appendix A, which lists individual functional spaces of the building, the suspect materials identified in that functional space, whether the suspect material was identified by analysis to be an ACM, an estimated amount of each suspect material for the functional space, and includes condition, assessment categories and hazard ratings based on subjective observations made by our representatives.

Bulk asbestos analysis was conducted in accordance with the Environmental Protection Agency's (EPA) Method 40 CFR, Chapter 1, Part 763, Subpart F, and Appendix A (7/1/87 Edition). Refer to Appendix B for Table II, which lists the homogenous material sample numbers, sample locations, suspect material descriptions, and the analysis results for each sample. This table summarizes the results from the Bulk Asbestos Laboratory Report, which is attached in Appendix D.

Note: One sample of the sheetrock/joint compound located in the upper office area of the 54 warehouse resulted in an asbestos concentration of less than one percent (<1%) asbestos when analyzed by PLM methodologies. This sample was further analyzed by PLM 400 Point Count Procedure in accordance with EPA Method 600/R-93/116. Results indicate that the sample was <1% asbestos and is considered non-ACM by regulatory definition. Refer to Appendix D for the Point Count Procedure Analysis Report.

Although not considered ACM and since trace amounts of asbestos were identified, this material is still regulated by the U.S. Occupational Safety and Health Administration (OSHA). OSHA prescribes work practices and prohibitions for work involving materials that contain any amount of asbestos regardless of the analytical concentrations and exposure levels. OSHA requires that employers inform employees about the presence of materials containing <1% asbestos and provide adequate training to employees that may perform work activities that involve these materials.

Bulk samples are retained at the laboratory for 60 days and then disposed of, unless instructed otherwise. Detailed quality-control information is available upon request.

C.2. Lead-Based Paint

Braun Intertec performed limited lead-based paint testing on August 25-26, 2015. A total of 26 XRF tests were performed on potential re-useable components painted surfaces. The EPA and Minnesota Department of Health (MDH) define “lead-based paint” as equal to or greater than 1.0 milligram per square centimeter (mg/cm²) via XRF analysis. The following painted surfaces had lead-based paint.

- Building 44 – exterior orange painted metal soffits and fascia
- Building 54 – interior yellow painted metal pipe guard
- 49 North Mooring Cell – yellow painted metal rope tie off

The U.S. Occupational Safety and Health Administration (OSHA) Lead in Construction Standard 29 CFR 1926.62 applies to all situations where employees are engaged in the disturbance of lead-containing coatings, regardless of the quantity of lead involved. Therefore, any XRF result above 0.0 mg/cm² is considered “lead-containing coatings” in order to be in compliance with the OSHA standard. The following painted surfaces had lead-containing paint.

- 52 South Dock – cream painted metal wall plate
- 52 South Dock – cream painted rope tie off

Refer to Table III. Lead-Based Paint Testing Results in Appendix C, which lists the sample numbers (1 through 26), sample locations, component descriptions, XRF field results, and the paint condition for each sample.

Field screening for lead-based paint was accomplished utilizing a XRF field portable analyzer, Model No. XLP703 (Serial No. 26139) equipped with a 40-milocurie CD-109 Source Model #XFB-3 installed on November 1, 2014.

C.3. Miscellaneous Regulated Waste

A visual inspection for miscellaneous regulated waste materials that require separate handling and disposal prior to disturbance during building renovation/demolition was also performed as part of this assessment.

The following is a list of items documented at the Site:

54 Warehouse

- Smoke detectors
- Exit signs
- Fluorescent lights
- HID Lamps
- HVAC systems
- Thermostats
- Hung space heater controls
- Lead acid batteries
- Exit signs
- Fire extinguishers
- Fire suppression system
- Roof top air conditioners
- Water fountains
- Refrigerators/freezers
- Vending machines
- Light ballasts
- Transformers
- Electrical panels
- Switch gear
- Pumps and motors
- Microwave oven
- Televisions
- Water heaters
- Door closers
- Grease
- Motors
- Aerosol spray cans
- Air compressor
- Automotive parts
- Computer equipment
- Gasoline containers
- Meters
- Miscellaneous cleaning supplies
- Overhead garage door openers
- Tires
- Kerosene heater
- Vacuum oil
- Compressor oil
- Brake fluid
- Motor oil
- Engine coolant
- Hydraulic fluid
- Degreaser
- Propane tanks

58 Rail Dump

- Explosion proof light fixtures with assumed ACM gaskets
- HID lamps
- Hydraulic equipment
- Rail receiving panel
- Space heater
- Treated timber
- Oil
- Degreaser

55 Shipping and Receiving

- Fluorescent lights
- Light ballasts
- Microwave oven
- In-wall AC unit
- Electrical panel
- Water cooler
- Fire extinguisher

61 Control Building

- Fluorescent lights
- Light ballasts
- HID lamps
- Roof top AC unit
- Oil
- Drinking fountains
- Control panels
- Security panels
- Electrical panel
- Thermostats
- Flammables cabinet
- Transformers
- Fire extinguishers
- Door closers
- Fire panels

65, 66, 68 Load Out Shelter and Domes

- HID Lamps
- Treated wood
- Conveyor motors
- Electrical panels
- Fertilizer

59 Red Elevator Tower

- HID lamps
- Conveyor motors
- Electrical panels
- Elevator with controls

57 Conveyor

- HID lamps
- Conveyor motors

56 Base Shed with Load Out Tower

- Diesel tank
- Motors and Pumps
- Explosion proof lamps
- Controls

60 Truck Dump Hoist

- HID lamps
- Space heaters with controls
- Switch gear
- Control panels
- Hydraulic equipment

67 Load Out Shelter

- HID lamps
- Treated wood
- Control panels
- Conveyor motors
-

64 Dome

- Fertilizer

50 North Dock

- Switch gear
- Conveyor motors
- Control panels

49 North Mooring Cell

- Switch gear
- Tires
- Control panels

63 Dome

- Switch gear
- Fertilizer
- Treated wood

69 Truck Dump

- HID Lamps
- Treated wood

59 4-Bins Elevator Tower

- HID Lamps
- Conveyor Motors

44 Office Building

- Fluorescent bulbs
- Light ballasts
- Exit signs
- Door closers
- Thermostats
- Switch gear
- Electrical panels
- Refrigerator/freezer
- Water heaters
- Meters

72 Boiler Shed

- HID lamps
- Switch gear
- Transformer
- Meters
- Gear lube
- Heat transfer fluid
- Generators
- Motors
- Diesel fuel
- Oil stained floors
- Unlabeled 55- gallon drums
- Tires
- Fluorescent bulks
- Light ballasts
- Oil
- Used oil filters
- Gasoline can
- Aerosol spray cans
- Thermostats
- Fuses

47 South Scale House (New)

- Fluorescent bulbs
- Light ballasts
- In-wall AC unit
- Computer equipment
- Propane torch

45 North Scale House

- Fluorescent bulbs
- Light ballasts
- Computer equipment
- Propane tank

D. Discussion

D.1. Asbestos-Containing Materials

D.1.a. Friable ACM

The following ACMs are classified as friable materials according to EPA 40 CFR Part 61 National Emission Standard for Hazardous Air Pollutants (NESHAPs):

54 Warehouse

- 1" – 6" pipe fitting insulation on fiberglass insulated piping

44 Office Building

- 2' x 4' ceiling panels – wobble fissured (salmon back)
- 7" – 12" roof drain pipe fitting insulation
- Debris from the 7" – 12" roof drain pipe fitting insulation
- 1" – 6" pipe fitting insulation on fiberglass insulated piping
- Sheetrock/joint compound

Note: The 7" – 12" roof drain pipe fitting insulation and associated ACM debris at the 44 Office Building was observed to be damaged at the time of our assessment. The ACM pipe fitting insulation and associated ACM debris should be cleaned up, HEPA vacuumed, and repaired by a certified asbestos abatement contractor and maintained in good condition to prevent potential exposure to asbestos. The remaining friable ACM's were observed to be in good condition at the time of our assessment. Friable ACMs are to be removed prior to disturbance by renovation/demolition in accordance with applicable state and federal regulations.

D.1.b. Category I Non-Friable ACM

The following ACMs are classified as a Category I non-friable materials according to EPA 40 CFR Part 61 National Emission Standard for Hazardous Air Pollutants (NESHAPs):

54 Warehouse

- 9" x 9" floor tile (cream, brown, tan)
- Asphalt roof flashing
- Asphalt base roofing material – assumed.
- Roof seam sealer (gray)
- Maintenance shop gaskets – assumed.

61 Control Building

- 12" x 12" floor tile (brown) with associated mastic (black)
- Asphalt base roofing and flashing material – assumed.

44 Office Building

- Furnace expansion cloth (gray) woven
- Asphalt base roofing and flashing material – assumed.

45 North Scale House

- 9" x 9" floor tile (tan) contains 3 percent chrysotile.
- Black floor tile mastic contains 5 percent chrysotile.
- Asphalt base roofing and flashing material – assumed.

The above Category I non-friable ACMs were observed to be in good condition at the time of our assessment. These materials should be maintained in good condition to prevent potential exposure to asbestos. Category I non-friable ACMs are not considered a hazard unless cut, drilled, sanded, or otherwise abraded. However, any Category I material that may become friable during renovation/demolition must be removed prior to that activity. Category I materials in good condition may be left in place for demolition. However, if left in place, the crushing or recycling of demolition debris is strictly prohibited. In addition, all demolition debris containing Category I materials must be disposed of at a landfill specifically permitted to accept this type of waste.

D.1.c. Category II Non-Friable ACM

The following ACMs are classified as Category II non-friable materials according to EPA NESHAPs:

54 Warehouse

- Interior office window glazing (gray)
- Interior office wall panel adhesive – assumed.

58 Rail Dump

- Transite panels (walls and roofing, and debris)

44 Office Building

- Transite ducting located under the floor slab – assumed.
- Interior and exterior door and window frame caulking (gray) contains 3 percent chrysotile.

Note: The ACM transite walls and roofing panels and associated ACM transite debris at the 58 Rail Dump was observed to be damaged at the time of our assessment. The ACM transite walls and roofing panels associated ACM debris should be cleaned up and repaired by a certified asbestos abatement contractor and maintained in good condition to prevent potential exposure to asbestos. The remaining Category II non-friable ACMs were observed to be in good condition at the time of our assessment. These materials should be maintained in good condition to prevent potential exposure to asbestos. Category II non-friable ACMs are not considered a hazard unless cut, drilled, sanded, or otherwise abraded. However, Category II non-friable ACMs are to be removed prior to disturbance by demolition in accordance with applicable state and federal regulations.

D.2. Lead-Based Paint

The U.S. Occupational Safety and Health Administration (OSHA) Lead in Construction Standard 29 CFR 1926.62 applies to all situations where employees are engaged in the disturbance of lead-containing coatings, regardless of the quantity of lead involved. Therefore, any XRF result above 0.0 mg/cm² is considered “lead-containing coatings” in order to be in compliance with the OSHA standard. Demolition of the building may involve disturbing lead-containing coatings. Contractors should be informed of the presence of lead coatings and that they will be required to comply with the OSHA lead standard.

D.3. Miscellaneous Regulated Waste

In the case of building renovation/demolition, any of the miscellaneous regulated waste items listed in Section C.3 that will be disturbed, must be removed prior to disturbance and must be recycled or disposed of in accordance with state and federal guidelines. In addition, all solid waste must be disposed of accordingly.

E. Limitations

In any building, the potential exists for hazardous building materials to be located inside walls, above ceilings, under floors, and other inaccessible areas. Also, the potential exists for hazardous materials to be found outside the building buried underground. This inspection was limited to areas available for observation via non-destructive means. Therefore, Braun Intertec cannot be held responsible for the presence of any such hidden materials. In the case of building renovation or demolition, contractors involved in the project should be made aware of this potential. If previously unidentified suspect hazardous building materials are exposed during their activities they should be sampled and analyzed for content prior to any disturbance.

In performing its services, Braun Intertec used that degree of care and skill ordinarily exercised under similar circumstances by reputable members of its profession currently practicing in the same locality. No warranty, express or implied, is made.

F. Asbestos Building Inspector Certification

I, the undersigned, do hereby certify that I am an accredited Asbestos Building Inspector in the State of Minnesota. A photocopy of my current asbestos building inspector certificate is attached in Appendix E.

Signature:  Date: 9-17-15
Gerald J. Wallerius, CHMM
Project Scientist
Minnesota Department of Health Asbestos Inspector No: AI2305