WE ARE BUILDING
A BETTER HARVEY

Integrity . Unity . Pride

Christopher J. Clark, Mayor
CITY OF HARVEY

REQUEST FOR PROPOSALS

Bid Number: 2023-08-02
for
BUILDINGS DEMOLITION PROJECT

A "Building a Better Harvey" Initiative

BID NUMBER:	2023-08-02
BID ISSUE DATE:	Monday, August 28, 2023
BID DUE:	Tuesday, September 12, 2023 at 10:00am (CT)
BID OPENING DATE:	Tuesday, September 12, 2023 at 10:01am (CT)
AWARD OF BID:	The City anticipates awarding the contract before the end of September

REQUEST FOR PROPOSALS
BUILDINGS DEMOLITION PROJECT
CITY OF HARVEY

This Request for Proposals ("RFP") is being issued by the City of Harvey ("City"), acting pursuant to the City's charter. The purpose of this RFP is to solicit proposals from qualified Demolition Contractors ("Contractor" or "Contractors") known to be experienced and regularly engaged in the demolition and removal of buildings, basements, and foundations, as well as the demolition and removal of site improvements, including but not limited to retaining walls, pavement, concrete, foundations, and landscaping. Satisfactory evidence that the Contractor has the necessary capital, equipment, experience, and personnel to complete the work in in accordance with all application federal, state, and local regulations may be required. The 2023 Harvey Buildings Demolition Project ("Project") includes the demolition and removal of five (5) city-owned properties.

The City will accept proposals via email at procurement@cityofharveyil.gov until Tuesday, September 12, 2023 by 10:00am (CT) as described in the RFP. Bids should be submitted via email with the subject line "BUILDINGS DEMOLITION PROJECT RFP – [COMPANY NAME]."

Bids will be publicly opened and read aloud in the City's Conference Chambers on Tuesday, September 12, 2023 at 10:01am (CT).

The RFP can be accessed here:
https://www.cityofharveyil.gov/building-inspectional-services/.

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1. INTRODUCTION

1.1. OVERVIEW

There are approximately 1,400 vacant and blighted building structures that need to be demolished or rehabilitated. The Harvey Buildings Demolition Project is part of Mayor Clark's "Building a Better Harvey" initiative and represents the second phase of a broader effort to demolish and reactivate vacant and blighted properties. The City intends to use Illinois Housing Development Authority's (IHDA) Strong Communities Program (SCP) funds as well as certain TIF dollars to finance the demolition program herein.

This Request for Proposals ("RFP") is being issued by the City of Harvey ("City"), acting pursuant to the City's charter. The purpose of this RFP is to solicit proposals from qualified Demolition Contractors ("Contractor" or "Contractors") known to be experienced and regularly engaged in the demolition and removal of buildings, basements, and foundations, as well as the demolition and removal of site improvements, including but not limited to retaining walls, pavement, concrete, foundations, and landscaping. Satisfactory evidence that the Contractor has the necessary capital, equipment, experience, and personnel to complete the work in in accordance with all application federal, state, and local regulations is required. The 2021 Harvey Residential Demolition Project ("Project") includes the demolition and removal of five (5) city-owned buildings.

The City is seeking to encourage participation by respondents who are MBE/WBE or Section 3 business enterprises.

Nothing in this RFP shall be construed to create any legal obligation on the part of the City or any respondents. The City reserves the right, in its sole discretion, to amend, suspend, terminate, or reissue this RFP in whole or in part, at any stage. In no event shall the City be liable to respondents for any cost or damages incurred in connection with the RFP process, including but not limited to, any and all costs of preparing a response to this RFP or any other costs incurred in reliance on this RFP. No respondent shall be entitled to repayment from the City for any costs, expenses or fees related to this RFP. All supporting documentation submitted in response to this RFP will become the property of the City. Respondents may also withdraw their interest in the RFP, in writing, at any point in time as more information becomes known.

The City will accept proposals via email at procurement@cityofharveyil.gov for the demolition of five (5) city-owned buildings within the City until Tuesday, September 12, 2023 at 10:00am (CT) as described in the RFP. Bids should be submitted via email with the subject line "BUILDINGS DEMOLITION PROJECT RFP – [COMPANY NAME]."

Bids will be publicly opened and read aloud in the City's Conference Chambers on Tuesday, September 12, 2023 at 10:01am (CT).

1.2. PROJECT TIMEFRAME

Demolition of all five (5) buildings must be complete by December 31, 2023.

1.3. TERM OF CONTRACT

Any contract awarded pursuant to this RFP solicitation shall be for a contract period up to 6 months, with the possibility of an extension. The contract will be made on the basis of a proposal for five (5) buildings.

1.4. REGULATIONS

The selected Contractor shall comply with all codes, standards, regulations, and workers' safety rules that are administered by federal agencies (HUD, EPA, OSHA, and DOT), state agencies (State OSHA, DNR, and DPH), and any other local regulations and standards (i.e., building codes) that may apply.
More specifically, the selected Contractor shall comply with all Federal, state, and local safety laws and regulations applicable to the execution of the Project including but not limited to: handling, storing and disposal of toxic or hazardous substances and materials (“Hazmat”); "Right to Know"; Illinois Dig-Safe (JULIE/Dial 811); Occupational Safety and Health Agency (OSHA); Illinois Department of Labor (IDOL); and other applicable federal, state and local codes laws and regulations regulating worker safety, transport and disposal. Contractor shall post any applicable workplace notices as required by Law.
The Contractor shall secure and shall pay for any required notifications, building or other permits applicable to completion of the Work. Contractor shall coordinate all efforts required to obtain required permits. All permits and governmental fees, licenses, and inspections necessary for proper execution and completion of the Work shall be secured and paid for by Contractor. Contractor shall comply with and give notices required by laws, ordinances, rules, regulations, and lawful orders of public authorities bearing on performance of the work.

2. CONTRACTOR REQUIREMENTS

2.1. SCOPE OF WORK

The City seeks proposals from qualified Contractors to provide demolition services for five (5) buildings located within the City's corporate limits. **Appendix A** includes a list of the properties to be demolished. Structures are to be demolished and disposed of according to the standard demolition specifications provided in **Appendix B.** The Asbestos and Lead-Based Paint Testing Report ("Environmental Assessment Reports") for each property is provided in **Appendix C.**

2.2. QUALIFICATIONS

Proposals are solicited only from qualified Contractors known to be experienced and regularly engaged in work of similar character and scope to that covered in this RFP. Satisfactory evidence that the bidder has the necessary capital, equipment, experience, and personnel to do the work is required. A detailed description of the Contractor's qualifications shall be included with the proposal, as described in **Section 3: Proposal Requirements.**

At a minimum, Respondents must have the following qualifications:

1. **Licenses and certifications.** Respondents shall provide proof of IDPH license and any other licenses or certifications.
2. **Prior experience.** Respondents shall provide satisfactory evidence years of experience and detailed qualifications in performing the range of demolition services on various property types in compliance with NESHAP standards, including team's resumes.
3. **Capacity.** Respondents shall provide satisfactory evidence that they have the necessary capital, equipment, experience, and personnel to complete the Project within the indicated timeframe.
4. **General Qualifications.** Respondents to provide a statement confirming the company's willingness and capacity to:
    - Perform the work and coordinate the work with others involved on the project;
    - Communicate and work effectively with the City of Harvey, its officials, administration, staff, and consultants with respect to any of the services required;
    - Coordinate effectively with public agencies and officials;
    - Submit reviews, reports, and inspection results in writing and in a timely manner to the City of Harvey, if so requested; and
    - Attend any regular or special meetings, as requested by the City.
5. **Project-specific Qualifications.** Respondents to provide a statement confirming the company's capacity complete the Project in accordance with the Standard Demolition Specifications described in **Appendix B.**

2.3. INSURANCE

The Contractor shall procure and maintain for the duration of the contract insurance against claims for injuries to persons or damages to property which may arise from, or in connection with the performance of the Work by the Contractor, his agents, representatives, employees, or subcontractors.

Coverage shall be at least as broad as:

- Insurance Service Office Commercial General Liability occurrence form CG 0001 (Ed. 11/85).
- Insurance Service Office Business Auto Liability coverage form number CA 0001 (Ed. 10/90), Symbol 01 "Any Auto" or Business Auto Liability coverage form number CA 0001 (Ed. 1/87) and endorsement CA 0029 (Ed. 2/88) changes in Business Auto and Truckers coverage forms: Insured Contract.
- Workers' Compensation as required by the Labor Code of the State of Illinois and Employers' Liability Insurance.

Contractor shall maintain limits no less than:

- Commercial General Liability: $1,000,000 combined single limit per occurrence for bodily injury, personal injury and property damage. The general aggregate shall be twice the required occurrence limit. Minimum General Aggregate shall be no less than $2,000,000 or a project/contract specific aggregate of $1,000,000.
- Business Automobile Liability: $1,000,000 combined single limit per accident for bodily injury and property damage.
- Workers' Compensation and Employers' Liability: Workers' Compensation coverage with statutory limits and Employers' Liability limits of $1,000,000 per accident.

Any deductibles or self-insured retentions must be declared to and approved by the City. At the option of the City, either: the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the City of Harvey, its officials, agents, employees and volunteers; or the Contractor shall procure a bond guaranteeing payment of losses and related investigation, claim administration and defense expenses.

The policies are to contain, or be endorsed to contain, the following provisions: The City of Harvey, its officials, agents, employees and volunteers are to be covered as insured’s in respect to liability arising out of activities performed by or on behalf of the Contractor; products and completed operations of the Contractor; premises owned, leased or used by the Contractor; or automobiles owned, leased, hired or borrowed by the Contractor. The coverage shall contain no special limitations on the scope of protection afforded to the City of Harvey, its officials, agents, employees and volunteers. The Contractor's insurance coverage shall be primary as respects the City of Harvey, its officials, agents, employees and volunteers. Any insurance or self-insurance maintained by the City of Harvey, its officials, agents, employees and volunteers shall be excess of Contractor's insurance and shall not contribute with it. Any failure to comply with reporting provisions of the policies shall not affect coverage provided to City of Harvey, its officials, agents, employees and volunteers.

The Contractor shall furnish the City with certificates of insurance naming the City of Harvey, its officials, agents, employees and volunteers as additional insured, and with original endorsements affecting coverage required by this clause. The certificates and endorsements for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. The certificates and

endorsements shall be submitted to, approved by the City before any of the Work commences. The City reserves the right to request full certified copies of the insurance policies and endorsements.
An Additional Insured Endorsement providing coverage to the City of Harvey, its officials, agents, employees and volunteers shall also be furnished to the City.

2.4. CERTIFICATIONS OF INSURANCE

Included in bid package, Respondents shall provide to the City complete certificates of insurance to meet the above requirements. Policies shall be endorsed to provide the City at least 30 days written notice of reduction, cancellation or intent not to renew coverages as called for above. If insurance is canceled, reduced, non-renewed or otherwise is not in effect to the minimum required coverage, the Selected Contractor must cease work on this bid.

The Selected Contractor shall provide the City with a copy of its required insurance policies and certificates of insurance as described above. If the Selected Contractor does not provide such materials in the time provided for, the Selected Contractor will be disqualified and the bid will be awarded to the next lowest bidder or in the creation of a new request for bids.

2.5. PERFORMANCE BOND

A Performance Bond will be required for this Project. The Selected Contractor, within seven (7) calendar days of receipt of written notice from the City, must furnish a Performance Bond in the amount of 100% of the contract value. The Bond must be on the Contractor's Performance Bond form, issued by a surety that is satisfactory to the City Comptroller.

2.6. DAMAGE TO PERSONS OR PROPERTY

The Selected Contractor also accepts sole responsibility for any damage to any person or damage to public or private property resulting from their performance of the work, whether based on negligence or any other legal or equitable claim.

The Selected Contractor will protect, defend, and hold harmless the City from any and all damage, claim, liability, or expenses whatsoever, or any amounts paid in compromise there of arising out of or connected with the performance of this contract, including those related to the Selected Contractor's (or its subcontractors') negligence.

2.7. QUALITY OF SERVICE

The City expects the Selected Contractor to maintain all equipment in a clean and well-operating fashion, with special consideration for proper maintenance and care of all elements, items and equipment mentioned in this document. The Selected Contractor will operate in a professional manner and keep all noise and other nuisances to a minimum at all times while under contract with the City. The

City is looking to inconveniencing the public as little as possible, considering the service Selected Contractor is providing. The Selected Contractor shall file all documents outlined in this RFP in a timely and well-organized manner.

2.8. OPERATION OF VEHICLES

The Selected Contractor shall operate all company vehicles in a manner so as to not impede traffic flow on City streets. Company vehicles are not to be left unattended for any reason except for emergencies or in the actual performance of the job. When a vehicle is left unattended for the actual performance of the job, it shall be according to all City Codes and ordinance in place at that time.

2.9. SUPPORT FACILITIES

Selected Contractor shall have an available office with sufficient staff and communications facilities to assure ready accessibility and prompt response to the needs of the City.

2.10. CONTRACTOR'S PAYMENT OF TAXES, PERMITS, ETC.

The Selected Contractor shall be solely responsible for:

A) Payment of wages to its work force in compliance with all Federal and State laws, including the Federal and State Wage and Hour laws.
B) Payment of any and all FICA, unemployment contributions and other payroll-related taxes or contributions required to be paid by the Selected Contractor under State and Federal law.
C) Payment of all applicable Federal, State, or Municipal taxes, charges or permit fees, whether now in force or subsequently enacted.
D) Payment of any and all suppliers, merchants, or vendors from whom the Selected Contractor obtains items and materials related to the contract.

The Selected Contractor shall indemnify and hold the City harmless from all claims arising from the foregoing payment obligations of the Selected Contractor.

2.11. ASSIGNMENTS OF SUBCONTRACTING

The Selected Contractor shall not assign, subcontract or otherwise transfer its duties and/or obligations under this proposal, without prior written consent of the City. If the bidder anticipates that it will need to subcontract its duties in order to fulfill the Contract requirements, that information must be disclosed in the Bidder's response.

2.12. FAIR EMPLOYMENT PRACTICES

The Selected Contractor agrees to not discriminate against any employee or applicant for employment, to be hired in the performance of the contract with respect to hire, tenure, term, conditions or privileges of employment, or any other matter directly or indirectly related to employment, because of sex, race, color, religion, nation origin, ancestry, handicap or any other basis prohibited by State or Federal law or regulations.

2.13. PREVAILING WAGES

As applicable when this Contract calls for the construction of a "public work", within the meaning of the Illinois Prevailing Wage Act, 820 ILCS 130/.01 et. seq. ("the Act"), then the Act requires all contractors and subcontractors to pay laborers, workers and mechanics performing services on public works projects no less than "prevailing rate of wages", defined as hourly cash wages plus fringe benefits, in the county where the work is performed. The Contractor is solely responsible to ascertaining the current and applicable Prevailing Wages for the work; and determining, and complying with, all other applicable provisions of Illinois statutes pursuant to this section. For information regarding current prevailing wage rates, please refer to the Illinois Department of Labor's website at: http://www.state.il.us/agency/idol/rates.HTML. All contractors and subcontractors rendering services

under this Contract must comply with all requirements of the Act, including but not limited to, all wage notice and benefits, posting and record keeping duties. The Contractor should contact the Illinois Department of Labor, if there is uncertainty as to the application of prevailing wages for the Work. By executing this Contract the Contractor acknowledges that it has received written notice from the City of Harvey pursuant to the Act that, as applicable, not less than the prevailing wages as found by the City of Harvey or The Department of Labor or determined by the court on review shall be paid to all laborers, workers and mechanics performing the Work.

2.14. TIME IS OF THE ESSENCE

Time is of the essence in this matter. The Selected Contractor must schedule its work and that of its subcontractors to meet the needs and requirements of the City. The Selected Contractor must perform the work expeditiously in cooperation with the City. The Selected Contractor's sole remedy for any delay caused by the City or its agents, employees, contractors, or subcontractors will be an extension in the contract time; damages will be unavailable to Selected Contractor on such grounds.

2.15. CONTRACT EXECUTION

The Contractor to whom the Contract is awarded shall, within ten (10) calendar days after the notice of award, enter into a written contract with the City. Failure to execute a contract will be considered abandonment of the award and the City shall have no further obligation to that bidder.

2.16. BREACH OF CONTRACT AND CITY'S RIGHT TO TERMINATE CONTRACT

In the event that any of the provisions of this bid and/or resulting contract are breached by the Selected Contractor, the City shall give written notice to the Selected Contractor of the breach or pattern of behavior that constitutes the breach and allow the Selected Contractor to resolve the breach or pattern of behavior that constitutes the breach within ten (10) calendar days of Selected Contractor's receipt of notice. If the breach or pattern of behavior is not resolved, then the City Administrator of the City of Harvey shall have the right to cancel any contract by sending written notice to the Selected Contractor of the cancellation. If the Selected Contractor should be judged bankrupt, if it should make a general assignment for the benefit of its creditors, if a receiver should be appointed on account of its insolvency, if it should persistently or repeatedly refuse to supply enough labor, materials and/or equipment to meet the scope of work of the contract, if it should persistently disregard laws of the State of Illinois and/or ordinances of the City, or if it fails to comply and fulfill its obligations under any provision of the contract resulting from its bid, the City may, without prejudice to any other right or remedy, terminate the contract immediately. If the Selected Contractor fails to perform or complete the demolition and clean-up of the residential building as agreed or otherwise breaches its duties under this bid or the resulting contract, the Selected Contractor shall be responsible for any and all costs the City incurs in obtaining satisfactory performance of the project and/or litigation costs and attorneys fees to enforce its rights under the bid and this contract. Such relief shall be in addition to any other legal and equitable remedies available to the City.

2.17. CITY'S RIGHT TO MODIFY CONTRACT

The City reserves the right to negotiate with the Selected Contractor for a change in terms of the contract during the term of the contract and to make adjustments relative to the implementation of a change that reduces or modifies the need for the engineering services. If the City and the Selected Contractor are unable to agree on a revised contract, the City may seek new proposals and, upon a minimum of ten (10) calendar days written notice from the City, may terminate the unexpired portion of the contract. The City shall not be liable for any cost under this section beyond the contract price for the period where service is actually provided.

2.18. NO CONFLICT OF INTEREST

The bidder must provide a statement that it has no conflicting financial or professional interests and is qualified to perform the services requested. A bidder working for the City would be considered to have a conflicting interest if they derive any personal profit or gain, directly or indirectly, by reason of his or her participation with the City.

2.19. PAYMENT

Invoices to City shall include a 10% Retainage as part of this Project. The City shall pay for acceptable work within thirty (30) days of receipt of invoice and all supporting documentation necessary for the City to verify that satisfactory delivery of services have been provided. The City will not be obligated to pay for any work or services that were not ordered under the Contract or with a Change Order. Any work or services which fail tests and/or inspections are subject to correction or replacement at the cost of the Contractor.

3. PROPOSAL REQUIREMENTS

3.1. PROPOSAL REQUIREMENTS

A complete RFP submittal will include the following items:

1. **Cover Letter.** All Respondents shall submit a Cover Letter signed by a duly authorized officer or representative of the firm, not to exceed two pages in length. The Cover Letter must also include the following information:
    - The principal place of business and the contact person, title, telephone/fax numbers and email address.
    - A summary of the qualifications of the Respondent and team.
2. **Threshold Requirements.** These documents must be submitted and acceptable before the City will review the Main Proposal:
    - Certificate of Good Standing (Corporation) or Certificate of Existence (Limited Liability Company): Provide a copy of relevant certificate(s) issued by the Illinois Secretary of State.
    - Evidence of Insurance: Provide evidence of the insurance coverages described in **Section 2.3. Insurance.**
    - License: Provide State license and certifications in accordance with title XI of the Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (FIRREA) (12 U.S.C. 3331 et seq.)
    - Conflict of Interest Statement & Supporting Documentation: Disclose any professional or personal financial interests that may be a conflict of interest in representing the City of Harvey. In addition, all Respondents shall further disclose arrangement to derive additional compensation from various investment and reinvestment products, including financial contracts.
3. **Main Proposal.** Please provide the following information (this information is the main substance for the selection criteria stated under the Section 4: Evaluation and Scoring):
    - Qualifications: Provide evidence of the qualifications described in **Section 2.2**.
    - Technical Approach: Briefly describe your company's approach for completing the project in accordance with the Standard Demolition Specifications provided in **Appendix B.** Describe any expectations and requirements of the City of Harvey.
    - Three (3) References: Provide a list of at least three (3) professional references for whom the contractor has or is currently providing demolition services.
    - MBE/WBE Participation: Respondents should state whether they are an MBE/WBE. If so, please provide a copy of a current MBE/WBE certification letter or an affidavit.
4. **Price Proposal.** Complete and submit the Price Proposal Form provided in **Appendix D.**

3.2. CONTRACTOR RESPONSIBILITY

The City of Harvey will not be liable for any cost incurred in the development of a proposal responsive to this request. By submitting a bid to do the work, the Contractor represents that it is fully informed concerning the scope of the project, the requirements of the Contract, the physical conditions likely to be encountered in the work, and the character, quality, and quantity of services required by the City.

The Selected Contractor shall furnish all labor materials, supplies, devices, or tools needed to perform the required services. The Selected Contractor will not be entitled to additional compensation if it later determines that conditions require methods or equipment other than those anticipated in making its bid. In addition, the Selected Contractor shall provide all vehicles and other equipment and material necessary for the work. Respondents having questions regarding this RFP should request clarification before submitting a bid. Negligence or inattention of the Bidder in filing a bid, or in any phase of the performance of the work, shall be grounds for refusal of the City to agree to additional compensation. Respondents having questions regarding this RFP contact the City for clarification.

3.3. INCURRING COSTS

The City is not liable for any costs incurred by contractors prior to the issuance of a contract.

3.4. RESPONSE DATE

To be considered, bids must be received at the City on or before the time specified in the Invitation to Bid. The contractor's name must be included in the email subject line. All information submitted in the bid, including but not limited to bid prices, equipment, etc., must remain valid and available for acceptance by the City for at least ninety (90) days past the submission deadline.

3.5. OPENING OF BIDS

All bids received will be publicly opened and read at the time and place specified in the Invitation to Bid. All Respondents are invited to be physically present for the bid opening.

3.6. REJECTION OF BIDS

The City reserves the right to reject any or all bids, in part or in their entirety, or to waive any informality or defect in any bid, or to accept any bid which, in its opinion is deemed most advantageous to the City.

3.7. RESPONSE TO RESPONDENT QUESTIONS

Explanations desired by a prospective bidder shall be requested of the City by email, and if explanations are necessary, a reply shall be made in the form of an addendum, a copy of which will be forwarded to each bidder. Every request for such explanation and any requests to inspect the subject properties shall be submitted by email to procurement@cityofharveyil.gov by Tuesday, September 5, 2023 by 5:00pm (CT). Contractors seeking to inspect the subject properties will be required to sign a waiver indemnifying the City of any liabilities associated with inspecting the properties, which may be hazardous.

3.8. MATERIAL SUBMITTED

All materials submitted as part of a bid will become the property of the City. The City reserves the right to use any or all ideas presented.

4. PROPOSAL EVALUATION & SCORING

In evaluating responses to this Request for Proposal, the City will take into consideration the experience, capacity, and pricing that are being proposed by the Respondent. The following Evaluation Criteria will be considered in reviewing RFP submittals:

Criteria	Description	Points
Prior Experience	Respondents will be awarded up to 20 points for experience in providing demolition services. Consideration will be given to respondents who have familiarity with the area, including knowledge of and experience working with City Staff.	**20**
Capacity	Respondents will be awarded up to 20 points for their demonstrated Capacity to complete the Project within the designated timeframe. Consideration will be given to respondents who have demonstrated their capacity to effectively manage schedules and budgets.	**20**
Pricing	Respondents will be awarded up to 20 points for pricing.	**20**
WBE/MBE Participation	Respondents will be awarded up to 20 points for their experience in meeting MBE/WBE, City of Harvey's Local Hiring, Davis-Bacon, and HUD Section 3 requirements.	**20**
	Total Points	**80**

Appendix A. List of Properties to be Demolished

#	ADDRESS
1	15328 Wood Avenue
2	15303 Broadway Avenue
3	15305 Broadway Avenue
4	15307 Broadway Avenue
5	15315 Broadway Avenue

APPENDIX B. STANDARD DEMOLITION SPECIFICATIONS

DEMOLITION SPECIFICATIONS

The selected Contractor shall:

- Secure all necessary permits the City of Harvey.
- Keep dust to a minimum at demolition site. Use sprinklers or water trucks as necessary.
- Properly notify utility providers of the pending demolition and request and ensure disconnection of Utilities, Gas, Electric, Cable TV and any other utility to the residential building.
- Provide to the City proof of disconnection of all utilities.
- Demolish and remove main structure.
- Demolish and remove of any accessory structures, footings, and concrete slabs.
- Demolish and remove entire driveway and basement/crawlspace walls and floor. The City is amenable to the Contractor utilizing certain concrete basement/crawlspace materials as fill. The Contractor must communicate to the City what concrete materials, if any, will be used for fill.
- Demolish and remove sidewalk between main entry door and City, without removing City sidewalk in R/O/W at street. Contractor shall protect the City sidewalk and replace at its own cost any sections that are damaged due to the demolition work.
- Carefully clean and keep the project site clean from rubbish and refuse, as work progresses.
- Remove all building material, rubbish, or refuse from the project site *daily*; no material or debris may be buried on site.
- Furnish to the City all documentation regarding the proper disposal of all rubbish, soil, refuse, and any other debris.
- Keep the surface of the sidewalks and streets affected by its work, including decking and temporary paving, in a clean, neat, and safe condition, limiting to the extent possible dust and smoke on and around the project site. The Contractor shall sprinkle with water or otherwise treat the site surface and surrounding area being used by the contractor (i.e. street, right-of-way, etc.) sufficiently to keep down any dust generated during the progress of work. Contractor must remove all piles of dirt or debris.
- Ensure that NO fires of any kind or burning of any debris occurs.
- Properly remove asbestos and / or lead paint in compliance with applicable laws related thereto. The Asbestos and Lead-Based Paint Testing Report for each property is provided in **Appendix C.**
- The Contractor shall completely fill below grade areas and voids resulting from the demolition of structures. All unsuitable material shall be removed from the excavation prior to placement of fill. Use satisfactory materials containing native soils, stone, gravel, or sand, free from debris, trash, frozen materials, roots, and other organic matter. Concrete and masonry items measuring less than 6" diameter and certain basement foundation materials may be used as part of fill material if they are suitably shaped to obtain a dense compacted mass, are placed without nesting so as to prevent void. Place any concrete and masonry a minimum of 4 feet below finished subgrade. Before placing fill materials, ensure that areas to be filled are free of standing water, frost, frozen material, trash, and debris. The fill, wherever required, shall be compacted to at least 95% maximum laboratory dry density as determined by the Modified Proctor Test, measured by an independent testing firm hired and paid for by the Contractor and approved by the City. Placement of backfill should not proceed until the City or his agent has inspected and approved the subgrade or the underlying layer of backfill. Place fill materials in horizontal layers not exceeding 8 inches in loose depth. Compact each layer, by proof rolling with bulldozer.

- Rough grade to restore approximately the original contour, smooth to blend with adjacent ground, and ensure there are no isolated depressions and that no ponding will occur.
- Ensure that demolition work does not cause any increase of water velocity or damming of surface water as to create a water issue at adjacent or neighboring sites.
- Reseed or plant anew any grass plot or plots disturbed, and replace any shrubbery, trees not specified for removal. Apply six (6) inches of screened topsoil to each lot that is free from pulverized building materials and construction debris. Apply grass seed mix of 70% tall fescue, 20% perennial rye grass and 10%Kentucky Blue Grass applied at a rate of 100 pounds per acre, placed upon screened Topsoil. If weather conditions due not support the application of seed, apply mulch.

REGULATORY AND SAFETY REQUIREMENTS, PERMITS, FEES, AND NOTICES

The Contractor shall comply with all Federal, State, and Local safety laws and regulations applicable to the execution of the Work including but not limited to: handling, storing and disposal of toxic or hazardous substances and materials (“Hazmat”); "Right to Know"; Illinois Dig-Safe (JULIE/Dial 811); Occupational Safety and Health Agency (OSHA); Illinois Department of Labor (IDOL); and other applicable federal, state and local codes laws and regulations regulating worker safety, transport and disposal. Contractor shall post any applicable workplace notices as required by Law.

Contractor shall secure and shall pay for any required notifications, building or other permits applicable to completion of the Work. Contractor shall coordinate all efforts required to obtain required permits. All permits and governmental fees, licenses, and inspections necessary for proper execution and completion of the Work shall be secured and paid for by Contractor. Contractor shall comply with and give notices required by laws, ordinances, rules, regulations, and lawful orders of public authorities bearing on performance of the work.

SITE AND WORK AREA PROTECTION, SECURITY AND WEATHER PROTECTION

The Contractor is responsible to protect and secure the demolition site using at minimum vinyl construction fencing sufficiently installed, secured and maintained to prevent unauthorized access to the site. During execution of the Work, Contractor is solely responsible take necessary precautions not to disturb or damage any existing structures, landscaping, sidewalks, traffic signals, street lights, roads, trees, fencing, posts, poles, neighboring property walls, neighboring property lots, lawns, etc., or other items. Contractor shall restore any damaged items to original condition, and as directed by the City. Contractor shall provide and erect acceptable physical barriers and solid barricades, fences, signs, and other vehicular and pedestrian traffic control devices to protect the work from the public, and to protect from damage or access adjacent properties, adjacent property items, and adjacent occupants and transient persons, as required by City of Harvey Building Code and other applicable regulations. Contractor shall be solely responsible to secure the building site, and replace and maintain any existing boarded up windows, doors, or other openings temporarily removed at the end of each work day. Until the time of substantial completion, the building shall not be left open and the site shall not be left unsecured at any time the Contractor is not on site or the Work is being completed. Contractor is solely responsible to exercise special care, procedures to install physical, and or solid barriers, barricades or fencing to secure the site and prevent unauthorized access to any excavations or holes or cellars, resulting from demolition.

Any damages to Work site and neighboring property, including adjacent structures and items, caused by demolition activities shall be remedied by Contractor as directed by City, at Contractor’s sole expense.

The Contractor shall take necessary precautions to avoid damage to existing utilities, infrastructure, vegetation, trees or other items to remain in place, to be reused, or to remain the property, or adjacent City property, right-of-way and alleys, including paved parking spaces, sidewalks and utility appurtenances. Damaged items shall be repaired or replaced as required by City. Coordinate the work of this section with all other work indicated. Construct and maintain shoring, bracing, and supports as required. Ensure that structural elements are not overloaded. Increase structural supports or add new supports as may be required as a result of any cutting, removal, or demolition work performed under this contract. Do not overload structural elements. Pavements to remain as described herein and in other sections of these specifications. Provide new supports and reinforcement for existing construction weakened by demolition or removal work. Repairs, reinforcement, or structural replacement require approval by City to performing such work.

In the course of executing the Work, Contractor shall: not disturb existing construction beyond the extent indicated or necessary for installation of new construction; provide temporary shoring and bracing for support of building components to prevent settlement or other movement; provide protective measures to control accumulation and migration of dust and dirt in all work areas; remove dust, dirt, and debris from work areas daily.

The Contractor shall conduct Work in a safe, workmanlike manner providing suitable protection for the general public. Before, during and after the demolition work the Contractor shall continuously evaluate the condition of the structure being demolished and take immediate action to protect all personnel working in and the general public around or near the demolition site. Every excavation or area of construction on a site located five feet or less from the street or right of way line shall be enclosed with a suitable barrier to prevent the entry of unauthorized persons. Where located more than five feet from the street lot line, a barrier shall be erected, where required by the code official. All barriers shall be of adequate strength to resist wind pressure as specified by the Code Official. No area, section, or component of floors, roofs, walls, columns, pilasters, or other structural element will be allowed to be left standing without sufficient bracing, shoring, or lateral support to prevent collapse or failure while workmen remove debris or perform other work in the immediate area. Floors, roofs, walls, columns, pilasters, and other structural components that are designed and constructed to stand without lateral support or shoring, and are determined to be in stable condition, may remain standing without additional bracing, shoring, or lateral support until demolished, unless directed otherwise by City. Ensure that no elements determined to be unstable are left unsupported and place and secure bracing, shoring, or lateral supports as may be required as a result of any cutting, removal, or demolition work performed under this contract.

The Contractor shall install temporary barriers or barricade(s) at the Contractor's expense to control the spread debris or foreign objects which may cause potential damage to adjacent properties. Temporary barriers shall include netting or fabric designed to stop the spread of debris and foreign objects. Temporary barricade shall include a fence covered with a fabric designed to stop the spread of debris and foreign objects. Anchor the temporary barricade fence and fabric to prevent displacement by winds. Remove barricade when no longer required.

The Contractor shall comply with all applicable U.S. Environmental Protection Agency and Illinois Environmental Protection Agency requirements as required to complete the Work.
The use of fire, burning or incineration at the project site for the disposal of refuse and debris is strictly prohibited. The use of explosives is strictly prohibited.

ARCHAEOLOGICAL AND HISTORICAL RESOURCES

All items having any apparent historical or archaeological interest, which are discovered in the course of any demolition, construction or other activities related to the Work, shall be carefully preserved and reported immediately to City for determination of appropriate actions to be taken.

POLLUTION CONTROLS

Under the Authority of Section 112 of the Clean Air Act, as amended, 42 U.S.C. 1857 (C-7), the Administrator of the United States Environmental Protection Agency (EPA) promulgated National Emission Standards for Hazardous Air Pollutants (NESHAP) on April 6, 1973, (38 F.R. 8820). Asbestos was designated a hazardous air pollutant, and standards were set for its use and control. Demolition of certain buildings and structures was determined to be a significant source of asbestos emissions. Contractors are required under Section 114(a) of the Clean Air Act allow EPA personnel to freely enter facilities or demolition sites, review records, inspect any demolition method, and sample or observe any omissions.

All demolition must be undertaken in compliance with the applicable provisions of the Clean Air Act and 40 C.F.R. Section 61.22(d). The Selected Contractor is responsible for compliance with NESHAP. The Selected Contractor shall complete and submit Notification of Intent to Renovate or Demolish form to Department of Buildings and Inspectional Services. This form must be mailed at least 10 working days prior to undertaking demolition. The Contractor is solely responsible to: provide dust control during demolition and debris removal; prevent the spread of dust and debris to neighboring sites and properties; and avoid the creation of any nuisance or hazard in the surrounding area.

BUILDING DEMOLITION REQUIREMENTS

All work shall be in accordance with applicable City of Harvey Building Codes. All street curbing, pavement and public walkways shall remain and be protected and repaired or replaced new if damaged during demolition activities, as directed by City. Prior to commencing with building demolition, and as incidental to the Work, Contractor shall remove and lawfully dispose of:

- Any existing vegetation, landscape shrubbery around the building perimeter to enable demolition of the building. Existing trees shall be protected as directed by City.
- All private man-made structures, such as, but not limited to: concrete slabs; footings, brick, concrete and stone walks and stairs; wood and metal stair railings; wood decks and ramps; stones, landscape block/stone edging; private light poles, post lamps and exterior light fixtures; fences; or any structures or appurtenances associated with the building, except as otherwise noted in other sections herein or as directed by City. Remove all private concrete walkway entrances and stairs, where existing.
- Any materials not specified above adjacent to or within building footprint, site property boundary or on the site, discovered in during the execution of the Work.
- All perimeter and interior walls, supports beams, columns and exposed pilings shall be removed from the site entirely, and lawfully disposed in compliance with all applicable regulations.
- Masonry, stone and concrete basement, cellar or crawl space floors shall be removed and structural fill placed and compacted. The City is amenable to the Contractor utilizing certain concrete basement/crawlspace materials as fill. The Contractor must communicate to the City what concrete materials, if any, will be used for fill.

DISPOSITION OF MATERIALS

All building contents, materials and equipment removed and not reused, including items allowed to be salvaged by the Contractor in related Sections, shall become the property of the Contractor and shall be removed from City property. Title to materials resulting from demolition, and materials and equipment to be removed, is vested in Contractor upon approval by City of Contractor's demolition and removal procedures, and authorization to proceed by City to begin demolition. City will not be responsible for the condition or loss of, or damage to, such property after contract award. Materials and equipment shall not be viewed by prospective purchasers or sold on the site. Except as specified elsewhere, no specific materials and equipment have been identified to be reused and may be removed at the discretion of the contractor. Concrete, masonry, and other noncombustible material, shall be removed from the site. Debris, rubbish, scrap, and other non-salvageable materials resulting from removal operations shall be disposed in compliance with all applicable Federal, State, and local regulations as contractually specified off the Site. Burning of any materials generated in conjunction with the Work is strictly prohibited.

TRAFFIC CONTROL AND PROTECTION

The Contractor shall be responsible for furnishing, installing, maintaining, relocating and removal of all signs, signals, pavement markings, traffic cones, barricades, warning lights, flagmen, and other traffic control devices which are used for the purpose of regulating, warning or directing traffic during the construction or maintenance of the improvement. The Contractor shall be responsible to maintain the appropriate signs and caution lights at all times of the day and night. Traffic control and protection shall be considered incidental to the Contract, and shall be the sole responsibility of the Contractor.

UTILITIES

It shall be the Contractor's sole responsibility to locate buried utilities when the possibility exists of a conflict with utilities and the work to be done under this contract. Hand-digging in proximity to buried utilities may be required and shall be considered incidental to the Contract.

WATER

City water for purposes necessary to complete the Work will be available to the Contractor at no cost. The Contractor shall obtain City water from a source determined by the City.

Appendix C. Environmental Assessment Reports

Limited Asbestos & Lead-Based Paint Survey Report

15303 Broadway Ave.
Harvey, IL 60426

Inspection Date: 7/31/2023

SPC Project No.: I23-599.101

August 18, 2023

SPECIALTY CONSULTING, INC.
Architects, Engineers & Scientists
2942 West Van Buren
Chicago, IL – 60612
Phone: (312) 319-7575
www.spc-inc.com

SIGNATURE PAGE

Limited Asbestos & Lead-Based Paint Survey Report

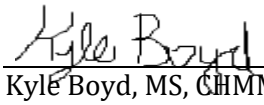
Project Site:

15303 Broadway Ave.
Harvey, IL 60426

Prepared for:

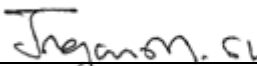
City of Harvey
15320 Broadway Ave.
Harvey, IL 60426

SPC Project #: I23-599.101

Prepared By:  August 18, 2023

Kyle Boyd, MS, CHMM
Sr. Project Manager

Date:

Reviewed By:  August 18, 2023

Jigar Shah, CIH, CSP, CHMM
Director of Industrial Hygiene

Date:

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EXECUTIVE SUMMARY

Scope and Objectives

Specialty Consulting, Inc. (SPC) was retained by the City of Harvey to conduct a limited asbestos and lead-based paint (LBP) survey of the structure located at 15303 Broadway Ave. in Harvey, Illinois. The purpose of this limited survey was to identify asbestos-containing material (ACM) and lead-based paint (LBP) that may require removal, special handling, and/or disposal prior to planned demolition activities. The survey was limited in scope due to the poor structural reliability of the structure. Only areas that could be safely accessed were assessed.

This limited survey was conducted from *July 31, 2023* through *August 1, 2023* by *David Avilla* and *Kyle Boyd* who are both state-licensed asbestos and lead Inspectors. The Illinois Department of Public Health (IDPH) issued licenses of the inspectors are provided in **Appendix F** of this report.

Findings

Asbestos-Containing Materials: ACM **was identified** during this limited survey. The materials that were identified as ACM include: exterior window caulk and roof field.

Please refer to **Table 3.1** for a complete list of building materials that were sampled during this limited survey. The laboratory results are provided in **Appendix A**.

Lead-Based Paint: LBP **was identified** on some of the painted components/surfaces tested during this limited survey. The surfaces/components that tested positive include:

- Window and Door Lintels
- Window Frames
- Garage Door
- Exterior Soffit
- Walls (Plaster, Brick, & Clay Tile)

The specific surfaces/components tested within the building are summarized in **Table 3.2**. XRF field data sheets are provided in **Appendix D**.

1.0 INTRODUCTION

Specialty Consulting, Inc. (SPC) was retained by the City of Harvey to conduct a limited asbestos and lead-based paint (LBP) survey of the structure located at 15303 Broadway Ave. in Harvey, Illinois. The purpose of this limited survey was to identify asbestos-containing material (ACM) and lead-based paint (LBP) that may require removal, special handling, and/or disposal prior to planned demolition activities. The survey was limited in scope due to the poor structural reliability of the structure. Only areas that could be safely accessed were assessed.

1.1 Scope & Objectives

The purpose of the survey was to identify the locations, condition, and quantity of asbestos-containing material (ACM) and lead-based paint (LBP) materials that may require removal, special handling, and/or disposal prior to planned renovation/ demolition activities.

The asbestos survey was conducted to satisfy requirements of the United States Environmental Protection Agency (USEPA) regulations under 40 CFR Part 61, Subpart M, National Emission Standards for Hazardous Air Pollutants (NESHAP). The lead survey was conducted to comply with the Occupational Safety and Health Administration (OSHA) lead regulations.

1.2 General Qualifications

The results, findings, conclusions, and recommendations expressed in this report are based on conditions observed during SPC's survey of the proposed project areas associated with SPC project I23-599.101. The information contained in this report represents conditions at the time of the survey and may not accurately represent conditions at a later date. The possibility exists that suspect hazardous building materials may exist within wall cavities, voids, or other areas hidden from view which were not observed and cannot be ruled out. Any additional potential hazardous materials encountered during the demolition/renovation activities that differ from the components/surfaces tested during this survey, were hidden from view, or were located in the areas not accessible at the time of this survey will require further assessment prior to any disturbance. The estimated quantities provided herein should be considered approximate and are accurate to the extent allowable under the terms and conditions of our contract. This report has been prepared with generally accepted industry practices and procedures. No other warranty, either expressed or implied, is made.

1.3 Report Organization

The report is divided into five sections which discuss the survey activities and methodology, findings, conclusions, and recommendations associated with the materials/areas addressed during this survey, as follows:

- Section 1.0 – Introduction
- Section 2.0 – Survey Methodology
- Section 3.0 – Summary of Findings
- Section 4.0 – Conclusions and Recommendations
- Section 5.0 – Certification

Supporting documentation is appended and referenced in each section as appropriate.

2.0 SURVEY METHODOLOGY

This section describes SPC's ACM & LBP survey approach and methodologies that were utilized during the field investigation activities. The limited building survey included performing the following tasks:

- ACM Inspection and Testing
- LBP Inspection and Testing

The following sections present an overview of the approach for each type of survey completed as part of this project.

2.1 Asbestos-Containing Materials

SPC began the asbestos sampling activities with a visual assessment, identification, and inventory of readily visible and accessible homogeneous areas of suspect ACM. A homogeneous area consists of building materials that are similar throughout in terms of color, texture, and age. Building materials identified as concrete (not including cement panels or pipe and soft concrete), glass (includes fiberglass), wood, masonry, metal, plastics are not considered suspect ACM and were not sampled.

A physical assessment of each homogeneous area of suspect ACM was conducted to assess the friability and condition of the materials. A friable material is defined by the USEPA as a material which can be crumbled, pulverized, or reduced to powder by hand pressure when dry. Friability was assessed by physically touching suspect materials.

Bulk samples of suspect ACM were collected in general accordance with NESHAP sampling protocols, based on the results of the visual observation. Random samples of suspect materials were collected of each homogeneous material. Samples were placed in new sealable containers and labeled with unique sample numbers using an indelible marker. All non-disposable sampling equipment was wet wiped and cleaned before and after each use.

A total of *thirty-three (33)* bulk samples were collected from various homogeneous areas of suspect ACM for this project. Bulk samples were collected from the following materials:

- Hard Coat Plaster
- Drywall
- Interior Brick

- Interior Mortar
- Interior Clay Block
- Interior Clay Block Mortar
- Exterior Window Caulking
- Exterior Dock Door Caulking
- Exterior Brick
- Exterior Mortar
- Roof Field

Refer to **Appendix A** for asbestos analytical testing results. Reference photographs are provided in **Appendix C**. Approximate sample location figure(s) can be found in **Appendix B**.

Bulk samples were submitted under chain-of-custody to STAT Analysis Corporation (STAT) in Chicago, Illinois for analysis by polarized light microscopy (PLM) with dispersion staining techniques per USEPA methodology 600/R-93-116. The percentage of asbestos, where applicable, was determined by microscopic visual estimation. Individual layers (when present) were analyzed, and the results were reported separately. Further analysis by Transmission Electron Microscopy (TEM) Methods was utilized for non-friable organically bound material (NOB) that tested negative by PLM (i.e., floor tiles).

STAT is accredited under the National Voluntary Laboratory Accreditation Program (NVLAP Accreditation No. 101202-0). Refer to **Appendix G** for laboratory accreditations.

2.2 Lead-Based Paint

The LBP survey was conducted in accordance with United Stated Department of Housing and Urban Development (HUD) and IDPH protocols. The survey included a visual inspection to identify suspect components/surfaces, analysis of suspect components/surfaces, and data recording. The objective of the testing was to identify painted/coated surfaces with a concentration of lead above 1.0 mg/cm^2 by x-ray fluorescence (XRF) analysis, the criteria established by the USEPA and HUD for classification of lead-based paint. The survey was performed by an IDPH-Licensed Lead Inspector using an XRF spectrum analyzer (Heuresis Model Pb200i, Serial Number 2710, manufactured by Viken Detection of Burlington, MA). A copy of the inspector's licenses and training certificates are provided in **Appendix F**.

A portable XRF analyzer was used due to its demonstrated ability to determine if LBP is present on numerous types of surfaces, analyze the paint without destructive sampling or paint removal, and

provide sample results immediately and at a relatively low cost per sample. Portable XRF instruments expose a building component to x-rays or gamma radiation, which causes lead to emit x-rays with a characteristic frequency or energy. The intensity of this radiation is measured by the instrument. The inspector then compares the displayed value (reading) on the analyzer with the inconclusive range or threshold specified in the XRF Performance Characteristic Sheet (PCS) in **Appendix E** for the specific substrate being tested. If the reading is less than the lower boundary of the inconclusive range, or less than the threshold, then the reading is considered negative. If the reading is greater than the upper boundary of the inconclusive range, or greater or equal to the threshold, then the reading is considered positive. Readings within the inconclusive range, including its boundary values, are considered inconclusive. Because the inconclusive ranges and/or thresholds shown in the PCS are based on 1.0 mg/cm^2, positive and negative readings are consistent with the HUD definition of lead-based paint for identification purposes.

3.0 SUMMARY OF FINDINGS

3.1 Asbestos-Containing Materials

Bulk samples of suspect ACM were collected and analyzed for the presence of asbestos. Results are summarized in **Table 3.1** and include a description of each material, location, material type, test results, and estimated quantity. Each suspect material was placed into one of three material categories: thermal systems insulation (TSI), surfacing materials (SURF), or miscellaneous materials (MISC). Materials confirmed to contain greater than one percent (1%) asbestos by PLM analysis are indicated to have a "positive" result and are therefore classified as ACM.

For the purpose of this building survey, SPC derived its definition of ACM from the USEPA, which classifies ACM as "any product containing more than one percent (1%) asbestos by volume, when analyzed by Polarized Light Microscopy (PLM)". Materials located in different areas of the same homogeneous area, even though not specifically tested, are considered positive or negative for ACM depending on the laboratory sample test results of that particular homogeneous area.

Table 3. 1

Materials Samples for ACM

Material Description	Location	Material Type [1]	ACM Type & %	Friable	PLM Test Results	TEM Test Results	[2] Estimated Quantity
Hard Coat Plaster	Throughout Building	Surf.	Asbestos Not Detected	No	Negative	N/A	N/A
Drywall	Throughout Building	Misc.	Asbestos Not Detected	No	Negative	N/A	N/A
Interior Brick	Throughout Building	Misc.	Asbestos Not Detected	No	Negative	N/A	N/A
Interior Mortar	Throughout Building	Misc.	Asbestos Not Detected	No	Negative	N/A	N/A
Interior Clay Tile	Throughout Building	Misc.	Asbestos Not Detected	No	Negative	N/A	N/A
Interior Clay Tile Mortar	Throughout Building	Misc.	Asbestos Not Detected	No	Negative	N/A	N/A
Exterior Window Caulking	Exterior of Building	Misc.	Chrysotile 5-10%	No	Positive	N/A	220 LF

Material Description	Location	Material Type [1]	ACM Type & %	Friable	PLM Test Results	TEM Test Results	[2]Estimated Quantity
Exterior Dock Door Caulking	Exterior of Building by Garage	Misc.	Asbestos Not Detected	No	Negative	N/A	N/A
Exterior Brick	Exterior of Building	Misc.	Asbestos Not Detected	No	Negative	N/A	N/A
Exterior Mortar	Exterior of Building	Misc.	Asbestos Not Detected	No	Negative	N/A	N/A
Roof Field	Exterior Roof	Misc.	Chrysotile 1-5%	No	Positive	N/A	5600 SF

Notes:

1 *TSI= Thermal System Insulation, Surf= Surfacing Material, and Misc. = Miscellaneous*

2 *Quantities are estimates only, all quantities must be field verify.*

Refer to **Appendix B** (sample location figures) for approximate location of samples collected, and **Appendix C** for reference photographs of materials surveyed in this project.

3.2 Lead-Based Paint

LBP **was identified** on some of the painted surfaces/components tested during this limited survey. The surfaces/components tested for LBP are summarized in **Table 3.2**.

Table 3. 2

Surfaces/Components Tested for LBP

Room/Location	Component	Substrate	Color	XRF Reading mg/cm^2	Classification P= Positive N=Negative
North Elevation	Window Frame	Metal	Green	0.7	N
	Window Covering	Wood	Green	0.4	N
	Window Covering	Metal	Green	0.3	N
	Window Lintel	Metal	Green	8.3	P
	Window Lintel	Metal	Green	6.8	P
	Door Lintel	Metal	Green	3.7	P
	Door Covering	Wood	Green	0.2	N
	Garage Door	Metal	White	0.4	N
	Garage Door Lintel	Metal	Green	7.2	P
	Garage Door Covering	Metal	Green	0.4	N
	Garage Door Covering	Wood	Green	0.3	N
East Elevation	Garage Door	Wood	Green	6.5	P
	Garage Lintel	Metal	Green	7.7	P
	Window Covering	Wood	Green	0.5	N
	Window Lintel	Metal	Green	8.7	P
West Elevation	Entry Canopy/ Soffit	Wood	Green	6.4	P
	Window Covering	Wood	Green	0.4	N
	Window Lintel	Metal	Green	6.5	P
	Door Covering	Wood	Green	0.2	N
Interior	Window Frame	Wood	White	5.2	P
	Window Frame	Wood	White	5.5	P
	Wall	Brick	White	3.2	P
	Wall	Clay Tile	White	5.1	P
	Wall	Plaster	Beige	4.3	P
	Door	Wood	Gray	0.2	N
	Door Frame	Metal	Black	0.5	N

Room/Location	Component	Substrate	Color	XRF Reading mg/cm^2	Classification P= Positive N=Negative
Interior	Wall	Drywall	White	0.2	N
	Wall	Drywall	White	0.2	N

4.0 CONCLUSIONS AND RECOMMENDATIONS

4.1 Asbestos-Containing Materials

The following ACM **were identified** during this limited survey: exterior window caulking and the roof field.

SPC recommends the preparation of an asbestos abatement project design prior to any demolition activities in which ACM may be impacted. An asbestos abatement design plan and specifications should include information regarding the location of containments and barriers, type of sealant, and air sampling requirements and clearance during the asbestos abatement activities. The asbestos design plan and specification shall be prepared and signed by an IDPH licensed asbestos project designer in accordance with Illinois regulations. Asbestos abatement work shall be conducted by a licensed abatement contractor under the supervision of a licensed asbestos project manager in accordance with all applicable Federal, state, and local regulations.

Any suspect material that is discovered during the renovation/demolition activities and is not listed in **Table 3.1**, was not assessed during this survey. Such material shall be assumed and treated as ACM until tested and proven otherwise.

4.2 Lead-Based Paint

LBP **was identified** on some of the painted components/surfaces tested within this limited survey. Surfaces/components that tested positive for LBP included: metal lintels, garage door, entry soffit, wood window frames, plaster walls, brick walls, and clay tile walls.

SPC recommends that prior to any demolition/renovation activities in which LBP surfaces/components may be impacted or disturbed, a lead mitigation/abatement project design/work plan shall be prepared. The design/work plan shall include information regarding lead-based paint locations, exposure assessment, and lead-based paint waste handling, removal, and disposal. Also, all LBP mitigation/abatement work shall be performed and supervised by properly trained workers and supervisors, along with using industry accredited contractors specializing in this type of LBP abatement under the monitoring of an environmental consultant. The mitigation/abatement work shall be performed in accordance with applicable local, state, and federal regulations, including but not limited to: IDPH Lead Poisoning Prevention Act (Title 77, Part 845); Illinois Environmental Protection Act (415 ILCS); Occupational Safety and Health Regulations (1926.62); and EPA Renovation, Repair, and Painting (RRP).

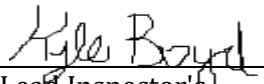
For the surfaces/components that tested negative during this survey, the Occupational Safety and Health Administration (OSHA) Lead in Construction Standard states that "negative" readings (i.e. those below the HUD/EPA definition of what constitutes LBP (1.0 mg/cm^2) DO NOT relieve contractors from performing exposure assessments (personal air monitoring) on their employees per the OSHA Lead Standard, and should not be interpreted as lead is not present. Although a reading may indicate "negative", airborne lead concentrations still may exceed the OSHA Action Level or the OSHA Permissible Exposure Limit (PEL) depending on the work activity. SPC recommends that prior to any renovation activities in the building, engineering control measures be implemented in the renovation area to minimize the generation of dust, and site worker and occupant exposures to lead.

For any surfaces/components that are not listed in **Table 3.2** were not assessed during this survey, such surfaces/components shall be assumed and treated as LBP until tested and proven otherwise.

5.0 CERTIFICATION

The undersigned hereby affirm that the conditions described herein are accurate to the best of our knowledge and belief and are subject to the limitations inherent in the investigative techniques used and any expressed limitations of this survey. Applicable licensing to perform the described survey activities were valid at the time of performance of services in accordance with applicable federal, state, and local laws, rules, and regulations.

Inspection Performed By:

David Avilla	*100-11093*	*Kyle Boyd*	*1001913*
Asbestos Inspector's Name	IDPH License #	Lead Inspector's Name	IDPH License #
David Avilla	8/17/2023		8/17/2023
Asbestos Inspector's Signature	Date	Lead Inspector's Signature	Date

APPENDIX - A

ANALYTICAL TESTING RESULTS

(PLM)

STAT Analysis Corporation
2242 West Harrison St., Suite 200, Chicago, IL 60612-3766
Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

NVLAP Lab Code 101202-0

ASBESTOS ANALYSIS BY POLARIZED LIGHT MICROSCOPY

Method: EPA/600/R-93/116

SPC Specialty Consulting, Inc
2942 W Van Buren Street
Chicago, IL 60612
Phone: (312) 319-7575
Fax: (312) 319-7580

Reference:	I23-599.101	Date Received:	08/02/2023
Location:	15303 S. Broadway	Date Analyzed:	08/10/2023
Batch No.:	366652	Date Reported:	08/10/2023
Customer No.:	4855	Turn Around Time:	5 Days

Laboratory Sample	Customer Sample Number	Asbestos Components (%)	Non-Asbestos Components (%)
366652001	DA073123-01	ND	Cellulose 1-5% Binder 95-99%
366652002	DA073123-02	ND	Cellulose 1-5% Binder 95-99%
366652003	DA073123-03	ND	Cellulose 1-5% Binder 95-99%
366652004	DA073123-04	ND	Cellulose 10-15% Binder 85-90%
366652005	DA073123-05	ND	Cellulose 10-15% Binder 85-90%
366652006	DA073123-06	ND	Cellulose 10-15% Binder 85-90%
366652007	DA073123-07	ND	Cellulose 1-5% Binder 95-99%
366652008	DA073123-08	ND	Cellulose 1-5% Binder 95-99%
366652009	DA073123-09	ND	Cellulose 1-5% Binder 95-99%
366652010	DA073123-10	ND	Cellulose 1-5% Binder 95-99%

ND = Asbestos Not Detected (Not Present) NA = Not Analyzed NS = Not Submitted

Components of inhomogeneous samples are analyzed per our Standard Operating Procedure, or per customer request.

The use of the NVLAP logo does not imply endorsement by NVLAP or any agency of the US Government.

Analyzed by Name :

Daniel Mikos / Microscopist

Date: 08/10/2023

STAT Analysis Corporation
2242 West Harrison St., Suite 200, Chicago, IL 60612-3766
Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

NVLAP Lab Code 101202-0

ASBESTOS ANALYSIS BY POLARIZED LIGHT MICROSCOPY

Method: EPA/600/R-93/116

SPC Specialty Consulting, Inc
2942 W Van Buren Street
Chicago, IL 60612
Phone: (312) 319-7575
Fax: (312) 319-7580

Reference:	I23-599.101	Date Received:	08/02/2023
Location:	15303 S. Broadway	Date Analyzed:	08/10/2023
Batch No.:	366652	Date Reported:	08/10/2023
Customer No.:	4855	Turn Around Time:	5 Days

Laboratory Sample	Customer Sample Number	Asbestos Components (%)	Non-Asbestos Components (%)
366652011	DA073123-11	ND	Cellulose 1-5% Binder 95-99%
366652012	DA073123-12	ND	Cellulose 1-5% Binder 95-99%
366652013	DA073123-13	ND	Cellulose 1-5% Binder 95-99%
366652014	DA073123-14	ND	Cellulose 1-5% Binder 95-99%
366652015	DA073123-15	ND	Cellulose 1-5% Binder 95-99%
366652016	DA073123-16	ND	Cellulose 1-5% Binder 95-99%
366652017	DA073123-17	ND	Cellulose 1-5% Binder 95-99%
366652018	DA073123-18	ND	Cellulose 1-5% Binder 95-99%
366652019	DA073123-19	Chrysotile 5-10%	Binder 90-95%
366652020	DA073123-20	NA	
366652021	DA073123-21	NA	

ND = Asbestos Not Detected (Not Present) NA = Not Analyzed NS = Not Submitted

Components of inhomogeneous samples are analyzed per our Standard Operating Procedure, or per customer request.

The use of the NVLAP logo does not imply endorsement by NVLAP or any agency of the US Government.

Analyzed by Name : Daniel Mikos / Microscopist Date: 08/10/2023

STAT Analysis Corporation
2242 West Harrison St., Suite 200, Chicago, IL 60612-3766
Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

NVLAP Lab Code 101202-0

ASBESTOS ANALYSIS BY POLARIZED LIGHT MICROSCOPY

Method: EPA/600/R-93/116

SPC Specialty Consulting, Inc
2942 W Van Buren Street
Chicago, IL 60612
Phone: (312) 319-7575
Fax: (312) 319-7580

Reference:	I23-599.101	Date Received:	08/02/2023
Location:	15303 S. Broadway	Date Analyzed:	08/10/2023
Batch No.:	366652	Date Reported:	08/10/2023
Customer No.:	4855	Turn Around Time:	5 Days

Laboratory Sample	Customer Sample Number	Asbestos Components (%)	Non-Asbestos Components (%)
366652022	DA073123-22	ND	Cellulose 1-5% Binder 95-99%
366652023	DA073123-23	ND	Cellulose 1-5% Binder 95-99%
366652024	DA073123-24	ND	Cellulose 1-5% Binder 95-99%
366652025	DA073123-25	ND	Cellulose 1-5% Binder 95-99%
366652026	DA073123-26	ND	Cellulose 1-5% Binder 99-100%
366652027	DA073123-27	ND	Cellulose 1-5% Binder 95-99%
366652028	DA073123-28	ND	Cellulose 1-5% Binder 95-99%
366652029	DA073123-29	ND	Cellulose 1-5% Binder 95-99%
366652030	DA073123-30	ND	Cellulose 1-5% Binder 95-99%
366652031	DA073123-31	Chrysotile 1-5%	Binder 95-99%
366652032	DA073123-32	NA	

ND = Asbestos Not Detected (Not Present) NA = Not Analyzed NS = Not Submitted

Components of inhomogeneous samples are analyzed per our Standard Operating Procedure, or per customer request.

The use of the NVLAP logo does not imply endorsement by NVLAP or any agency of the US Government.

Analyzed by Name : Daniel Mikos / Microscopist Date: 08/10/2023

STAT Analysis Corporation
2242 West Harrison St., Suite 200, Chicago, IL 60612-3766
Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

NVLAP Lab Code 101202-0

ASBESTOS ANALYSIS BY POLARIZED LIGHT MICROSCOPY

Method: EPA/600/R-93/116

SPC Specialty Consulting, Inc
2942 W Van Buren Street
Chicago, IL 60612
Phone: (312) 319-7575
Fax: (312) 319-7580

Reference:	I23-599.101	Date Received:	08/02/2023
Location:	15303 S. Broadway	Date Analyzed:	08/10/2023
Batch No.:	366652	Date Reported:	08/10/2023
Customer No.:	4855	Turn Around Time:	5 Days

Laboratory Sample	Customer Sample Number	Asbestos Components (%)	Non-Asbestos Components (%)
366652033	DA073123-33	NA	

ND = Asbestos Not Detected (Not Present) NA = Not Analyzed NS = Not Submitted

Components of inhomogeneous samples are analyzed per our Standard Operating Procedure, or per customer request.

The use of the NVLAP logo does not imply endorsement by NVLAP or any agency of the US Government.

Analyzed by Name : 

Daniel Mikos / Microscopist

Date: 08/10/2023

SPECIALTY CONSULTING, INC.
Architects, Engineers & Scientists

2942 W. Van Buren Street
Chicago, IL 60612
312.319.7575 (O) 312.319.7580 (F)
www.spc-inc.com

366652

PLM BULK LABORATORY ANALYSIS FORM

Project Name: 15303 S. Broadway	**Project Manager:** David Avila
Project Number: I23-599.101	**Building Inspector:** David Avila
Project Address: 15303 S. Broadway	**IDPH Number:** 100-11093
City/ State: Harvey, IL	**Work Day:** S M T W TH F S
Client: City of Harvey	**Analyze by Method:** EPA/600/R-93-116
Date: 7/31/2023	

Field Number	HA Number	Type of material, specific sample location (i.e., Room Number, Building Construction Date)
DA073123-01		Plaster – Interior of Building
DA073123-02		Plaster – Interior of Building
DA073123-03		Plaster – Interior of Building
DA073123-04		Drywall – Interior of Building
DA073123-05		Drywall – Interior of Building
DA073123-06		Drywall – Interior of Building
DA073123-07		Interior Brick
DA073123-08		Interior Brick
DA073123-09		Interior Brick
DA073123-10		Interior Mortar
DA073123-11		Interior Mortar
DA073123-12		Interior Mortar

TURN AROUND TIME: 1 Day, 2 Days, 3 Days

5 Days

COMMENTS: E-mail Results to: davila@spc-inc.com & kboyd@spc-inc.com

Stop at 1st Positive

CHAIN OF CUSTODY RECORD

Collected by: (Signature) Dan Avil	*Date:* 7/31	*Time:*	Relinquished by (Signature) Dan Avil	*Date:* 7/31	*Time:*
Received by: (Signature)	*Date:*	*Time:*	Relinquished by: (signature)	*Date:*	*Time:*
Dispatched by: (Signature, if mailed)	*Date:*	*Time:*	Received for Laboratory by:	*Date:* 8-2-2023	*Time:* 11:35

Definitions: BLK-Bulk Sample, PLM-Polarized Light Microscopy, TEM-Transmission Electron Microscope.

SPECIALTY CONSULTING, INC.
Architects, Engineers & Scientists

2942 W. Van Buren Street
Chicago, IL 60612
312.319.7575 (O) 312.319.7580 (F)
www.spc-inc.com

366652

PLM BULK LABORATORY ANALYSIS FORM

Project Name: 15303 S. Broadway	**Project Manager:** David Avila
Project Number: I23-599.101	**Building Inspector:** David Avila
Project Address: 15303 S. Broadway	**IDPH Number:** 100-11093
City/ State: Harvey, IL	**Work Day:** S M T W TH F S
Client: City of Harvey	**Analyze by Method:** EPA/600/R-93-116
Date: 7/31/2023	

Field Number	HA Number	Type of material, specific sample location (i.e., Room Number, Building Construction Date)
DA073123-13		Interior Clay Block
DA073123-14		Interior Clay Block
DA073123-15		Interior Clay Block
DA073123-16		Interior Clay Block Mortar
DA073123-17		Interior Clay Block Mortar
DA073123-18		Interior Clay Block Mortar
DA073123-19		Exterior Window Caulk
DA073123-20		Exterior Window Caulk
DA073123-21		Exterior Window Caulk
DA073123-22		Exterior Dock Door Caulk
DA073123-23		Exterior Dock Door Caulk
DA073123-24		Exterior Dock Door Caulk

TURN AROUND TIME: 1 Day, 2 Days, 3 Days

5 Days

COMMENTS: E-mail Results to: davila@spc-inc.com & kboyd@spc-inc.com

Stop at 1st Positive

CHAIN OF CUSTODY RECORD

Collected by: (Signature) Dan Cud	Date: 7/31	Time:	Relinquished by (Signature) Dan Cud	Date: 7/31	Time:
Received by: (Signature)	Date:	Time:	Relinquished by: (signature)	Date:	Time:
Dispatched by: (Signature, if mailed)	Date:	Time:	Received for Laboratory by:	Date: 8-2-2023	Time: 11:35

Definitions: BLK-Bulk Sample, PLM-Polarized Light Microscopy, TEM-Transmission Electron Microscope.

SPECIALTY CONSULTING, INC.
Architects, Engineers & Scientists

2942 W. Van Buren Street
Chicago, IL 60612
312.319.7575 (O) 312.319.7580 (F)
www.spc-inc.com

366652

PLM BULK LABORATORY ANALYSIS FORM

Project Name: 15303 S. Broadway	**Project Manager:** David Avila
Project Number: I23-599.101	**Building Inspector:** David Avila
Project Address: 15303 S. Broadway	**IDPH Number:** 100-11093
City/ State: Harvey, IL	**Work Day:** S M T W TH F S
Client: City of Harvey	**Analyze by Method:** EPA/600/R-93-116
Date: 7/31/2023	

Field Number	HA Number	Type of material, specific sample location (i.e., Room Number, Building Construction Date)
DA073123-25		Exterior Brick
DA073123-26		Exterior Brick
DA073123-27		Exterior Brick
DA073123-28		Exterior Mortar
DA073123-29		Exterior Mortar
DA073123-30		Exterior Mortar
DA073123-31		Roof Field
DA073123-32		Roof Field
DA073123-33		Roof Field

TURN AROUND TIME: 1 Day, 2 Days, 3 Days

5 Days

COMMENTS: E-mail Results to: davila@spc-inc.com & kboyd@spc-inc.com

Stop at 1st Positive

CHAIN OF CUSTODY RECORD

Collected by (Signature) Dan Cud	*Date:*	*Time:*	Relinquished by (Signature) Dan Cud	*Date:*	*Time:*
Received by: (Signature)	*Date:*	*Time:*	Relinquished by: (signature)	*Date:*	*Time:*
Dispatched by: (Signature, if mailed)	*Date:*	*Time:*	Received for Laboratory by:	*Date:* 8-2-2023	*Time:* 11:35

Definitions: BLK-Bulk Sample, PLM-Polarized Light Microscopy, TEM-Transmission Electron Microscope.

APPENDIX - B

SAMPLE LOCATION FIGURE(S)
N/A

APPENDIX - C

REFERENCE PHOTOGRAPHS(S)

Material Description:
Hard Coat Plaster

Photo Location:
Interior of Building

City of Harvey 15303 Broadway Ave. Harvey, IL 60426	Specialty Consulting, Inc. 2942 W. Van Buren St. Chicago, Illinois 60612	**Date:** 07/31/2023

Material Description:
Drywall

Photo Location:
Interior of Building

City of Harvey 15303 Broadway Ave. Harvey, IL 60426	Specialty Consulting, Inc. 2942 W. Van Buren St. Chicago, Illinois 60612	**Date:** 07/31/2023

Material Description:
Interior Brick

Photo Location:
Interior of Building

City of Harvey 15303 Broadway Ave. Harvey, IL 60426	Specialty Consulting, Inc. 2942 W. Van Buren St. Chicago, Illinois 60612	**Date:** 07/31/2023

Material Description:
Interior Mortar

Photo Location:
Interior of Building

City of Harvey 15303 Broadway Ave. Harvey, IL 60426	Specialty Consulting, Inc. 2942 W. Van Buren St. Chicago, Illinois 60612	**Date:** 07/31/2023

Material Description:
Interior Clay Block

Photo Location:
Interior of Building

City of Harvey 15303 Broadway Ave. Harvey, IL 60426	Specialty Consulting, Inc. 2942 W. Van Buren St. Chicago, Illinois 60612	**Date:** 07/31/2023

Material Description:
Interior Clay Black Mortar

Photo Location:
Interior of Building

City of Harvey 15303 Broadway Ave. Harvey, IL 60426	Specialty Consulting, Inc. 2942 W. Van Buren St. Chicago, Illinois 60612	**Date:** 07/31/2023

Material Description:
Exterior Window Caulk (ACM)

Photo Location:
Exterior of Building

City of Harvey 15303 Broadway Ave. Harvey, IL 60426	Specialty Consulting, Inc. 2942 W. Van Buren St. Chicago, Illinois 60612	**Date:** 07/31/2023

Material Description:
Exterior Dock Door Caulk

Photo Location:
Exterior Dock Area

City of Harvey 15303 Broadway Ave. Harvey, IL 60426	Specialty Consulting, Inc. 2942 W. Van Buren St. Chicago, Illinois 60612	**Date:** 07/31/2023

Material Description:
Exterior Brick

Photo Location:
Exterior of Building

City of Harvey 15303 Broadway Ave. Harvey, IL 60426	Specialty Consulting, Inc. 2942 W. Van Buren St. Chicago, Illinois 60612	**Date:** 07/31/2023

Material Description:
Exterior Mortar

Photo Location:
Exterior of Building

City of Harvey 15303 Broadway Ave. Harvey, IL 60426	Specialty Consulting, Inc. 2942 W. Van Buren St. Chicago, Illinois 60612	**Date:** 07/31/2023

Material Description:
Roof Field (ACM)

Photo Location:
Exterior of Building

City of Harvey 15303 Broadway Ave. Harvey, IL 60426	Specialty Consulting, Inc. 2942 W. Van Buren St. Chicago, Illinois 60612	**Date:** 07/31/2023

Material Description:
Safety Concerns with reliability of structure

Photo Location:

Interior of Building

City of Harvey 15303 Broadway Ave. Harvey, IL 60426	Specialty Consulting, Inc. 2942 W. Van Buren St. Chicago, Illinois 60612	**Date:** 07/31/2023

APPENDIX - D

XRF FIELD DATA SHEET(S)

SPECIALTY CONSULTING, INC.
Architects, Engineers & Scientists
2942 West Van Buren
Chicago, IL – 60612
Tel: (312) 319 7575 • Fax: (312) 319 7580
www.spc-inc.com

XRF FIELD DATA SHEETS

Project Name:	City of Harvey ACM & LBP Survey	**Building Inspector:**	Kyle Boyd
Project Number:	I23-599.101	**IDPH Number:**	1001913
Project Address:	15303 Broadway Ave.	**XRF Serial Number:**	2710
City/State:	Harvey, IL 60426	**Date:**	7/31/2023
Client:	City of Harvey	**Comments:**	

ROOM/LOCATION	Component	Substrate	Color	XRF Reading mg/cm2	Classification P= Positive N=Negative	Damage/Comments
CAL	N/A			1.0	P	
CAL	N/A			1.0	P	
CAL	N/A			1.0	P	
North Elevation	Window Frame	Metal	Green	0.7	N	
	Window Covering	Wood	Green	0.4	N	
	Window Covering	Metal	Green	0.3	N	
	Window Lintel	Metal	Green	8.3	P	
	Window Lintel	Metal	Green	6.8	P	
	Door Lintel	Metal	Green	3.7	P	
	Door Covering	Wood	Green	0.2	N	
	Garage Door	Metal	White	0.4	N	
	Garage Door Lintel	Metal	Green	7.2	P	
	Garage Door Covering	Metal	Green	0.4	N	
	Garage Door Covering	Wood	Green	0.3	N	
East Elevation	Garage Door	Wood	Green	6.5	P	
	Garage Lintel	Metal	Green	7.7	P	
	Window Covering	Wood	Green	0.5	N	
	Window Lintel	Metal	Green	8.7	P	
West Elevation	Entry Canopy/ Soffit	Wood	Green	6.4	P	
	Window Covering	Wood	Green	0.4	N	
	Window Lintel	Metal	Green	6.5	P	
	Door Covering	Wood	Green	0.2	N	
Interior	Window Frame	Wood	White	5.2	P	
	Window Frame	Wood	White	5.5	P	
	Wall	Brick	White	3.2	P	
	Wall	Clay Tile	White	5.1	P	
	Wall	Plaster	Beige	4.3	P	
	Door	Wood	Gray	0.2	N	
	Door Frame	Metal	Black	0.5	N	
	Wall	Drywall	White	0.2	N	
	Wall	Drywall	White	0.2	N	
CAL	N/A			1.0	P	
CAL	N/A			1.0	P	
CAL	N/A			1.0	P	

APPENDIX - E

HEURESIS MODEL Pb200i
PERFORMANCE CHARACTERISTICS SHEET(S)

Performance Characteristic Sheet

EFFECTIVE DATE: December 1, 2020

MANUFACTURER AND MODEL:

Make: ***Viken Detection*** (previously Heuresis)
Models: ***Model Pb200i***
Source: ***^{57}Co, 5 mCi (nominal – new source)***

FIELD OPERATION GUIDANCE

ACTION LEVEL SETTING:

0.5 mg/cm^2

OPERATING PARAMETERS:

Action Level mode

XRF CALIBRATION CHECK LIMITS:

0.8 to 1.2 mg/cm^2 (inclusive) at Action Level setting = 1.0 mg/cm^2

SUBSTRATE CORRECTION:

Not applicable

INCONCLUSIVE RANGE OR THRESHOLD:

ACTION LEVEL MODE READING DESCRIPTION	SUBSTRATE	INCONCLUSIVE RANGE (mg/cm^2)
Results not corrected for substrate bias on any substrate	Brick Concrete Drywall Metal Plaster Wood	0.4 – 0.6 0.4 – 0.6 0.4 – 0.6 0.4 – 0.6 0.4 – 0.6 0.4 – 0.6

BACKGROUND INFORMATION

EVALUATION DATA SOURCE AND DATE:

This sheet is supplemental information to be used in conjunction with Chapter 7 of the HUD *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing*, 2012 Edition ("HUD Guidelines"). Performance parameters shown on this sheet are calculated using test results on building components in the HUD archive. Testing was conducted on 146 test samples in January 2020, with two separate instruments running software version Pb200i 5.0 (DEBUG version) in Action Level test mode. The actual source strength of each instrument on the day of testing was approximately 2.9 mCi; source ages were approximately 9 months.

OPERATING PARAMETERS

Performance parameters shown in this sheet are applicable only when properly operating the instrument using the manufacturer's instructions and procedures described in Chapter 7 of the HUD Guidelines.

XRF CALIBRATION CHECK:

The calibration of the XRF instrument should be checked ***with the Action Level set to 1.0 mg/cm^2*** using the paint film nearest 1.0 mg/cm^2 in the NIST Standard Reference Material (SRM) used (e.g., for NIST SRM 2579, use the 1.02 mg/cm^2 film; for NIST SRM 2579a, use the 1.04 mg/cm^2 film).

If the average (rounded to 1 decimal place) of three readings is outside the acceptable calibration check range, follow the manufacturer's instructions to bring the instrument into control before XRF testing proceeds.

EVALUATING THE QUALITY OF XRF TESTING:

Randomly select ten testing combinations for retesting from each house or from two randomly selected units in multifamily housing.

Conduct XRF re-testing at the ten testing combinations selected for retesting.

Determine if the XRF testing in the units or house passed or failed the test by applying the steps below. Compute the Retest Tolerance Limit by the following steps:

Determine XRF results for the original and retest XRF readings. In single-family and multi-family housing, a result is defined as a single reading. Therefore, there will be ten original and ten retest XRF results for each house or for the two selected units.

Calculate the average of the original XRF result and the retest XRF result for each testing combination.

Square the average for each testing combination.

Add the ten squared averages together. Call this quantity C.

Multiply the number C by 0.0072. Call this quantity D.

Add the number 0.032 to D. Call this quantity E.

Take the square root of E. Call this quantity F.

Multiply F by 1.645. The result is the Retest Tolerance Limit.

Compute the average of all ten original XRF readings.

Compute the average of all ten re-test XRF readings.

Find the absolute difference of the two averages.

If the difference is less than the Retest Tolerance Limit, the inspection has passed the retest. If the difference of the overall averages equals or exceeds the Retest Tolerance Limit, this procedure should be repeated with ten new testing combinations. If the difference of the overall averages is equal to or greater than the Retest Tolerance Limit a second time, then the inspection should be considered deficient.

Use of this procedure is estimated to produce a spurious result approximately 1% of the time. That is, results of this procedure will call for further examination when no examination is warranted in approximately 1 out of 100 dwelling units tested.

TESTING TIMES:

The instrument time to take a reading varied within a narrow range from 5 to 6 seconds, with a small number (3%) of longer times from 7 to 11 seconds. The longer readings were almost all on wood substrates. This range of reading times applies only to instruments with the same source strength as those tested (2.9 mCi at the time of PCS testing). Instruments with stronger sources will have shorter reading times and those with weaker sources, longer reading times.

CLASSIFICATION OF RESULTS:

XRF results are classified as **positive** if they are **greater than or equal** to 0.6 mg/cm^2, ***negative*** if they are ***less than or equal*** *to* 0.4 mg/cm^2 and ***inconclusive*** if they are ***equal*** to 0.5 mg/ cm^2.

DOCUMENTATION:

This XRF Performance Characteristic Sheet (PCS) was developed by QuanTech, Inc., under a contract with the U.S. Department of Housing and Urban Development, Office of Lead Hazard Control and Healthy Homes.

A report titled *Methodology for XRF Performance Characteristic Sheets* (EPA 747-R-95-008) provides an explanation of the statistical methodology used to develop Performance Characteristic Sheets at the Federal standard (Action Level) of 1.0 mg/cm^2, and provides empirical results from using the recommended inconclusive ranges or thresholds for specific XRF instruments. The report may be downloaded at http://www2.epa.gov/lead/methodology-xrf-performance-characteristic-sheets-epa-747-r-95-008-september-1997. The methodology was subsequently generalized by QuanTech for application to other Action Levels.

APPENDIX - F

ASBESTOS & LEAD INSPECTOR / RISK ASSESSOR LICENSE(S) & CERTIFICATION(S)

IDPH

ILLINOIS DEPARTMENT OF PUBLIC HEALTH

525-535 West Jefferson Street • Springfield, Illin

IDPH ASBESTOS PROFESSIONAL LICENSE

ID NUMBER 100 - 11093 ISSUED 4/19/2023 EXPIRES 05/15/2024

DAVID AVILA
2942 W VAN BUREN ST
CHICAGO, IL 60612
Environmental Health

DAVID AVILA
2942 W VAN BUREN ST
CHICAGO, IL 60612

4/19/2023

ASBESTOS PROFESSIONAL LICENSE ID NUMBER: 11093

Enclosed is your Asbestos Professional License. Please note the expiration date on the card and in the image depicted below.

COPY OF THE ASBESTOS PROFESSIONAL LICENSE

Front of License

IDPH

ASBESTOS PROFESSIONAL LICENSE

ID NUMBER 100 - 11093 ISSUED **4/19/2023** EXPIRES 05/15/2024

DAVID AVILA
2942 W VAN BUREN ST
CHICAGO, IL 60612
Environmental Health

Back of License

ENDORSEMENTS	TC EXPIRES
INSPECTOR	9/9/2023
PROJECT MANAGER AIR SAMPLING PROFESSIONAL	9/10/2023

Alteration of this license shall result in legal action
This license issued under authority of the State of Illinois Department of Public Health
This license is valid only when accompanied by a valid training course certificate.

If you have any questions or need further assistance, contact the Asbestos Program at (217)782-3517 or fax (217)785-5897.

Our WEB address is: dph.illinois.gov/topics-services/environmental-health-protection/asbestos
EMAIL Address: dph.asbestos@illinois.gov

7233 S. Adams Street | Willowbrook, IL 60527
(630) 655-3900 | www.otssafety.com

2022

OCCUPATIONAL TRAINING & SUPPLY, INC.

Asbestos Building Inspector Refresher

Occupational Training & Supply, Inc. certifies that

David Avila

has successfully completed the Asbestos Building Inspector Refresher course and has passed the competency exam with a minimum score of 70%. The course is accredited by the Illinois Department of Public Health and Indiana Department of Environmental Management for purposes of accreditation in accordance with EPA 40 CFR 763, Asbestos Hazard Emergency response Act (AHERA) and TSCA Title II.

Course Date: 9/9/2022

Exam Date: 9/9/2022

Expiration Date: 9/9/2023

Certificate Number: BIR2209092141

Kathy DeSalvo

Kathy DeSalvo, Director

CERTIFICATE OF ACHIEVEMENT

Lead Risk Assessment Recertification

Accredited by Illinois Department of Public Health

This is to certify that KYLE BOYD has completed the 8-HOUR LEAD RISK ASSESSMENT RECERTIFICATION course and successfully passed the examination on 07/25/2023 with a minimum score of 70%. Training was in accordance with Title X, U.S. EPA Model Training Course Curriculum, 1995 [illegible] HUD Guidelines 1995, and the Illinois Dept. of Public Health, 1998.

IDPH **LEAD RISK ASSESSOR LICENSE**

LEAD ID	ISSUED	EXPIRES
1001913	12/23/2022	1/31/2024

Kyle R Boyd
2942 W. VanBuren Street
Chicago, IL 60612

ILLINOIS LEAD PROGRAM
Environmental Health

PHS Environment[illegible]
Occupationa[illegible]

37 S Ashland Ave, Chicago, IL 60607 ● www.pub[illegible]

07/25/2023
Course Dates:

07/25/2026
Expires:

2307RAR01
Certificate Number:

Director of Training
Nicholas J. Peneff
Doctor of Public Health

Phone: 312-491-0081

FORM # L-017B

APPENDIX - G

LABORATORY LICENSES & ACCREDITATIONS

United States Department of Commerce
National Institute of Standards and Technology

Certificate of Accreditation to ISO/IEC 17025:2017

NVLAP LAB CODE: 101202-0

STAT Analysis Corporation

Chicago, IL

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

Asbestos Fiber Analysis

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2023-07-01 through 2024-06-30

Effective Dates

For the National Voluntary Laboratory Accreditation Program

National Voluntary Laboratory Accreditation Program

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

STAT Analysis Corporation
STAT Analysis Corporation
2242 W. Harrison St. Suite 200
Chicago, IL 60612
Carolyn Mazzuca
Phone: 312-733-0551
Email: cmazzuca@statanalysis.com
http://www.STATAnalysis.com

ASBESTOS FIBER ANALYSIS **NVLAP LAB CODE 101202-0**

Bulk Asbestos Analysis

Code	***Description***
18/A01	EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

Airborne Asbestos Analysis

Code	***Description***
18/A02	U.S. EPA's "Interim Transmission Electron Microscopy Analytical Methods-Mandatory and Nonmandatory-and Mandatory Section to Determine Completion of Response Actions" as found in 40 CFR, Part 763, Subpart E, Appendix A.

For the National Voluntary Laboratory Accreditation Program

Limited Asbestos & Lead-Based Paint Survey Report

15305 Broadway Ave.
Harvey, IL 60426

Inspection Date: 7/31/2023

SPC Project No.: I23-599.101

August 18, 2023

SPECIALTY CONSULTING, INC.
Architects, Engineers & Scientists
2942 West Van Buren
Chicago, IL – 60612
Phone: (312) 319-7575
www.spc-inc.com

SIGNATURE PAGE

Limited Asbestos & Lead-Based Paint Survey Report

Project Site:

15305 Broadway Ave.
Harvey, IL 60426

Prepared for:

City of Harvey
15320 Broadway Ave.
Harvey, IL 60426

SPC Project #: I23-599.101

Prepared By: Kyle Boyd — August 18, 2023
Kyle Boyd, MS, CHMM — Date:
Sr. Project Manager

Reviewed By: Jigar Shah — August 18, 2023
Jigar Shah, CIH, CSP, CHMM — Date:
Director of Industrial Hygiene

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EXECUTIVE SUMMARY

Scope and Objectives

Specialty Consulting, Inc. (SPC) was retained by the City of Harvey to conduct a limited asbestos and lead-based paint (LBP) survey of the structure located at 15305 Broadway Ave. in Harvey, Illinois. The purpose of this limited survey was to identify asbestos-containing material (ACM) and lead-based paint (LBP) that may require removal, special handling, and/or disposal prior to planned demolition activities. The survey was limited in scope due to the poor structural reliability of the structure. Only areas that could be safely accessed were assessed.

This limited survey was conducted from *July 31, 2023* through *August 1, 2023* by *David Avilla* and *Kyle Boyd* who are both state-licensed asbestos and lead Inspectors. The Illinois Department of Public Health (IDPH) issued licenses of the inspectors are provided in **Appendix F** of this report.

Findings

Asbestos-Containing Materials: ACM **was identified** during this limited survey. The materials that were identified as ACM include: door caulk and roof field.

Please refer to **Table 3.1** for a complete list of building materials that were sampled during this limited survey. The laboratory results are provided in **Appendix A**.

Lead-Based Paint: LBP **was identified** on some of the painted components/surfaces tested during this limited survey. The surfaces/components that tested positive include:

- Door Canopy
- Window
- Door Frames
- Exterior Soffit
- Garage Door
- Window Lintels
- Walls (Plaster)

The specific surfaces/components tested within the building are summarized in **Table 3.2**. XRF field data sheets are provided in **Appendix D**.

1.0 INTRODUCTION

Specialty Consulting, Inc. (SPC) was retained by the City of Harvey to conduct a limited asbestos and lead-based paint (LBP) survey of the structure located at 15305 Broadway Ave. in Harvey, Illinois. The purpose of this limited survey was to identify asbestos-containing material (ACM) and lead-based paint (LBP) that may require removal, special handling, and/or disposal prior to planned demolition activities. The survey was limited in scope due to the poor structural reliability of the structure. Only areas that could be safely accessed were assessed.

1.1 Scope & Objectives

The purpose of the survey was to identify the locations, condition, and quantity of asbestos-containing material (ACM) and lead-based paint (LBP) materials that may require removal, special handling, and/or disposal prior to planned renovation/ demolition activities.

The asbestos survey was conducted to satisfy requirements of the United States Environmental Protection Agency (USEPA) regulations under 40 CFR Part 61, Subpart M, National Emission Standards for Hazardous Air Pollutants (NESHAP). The lead survey was conducted to comply with the Occupational Safety and Health Administration (OSHA) lead regulations.

1.2 General Qualifications

The results, findings, conclusions, and recommendations expressed in this report are based on conditions observed during SPC's survey of the proposed project areas associated with SPC project I23-599.101. The information contained in this report represents conditions at the time of the survey and may not accurately represent conditions at a later date. The possibility exists that suspect hazardous building materials may exist within wall cavities, voids, or other areas hidden from view which were not observed and cannot be ruled out. Any additional potential hazardous materials encountered during the demolition/renovation activities that differ from the components/surfaces tested during this survey, were hidden from view, or were located in the areas not accessible at the time of this survey will require further assessment prior to any disturbance. The estimated quantities provided herein should be considered approximate and are accurate to the extent allowable under the terms and conditions of our contract. This report has been prepared with generally accepted industry practices and procedures. No other warranty, either expressed or implied, is made.

1.3 Report Organization

The report is divided into five sections which discuss the survey activities and methodology, findings, conclusions, and recommendations associated with the materials/areas addressed during this survey, as follows:

- Section 1.0 – Introduction
- Section 2.0 – Survey Methodology
- Section 3.0 – Summary of Findings
- Section 4.0 – Conclusions and Recommendations
- Section 5.0 – Certification

Supporting documentation is appended and referenced in each section as appropriate.

2.0 SURVEY METHODOLOGY

This section describes SPC's ACM & LBP survey approach and methodologies that were utilized during the field investigation activities. The limited building survey included performing the following tasks:

- ACM Inspection and Testing
- LBP Inspection and Testing

The following sections present an overview of the approach for each type of survey completed as part of this project.

2.1 Asbestos-Containing Materials

SPC began the asbestos sampling activities with a visual assessment, identification, and inventory of readily visible and accessible homogeneous areas of suspect ACM. A homogeneous area consists of building materials that are similar throughout in terms of color, texture, and age. Building materials identified as concrete (not including cement panels or pipe and soft concrete), glass (includes fiberglass), wood, masonry, metal, plastics are not considered suspect ACM and were not sampled.

A physical assessment of each homogeneous area of suspect ACM was conducted to assess the friability and condition of the materials. A friable material is defined by the USEPA as a material which can be crumbled, pulverized, or reduced to powder by hand pressure when dry. Friability was assessed by physically touching suspect materials.

Bulk samples of suspect ACM were collected in general accordance with NESHAP sampling protocols, based on the results of the visual observation. Random samples of suspect materials were collected of each homogeneous material. Samples were placed in new sealable containers and labeled with unique sample numbers using an indelible marker. All non-disposable sampling equipment was wet wiped and cleaned before and after each use.

A total of *twenty-one (21)* bulk samples were collected from various homogeneous areas of suspect ACM for this project. Bulk samples were collected from the following materials:

- Hard Coat Plaster
- Interior Brick
- Interior Mortar

- Door Caulking
- Exterior Brick
- Exterior Mortar
- Roof Field

Refer to **Appendix A** for asbestos analytical testing results. Reference photographs are provided in **Appendix C**. Approximate sample location figure(s) can be found in **Appendix B**.

Bulk samples were submitted under chain-of-custody to STAT Analysis Corporation (STAT) in Chicago, Illinois for analysis by polarized light microscopy (PLM) with dispersion staining techniques per USEPA methodology 600/R-93-116. The percentage of asbestos, where applicable, was determined by microscopic visual estimation. Individual layers (when present) were analyzed, and the results were reported separately. Further analysis by Transmission Electron Microscopy (TEM) Methods was utilized for non-friable organically bound material (NOB) that tested negative by PLM (i.e., floor tiles).

STAT is accredited under the National Voluntary Laboratory Accreditation Program (NVLAP Accreditation No. 101202-0). Refer to **Appendix G** for laboratory accreditations.

2.2 Lead-Based Paint

The LBP survey was conducted in accordance with United Stated Department of Housing and Urban Development (HUD) and IDPH protocols. The survey included a visual inspection to identify suspect components/surfaces, analysis of suspect components/surfaces, and data recording. The objective of the testing was to identify painted/coated surfaces with a concentration of lead above 1.0 mg/cm^2 by x-ray fluorescence (XRF) analysis, the criteria established by the USEPA and HUD for classification of lead-based paint. The survey was performed by an IDPH-Licensed Lead Inspector using an XRF spectrum analyzer (Heuresis Model Pb200i, Serial Number 2710, manufactured by Viken Detection of Burlington, MA). A copy of the inspector's licenses and training certificates are provided in **Appendix F**.

A portable XRF analyzer was used due to its demonstrated ability to determine if LBP is present on numerous types of surfaces, analyze the paint without destructive sampling or paint removal, and provide sample results immediately and at a relatively low cost per sample. Portable XRF instruments expose a building component to x-rays or gamma radiation, which causes lead to emit x-rays with a characteristic frequency or energy. The intensity of this radiation is measured by the instrument. The inspector then compares the displayed value (reading) on the analyzer with the

inconclusive range or threshold specified in the XRF Performance Characteristic Sheet (PCS) in **Appendix E** for the specific substrate being tested. If the reading is less than the lower boundary of the inconclusive range, or less than the threshold, then the reading is considered negative. If the reading is greater than the upper boundary of the inconclusive range, or greater or equal to the threshold, then the reading is considered positive. Readings within the inconclusive range, including its boundary values, are considered inconclusive. Because the inconclusive ranges and/or thresholds shown in the PCS are based on 1.0 mg/cm^2, positive and negative readings are consistent with the HUD definition of lead-based paint for identification purposes.

3.0 SUMMARY OF FINDINGS

3.1 Asbestos-Containing Materials

Bulk samples of suspect ACM were collected and analyzed for the presence of asbestos. Results are summarized in **Table 3.1** and include a description of each material, location, material type, test results, and estimated quantity. Each suspect material was placed into one of three material categories: thermal systems insulation (TSI), surfacing materials (SURF), or miscellaneous materials (MISC). Materials confirmed to contain greater than one percent (1%) asbestos by PLM analysis are indicated to have a "positive" result and are therefore classified as ACM.

For the purpose of this building survey, SPC derived its definition of ACM from the USEPA, which classifies ACM as "any product containing more than one percent (1%) asbestos by volume, when analyzed by Polarized Light Microscopy (PLM)". Materials located in different areas of the same homogeneous area, even though not specifically tested, are considered positive or negative for ACM depending on the laboratory sample test results of that particular homogeneous area.

Table 3. 1

Materials Samples for ACM

Material Description	Location	Material Type [1]	ACM Type & %	Friable	PLM Test Results	TEM Test Results	[2] Estimated Quantity
Hard Coat Plaster	Throughout Building	Surf.	Asbestos Not Detected	No	Negative	N/A	N/A
Interior Brick	Throughout Building	Misc.	Asbestos Not Detected	No	Negative	N/A	N/A
Interior Mortar	Throughout Building	Misc.	Asbestos Not Detected	No	Negative	N/A	N/A
Door Caulking	Exterior of Building by Garage	Misc.	Chrysotile 1-5%	No	Positive	N/A	24 LF
Exterior Brick	Exterior of Building	Misc.	Asbestos Not Detected	No	Negative	N/A	N/A
Exterior Mortar	Exterior of Building	Misc.	Asbestos Not Detected	No	Negative	N/A	N/A

Material Description	Location	Material Type [1]	ACM Type & %	Friable	PLM Test Results	TEM Test Results	[2]Estimated Quantity
Roof Field	Exterior Roof	Misc.	Chrysotile 1-5%	No	Positive	N/A	4,000 SF

Notes:
1. *TSI= Thermal System Insulation, Surf= Surfacing Material, and Misc. = Miscellaneous*
2. *Quantities are estimates only, all quantities must be field verify.*

Refer to **Appendix B** (sample location figures) for approximate location of samples collected, and **Appendix C** for reference photographs of materials surveyed in this project.

3.2 Lead-Based Paint

LBP **was identified** on some of the painted surfaces/components tested during this limited survey. The surfaces/components tested for LBP are summarized in **Table 3.2**.

Table 3. 2

Surfaces/Components Tested for LBP

Room/Location	Component	Substrate	Color	XRF Reading mg/cm^2	Classification P= Positive N=Negative
West Elevation	Window	Metal	Green	0.7	N
	Entry canopy door	Wood	Green	6.2	P
	Door Covering	Wood	Green	0.3	N
	Entry Soffit	Wood	White	3.2	P
	Entry Soffit	Wood	White	1.7	P
	Door	Wood	White	5.5	P
	Door Frame	Wood	White	6.3	P
	Window Covering	Wood	Green	0.5	N
	Entry canopy door	Metal	Green	0.7	N
	Window	Wood	White	5.4	P
	Window	Wood	White	4.8	P
	Window Canopy	Metal	Green	4.2	P
East Elevation	Garage Door	Wood	Brown	3.5	P
	Window bars	Metal	Red	0.3	N
	Window Covering	Wood	Green	0.5	N
	Window Lintel	Metal	Green	8.1	P
Interior	Wall	Plaster	White	3.7	P
	Wall	Plaster	Beige	5.5	P
	Wall	Drywall	White	0.3	N

4.0 CONCLUSIONS AND RECOMMENDATIONS

4.1 Asbestos-Containing Materials

The following ACM **were identified** during this limited survey: door caulking and the roof field.

SPC recommends the preparation of an asbestos abatement project design prior to any demolition activities in which ACM may be impacted. An asbestos abatement design plan and specifications should include information regarding the location of containments and barriers, type of sealant, and air sampling requirements and clearance during the asbestos abatement activities. The asbestos design plan and specification shall be prepared and signed by an IDPH licensed asbestos project designer in accordance with Illinois regulations. Asbestos abatement work shall be conducted by a licensed abatement contractor under the supervision of a licensed asbestos project manager in accordance with all applicable Federal, state, and local regulations.

Any suspect material that is discovered during the renovation/demolition activities and is not listed in **Table 3.1**, was not assessed during this survey. Such material shall be assumed and treated as ACM until tested and proven otherwise.

4.2 Lead-Based Paint

LBP **was identified** on some of the painted components/surfaces tested within this limited survey. Surfaces/components that tested positive for LBP included: metal lintels, garage door, entry soffit, wood windows, plaster walls, doors and door frames, window and door canopies.

SPC recommends that prior to any demolition/renovation activities in which LBP surfaces/components may be impacted or disturbed, a lead mitigation/abatement project design/work plan shall be prepared. The design/work plan shall include information regarding lead-based paint locations, exposure assessment, and lead-based paint waste handling, removal, and disposal. Also, all LBP mitigation/abatement work shall be performed and supervised by properly trained workers and supervisors, along with using industry accredited contractors specializing in this type of LBP abatement under the monitoring of an environmental consultant. The mitigation/abatement work shall be performed in accordance with applicable local, state, and federal regulations, including but not limited to: IDPH Lead Poisoning Prevention Act (Title 77, Part 845); Illinois Environmental Protection Act (415 ILCS); Occupational Safety and Health Regulations (1926.62); and EPA Renovation, Repair, and Painting (RRP).

For the surfaces/components that tested negative during this survey, the Occupational Safety and Health Administration (OSHA) Lead in Construction Standard states that "negative" readings (i.e. those below the HUD/EPA definition of what constitutes LBP (1.0 mg/cm^2) DO NOT relieve contractors from performing exposure assessments (personal air monitoring) on their employees per the OSHA Lead Standard, and should not be interpreted as lead is not present. Although a reading may indicate "negative", airborne lead concentrations still may exceed the OSHA Action Level or the OSHA Permissible Exposure Limit (PEL) depending on the work activity. SPC recommends that prior to any renovation activities in the building, engineering control measures be implemented in the renovation area to minimize the generation of dust, and site worker and occupant exposures to lead.

For any surfaces/components that are not listed in **Table 3.2** were not assessed during this survey, such surfaces/components shall be assumed and treated as LBP until tested and proven otherwise.

5.0 CERTIFICATION

The undersigned hereby affirm that the conditions described herein are accurate to the best of our knowledge and belief and are subject to the limitations inherent in the investigative techniques used and any expressed limitations of this survey. Applicable licensing to perform the described survey activities were valid at the time of performance of services in accordance with applicable federal, state, and local laws, rules, and regulations.

Inspection Performed By:

David Avilla	*10011093*	*Kyle Boyd*	*1001913*
Asbestos Inspector's Name	IDPH License #	Lead Inspector's Name	IDPH License #
David Avilla	8/17/2023		8/17/2023
Asbestos Inspector's Signature	Date	Lead Inspector's Signature	Date

APPENDIX - A

ANALYTICAL TESTING RESULTS

(PLM)

STAT Analysis Corporation
2242 West Harrison St., Suite 200, Chicago, IL 60612-3766
Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

NVLAP Lab Code 101202-0

ASBESTOS ANALYSIS BY POLARIZED LIGHT MICROSCOPY

Method: EPA/600/R-93/116

SPC Specialty Consulting, Inc
2942 W Van Buren Street
Chicago, IL 60612
Phone: (312) 319-7575
Fax: (312) 319-7580

Reference:	I23-599.101	Date Received:	08/02/2023
Location:	15305 S. Broadway	Date Analyzed:	08/10/2023
Batch No.:	366650	Date Reported:	08/10/2023
Customer No.:	4855	Turn Around Time:	5 Days

Laboratory Sample	Customer Sample Number	Asbestos Components (%)	Non-Asbestos Components (%)
366650001	DA073123-01	ND	Cellulose 1-5% Binder 95-99%
366650002	DA073123-02	ND	Cellulose 1-5% Binder 95-99%
366650003	DA073123-03	ND	Cellulose 1-5% Binder 95-99%
366650004	DA073123-04	ND	Cellulose 1-5% Binder 95-99%
366650005	DA073123-05	ND	Cellulose 1-5% Binder 95-99%
366650006	DA073123-06	ND	Cellulose 1-5% Binder 95-99%
366650007	DA073123-07	ND	Cellulose 1-5% Binder 95-99%
366650008	DA073123-08	ND	Cellulose 1-5% Binder 95-99%
366650009	DA073123-09	ND	Cellulose 1-5% Binder 95-99%
366650010	DA073123-10	Chrysotile 1-5%	Binder 95-99%
366650011	DA073123-11	NA	

ND = Asbestos Not Detected (Not Present) NA = Not Analyzed NS = Not Submitted

Components of inhomogeneous samples are analyzed per our Standard Operating Procedure, or per customer request.

The use of the NVLAP logo does not imply endorsement by NVLAP or any agency of the US Government.

Analyzed by Name : Daniel Mikos / Microscopist Date: 08/10/2023

STAT Analysis Corporation
2242 West Harrison St., Suite 200, Chicago, IL 60612-3766
Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

NVLAP Lab Code 101202-0

ASBESTOS ANALYSIS BY POLARIZED LIGHT MICROSCOPY

Method: EPA/600/R-93/116

SPC Specialty Consulting, Inc
2942 W Van Buren Street
Chicago, IL 60612
Phone: (312) 319-7575
Fax: (312) 319-7580

Reference:	I23-599.101	Date Received:	08/02/2023
Location:	15305 S. Broadway	Date Analyzed:	08/10/2023
Batch No.:	366650	Date Reported:	08/10/2023
Customer No.:	4855	Turn Around Time:	5 Days

Laboratory Sample	Customer Sample Number	Asbestos Components (%)	Non-Asbestos Components (%)
366650012	DA073123-12	NA	
366650013	DA073123-13	ND	Cellulose 1-5% Binder 95-99%
366650014	DA073123-14	ND	Cellulose 1-5% Binder 95-99%
366650015	DA073123-15	ND	Cellulose 1-5% Binder 95-99%
366650016	DA073123-16	ND	Cellulose 1-5% Binder 95-99%
366650017	DA073123-17	ND	Cellulose 1-5% Binder 95-99%
366650018	DA073123-18	ND	Cellulose 1-5% Binder 95-99%
366650019	DA073123-19	Chrysotile 1-5%	Binder 95-99%
366650020	DA073123-20	NA	
366650021	DA073123-21	NA	

ND = Asbestos Not Detected (Not Present) NA = Not Analyzed NS = Not Submitted

Components of inhomogeneous samples are analyzed per our Standard Operating Procedure, or per customer request.

The use of the NVLAP logo does not imply endorsement by NVLAP or any agency of the US Government.

Analyzed by Name : Daniel Mikos / Microscopist Date: 08/10/2023

SPECIALTY CONSULTING, INC.
Architects, Engineers & Scientists

2942 W. Van Buren Street
Chicago, IL 60612
312.319.7575 (O) 312.319.7580 (F)
www.spc-inc.com

366650

PLM BULK LABORATORY ANALYSIS FORM

Project Name: 15305 S. Broadway	**Project Manager:** David Avila
Project Number: I23-599.101	**Building Inspector:** David Avila
Project Address: 15305 S. Broadway	**IDPH Number:** 100-11093
City/ State: Harvey, IL	**Work Day:** S M T W TH F S
Client: City of Harvey	**Analyze by Method:** EPA/600/R-93-116
Date: 7/31/2023	

Field Number	HA Number	Type of material, specific sample location (i.e., Room Number, Building Construction Date)
DA073123-01		Plaster – Interior of Building
DA073123-02		Plaster – Interior of Building
DA073123-03		Plaster – Interior of Building
DA073123-04		Interior Brick
DA073123-05		Interior Brick
DA073123-06		Interior Brick
DA073123-07		Interior Mortar
DA073123-08		Interior Mortar
DA073123-09		Interior Mortar
DA073123-10		Door Caulk
DA073123-11		Door Caulk
DA073123-12		Door Caulk

TURN AROUND TIME: 1 Day, 2 Days, 3 Days 5 Days	**COMMENTS:** E-mail Results to: davila@spc-inc.com & kboyd@spc-inc.com **Stop at 1st Positive**

CHAIN OF CUSTODY RECORD

Collected by: (Signature)	*Date:* 7/31	*Time:*	Relinquished by (Signature)	*Date:* 7/31	*Time:*
Received by: (Signature)	*Date:*	*Time:*	Relinquished by: (signature)	*Date:*	*Time:*
Dispatched by: (Signature, if mailed)	*Date:*	*Time:*	Received for Laboratory by:	*Date:* 8-1-2023	*Time:* 11:35

Definitions: BLK-Bulk Sample, PLM-Polarized Light Microscopy, TEM-Transmission Electron Microscope.

SPECIALTY CONSULTING, INC.
Architects, Engineers & Scientists

2942 W. Van Buren Street
Chicago, IL 60612
312.319.7575 (O) 312.319.7580 (F)
www.spc-inc.com

366650

PLM BULK LABORATORY ANALYSIS FORM

Project Name: 15305 S. Broadway	**Project Manager:** David Avila
Project Number: I23-599.101	**Building Inspector:** David Avila
Project Address: 15305 S. Broadway	**IDPH Number:** 100-11093
City/ State: Harvey, IL	**Work Day:** S M T W TH F S
Client: City of Harvey	**Analyze by Method:** EPA/600/R-93-116
Date: 7/31/2023	

Field Number	HA Number	Type of material, specific sample location (i.e., Room Number, Building Construction Date)
DA073123-13		Exterior Brick
DA073123-14		Exterior Brick
DA073123-15		Exterior Brick
DA073123-16		Exterior Mortar
DA073123-17		Exterior Mortar
DA073123-18		Exterior Mortar
DA073123-19		Roof Field
DA073123-20		Roof Field
DA073123-21		Roof Field

TURN AROUND TIME: 1 Day / 2 Days / 3 Days

5 Days

COMMENTS: E-mail Results to: davila@spc-inc.com & kboyd@spc-inc.com

Stop at 1st Positive

CHAIN OF CUSTODY RECORD

Collected by (Signature) Dan Cud	Date: 7/31	Time:	Relinquished by (Signature) Dan Cud	Date: 7/31	Time:
Received by: (Signature)	Date:	Time:	Relinquished by: (signature)	Date:	Time:
Dispatched by: (Signature, if mailed)	Date:	Time:	Received for Laboratory by:	Date: 8.2.2023	Time: 11:35

Definitions: BLK-Bulk Sample, PLM-Polarized Light Microscopy, TEM-Transmission Electron Microscope.

APPENDIX - B

SAMPLE LOCATION FIGURE(S)
N/A

APPENDIX - C

REFERENCE PHOTOGRAPHS(S)

Material Description:
Hard Coat Plaster

Photo Location:
Interior of Building

City of Harvey 15305 Broadway Ave. Harvey, IL 60426	Specialty Consulting, Inc. 2942 W. Van Buren St. Chicago, Illinois 60612	**Date:** 07/31/2023

Material Description:
Interior Brick

Photo Location:
Interior of Building

City of Harvey 15305 Broadway Ave. Harvey, IL 60426	Specialty Consulting, Inc. 2942 W. Van Buren St. Chicago, Illinois 60612	**Date:** 07/31/2023

Material Description:
Interior Mortar

Photo Location:
Interior of Building

City of Harvey 15305 Broadway Ave. Harvey, IL 60426	Specialty Consulting, Inc. 2942 W. Van Buren St. Chicago, Illinois 60612	**Date:** 07/31/2023

Material Description:
Door Caulk (ACM)

Photo Location:
Exterior of Building

City of Harvey 15305 Broadway Ave. Harvey, IL 60426	Specialty Consulting, Inc. 2942 W. Van Buren St. Chicago, Illinois 60612	**Date:** 07/31/2023

Material Description:
Exterior Brick

Photo Location:
Exterior of Building

City of Harvey 15305 Broadway Ave. Harvey, IL 60426	Specialty Consulting, Inc. 2942 W. Van Buren St. Chicago, Illinois 60612	**Date:** 07/31/2023

Material Description:
Exterior Mortar

Photo Location:
Exterior of Building

City of Harvey 15305 Broadway Ave. Harvey, IL 60426	Specialty Consulting, Inc. 2942 W. Van Buren St. Chicago, Illinois 60612	**Date:** 07/31/2023

Material Description:
Roof Field (ACM)

Photo Location:
Exterior of Building

City of Harvey 15305 Broadway Ave. Harvey, IL 60426	Specialty Consulting, Inc. 2942 W. Van Buren St. Chicago, Illinois 60612	**Date:** 07/31/2023

Material Description:
Safety Concerns with reliability of structure

Photo Location:
Interior of Building

City of Harvey 15305 Broadway Ave. Harvey, IL 60426	Specialty Consulting, Inc. 2942 W. Van Buren St. Chicago, Illinois 60612	**Date:** 07/31/2023

APPENDIX - D

XRF FIELD DATA SHEET(S)

SPECIALTY CONSULTING, INC.
Architects, Engineers & Scientists
2942 West Van Buren
Chicago, IL – 60612
Tel: (312) 319 7575 • Fax: (312) 319 7580
www.spc-inc.com

XRF FIELD DATA SHEETS

Project Name:	City of Harvey ACM & LBP Survey	**Building Inspector:**	Kyle Boyd
Project Number:	I23-599.101	**IDPH Number:**	1001913
Project Address:	15305 Broadway Ave.	**XRF Serial Number:**	2710
City/State:	Harvey, IL 60624	**Date:**	7/31/2023
Client:	City of Harvey	**Comments:**	

ROOM/LOCATION	Component	Substrate	Color	XRF Reading mg/cm2	Classification P= Positive N=Negative	Damage/Comments
CAL	N/A			1.0	P	
CAL	N/A			1.0	P	
CAL	N/A			1.0	P	
West Elevation	Window	Metal	Green	0.7	N	
	Entry canapy door	Wood	Green	6.2	P	
	Door Covering	Wood	Green	0.3	N	
	Entry Soffit	Wood	White	3.2	P	
	Entry Soffit	Wood	White	1.7	P	
	Door	Wood	White	5.5	P	
	Door Frame	Wood	White	6.3	P	
	Window Covering	Wood	Green	0.5	N	
	Entry canapy door	Metal	Green	0.7	N	
	Window	Wood	White	5.4	P	
	Window	Wood	White	4.8	P	
	Window Canopy	Metal	Green	4.2	P	
East Elevation	Garage Door	Wood	Brown	3.5	P	
	Window bars	Metal	Red	0.3	N	
	Window Covering	Wood	Green	0.5	N	
	Window Lintel	Metal	Green	8.1	P	
Interior	Wall	Plaster	White	3.7	P	
	Wall	Plaster	Beige	5.5	P	
	Wall	Drywall	White	0.3	N	
CAL	N/A			1.0	P	
CAL	N/A			1.0	P	
CAL	N/A			1.0	P	

APPENDIX - E

HEURESIS MODEL Pb200i
PERFORMANCE CHARACTERISTICS SHEET(S)

Performance Characteristic Sheet

EFFECTIVE DATE: December 1, 2020

MANUFACTURER AND MODEL:

Make: ***Viken Detection*** (previously Heuresis)
Models: ***Model Pb200i***
Source: ***^{57}Co, 5 mCi (nominal – new source)***

FIELD OPERATION GUIDANCE

ACTION LEVEL SETTING:

0.5 mg/cm^2

OPERATING PARAMETERS:

Action Level mode

XRF CALIBRATION CHECK LIMITS:

0.8 to 1.2 mg/cm^2 (inclusive) at Action Level setting = 1.0 mg/cm^2

SUBSTRATE CORRECTION:

Not applicable

INCONCLUSIVE RANGE OR THRESHOLD:

ACTION LEVEL MODE READING DESCRIPTION	SUBSTRATE	INCONCLUSIVE RANGE (mg/cm^2)
Results not corrected for substrate bias on any substrate	Brick Concrete Drywall Metal Plaster Wood	0.4 – 0.6 0.4 – 0.6 0.4 – 0.6 0.4 – 0.6 0.4 – 0.6 0.4 – 0.6

BACKGROUND INFORMATION

EVALUATION DATA SOURCE AND DATE:

This sheet is supplemental information to be used in conjunction with Chapter 7 of the HUD *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing*, 2012 Edition ("HUD Guidelines"). Performance parameters shown on this sheet are calculated using test results on building components in the HUD archive. Testing was conducted on 146 test samples in January 2020, with two separate instruments running software version Pb200i 5.0 (DEBUG version) in Action Level test mode. The actual source strength of each instrument on the day of testing was approximately 2.9 mCi; source ages were approximately 9 months.

OPERATING PARAMETERS

Performance parameters shown in this sheet are applicable only when properly operating the instrument using the manufacturer's instructions and procedures described in Chapter 7 of the HUD Guidelines.

XRF CALIBRATION CHECK:

The calibration of the XRF instrument should be checked ***with the Action Level set to 1.0 mg/cm^2*** using the paint film nearest 1.0 mg/cm^2 in the NIST Standard Reference Material (SRM) used (e.g., for NIST SRM 2579, use the 1.02 mg/cm^2 film; for NIST SRM 2579a, use the 1.04 mg/cm^2 film).

If the average (rounded to 1 decimal place) of three readings is outside the acceptable calibration check range, follow the manufacturer's instructions to bring the instrument into control before XRF testing proceeds.

EVALUATING THE QUALITY OF XRF TESTING:

Randomly select ten testing combinations for retesting from each house or from two randomly selected units in multifamily housing.

Conduct XRF re-testing at the ten testing combinations selected for retesting.

Determine if the XRF testing in the units or house passed or failed the test by applying the steps below. Compute the Retest Tolerance Limit by the following steps:

Determine XRF results for the original and retest XRF readings. In single-family and multi-family housing, a result is defined as a single reading. Therefore, there will be ten original and ten retest XRF results for each house or for the two selected units.

Calculate the average of the original XRF result and the retest XRF result for each testing combination.

Square the average for each testing combination.

Add the ten squared averages together. Call this quantity C.

Multiply the number C by 0.0072. Call this quantity D.

Add the number 0.032 to D. Call this quantity E.

Take the square root of E. Call this quantity F.

Multiply F by 1.645. The result is the Retest Tolerance Limit.

Compute the average of all ten original XRF readings.

Compute the average of all ten re-test XRF readings.

Find the absolute difference of the two averages.

If the difference is less than the Retest Tolerance Limit, the inspection has passed the retest. If the difference of the overall averages equals or exceeds the Retest Tolerance Limit, this procedure should be repeated with ten new testing combinations. If the difference of the overall averages is equal to or greater than the Retest Tolerance Limit a second time, then the inspection should be considered deficient.

Use of this procedure is estimated to produce a spurious result approximately 1% of the time. That is, results of this procedure will call for further examination when no examination is warranted in approximately 1 out of 100 dwelling units tested.

TESTING TIMES:

The instrument time to take a reading varied within a narrow range from 5 to 6 seconds, with a small number (3%) of longer times from 7 to 11 seconds. The longer readings were almost all on wood substrates. This range of reading times applies only to instruments with the same source strength as those tested (2.9 mCi at the time of PCS testing). Instruments with stronger sources will have shorter reading times and those with weaker sources, longer reading times.

CLASSIFICATION OF RESULTS:

XRF results are classified as **positive** if they are **greater than or equal** to 0.6 mg/cm^2, ***negative*** if they are ***less than or equal*** *to* 0.4 mg/cm^2 and ***inconclusive*** if they are ***equal*** to 0.5 mg/ cm^2.

DOCUMENTATION:

This XRF Performance Characteristic Sheet (PCS) was developed by QuanTech, Inc., under a contract with the U.S. Department of Housing and Urban Development, Office of Lead Hazard Control and Healthy Homes.

A report titled *Methodology for XRF Performance Characteristic Sheets* (EPA 747-R-95-008) provides an explanation of the statistical methodology used to develop Performance Characteristic Sheets at the Federal standard (Action Level) of 1.0 mg/cm^2, and provides empirical results from using the recommended inconclusive ranges or thresholds for specific XRF instruments. The report may be downloaded at http://www2.epa.gov/lead/methodology-xrf-performance-characteristic-sheets-epa-747-r-95-008-september-1997. The methodology was subsequently generalized by QuanTech for application to other Action Levels.

APPENDIX - F

ASBESTOS & LEAD INSPECTOR / RISK ASSESSOR LICENSE(S) & CERTIFICATION(S)

IDPH

ILLINOIS DEPARTMENT OF PUBLIC HEALTH

525-535 West Jefferson Street • Springfield, Illin

IDPH ASBESTOS PROFESSIONAL LICENSE

ID NUMBER 100 - 11093 ISSUED 4/19/2023 EXPIRES 05/15/2024

DAVID AVILA
2942 W VAN BUREN ST
CHICAGO, IL 60612
Environmental Health

DAVID AVILA
2942 W VAN BUREN ST
CHICAGO, IL 60612

4/19/2023

ASBESTOS PROFESSIONAL LICENSE ID NUMBER: 11093

Enclosed is your Asbestos Professional License. Please note the expiration date on the card and in the image depicted below.

COPY OF THE ASBESTOS PROFESSIONAL LICENSE

Front of License

IDPH

ASBESTOS PROFESSIONAL LICENSE

ID NUMBER 100 - 11093 ISSUED **4/19/2023** EXPIRES 05/15/2024

DAVID AVILA
2942 W VAN BUREN ST
CHICAGO, IL 60612
Environmental Health

Back of License

ENDORSEMENTS	TC EXPIRES
INSPECTOR	9/9/2023
PROJECT MANAGER AIR SAMPLING PROFESSIONAL	9/10/2023

Alteration of this license shall result in legal action
This license issued under authority of the State of Illinois Department of Public Health
This license is valid only when accompanied by a valid training course certificate.

If you have any questions or need further assistance, contact the Asbestos Program at (217)782-3517 or fax (217)785-5897.

Our WEB address is: dph.illinois.gov/topics-services/environmental-health-protection/asbestos
EMAIL Address: dph.asbestos@illinois.gov

7233 S. Adams Street | Willowbrook, IL 60527
(630) 655-3900 | www.otssafety.com

2022

OCCUPATIONAL TRAINING & SUPPLY, INC.

Asbestos Building Inspector Refresher

Occupational Training & Supply, Inc. certifies that

David Avila

has successfully completed the Asbestos Building Inspector Refresher course and has passed the competency exam with a minimum score of 70%. The course is accredited by the Illinois Department of Public Health and Indiana Department of Environmental Management for purposes of accreditation in accordance with EPA 40 CFR 763, Asbestos Hazard Emergency response Act (AHERA) and TSCA Title II.

Course Date: 9/9/2022

Exam Date: 9/9/2022

Expiration Date: 9/9/2023

Certificate Number: BIR2209092141

Kathy DeSalvo

Kathy DeSalvo, Director

CERTIFICATE OF ACHIEVEMENT

Lead Risk Assessment Recertification

Accredited by Illinois Department of Public Health

This is to certify that KYLE BOYD has completed the 8-HOUR LEAD RISK ASSESSMENT RECERTIFICATION course and successfully passed the examination on 07/25/2023 with a minimum score of 70%. Training was in accordance with Title X, U.S. EPA Model Training Course Curriculum, 1995 [illegible] HUD Guidelines 1995, and the Illinois Dept. of Public Health, 1998.

IDPH **LEAD RISK ASSESSOR LICENSE**

LEAD ID	ISSUED	EXPIRES
1001913	12/23/2022	1/31/2024

Kyle R Boyd
2942 W. VanBuren Street
Chicago, IL 60612

ILLINOIS LEAD PROGRAM
Environmental Health

PHS Environment[illegible]
Occupationa[illegible]

37 S Ashland Ave, Chicago, IL 60607 ● www.pub[illegible]

07/25/2023
Course Dates:

07/25/2026
Expires:

2307RAR01
Certificate Number:

Director of Training
Nicholas J. Peneff
Doctor of Public Health

Phone: 312-491-0081

FORM # L-017B

APPENDIX - G

LABORATORY LICENSES & ACCREDITATIONS

United States Department of Commerce
National Institute of Standards and Technology

Certificate of Accreditation to ISO/IEC 17025:2017

NVLAP LAB CODE: 101202-0

STAT Analysis Corporation

Chicago, IL

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

Asbestos Fiber Analysis

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2023-07-01 through 2024-06-30

Effective Dates

For the National Voluntary Laboratory Accreditation Program

National Voluntary Laboratory Accreditation Program

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

STAT Analysis Corporation
STAT Analysis Corporation
2242 W. Harrison St. Suite 200
Chicago, IL 60612
Carolyn Mazzuca
Phone: 312-733-0551
Email: cmazzuca@statanalysis.com
http://www.STATAnalysis.com

ASBESTOS FIBER ANALYSIS **NVLAP LAB CODE 101202-0**

Bulk Asbestos Analysis

Code	***Description***
18/A01	EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

Airborne Asbestos Analysis

Code	***Description***
18/A02	U.S. EPA's "Interim Transmission Electron Microscopy Analytical Methods-Mandatory and Nonmandatory-and Mandatory Section to Determine Completion of Response Actions" as found in 40 CFR, Part 763, Subpart E, Appendix A.

For the National Voluntary Laboratory Accreditation Program

Asbestos & Lead-Based Paint Survey Report

15307 Broadway Ave.
Harvey, IL 60426

Inspection Date: 7/31/2023

SPC Project No.: I23-599.101

August 18, 2023

SPECIALTY CONSULTING, INC.
Architects, Engineers & Scientists
2942 West Van Buren
Chicago, IL – 60612
Phone: (312) 319-7575
www.spc-inc.com

SIGNATURE PAGE

Asbestos & Lead-Based Paint Survey Report

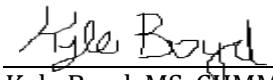
Project Site:

15307 Broadway Ave.
Harvey, IL 60426

Prepared for:

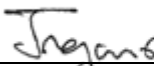
City of Harvey
15320 Broadway Ave.
Harvey, IL 60426

SPC Project #: I23-599.101

Prepared By:  August 18, 2023

Kyle Boyd, MS, CHMM
Sr. Project Manager

Date:

Reviewed By:  August 18, 2023

Jigar Shah, CIH, CSP, CHMM
Director of Industrial Hygiene

Date:

TABLE OF CONTENTS

EXECUTIVE SUMMARY

Scope and Objectives

Specialty Consulting, Inc. (SPC) was retained by the City of Harvey to conduct an asbestos and lead-based paint (LBP) survey of the structure located at 15307 Broadway Ave. in Harvey, Illinois. The purpose of this survey was to identify asbestos-containing material (ACM) and lead-based paint (LBP) that may require removal, special handling, and/or disposal prior to planned demolition activities.

This survey was conducted from *July 31, 2023* through *August 1, 2023* by *David Avilla* and *Kyle Boyd* who are both state-licensed asbestos and lead Inspectors. The Illinois Department of Public Health (IDPH) issued licenses of the inspectors are provided in **Appendix F** of this report.

Findings

Asbestos-Containing Materials: ACM **was identified** during this survey. The materials that were identified as ACM include: roof field.

Please refer to **Table 3.1** for a complete list of building materials that were sampled during this survey. The laboratory results are provided in **Appendix A**.

Lead-Based Paint: LBP **was identified** on some of the painted components/surfaces tested during this survey. The surfaces/components that tested positive include:

- Window Covers
- Lintels
- Support Beams
- Garage Door
- Door
- Vent Duct
- Walls (Plaster, Brick, & Clay Tile)

The specific surfaces/components tested within the building are summarized in **Table 3.2**. XRF field data sheets are provided in **Appendix D**.

1.0 INTRODUCTION

Specialty Consulting, Inc. (SPC) was retained by the City of Harvey to conduct an asbestos and lead-based paint (LBP) survey of the structure located at 15307 Broadway Ave. in Harvey, Illinois. The purpose of this survey was to identify asbestos-containing material (ACM) and lead-based paint (LBP) that may require removal, special handling, and/or disposal prior to planned demolition activities.

1.1 Scope & Objectives

The purpose of the survey was to identify the locations, condition, and quantity of asbestos-containing material (ACM) and lead-based paint (LBP) materials that may require removal, special handling, and/or disposal prior to planned renovation/ demolition activities.

The asbestos survey was conducted to satisfy requirements of the United States Environmental Protection Agency (USEPA) regulations under 40 CFR Part 61, Subpart M, National Emission Standards for Hazardous Air Pollutants (NESHAP). The lead survey was conducted to comply with the Occupational Safety and Health Administration (OSHA) lead regulations.

1.2 General Qualifications

The results, findings, conclusions, and recommendations expressed in this report are based on conditions observed during SPC's survey of the proposed project areas associated with SPC project I23-599.101. The information contained in this report represents conditions at the time of the survey and may not accurately represent conditions at a later date. The possibility exists that suspect hazardous building materials may exist within wall cavities, voids, or other areas hidden from view which were not observed and cannot be ruled out. Any additional potential hazardous materials encountered during the demolition/renovation activities that differ from the components/surfaces tested during this survey, were hidden from view, or were located in the areas not accessible at the time of this survey will require further assessment prior to any disturbance. The estimated quantities provided herein should be considered approximate and are accurate to the extent allowable under the terms and conditions of our contract. This report has been prepared with generally accepted industry practices and procedures. No other warranty, either expressed or implied, is made.

1.3 Report Organization

The report is divided into five sections which discuss the survey activities and methodology, findings,

conclusions, and recommendations associated with the materials/areas addressed during this survey, as follows:

- Section 1.0 – Introduction
- Section 2.0 – Survey Methodology
- Section 3.0 – Summary of Findings
- Section 4.0 – Conclusions and Recommendations
- Section 5.0 – Certification

Supporting documentation is appended and referenced in each section as appropriate.

2.0 SURVEY METHODOLOGY

This section describes SPC's ACM & LBP survey approach and methodologies that were utilized during the field investigation activities. The building survey included performing the following tasks:

- ACM Inspection and Testing
- LBP Inspection and Testing

The following sections present an overview of the approach for each type of survey completed as part of this project.

2.1 Asbestos-Containing Materials

SPC began the asbestos sampling activities with a visual assessment, identification, and inventory of readily visible and accessible homogeneous areas of suspect ACM. A homogeneous area consists of building materials that are similar throughout in terms of color, texture, and age. Building materials identified as concrete (not including cement panels or pipe and soft concrete), glass (includes fiberglass), wood, masonry, metal, plastics are not considered suspect ACM and were not sampled.

A physical assessment of each homogeneous area of suspect ACM was conducted to assess the friability and condition of the materials. A friable material is defined by the USEPA as a material which can be crumbled, pulverized, or reduced to powder by hand pressure when dry. Friability was assessed by physically touching suspect materials.

Bulk samples of suspect ACM were collected in general accordance with NESHAP sampling protocols, based on the results of the visual observation. Random samples of suspect materials were collected of each homogeneous material. Samples were placed in new sealable containers and labeled with unique sample numbers using an indelible marker. All non-disposable sampling equipment was wet wiped and cleaned before and after each use.

A total of *thirty-three (33)* bulk samples were collected from various homogeneous areas of suspect ACM for this project. Bulk samples were collected from the following materials:

- Hard Coat Plaster
- 2' x 4' Ceiling Tile
- Window Caulk
- Interior Brick

- Interior Mortar
- Skylight Caulk
- Roof Shingles on Storefront
- Felt Paper Under Roof Shingles
- Roof Field
- Exterior Brick
- Exterior Mortar

Refer to **Appendix A** for asbestos analytical testing results. Reference photographs are provided in **Appendix C**. Approximate sample location figure(s) can be found in **Appendix B**.

Bulk samples were submitted under chain-of-custody to STAT Analysis Corporation (STAT) in Chicago, Illinois for analysis by polarized light microscopy (PLM) with dispersion staining techniques per USEPA methodology 600/R-93-116. The percentage of asbestos, where applicable, was determined by microscopic visual estimation. Individual layers (when present) were analyzed, and the results were reported separately. Further analysis by Transmission Electron Microscopy (TEM) Methods was utilized for non-friable organically bound material (NOB) that tested negative by PLM (i.e., floor tiles).

STAT is accredited under the National Voluntary Laboratory Accreditation Program (NVLAP Accreditation No. 101202-0). Refer to **Appendix G** for laboratory accreditations.

2.2 Lead-Based Paint

The LBP survey was conducted in accordance with United Stated Department of Housing and Urban Development (HUD) and IDPH protocols. The survey included a visual inspection to identify suspect components/surfaces, analysis of suspect components/surfaces, and data recording. The objective of the testing was to identify painted/coated surfaces with a concentration of lead above 1.0 mg/cm^2 by x-ray fluorescence (XRF) analysis, the criteria established by the USEPA and HUD for classification of lead-based paint. The survey was performed by an IDPH-Licensed Lead Inspector using an XRF spectrum analyzer (Heuresis Model Pb200i, Serial Number 2710, manufactured by Viken Detection of Burlington, MA). A copy of the inspector's licenses and training certificates are provided in **Appendix F**.

A portable XRF analyzer was used due to its demonstrated ability to determine if LBP is present on numerous types of surfaces, analyze the paint without destructive sampling or paint removal, and provide sample results immediately and at a relatively low cost per sample. Portable XRF

instruments expose a building component to x-rays or gamma radiation, which causes lead to emit x-rays with a characteristic frequency or energy. The intensity of this radiation is measured by the instrument. The inspector then compares the displayed value (reading) on the analyzer with the inconclusive range or threshold specified in the XRF Performance Characteristic Sheet (PCS) in **Appendix E** for the specific substrate being tested. If the reading is less than the lower boundary of the inconclusive range, or less than the threshold, then the reading is considered negative. If the reading is greater than the upper boundary of the inconclusive range, or greater or equal to the threshold, then the reading is considered positive. Readings within the inconclusive range, including its boundary values, are considered inconclusive. Because the inconclusive ranges and/or thresholds shown in the PCS are based on 1.0 mg/cm^2, positive and negative readings are consistent with the HUD definition of lead-based paint for identification purposes.

3.0 SUMMARY OF FINDINGS

3.1 Asbestos-Containing Materials

Bulk samples of suspect ACM were collected and analyzed for the presence of asbestos. Results are summarized in **Table 3.1** and include a description of each material, location, material type, test results, and estimated quantity. Each suspect material was placed into one of three material categories: thermal systems insulation (TSI), surfacing materials (SURF), or miscellaneous materials (MISC). Materials confirmed to contain greater than one percent (1%) asbestos by PLM analysis are indicated to have a "positive" result and are therefore classified as ACM.

For the purpose of this building survey, SPC derived its definition of ACM from the USEPA, which classifies ACM as "any product containing more than one percent (1%) asbestos by volume, when analyzed by Polarized Light Microscopy (PLM)". Materials located in different areas of the same homogeneous area, even though not specifically tested, are considered positive or negative for ACM depending on the laboratory sample test results of that particular homogeneous area.

Table 3. 1

Materials Samples for ACM

Material Description	Location	Material Type [1]	ACM Type & %	Friable	PLM Test Results	TEM Test Results	[2] Estimated Quantity
Hard Coat Plaster	Throughout Building	Surf.	Asbestos Not Detected	No	Negative	N/A	N/A
2' x 4' Ceiling Tile	Office Space, and Storage	Misc.	Asbestos Not Detected	No	Negative	N/A	N/A
Window Caulk	Exterior Windows	Misc.	Asbestos Not Detected	No	Negative	N/A	N/A
Interior Brick	Throughout Building	Misc.	Asbestos Not Detected	No	Negative	N/A	N/A
Interior Mortar	Throughout Building	Misc.	Asbestos Not Detected	No	Negative	N/A	N/A
Skylight Caulk	Skylight	Misc.	Asbestos Not Detected	No	Negative	N/A	N/A

Material Description	Location	Material Type [1]	ACM Type & %	Friable	PLM Test Results	TEM Test Results	[2]Estimated Quantity
Shingles on Store Front	Roof	Misc.	Asbestos Not Detected	No	Negative	N/A	N/A
Felt Paper Under Shingles	Roof	Misc.	Asbestos Not Detected	No	Negative	N/A	N/A
Roof Field	Exterior Roof	Misc.	Chrysotile 1-5%	No	Positive	N/A	5750 SF
Exterior Brick	Exterior of Building	Misc.	Asbestos Not Detected	No	Negative	N/A	N/A
Exterior Mortar	Exterior of Building	Misc.	Asbestos Not Detected	No	Negative	N/A	N/A

Notes:

1 *TSI= Thermal System Insulation, Surf= Surfacing Material, and Misc. = Miscellaneous*

2 *Quantities are estimates only, all quantities must be field verify.*

Refer to **Appendix B** (sample location figures) for approximate location of samples collected, and **Appendix C** for reference photographs of materials surveyed in this project.

3.2 Lead-Based Paint

LBP **was identified** on some of the painted surfaces/components tested during this survey. The surfaces/components tested for LBP are summarized in **Table 3.2**.

Table 3. 2

Surfaces/Components Tested for LBP

Room/Location	Component	Substrate	Color	XRF Reading mg/cm^2	Classification P= Positive N=Negative
East Elevation	Exterior wood paneling	Wood	Green	0.4	N
	Exterior wood paneling	Wood	Green	0.3	N
	Window frame	Wood	Green	0.7	N
	A/c unit	Metal	Green	0.3	N
West Elevation	Exterior wall	Brick	White	5.2	P
	Garage door	Wood	White	4.1	P
	Window Cover	Wood	Whtie	3.5	P
	Window Lintel	Metal	White	3.2	P
	Garage Door Lintel	Metal	White	4.2	P
Inside Building Open RM	Support Beams	Wood	White	3.2	P
	Skylight	Metal	Black	0.4	N
	Door	Wood	White	5.1	P
	Walls	Brick	White	3.2	P
	Walls	Brick	White	4.1	P
	Walls	Brick	Green	3.5	P
	Walls	Brick	Green	4.8	P
	Garage Door	Metal	White	4.2	P
	Vent Duct	Metal	White	5.5	P
Attic	Storage Room Wall Attic	Plaster	White	3.1	P
	Storage Room Wall Attic	Plaster	White	2.7	P
	Stair Handrail	Metal	Orange	0.7	N
	Stair Tread	Metal	Black	0.5	N
Storage Room	Walls	Drywall	White	0.5	N
	Walls	Drywall	White	0.4	N

Room/Location	Component	Substrate	Color	XRF Reading mg/cm^2	Classification P= Positive N=Negative
Storage Room	Walls	Drywall	White	0.3	N
	Walls	Drywall	White	0.4	N
	Ceiling	Drywall	White	0.5	N
Office/ Storage	Walls	Wood	Varnish	0.5	N
	Walls	Wood	Varnish	0.5	N
	Window	Wood	Green	0.4	N

4.0 CONCLUSIONS AND RECOMMENDATIONS

4.1 Asbestos-Containing Materials

The following ACM were **identified** during this survey: roof field.

SPC recommends the preparation of an asbestos abatement project design prior to any demolition activities in which ACM may be impacted. An asbestos abatement design plan and specifications should include information regarding the location of containments and barriers, type of sealant, and air sampling requirements and clearance during the asbestos abatement activities. The asbestos design plan and specification shall be prepared and signed by an IDPH licensed asbestos project designer in accordance with Illinois regulations. Asbestos abatement work shall be conducted by a licensed abatement contractor under the supervision of a licensed asbestos project manager in accordance with all applicable Federal, state, and local regulations.

Any suspect material that is discovered during the renovation/demolition activities and is not listed in **Table 3.1**, was not assessed during this survey. Such material shall be assumed and treated as ACM until tested and proven otherwise.

4.2 Lead-Based Paint

LBP **was identified** on some of the painted components/surfaces tested within this survey. Surfaces/components that tested positive for LBP included: metal lintels, garage door, support beams, doors, plaster walls, and brick walls.

SPC recommends that prior to any demolition/renovation activities in which LBP surfaces/components may be impacted or disturbed, a lead mitigation/abatement project design/work plan shall be prepared. The design/work plan shall include information regarding lead-based paint locations, exposure assessment, and lead-based paint waste handling, removal, and disposal. Also, all LBP mitigation/abatement work shall be performed and supervised by properly trained workers and supervisors, along with using industry accredited contractors specializing in this type of LBP abatement under the monitoring of an environmental consultant. The mitigation/abatement work shall be performed in accordance with applicable local, state, and federal regulations, including but not limited to: IDPH Lead Poisoning Prevention Act (Title 77, Part 845); Illinois Environmental Protection Act (415 ILCS); Occupational Safety and Health Regulations (1926.62); and EPA Renovation, Repair, and Painting (RRP).

For the surfaces/components that tested negative during this survey, the Occupational Safety and Health Administration (OSHA) Lead in Construction Standard states that "negative" readings (i.e., those below the HUD/EPA definition of what constitutes LBP (1.0 mg/cm^2) DO NOT relieve contractors from performing exposure assessments (personal air monitoring) on their employees per the OSHA Lead Standard, and should not be interpreted as lead is not present. Although a reading may indicate "negative", airborne lead concentrations still may exceed the OSHA Action Level or the OSHA Permissible Exposure Limit (PEL) depending on the work activity. SPC recommends that prior to any renovation activities in the building, engineering control measures be implemented in the renovation area to minimize the generation of dust, and site worker and occupant exposures to lead.

For any surfaces/components that are not listed in **Table 3.2** were not assessed during this survey, such surfaces/components shall be assumed and treated as LBP until tested and proven otherwise.

5.0 CERTIFICATION

The undersigned hereby affirm that the conditions described herein are accurate to the best of our knowledge and belief and are subject to the limitations inherent in the investigative techniques used and any expressed limitations of this survey. Applicable licensing to perform the described survey activities were valid at the time of performance of services in accordance with applicable federal, state, and local laws, rules, and regulations.

Inspection Performed By:

David Avilla	*100-11093*	*Kyle Boyd*	*1001913*
Asbestos Inspector's Name	IDPH License #	Lead Inspector's Name	IDPH License #
David Avilla	8/17/2023	Kyle Boyd	8/17/2023
Asbestos Inspector's Signature	Date	Lead Inspector's Signature	Date

APPENDIX - A

ANALYTICAL TESTING RESULTS

(PLM)

STAT Analysis Corporation
2242 West Harrison St., Suite 200, Chicago, IL 60612-3766
Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

NVLAP Lab Code 101202-0

ASBESTOS ANALYSIS BY POLARIZED LIGHT MICROSCOPY

Method: EPA/600/R-93/116

SPC Specialty Consulting, Inc
2942 W Van Buren Street
Chicago, IL 60612
Phone: (312) 319-7575
Fax: (312) 319-7580

Reference:	I23-599.101	Date Received:	08/02/2023
Location:	15307 S. Broadway	Date Analyzed:	08/10/2023
Batch No.:	366658	Date Reported:	08/10/2023
Customer No.:	4855	Turn Around Time:	5 Days

Laboratory Sample	Customer Sample Number	Asbestos Components (%)	Non-Asbestos Components (%)
366658001	DA073123-01	ND	Cellulose 1-5% Binder 95-99%
366658002	DA073123-02	ND	Cellulose 1-5% Binder 95-99%
366658003	DA073123-03	ND	Cellulose 1-5% Binder 95-99%
366658004	DA073123-04	ND	Cellulose 35-40% Binder 60-65%
366658005	DA073123-05	ND	Cellulose 35-40% Binder 60-65%
366658006	DA073123-06	ND	Cellulose 35-40% Binder 60-65%
366658007	DA073123-07	ND	Cellulose 1-5% Binder 95-99%
366658008	DA073123-08	ND	Cellulose 1-5% Binder 95-99%
366658009	DA073123-09	ND	Cellulose 1-5% Binder 95-99%
366658010	DA073123-10	ND	Cellulose 1-5% Binder 95-99%

ND = Asbestos Not Detected (Not Present) NA = Not Analyzed NS = Not Submitted

Components of inhomogeneous samples are analyzed per our Standard Operating Procedure, or per customer request.

The use of the NVLAP logo does not imply endorsement by NVLAP or any agency of the US Government.

Analyzed by Name : Daniel Mikos / Microscopist Date: 08/10/2023

STAT Analysis Corporation
2242 West Harrison St., Suite 200, Chicago, IL 60612-3766
Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

NVLAP Lab Code 101202-0

ASBESTOS ANALYSIS BY POLARIZED LIGHT MICROSCOPY

Method: EPA/600/R-93/116

SPC Specialty Consulting, Inc
2942 W Van Buren Street
Chicago, IL 60612
Phone: (312) 319-7575
Fax: (312) 319-7580

Reference:	I23-599.101	Date Received:	08/02/2023
Location:	15307 S. Broadway	Date Analyzed:	08/10/2023
Batch No.:	366658	Date Reported:	08/10/2023
Customer No.:	4855	Turn Around Time:	5 Days

Laboratory Sample	Customer Sample Number	Asbestos Components (%)	Non-Asbestos Components (%)
366658011	DA073123-11	ND	Cellulose 1-5% Binder 95-99%
366658012	DA073123-12	ND	Cellulose 1-5% Binder 95-99%
366658013	DA073123-13	ND	Cellulose 1-5% Binder 95-99%
366658014	DA073123-14	ND	Cellulose 1-5% Binder 95-99%
366658015	DA073123-15	ND	Cellulose 1-5% Binder 95-99%
366658016	DA073123-16	ND	Cellulose 1-5% Binder 95-99%
366658017	DA073123-17	ND	Cellulose 1-5% Binder 95-99%
366658018	DA073123-18	ND	Cellulose 1-5% Binder 95-99%
366658019	DA073123-19	ND	Binder 60-65% Other 35-40%
366658020	DA073123-20	ND	Binder 60-65% Other 35-40%

ND = Asbestos Not Detected (Not Present) NA = Not Analyzed NS = Not Submitted

Components of inhomogeneous samples are analyzed per our Standard Operating Procedure, or per customer request.

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Analyzed by Name : Daniel Mikos / Microscopist Date: 08/10/2023

STAT Analysis Corporation
2242 West Harrison St., Suite 200, Chicago, IL 60612-3766
Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

NVLAP Lab Code 101202-0

ASBESTOS ANALYSIS BY POLARIZED LIGHT MICROSCOPY

Method: EPA/600/R-93/116

SPC Specialty Consulting, Inc
2942 W Van Buren Street
Chicago, IL 60612
Phone: (312) 319-7575
Fax: (312) 319-7580

Reference:	I23-599.101	Date Received:	08/02/2023
Location:	15307 S. Broadway	Date Analyzed:	08/10/2023
Batch No.:	366658	Date Reported:	08/10/2023
Customer No.:	4855	Turn Around Time:	5 Days

Laboratory Sample	Customer Sample Number	Asbestos Components (%)	Non-Asbestos Components (%)
366658021	DA073123-21	ND	Binder 60-65% Other 35-40%
366658022	DA073123-22	ND	Cellulose 10-15% Binder 85-90%
366658023	DA073123-23	ND	Cellulose 10-15% Binder 85-90%
366658024	DA073123-24	ND	Cellulose 10-15% Binder 85-90%
366658025	DA073123-25	Chrysotile 1-5%	Binder 95-99%
366658026	DA073123-26	NA	
366658027	DA073123-27	NA	
366658028	DA073123-28	ND	Cellulose 1-5% Binder 95-99%
366658029	DA073123-29	ND	Cellulose 1-5% Binder 95-99%
366658030	DA073123-30	ND	Cellulose 1-5% Binder 95-99%
366658031	DA073123-31	ND	Cellulose 1-5% Binder 95-99%

ND = Asbestos Not Detected (Not Present) NA = Not Analyzed NS = Not Submitted

Components of inhomogeneous samples are analyzed per our Standard Operating Procedure, or per customer request.

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Analyzed by Name : Daniel Mikos / Microscopist Date: 08/10/2023

STAT Analysis Corporation
2242 West Harrison St., Suite 200, Chicago, IL 60612-3766
Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

NVLAP Lab Code 101202-0

ASBESTOS ANALYSIS BY POLARIZED LIGHT MICROSCOPY

Method: EPA/600/R-93/116

SPC Specialty Consulting, Inc
2942 W Van Buren Street
Chicago, IL 60612
Phone: (312) 319-7575
Fax: (312) 319-7580

Reference:	I23-599.101	Date Received:	08/02/2023
Location:	15307 S. Broadway	Date Analyzed:	08/10/2023
Batch No.:	366658	Date Reported:	08/10/2023
Customer No.:	4855	Turn Around Time:	5 Days

Laboratory Sample	Customer Sample Number	Asbestos Components (%)	Non-Asbestos Components (%)
366658032	DA073123-32	ND	Cellulose 1-5% Binder 95-99%
366658033	DA073123-33	ND	Cellulose 1-5% Binder 95-99%

ND = Asbestos Not Detected (Not Present) NA = Not Analyzed NS = Not Submitted

Components of inhomogeneous samples are analyzed per our Standard Operating Procedure, or per customer request.

The use of the NVLAP logo does not imply endorsement by NVLAP or any agency of the US Government.

Analyzed by Name : Daniel Mikos / Microscopist Date: 08/10/2023

SPECIALTY CONSULTING, INC.
Architects, Engineers & Scientists

2942 W. Van Buren Street
Chicago, IL 60612
312.319.7575 (O) 312.319.7580 (F)
www.spc-inc.com

366658

PLM BULK LABORATORY ANALYSIS FORM

Project Name: 15307 S. Broadway	**Project Manager:** David Avila
Project Number: I23-599.101	**Building Inspector:** David Avila
Project Address: 15307 S. Broadway	**IDPH Number:** 100-11093
City/ State: Harvey, IL	**Work Day:** S M T W TH F S
Client: City of Harvey	**Analyze by Method:** EPA/600/R-93-116
Date: 7/31/2023	

Field Number	HA Number	Type of material, specific sample location (i.e., Room Number, Building Construction Date)
DA073123-01		Plaster – Interior of Building
DA073123-02		Plaster – Interior of Building
DA073123-03		Plaster – Interior of Building
DA073123-04		2'x4" Ceiling Tile – Interior of Building
DA073123-05		2'x4" Ceiling Tile – Interior of Building
DA073123-06		2'x4" Ceiling Tile – Interior of Building
DA073123-07		Window Caulk
DA073123-08		Window Caulk
DA073123-09		Window Caulk
DA073123-10		Interior Brick
DA073123-11		Interior Brick
DA073123-12		Interior Brick

TURN AROUND TIME: 1 Day / 2 Days / 3 Days

5 Days

COMMENTS: E-mail Results to: davila@spc-inc.com & kboyd@spc-inc.com

Stop at 1st Positive

CHAIN OF CUSTODY RECORD

Collected by (Signature) Dan Dud	*Date:* 7/31	*Time:*	Relinquished by (Signature) Dan Dud	*Date:* 7/31	*Time:*
Received by: (Signature)	*Date:*	*Time:*	Relinquished by: (signature)	*Date:*	*Time:*
Dispatched by: (Signature, if mailed)	*Date:*	*Time:*	Received for Laboratory by:	*Date:* 8-2-2023	*Time:* 11:35

Definitions: BLK-Bulk Sample, PLM-Polarized Light Microscopy, TEM-Transmission Electron Microscope.

SPECIALTY CONSULTING, INC.
Architects, Engineers & Scientists

2942 W. Van Buren Street
Chicago, IL 60612
312.319.7575 (O) 312.319.7580 (F)
www.spc-inc.com

366658

PLM BULK LABORATORY ANALYSIS FORM

Project Name: 15307 S. Broadway	**Project Manager:** David Avila
Project Number: I23-599.101	**Building Inspector:** David Avila
Project Address: 15307 S. Broadway	**IDPH Number:** 100-11093
City/ State: Harvey, IL	**Work Day:** S M T W TH F S
Client: City of Harvey	**Analyze by Method:** EPA/600/R-93-116
Date: 7/31/2023	

Field Number	HA Number	Type of material, specific sample location (i.e., Room Number, Building Construction Date)
DA073123-13		Interior Mortar
DA073123-14		Interior Mortar
DA073123-15		Interior Mortar
DA073123-16		Skylight Caulk
DA073123-17		Skylight Caulk
DA073123-18		Skylight Caulk
DA073123-19		Shingles on Store Front
DA073123-20		Shingles on Store Front
DA073123-21		Shingles on Store Front
DA073123-22		Felt Paper under Shingles
DA073123-23		Felt Paper under Shingles
DA073123-24		Felt Paper under Shingles

TURN AROUND TIME: 1 Day / 2 Days / 3 Days

5 Days

COMMENTS: E-mail Results to: davila@spc-inc.com & kboyd@spc-inc.com

Stop at 1st Positive

CHAIN OF CUSTODY RECORD

Collected by: (Signature) Dan Cud	*Date:* 7/31	*Time:*	Relinquished by (Signature) Dan Cud	*Date:* 7/31	*Time:*
Received by: (Signature)	*Date:*	*Time:*	Relinquished by: (signature)	*Date:*	*Time:*
Dispatched by: (Signature, if mailed)	*Date:*	*Time:*	Received for Laboratory by:	*Date:* 8-2-2023	*Time:* 11:35

Definitions: BLK-Bulk Sample, PLM-Polarized Light Microscopy, TEM-Transmission Electron Microscope.

SPECIALTY CONSULTING, INC.
Architects, Engineers & Scientists

2942 W. Van Buren Street
Chicago, IL 60612
312.319.7575 (O) 312.319.7580 (F)
www.spc-inc.com

366658

PLM BULK LABORATORY ANALYSIS FORM

Project Name: 15307 S. Broadway	**Project Manager:** David Avila
Project Number: I23-599.101	**Building Inspector:** David Avila
Project Address: 15307 S. Broadway	**IDPH Number:** 100-11093
City/ State: Harvey, IL	**Work Day:** S M T W TH F S
Client: City of Harvey	**Analyze by Method:** EPA/600/R-93-116
Date: 7/31/2023	

Field Number	HA Number	Type of material, specific sample location (i.e., Room Number, Building Construction Date)
DA073123-25		Roof Field
DA073123-26		Roof Field
DA073123-27		Roof Field
DA073123-28		Exterior Brick
DA073123-29		Exterior Brick
DA073123-30		Exterior Brick
DA073123-31		Exterior Mortar
DA073123-32		Exterior Mortar
DA073123-33		Exterior Mortar

TURN AROUND TIME: 1 Day, 2 Days, 3 Days

5 Days

COMMENTS: E-mail Results to: davila@spc-inc.com & kboyd@spc-inc.com

Stop at 1st Positive

CHAIN OF CUSTODY RECORD

Collected by: (Signature) Dan Cul	*Date:* 5/20	*Time:*	Relinquished by (Signature) Dan Cul	*Date:* 5/23	*Time:*
Received by: (Signature)	*Date:*	*Time:*	Relinquished by: (signature)	*Date:*	*Time:*
Dispatched by: (Signature, if mailed)	*Date:*	*Time:*	Received for Laboratory by:	*Date:* 8-1-2023	*Time:* 11:35

Definitions: BLK-Bulk Sample, PLM-Polarized Light Microscopy, TEM-Transmission Electron Microscope.

APPENDIX - B

SAMPLE LOCATION FIGURE(S)

N/A

APPENDIX - C

REFERENCE PHOTOGRAPHS(S)

Material Description:
Hard Coat Plaster

Photo Location:
Interior of Building

City of Harvey 15307 Broadway Ave. Harvey, IL 60426	Specialty Consulting, Inc. 2942 W. Van Buren St. Chicago, Illinois 60612	**Date:** 07/31/2023

Material Description:
2' x 4' Ceiling Tile

Photo Location:
Office Area

City of Harvey 15307 Broadway Ave. Harvey, IL 60426	Specialty Consulting, Inc. 2942 W. Van Buren St. Chicago, Illinois 60612	**Date:** 07/31/2023

Material Description:
Window Caulk

Photo Location:
Exterior of Building

City of Harvey 15307 Broadway Ave. Harvey, IL 60426	Specialty Consulting, Inc. 2942 W. Van Buren St. Chicago, Illinois 60612	**Date:** 07/31/2023

Material Description:
Interior Brick

Photo Location:
Interior of Building

City of Harvey 15307 Broadway Ave. Harvey, IL 60426	Specialty Consulting, Inc. 2942 W. Van Buren St. Chicago, Illinois 60612	**Date:** 07/31/2023

Material Description:
Interior Mortar

Photo Location:
Interior of Building

City of Harvey 15307 Broadway Ave. Harvey, IL 60426	Specialty Consulting, Inc. 2942 W. Van Buren St. Chicago, Illinois 60612	**Date:** 07/31/2023

Material Description:
Skylight Caulk

Photo Location:
Interior of Building Skylight collapse in

City of Harvey 15307 Broadway Ave. Harvey, IL 60426	Specialty Consulting, Inc. 2942 W. Van Buren St. Chicago, Illinois 60612	**Date:** 07/31/2023

Material Description:
Shingles on Storefront

Photo Location:
Exterior of Building

City of Harvey 15307 Broadway Ave. Harvey, IL 60426	Specialty Consulting, Inc. 2942 W. Van Buren St. Chicago, Illinois 60612	**Date:** 07/31/2023

Material Description:
Felt Paper Under Roof Shingles

Photo Location:
Exterior of Building

City of Harvey 15307 Broadway Ave. Harvey, IL 60426	Specialty Consulting, Inc. 2942 W. Van Buren St. Chicago, Illinois 60612	**Date:** 07/31/2023

Material Description:
Roof Field (ACM)

Photo Location:
Exterior of Building

City of Harvey 15307 Broadway Ave. Harvey, IL 60426	Specialty Consulting, Inc. 2942 W. Van Buren St. Chicago, Illinois 60612	**Date:** 07/31/2023

Material Description:
Exterior Brick

Photo Location:
Exterior of Building

City of Harvey 15307 Broadway Ave. Harvey, IL 60426	Specialty Consulting, Inc. 2942 W. Van Buren St. Chicago, Illinois 60612	**Date:** 07/31/2023

Material Description:
Exterior Mortar

Photo Location:
Exterior of Building

City of Harvey 15307 Broadway Ave. Harvey, IL 60426	Specialty Consulting, Inc. 2942 W. Van Buren St. Chicago, Illinois 60612	**Date:** 07/31/2023

APPENDIX - D

XRF FIELD DATA SHEET(S)

SPECIALTY CONSULTING, INC.
Architects, Engineers & Scientists
2942 West Van Buren
Chicago, IL – 60612
Tel: (312) 319 7575 • Fax: (312) 319 7580
www.spc-inc.com

XRF FIELD DATA SHEETS

Project Name:	City of Harvey ACM & LBP Survey	**Building Inspector:**	Kyle Boyd
Project Number:	I23-599.101	**IDPH Number:**	1001913
Project Address:	15307 Broadway Ave.	**XRF Serial Number:**	2710
City/State:	Harvey, IL 60624	**Date:**	7/31/2023
Client:	City of Harvey	**Comments:**	

ROOM/LOCATION	Component	Substrate	Color	XRF Reading mg/cm2	Classification P= Positive N=Negative	Damage/Comments
CAL	N/A			1.0	P	
CAL	N/A			1.0	P	
CAL	N/A			1.0	P	
East Elevation	Exterior wood paneling	Wood	Green	0.4	N	
	Exterior wood paneling	Wood	Green	0.3	N	
	Window frame	Wood	Green	0.7	N	
	A/c unit	Metal	Green	0.3	N	
West Elevation	Exterior wall	Brick	White	5.2	P	
	Garage door	Wood	White	4.1	P	
	Window Cover	Wood	Whtie	3.5	P	
	Window Lintel	Metal	White	3.2	P	
	Garage Door Lintel	Metal	White	4.2	P	
Open Room	Support Beams	Wood	White	3.2	P	
	Skylighy	Metal	Black	0.4	N	
	Door	Wood	White	5.1	P	
	Walls	Brick	White	3.2	P	
	Walls	Brick	White	4.1	P	
	Walls	Brick	Green	3.5	P	
	Walls	Brick	Green	4.8	P	
	Garage Door	Metal	White	4.2	P	
	Vent Duct	Metal	White	5.5	P	
Attic	Storage Room Wall Attic	Plaster	White	3.1	P	
	Storage Room Wall Attic	Plaster	White	2.7	P	
	Stair Handrail	Metal	Orange	0.7	N	
	Stair Tread	Metal	Black	0.5	N	
Storage Room	Walls	Drywall	White	0.5	N	
	Walls	Drywall	White	0.4	N	
	Walls	Drywall	White	0.3	N	
	Walls	Drywall	White	0.4	N	
	Ceiling	Drywall	White	0.5	N	
Office/ Storage	Walls	Wood	Varnish	0.5	N	
	Walls	Wood	Varnish	0.5	N	
	Window	Wood	Green	0.4	N	
CAL	N/A			1.0	P	
CAL	N/A			1.0	P	
CAL	N/A			1.0	P	

APPENDIX - E

HEURESIS MODEL Pb200i
PERFORMANCE CHARACTERISTICS SHEET(S)

Performance Characteristic Sheet

EFFECTIVE DATE: December 1, 2020

MANUFACTURER AND MODEL:

Make: ***Viken Detection*** (previously Heuresis)
Models: ***Model Pb200i***
Source: ***^{57}Co, 5 mCi (nominal – new source)***

FIELD OPERATION GUIDANCE

ACTION LEVEL SETTING:

0.5 mg/cm^2

OPERATING PARAMETERS:

Action Level mode

XRF CALIBRATION CHECK LIMITS:

0.8 to 1.2 mg/cm^2 (inclusive) at Action Level setting = 1.0 mg/cm^2

SUBSTRATE CORRECTION:

Not applicable

INCONCLUSIVE RANGE OR THRESHOLD:

ACTION LEVEL MODE READING DESCRIPTION	SUBSTRATE	INCONCLUSIVE RANGE (mg/cm^2)
Results not corrected for substrate bias on any substrate	Brick Concrete Drywall Metal Plaster Wood	0.4 – 0.6 0.4 – 0.6 0.4 – 0.6 0.4 – 0.6 0.4 – 0.6 0.4 – 0.6

BACKGROUND INFORMATION

EVALUATION DATA SOURCE AND DATE:

This sheet is supplemental information to be used in conjunction with Chapter 7 of the HUD *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing*, 2012 Edition ("HUD Guidelines"). Performance parameters shown on this sheet are calculated using test results on building components in the HUD archive. Testing was conducted on 146 test samples in January 2020, with two separate instruments running software version Pb200i 5.0 (DEBUG version) in Action Level test mode. The actual source strength of each instrument on the day of testing was approximately 2.9 mCi; source ages were approximately 9 months.

OPERATING PARAMETERS

Performance parameters shown in this sheet are applicable only when properly operating the instrument using the manufacturer's instructions and procedures described in Chapter 7 of the HUD Guidelines.

XRF CALIBRATION CHECK:

The calibration of the XRF instrument should be checked ***with the Action Level set to 1.0 mg/cm^2*** using the paint film nearest 1.0 mg/cm^2 in the NIST Standard Reference Material (SRM) used (e.g., for NIST SRM 2579, use the 1.02 mg/cm^2 film; for NIST SRM 2579a, use the 1.04 mg/cm^2 film).

If the average (rounded to 1 decimal place) of three readings is outside the acceptable calibration check range, follow the manufacturer's instructions to bring the instrument into control before XRF testing proceeds.

EVALUATING THE QUALITY OF XRF TESTING:

Randomly select ten testing combinations for retesting from each house or from two randomly selected units in multifamily housing.

Conduct XRF re-testing at the ten testing combinations selected for retesting.

Determine if the XRF testing in the units or house passed or failed the test by applying the steps below. Compute the Retest Tolerance Limit by the following steps:

Determine XRF results for the original and retest XRF readings. In single-family and multi-family housing, a result is defined as a single reading. Therefore, there will be ten original and ten retest XRF results for each house or for the two selected units.

Calculate the average of the original XRF result and the retest XRF result for each testing combination.

Square the average for each testing combination.

Add the ten squared averages together. Call this quantity C.

Multiply the number C by 0.0072. Call this quantity D.

Add the number 0.032 to D. Call this quantity E.

Take the square root of E. Call this quantity F.

Multiply F by 1.645. The result is the Retest Tolerance Limit.

Compute the average of all ten original XRF readings.

Compute the average of all ten re-test XRF readings.

Find the absolute difference of the two averages.

If the difference is less than the Retest Tolerance Limit, the inspection has passed the retest. If the difference of the overall averages equals or exceeds the Retest Tolerance Limit, this procedure should be repeated with ten new testing combinations. If the difference of the overall averages is equal to or greater than the Retest Tolerance Limit a second time, then the inspection should be considered deficient.

Use of this procedure is estimated to produce a spurious result approximately 1% of the time. That is, results of this procedure will call for further examination when no examination is warranted in approximately 1 out of 100 dwelling units tested.

TESTING TIMES:

The instrument time to take a reading varied within a narrow range from 5 to 6 seconds, with a small number (3%) of longer times from 7 to 11 seconds. The longer readings were almost all on wood substrates. This range of reading times applies only to instruments with the same source strength as those tested (2.9 mCi at the time of PCS testing). Instruments with stronger sources will have shorter reading times and those with weaker sources, longer reading times.

CLASSIFICATION OF RESULTS:

XRF results are classified as **positive** if they are **greater than or equal** to 0.6 mg/cm^2, ***negative*** if they are ***less than or equal*** *to* 0.4 mg/cm^2 and ***inconclusive*** if they are ***equal*** to 0.5 mg/ cm^2.

DOCUMENTATION:

This XRF Performance Characteristic Sheet (PCS) was developed by QuanTech, Inc., under a contract with the U.S. Department of Housing and Urban Development, Office of Lead Hazard Control and Healthy Homes.

A report titled *Methodology for XRF Performance Characteristic Sheets* (EPA 747-R-95-008) provides an explanation of the statistical methodology used to develop Performance Characteristic Sheets at the Federal standard (Action Level) of 1.0 mg/cm^2, and provides empirical results from using the recommended inconclusive ranges or thresholds for specific XRF instruments. The report may be downloaded at http://www2.epa.gov/lead/methodology-xrf-performance-characteristic-sheets-epa-747-r-95-008-september-1997. The methodology was subsequently generalized by QuanTech for application to other Action Levels.

APPENDIX - F

ASBESTOS & LEAD INSPECTOR / RISK ASSESSOR LICENSE(S) & CERTIFICATION(S)

IDPH

ILLINOIS DEPARTMENT OF PUBLIC HEALTH

525-535 West Jefferson Street • Springfield, Illin

IDPH ASBESTOS PROFESSIONAL LICENSE

ID NUMBER 100 - 11093 ISSUED 4/19/2023 EXPIRES 05/15/2024

DAVID AVILA
2942 W VAN BUREN ST
CHICAGO, IL 60612
Environmental Health

DAVID AVILA
2942 W VAN BUREN ST
CHICAGO, IL 60612

4/19/2023

ASBESTOS PROFESSIONAL LICENSE ID NUMBER: 11093

Enclosed is your Asbestos Professional License. Please note the expiration date on the card and in the image depicted below.

COPY OF THE ASBESTOS PROFESSIONAL LICENSE

Front of License

IDPH

ASBESTOS PROFESSIONAL LICENSE

ID NUMBER 100 - 11093 ISSUED **4/19/2023** EXPIRES 05/15/2024

DAVID AVILA
2942 W VAN BUREN ST
CHICAGO, IL 60612
Environmental Health

Back of License

ENDORSEMENTS	TC EXPIRES
INSPECTOR	9/9/2023
PROJECT MANAGER AIR SAMPLING PROFESSIONAL	9/10/2023

Alteration of this license shall result in legal action
This license issued under authority of the State of Illinois Department of Public Health
This license is valid only when accompanied by a valid training course certificate.

If you have any questions or need further assistance, contact the Asbestos Program at (217)782-3517 or fax (217)785-5897.

Our WEB address is: dph.illinois.gov/topics-services/environmental-health-protection/asbestos
EMAIL Address: dph.asbestos@illinois.gov

7233 S. Adams Street | Willowbrook, IL 60527
(630) 655-3900 | www.otssafety.com

2022

OCCUPATIONAL TRAINING & SUPPLY, INC.

Asbestos Building Inspector Refresher

Occupational Training & Supply, Inc. certifies that

David Avila

has successfully completed the Asbestos Building Inspector Refresher course and has passed the competency exam with a minimum score of 70%. The course is accredited by the Illinois Department of Public Health and Indiana Department of Environmental Management for purposes of accreditation in accordance with EPA 40 CFR 763, Asbestos Hazard Emergency response Act (AHERA) and TSCA Title II.

Course Date: 9/9/2022

Exam Date: 9/9/2022

Expiration Date: 9/9/2023

Certificate Number: BIR2209092141

Kathy DeSalvo

Kathy DeSalvo, Director

CERTIFICATE OF ACHIEVEMENT

Lead Risk Assessment Recertification

Accredited by Illinois Department of Public Health

This is to certify that KYLE BOYD has completed the 8-HOUR LEAD RISK ASSESSMENT RECERTIFICATION course and successfully passed the examination on 07/25/2023 with a minimum score of 70%. Training was in accordance with Title X, U.S. EPA Model Training Course Curriculum, 1995 [illegible] HUD Guidelines 1995, and the Illinois Dept. of Public Health, 1998.

IDPH **LEAD RISK ASSESSOR LICENSE**

LEAD ID	ISSUED	EXPIRES
1001913	12/23/2022	1/31/2024

Kyle R Boyd
2942 W. VanBuren Street
Chicago, IL 60612

ILLINOIS LEAD PROGRAM
Environmental Health

PHS Environment[illegible]
Occupationa[illegible]

37 S Ashland Ave, Chicago, IL 60607 ● www.pub[illegible]

07/25/2023
Course Dates:

07/25/2026
Expires:

2307RAR01
Certificate Number:

Director of Training
Nicholas J. Peneff
Doctor of Public Health

Phone: 312-491-0081

FORM # L-017B

APPENDIX - G

LABORATORY LICENSES & ACCREDITATIONS

United States Department of Commerce
National Institute of Standards and Technology

Certificate of Accreditation to ISO/IEC 17025:2017

NVLAP LAB CODE: 101202-0

STAT Analysis Corporation

Chicago, IL

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

Asbestos Fiber Analysis

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2023-07-01 through 2024-06-30

Effective Dates

For the National Voluntary Laboratory Accreditation Program

National Voluntary Laboratory Accreditation Program

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

STAT Analysis Corporation
STAT Analysis Corporation
2242 W. Harrison St. Suite 200
Chicago, IL 60612
Carolyn Mazzuca
Phone: 312-733-0551
Email: cmazzuca@statanalysis.com
http://www.STATAnalysis.com

ASBESTOS FIBER ANALYSIS **NVLAP LAB CODE 101202-0**

Bulk Asbestos Analysis

Code	***Description***
18/A01	EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

Airborne Asbestos Analysis

Code	***Description***
18/A02	U.S. EPA's "Interim Transmission Electron Microscopy Analytical Methods-Mandatory and Nonmandatory-and Mandatory Section to Determine Completion of Response Actions" as found in 40 CFR, Part 763, Subpart E, Appendix A.

For the National Voluntary Laboratory Accreditation Program

Limited Asbestos & Lead-Based Paint Survey Report

15315 Broadway Ave.
Harvey, IL 60426

Inspection Date: 7/31/2023

SPC Project No.: I23-599.101

August 18, 2023

SPECIALTY CONSULTING, INC.
Architects, Engineers & Scientists
2942 West Van Buren
Chicago, IL – 60612
Phone: (312) 319-7575
www.spc-inc.com

SIGNATURE PAGE

Limited Asbestos & Lead-Based Paint Survey Report

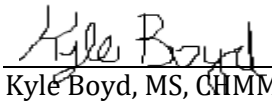
Project Site:

15315 Broadway Ave.
Harvey, IL 60426

Prepared for:

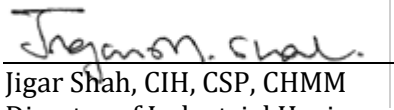
City of Harvey
15320 Broadway Ave.
Harvey, IL 60426

SPC Project #: I23-599.101

Prepared By:  August 18, 2023

Kyle Boyd, MS, CHMM
Sr. Project Manager

Date:

Reviewed By:  August 18, 2023

Jigar Shah, CIH, CSP, CHMM
Director of Industrial Hygiene

Date:

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EXECUTIVE SUMMARY

Scope and Objectives

Specialty Consulting, Inc. (SPC) was retained by the City of Harvey to conduct a limited asbestos and lead-based paint (LBP) survey of the structure located at 15315 Broadway Ave. in Harvey, Illinois. The purpose of this limited survey was to identify asbestos-containing material (ACM) and lead-based paint (LBP) that may require removal, special handling, and/or disposal prior to planned demolition activities. The survey was limited in scope due to the poor structural reliability of the structure. Only areas that could be safely accessed were assessed.

This limited survey was conducted from *July 31, 2023* through *August 1, 2023* by *David Avilla* and *Kyle Boyd* who are both state-licensed asbestos and lead Inspectors. The Illinois Department of Public Health (IDPH) issued licenses of the inspectors are provided in **Appendix F** of this report.

Findings

Asbestos-Containing Materials: ACM **was identified** during this limited survey. The materials that were identified as ACM include: exterior window caulk.

Please refer to **Table 3.1** for a complete list of building materials that were sampled during this limited survey. The laboratory results are provided in **Appendix A**.

Lead-Based Paint: LBP **was identified** on some of the painted components/surfaces tested during this limited survey. The surfaces/components that tested positive include:

- Garage Door and Frame
- Window Coverings
- Door and Frame
- Stair Components
- Canopy Support
- Window Frames

The specific surfaces/components tested within the building are summarized in **Table 3.2**. XRF field data sheets are provided in **Appendix D**.

1.0 INTRODUCTION

Specialty Consulting, Inc. (SPC) was retained by the City of Harvey to conduct a limited asbestos and lead-based paint (LBP) survey of the structure located at 15315 Broadway Ave. in Harvey, Illinois. The purpose of this limited survey was to identify asbestos-containing material (ACM) and lead-based paint (LBP) that may require removal, special handling, and/or disposal prior to planned demolition activities. The survey was limited in scope due to the poor structural reliability of the structure. Only areas that could be safely accessed were assessed.

1.1 Scope & Objectives

The purpose of the survey was to identify the locations, condition, and quantity of asbestos-containing material (ACM) and lead-based paint (LBP) materials that may require removal, special handling, and/or disposal prior to planned renovation/ demolition activities.

The asbestos survey was conducted to satisfy requirements of the United States Environmental Protection Agency (USEPA) regulations under 40 CFR Part 61, Subpart M, National Emission Standards for Hazardous Air Pollutants (NESHAP). The lead survey was conducted to comply with the Occupational Safety and Health Administration (OSHA) lead regulations.

1.2 General Qualifications

The results, findings, conclusions, and recommendations expressed in this report are based on conditions observed during SPC's survey of the proposed project areas associated with SPC project I23-599.101. The information contained in this report represents conditions at the time of the survey and may not accurately represent conditions at a later date. The possibility exists that suspect hazardous building materials may exist within wall cavities, voids, or other areas hidden from view which were not observed and cannot be ruled out. Any additional potential hazardous materials encountered during the demolition/renovation activities that differ from the components/surfaces tested during this survey, were hidden from view, or were located in the areas not accessible at the time of this survey will require further assessment prior to any disturbance. The estimated quantities provided herein should be considered approximate and are accurate to the extent allowable under the terms and conditions of our contract. This report has been prepared with generally accepted industry practices and procedures. No other warranty, either expressed or implied, is made.

1.3 Report Organization

The report is divided into five sections which discuss the survey activities and methodology, findings, conclusions, and recommendations associated with the materials/areas addressed during this survey, as follows:

- Section 1.0 – Introduction
- Section 2.0 – Survey Methodology
- Section 3.0 – Summary of Findings
- Section 4.0 – Conclusions and Recommendations
- Section 5.0 – Certification

Supporting documentation is appended and referenced in each section as appropriate.

2.0 SURVEY METHODOLOGY

This section describes SPC's ACM & LBP survey approach and methodologies that were utilized during the field investigation activities. The limited building survey included performing the following tasks:

- ACM Inspection and Testing
- LBP Inspection and Testing

The following sections present an overview of the approach for each type of survey completed as part of this project.

2.1 Asbestos-Containing Materials

SPC began the asbestos sampling activities with a visual assessment, identification, and inventory of readily visible and accessible homogeneous areas of suspect ACM. A homogeneous area consists of building materials that are similar throughout in terms of color, texture, and age. Building materials identified as concrete (not including cement panels or pipe and soft concrete), glass (includes fiberglass), wood, masonry, metal, plastics are not considered suspect ACM and were not sampled.

A physical assessment of each homogeneous area of suspect ACM was conducted to assess the friability and condition of the materials. A friable material is defined by the USEPA as a material which can be crumbled, pulverized, or reduced to powder by hand pressure when dry. Friability was assessed by physically touching suspect materials.

Bulk samples of suspect ACM were collected in general accordance with NESHAP sampling protocols, based on the results of the visual observation. Random samples of suspect materials were collected of each homogeneous material. Samples were placed in new sealable containers and labeled with unique sample numbers using an indelible marker. All non-disposable sampling equipment was wet wiped and cleaned before and after each use.

A total of *fifteen (15)* bulk samples were collected from various homogeneous areas of suspect ACM for this project. Bulk samples were collected from the following materials:

- Drywall
- Exterior Window Caulk
- Exterior Brick

- Exterior Mortar
- Roof Field

Refer to **Appendix A** for asbestos analytical testing results. Reference photographs are provided in **Appendix C**. Approximate sample location figure(s) can be found in **Appendix B**.

Bulk samples were submitted under chain-of-custody to STAT Analysis Corporation (STAT) in Chicago, Illinois for analysis by polarized light microscopy (PLM) with dispersion staining techniques per USEPA methodology 600/R-93-116. The percentage of asbestos, where applicable, was determined by microscopic visual estimation. Individual layers (when present) were analyzed, and the results were reported separately. Further analysis by Transmission Electron Microscopy (TEM) Methods was utilized for non-friable organically bound material (NOB) that tested negative by PLM (i.e., floor tiles).

STAT is accredited under the National Voluntary Laboratory Accreditation Program (NVLAP Accreditation No. 101202-0). Refer to **Appendix G** for laboratory accreditations.

2.2 Lead-Based Paint

The LBP survey was conducted in accordance with United Stated Department of Housing and Urban Development (HUD) and IDPH protocols. The survey included a visual inspection to identify suspect components/surfaces, analysis of suspect components/surfaces, and data recording. The objective of the testing was to identify painted/coated surfaces with a concentration of lead above 1.0 mg/cm^2 by x-ray fluorescence (XRF) analysis, the criteria established by the USEPA and HUD for classification of lead-based paint. The survey was performed by an IDPH-Licensed Lead Inspector using an XRF spectrum analyzer (Heuresis Model Pb200i, Serial Number 2710, manufactured by Viken Detection of Burlington, MA). A copy of the inspector's licenses and training certificates are provided in **Appendix F**.

A portable XRF analyzer was used due to its demonstrated ability to determine if LBP is present on numerous types of surfaces, analyze the paint without destructive sampling or paint removal, and provide sample results immediately and at a relatively low cost per sample. Portable XRF instruments expose a building component to x-rays or gamma radiation, which causes lead to emit x-rays with a characteristic frequency or energy. The intensity of this radiation is measured by the instrument. The inspector then compares the displayed value (reading) on the analyzer with the inconclusive range or threshold specified in the XRF Performance Characteristic Sheet (PCS) in **Appendix E** for the specific substrate being tested. If the reading is less than the lower boundary of

the inconclusive range, or less than the threshold, then the reading is considered negative. If the reading is greater than the upper boundary of the inconclusive range, or greater or equal to the threshold, then the reading is considered positive. Readings within the inconclusive range, including its boundary values, are considered inconclusive. Because the inconclusive ranges and/or thresholds shown in the PCS are based on 1.0 mg/cm^2, positive and negative readings are consistent with the HUD definition of lead-based paint for identification purposes.

3.0 SUMMARY OF FINDINGS

3.1 Asbestos-Containing Materials

Bulk samples of suspect ACM were collected and analyzed for the presence of asbestos. Results are summarized in **Table 3.1** and include a description of each material, location, material type, test results, and estimated quantity. Each suspect material was placed into one of three material categories: thermal systems insulation (TSI), surfacing materials (SURF), or miscellaneous materials (MISC). Materials confirmed to contain greater than one percent (1%) asbestos by PLM analysis are indicated to have a "positive" result and are therefore classified as ACM.

For the purpose of this building survey, SPC derived its definition of ACM from the USEPA, which classifies ACM as "any product containing more than one percent (1%) asbestos by volume, when analyzed by Polarized Light Microscopy (PLM)". Materials located in different areas of the same homogeneous area, even though not specifically tested, are considered positive or negative for ACM depending on the laboratory sample test results of that particular homogeneous area.

Table 3. 1

Materials Samples for ACM

Material Description	Location	Material Type [1]	ACM Type & %	Friable	PLM Test Results	TEM Test Results	[2] Estimated Quantity
Drywall	Throughout Building	Misc.	Asbestos Not Detected	No	Negative	N/A	N/A
Exterior Window Caulk	Exterior of Building	Misc.	Chrysotile 1-5%	No	Positive	N/A	1500 SF
Exterior Brick	Throughout Building	Misc.	Asbestos Not Detected	No	Negative	N/A	N/A
Exterior Mortar	Throughout Building	Misc.	Asbestos Not Detected	No	Negative	N/A	N/A
Roof Field	Exterior Roof	Misc.	Asbestos Not Detected	No	Negative	N/A	N/A

Notes:

1 *TSI= Thermal System Insulation, Surf= Surfacing Material, and Misc. = Miscellaneous*

2 *Quantities are estimates only, all quantities must be field verify.*

Refer to **Appendix B** (sample location figures) for approximate location of samples collected, and **Appendix C** for reference photographs of materials surveyed in this project.

3.2 Lead-Based Paint

LBP **was identified** on some of the painted surfaces/components tested during this limited survey. The surfaces/components tested for LBP are summarized in **Table 3.2**.

Table 3. 2

Surfaces/Components Tested for LBP

Room/Location	Component	Substrate	Color	XRF Reading mg/cm^2	Classification P= Positive N=Negative
West Elevation	Garage door	Wood	Blue	2.4	P
	Garage Door Frame	Wood	Blue	5.2	P
	Window Covering	Wood	Blue	3.2	P
	Door	Wood	Blue	1.2	P
	Door Frame	Wood	Blue	4.3	P
	Stairwell	Metal	Black	3.2	P
	Tread	Metal	Black	3.3	P
	Handrail	Metal	Black	5.3	P
	Gate Door	Metal	Black	3.2	P
	Gutters	Metal	Green	0.5	N
	Canopy support	Wood	Green	4.2	P
	Window Guards	Metal	Red	0.4	N
	Window frame	Wood	Green	4.3	P
	Window	Metal	White	0.3	N
East Elevation	Window	Metal	Silver	0.5	N
	Door	Metal	Silver	0.5	N
	Window frame	Wood	White	4.2	P
	Wall Paneling	Metal	Beige	0.4	N
Interior	Wall	Drywall	White	0.4	N
	Wall	Drywall	White	0.2	N

4.0 CONCLUSIONS AND RECOMMENDATIONS

4.1 Asbestos-Containing Materials

The following ACM **were identified** during this limited survey: exterior window caulking.

SPC recommends the preparation of an asbestos abatement project design prior to any demolition activities in which ACM may be impacted. An asbestos abatement design plan and specifications should include information regarding the location of containments and barriers, type of sealant, and air sampling requirements and clearance during the asbestos abatement activities. The asbestos design plan and specification shall be prepared and signed by an IDPH licensed asbestos project designer in accordance with Illinois regulations. Asbestos abatement work shall be conducted by a licensed abatement contractor under the supervision of a licensed asbestos project manager in accordance with all applicable Federal, state, and local regulations.

Any suspect material that is discovered during the renovation/demolition activities and is not listed in **Table 3.1**, was not assessed during this survey. Such material shall be assumed and treated as ACM until tested and proven otherwise.

4.2 Lead-Based Paint

LBP **was identified** on some of the painted components/surfaces tested within this limited survey. Surfaces/components that tested positive for LBP included: garage door and frame, window coverings, stair components, and canopy support.

SPC recommends that prior to any demolition/renovation activities in which LBP surfaces/components may be impacted or disturbed, a lead mitigation/abatement project design/work plan shall be prepared. The design/work plan shall include information regarding lead-based paint locations, exposure assessment, and lead-based paint waste handling, removal, and disposal. Also, all LBP mitigation/abatement work shall be performed and supervised by properly trained workers and supervisors, along with using industry accredited contractors specializing in this type of LBP abatement under the monitoring of an environmental consultant. The mitigation/abatement work shall be performed in accordance with applicable local, state, and federal regulations, including but not limited to: IDPH Lead Poisoning Prevention Act (Title 77, Part 845); Illinois Environmental Protection Act (415 ILCS); Occupational Safety and Health Regulations (1926.62); and EPA Renovation, Repair, and Painting (RRP).

For the surfaces/components that tested negative during this survey, the Occupational Safety and Health Administration (OSHA) Lead in Construction Standard states that "negative" readings (i.e. those below the HUD/EPA definition of what constitutes LBP (1.0 mg/cm^2) DO NOT relieve contractors from performing exposure assessments (personal air monitoring) on their employees per the OSHA Lead Standard, and should not be interpreted as lead is not present. Although a reading may indicate "negative", airborne lead concentrations still may exceed the OSHA Action Level or the OSHA Permissible Exposure Limit (PEL) depending on the work activity. SPC recommends that prior to any renovation activities in the building, engineering control measures be implemented in the renovation area to minimize the generation of dust, and site worker and occupant exposures to lead.

For any surfaces/components that are not listed in **Table 3.2** were not assessed during this survey, such surfaces/components shall be assumed and treated as LBP until tested and proven otherwise.

5.0 CERTIFICATION

The undersigned hereby affirm that the conditions described herein are accurate to the best of our knowledge and belief and are subject to the limitations inherent in the investigative techniques used and any expressed limitations of this survey. Applicable licensing to perform the described survey activities were valid at the time of performance of services in accordance with applicable federal, state, and local laws, rules, and regulations.

Inspection Performed By:

David Avilla	*100-11093*	*Kyle Boyd*	*1001913*
Asbestos Inspector's Name	IDPH License #	Lead Inspector's Name	IDPH License #
David Avilla	8/17/2023	Kyle Boyd	8/17/2023
Asbestos Inspector's Signature	Date	Lead Inspector's Signature	Date

APPENDIX - A

ANALYTICAL TESTING RESULTS

(PLM)

STAT Analysis Corporation
2242 West Harrison St., Suite 200, Chicago, IL 60612-3766
Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

NVLAP Lab Code 101202-0

ASBESTOS ANALYSIS BY POLARIZED LIGHT MICROSCOPY

Method: EPA/600/R-93/116

SPC Specialty Consulting, Inc
2942 W Van Buren Street
Chicago, IL 60612
Phone: (312) 319-7575
Fax: (312) 319-7580

Reference:	I23-599.101	Date Received:	08/02/2023
Location:	15315 S. Broadway	Date Analyzed:	08/10/2023
Batch No.:	366651	Date Reported:	08/10/2023
Customer No.:	4855	Turn Around Time:	5 Days

Laboratory Sample	Customer Sample Number	Asbestos Components (%)	Non-Asbestos Components (%)
366651001	DA073123-01	ND	Cellulose 10-15% Binder 99-100%
366651002	DA073123-02	ND	Cellulose 10-15% Binder 99-100%
366651003	DA073123-03	ND	Cellulose 10-15% Binder 99-100%
366651004	DA073123-04	Chrysotile 1-5%	Binder 95-99%
366651005	DA073123-05	NA	
366651006	DA073123-06	NA	
366651007	DA073123-07	ND	Cellulose 1-5% Binder 95-99%
366651008	DA073123-08	ND	Cellulose 1-5% Binder 95-99%
366651009	DA073123-09	ND	Cellulose 1-5% Binder 95-99%
366651010	DA073123-10	ND	Cellulose 1-5% Binder 95-99%
366651011	DA073123-11	ND	Cellulose 1-5% Binder 95-99%

ND = Asbestos Not Detected (Not Present) NA = Not Analyzed NS = Not Submitted

Components of inhomogeneous samples are analyzed per our Standard Operating Procedure, or per customer request.

The use of the NVLAP logo does not imply endorsement by NVLAP or any agency of the US Government.

Analyzed by Name : 

Daniel Mikos / Microscopist Date: 08/10/2023

STAT Analysis Corporation
2242 West Harrison St., Suite 200, Chicago, IL 60612-3766
Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

NVLAP Lab Code 101202-0

ASBESTOS ANALYSIS BY POLARIZED LIGHT MICROSCOPY

Method: EPA/600/R-93/116

SPC Specialty Consulting, Inc
2942 W Van Buren Street
Chicago, IL 60612
Phone: (312) 319-7575
Fax: (312) 319-7580

Reference:	I23-599.101	Date Received:	08/02/2023
Location:	15315 S. Broadway	Date Analyzed:	08/10/2023
Batch No.:	366651	Date Reported:	08/10/2023
Customer No.:	4855	Turn Around Time:	5 Days

Laboratory Sample	Customer Sample Number	Asbestos Components (%)	Non-Asbestos Components (%)
366651012	DA073123-12	ND	Cellulose 1-5% Binder 95-99%
366651013	DA073123-13	ND	Cellulose 10-15% Binder 85-90%
366651014	DA073123-14	ND	Cellulose 10-15% Binder 85-90%
366651015	DA073123-15	ND	Cellulose 10-15% Binder 85-90%

ND = Asbestos Not Detected (Not Present) NA = Not Analyzed NS = Not Submitted

Components of inhomogeneous samples are analyzed per our Standard Operating Procedure, or per customer request.

The use of the NVLAP logo does not imply endorsement by NVLAP or any agency of the US Government.

Analyzed by Name :

Daniel Mikos / Microscopist

Date: 08/10/2023

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366651

PLM BULK LABORATORY ANALYSIS FORM

Project Name: 15315 S. Broadway	**Project Manager:** David Avila
Project Number: I23-599.101	**Building Inspector:** David Avila
Project Address: 15315 S. Broadway	**IDPH Number:** 100-11093
City/ State: Harvey, IL	**Work Day:** S M T W TH F S
Client: City of Harvey	**Analyze by Method:** EPA/600/R-93-116
Date: 7/31/2023	

Field Number	HA Number	Type of material, specific sample location (i.e., Room Number, Building Construction Date)
DA073123-01		Drywall – Interior of Building
DA073123-02		Drywall – Interior of Building
DA073123-03		Drywall – Interior of Building
DA073123-04		Exterior Window Caulk
DA073123-05		Exterior Window Caulk
DA073123-06		Exterior Window Caulk
DA073123-07		Exterior Brick
DA073123-08		Exterior Brick
DA073123-09		Exterior Brick
DA073123-10		Exterior Mortar
DA073123-11		Exterior Mortar
DA073123-12		Exterior Mortar

TURN AROUND TIME: 1 Day / 2 Days / 3 Days

5 Days

COMMENTS: E-mail Results to: davila@spc-inc.com & kboyd@spc-inc.com

Stop at 1st Positive

CHAIN OF CUSTODY RECORD

Collected by (Signature) Dan Avila	*Date:* 7/31	*Time:*	Relinquished by (Signature) Dan Avila	*Date:* 7/31	*Time:*
Received by: (Signature)	*Date:*	*Time:*	Relinquished by: (signature)	*Date:*	*Time:*
Dispatched by: (Signature, if mailed)	*Date:*	*Time:*	Received for Laboratory by:	*Date:* 8-2-2023	*Time:* 11:35

Definitions: BLK-Bulk Sample, PLM-Polarized Light Microscopy, TEM-Transmission Electron Microscope.

SPECIALTY CONSULTING, INC.
Architects, Engineers & Scientists

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366651

PLM BULK LABORATORY ANALYSIS FORM

Project Name: 15315 S. Broadway	**Project Manager:** David Avila
Project Number: I23-599.101	**Building Inspector:** David Avila
Project Address: 15315 S. Broadway	**IDPH Number:** 100-11093
City/ State: Harvey, IL	**Work Day:** S M T W TH F S
Client: City of Harvey	**Analyze by Method:** EPA/600/R-93-116
Date: 7/31/2023	

Field Number	HA Number	Type of material, specific sample location (i.e., Room Number, Building Construction Date)
DA073123-13		Roof Field
DA073123-14		Roof Field
DA073123-15		Roof Field

TURN AROUND TIME: 1 Day / 2 Days / 3 Days

5 Days

COMMENTS: E-mail Results to: davila@spc-inc.com & kboyd@spc-inc.com

Stop at 1st Positive

CHAIN OF CUSTODY RECORD

Collected by: (Signature) Dan Dud	*Date:* 7/31	*Time:*	Relinquished by (Signature) Dan Dud	*Date:* 7/31	*Time:*
Received by: (Signature)	*Date:*	*Time:*	Relinquished by: (signature)	*Date:*	*Time:*
Dispatched by: (Signature, if mailed)	*Date:*	*Time:*	Received for Laboratory by:	*Date:* 8-2-2023	*Time:* 11:35

Definitions: BLK-Bulk Sample, PLM-Polarized Light Microscopy, TEM-Transmission Electron Microscope.

APPENDIX - B

SAMPLE LOCATION FIGURE(S)
N/A

APPENDIX - C

REFERENCE PHOTOGRAPHS(S)

Material Description:
Drywall

Photo Location:
Interior of Building

City of Harvey 15315 Broadway Ave. Harvey, IL 60426	Specialty Consulting, Inc. 2942 W. Van Buren St. Chicago, Illinois 60612	**Date:** 07/31/2023

Material Description:
Exterior Window Caulk (ACM)

Photo Location:
Exterior of Building

City of Harvey 15315 Broadway Ave. Harvey, IL 60426	Specialty Consulting, Inc. 2942 W. Van Buren St. Chicago, Illinois 60612	**Date:** 07/31/2023

Material Description:
Exterior Brick

Photo Location:
Exterior of Building

City of Harvey 15315 Broadway Ave. Harvey, IL 60426	Specialty Consulting, Inc. 2942 W. Van Buren St. Chicago, Illinois 60612	**Date:** 07/31/2023

Material Description:
Exterior Mortar

Photo Location:
Exterior of Building

City of Harvey 15315 Broadway Ave. Harvey, IL 60426	Specialty Consulting, Inc. 2942 W. Van Buren St. Chicago, Illinois 60612	**Date:** 07/31/2023

Material Description:
Roof Field

Photo Location:
Exterior of Building

City of Harvey 15315 Broadway Ave. Harvey, IL 60426	Specialty Consulting, Inc. 2942 W. Van Buren St. Chicago, Illinois 60612	**Date:** 07/31/2023

Material Description:
Safety Concerns with reliability of structure

Photo Location:
Interior of Building

City of Harvey 15315 Broadway Ave. Harvey, IL 60426	Specialty Consulting, Inc. 2942 W. Van Buren St. Chicago, Illinois 60612	**Date:** 07/31/2023

APPENDIX - D

XRF FIELD DATA SHEET(S)

SPECIALTY CONSULTING, INC.
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2942 West Van Buren
Chicago, IL – 60612
Tel: (312) 319 7575 • Fax: (312) 319 7580
www.spc-inc.com

XRF FIELD DATA SHEETS

Project Name:	City of Harvey ACM & LBP Survey	**Building Inspector:**	Kyle Boyd
Project Number:	I23-599.101	**IDPH Number:**	1001913
Project Address:	15315 Broadway Ave.	**XRF Serial Number:**	2710
City/State:	Harvey, IL 60624	**Date:**	7/31/2023
Client:	City of Harvey	**Comments:**	

ROOM/LOCATION	Component	Substrate	Color	XRF Reading mg/cm2	Classification P= Positive N=Negative	Damage/Comments
CAL	N/A			1.0	P	
CAL	N/A			1.0	P	
CAL	N/A			1.0	P	
West Elevation	Garage door	Wood	Blue	2.4	P	
	Garage Door Frame	Wood	Blue	5.2	P	
	Window Covering	Wood	Blue	3.2	P	
	Door	Wood	Blue	1.2	P	
	Door Frame	Wood	Blue	4.3	P	
	Stairwell	Metal	Black	3.2	P	
	Tread	Metal	Black	3.3	P	
	Handrail	Metal	Black	5.3	P	
	Gate Door	Metal	Black	3.2	P	
	Gutters	Metal	Green	0.5	N	
	Canopy support	Wood	Green	4.2	P	
	Window Guards	Metal	Red	0.4	N	
	Window frame	Wood	Green	4.3	P	
	Window	Metal	White	0.3	N	
East Elevation	Window	Metal	Silver	0.5	N	
	Door	Metal	Silver	0.5	N	
	Window frame	Wood	White	4.2	P	
	Wall Paneling	Metal	Beige	0.4	N	
Interior	Wall	Drywall	White	0.4	N	
	Wall	Drywall	White	0.2	N	
CAL	N/A			1.0	P	
CAL	N/A			1.0	P	
CAL	N/A			1.0	P	

APPENDIX - E

HEURESIS MODEL Pb200i
PERFORMANCE CHARACTERISTICS SHEET(S)

Performance Characteristic Sheet

EFFECTIVE DATE: December 1, 2020

MANUFACTURER AND MODEL:

Make: ***Viken Detection*** (previously Heuresis)
Models: ***Model Pb200i***
Source: ***^{57}Co, 5 mCi (nominal – new source)***

FIELD OPERATION GUIDANCE

ACTION LEVEL SETTING:

0.5 mg/cm^2

OPERATING PARAMETERS:

Action Level mode

XRF CALIBRATION CHECK LIMITS:

0.8 to 1.2 mg/cm^2 (inclusive) at Action Level setting = 1.0 mg/cm^2

SUBSTRATE CORRECTION:

Not applicable

INCONCLUSIVE RANGE OR THRESHOLD:

ACTION LEVEL MODE READING DESCRIPTION	SUBSTRATE	INCONCLUSIVE RANGE (mg/cm^2)
Results not corrected for substrate bias on any substrate	Brick Concrete Drywall Metal Plaster Wood	0.4 – 0.6 0.4 – 0.6 0.4 – 0.6 0.4 – 0.6 0.4 – 0.6 0.4 – 0.6

BACKGROUND INFORMATION

EVALUATION DATA SOURCE AND DATE:

This sheet is supplemental information to be used in conjunction with Chapter 7 of the HUD *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing*, 2012 Edition ("HUD Guidelines"). Performance parameters shown on this sheet are calculated using test results on building components in the HUD archive. Testing was conducted on 146 test samples in January 2020, with two separate instruments running software version Pb200i 5.0 (DEBUG version) in Action Level test mode. The actual source strength of each instrument on the day of testing was approximately 2.9 mCi; source ages were approximately 9 months.

OPERATING PARAMETERS

Performance parameters shown in this sheet are applicable only when properly operating the instrument using the manufacturer's instructions and procedures described in Chapter 7 of the HUD Guidelines.

XRF CALIBRATION CHECK:

The calibration of the XRF instrument should be checked ***with the Action Level set to 1.0 mg/cm^2*** using the paint film nearest 1.0 mg/cm^2 in the NIST Standard Reference Material (SRM) used (e.g., for NIST SRM 2579, use the 1.02 mg/cm^2 film; for NIST SRM 2579a, use the 1.04 mg/cm^2 film).

If the average (rounded to 1 decimal place) of three readings is outside the acceptable calibration check range, follow the manufacturer's instructions to bring the instrument into control before XRF testing proceeds.

EVALUATING THE QUALITY OF XRF TESTING:

Randomly select ten testing combinations for retesting from each house or from two randomly selected units in multifamily housing.

Conduct XRF re-testing at the ten testing combinations selected for retesting.

Determine if the XRF testing in the units or house passed or failed the test by applying the steps below. Compute the Retest Tolerance Limit by the following steps:

Determine XRF results for the original and retest XRF readings. In single-family and multi-family housing, a result is defined as a single reading. Therefore, there will be ten original and ten retest XRF results for each house or for the two selected units.

Calculate the average of the original XRF result and the retest XRF result for each testing combination.

Square the average for each testing combination.

Add the ten squared averages together. Call this quantity C.

Multiply the number C by 0.0072. Call this quantity D.

Add the number 0.032 to D. Call this quantity E.

Take the square root of E. Call this quantity F.

Multiply F by 1.645. The result is the Retest Tolerance Limit.

Compute the average of all ten original XRF readings.

Compute the average of all ten re-test XRF readings.

Find the absolute difference of the two averages.

If the difference is less than the Retest Tolerance Limit, the inspection has passed the retest. If the difference of the overall averages equals or exceeds the Retest Tolerance Limit, this procedure should be repeated with ten new testing combinations. If the difference of the overall averages is equal to or greater than the Retest Tolerance Limit a second time, then the inspection should be considered deficient.

Use of this procedure is estimated to produce a spurious result approximately 1% of the time. That is, results of this procedure will call for further examination when no examination is warranted in approximately 1 out of 100 dwelling units tested.

TESTING TIMES:

The instrument time to take a reading varied within a narrow range from 5 to 6 seconds, with a small number (3%) of longer times from 7 to 11 seconds. The longer readings were almost all on wood substrates. This range of reading times applies only to instruments with the same source strength as those tested (2.9 mCi at the time of PCS testing). Instruments with stronger sources will have shorter reading times and those with weaker sources, longer reading times.

CLASSIFICATION OF RESULTS:

XRF results are classified as **positive** if they are **greater than or equal** to 0.6 mg/cm^2, ***negative*** if they are ***less than or equal*** *to* 0.4 mg/cm^2 and ***inconclusive*** if they are ***equal*** to 0.5 mg/ cm^2.

DOCUMENTATION:

This XRF Performance Characteristic Sheet (PCS) was developed by QuanTech, Inc., under a contract with the U.S. Department of Housing and Urban Development, Office of Lead Hazard Control and Healthy Homes.

A report titled *Methodology for XRF Performance Characteristic Sheets* (EPA 747-R-95-008) provides an explanation of the statistical methodology used to develop Performance Characteristic Sheets at the Federal standard (Action Level) of 1.0 mg/cm^2, and provides empirical results from using the recommended inconclusive ranges or thresholds for specific XRF instruments. The report may be downloaded at http://www2.epa.gov/lead/methodology-xrf-performance-characteristic-sheets-epa-747-r-95-008-september-1997. The methodology was subsequently generalized by QuanTech for application to other Action Levels.

APPENDIX - F

ASBESTOS & LEAD INSPECTOR / RISK ASSESSOR LICENSE(S) & CERTIFICATION(S)

IDPH

ILLINOIS DEPARTMENT OF PUBLIC HEALTH

525-535 West Jefferson Street • Springfield, Illin

IDPH ASBESTOS PROFESSIONAL LICENSE

ID NUMBER 100 - 11093 ISSUED 4/19/2023 EXPIRES 05/15/2024

DAVID AVILA
2942 W VAN BUREN ST
CHICAGO, IL 60612
Environmental Health

DAVID AVILA
2942 W VAN BUREN ST
CHICAGO, IL 60612

4/19/2023

ASBESTOS PROFESSIONAL LICENSE ID NUMBER: 11093

Enclosed is your Asbestos Professional License. Please note the expiration date on the card and in the image depicted below.

COPY OF THE ASBESTOS PROFESSIONAL LICENSE

Front of License

IDPH

ASBESTOS PROFESSIONAL LICENSE

ID NUMBER 100 - 11093 ISSUED **4/19/2023** EXPIRES 05/15/2024

DAVID AVILA
2942 W VAN BUREN ST
CHICAGO, IL 60612
Environmental Health

Back of License

ENDORSEMENTS	TC EXPIRES
INSPECTOR	9/9/2023
PROJECT MANAGER AIR SAMPLING PROFESSIONAL	9/10/2023

Alteration of this license shall result in legal action
This license issued under authority of the State of Illinois Department of Public Health
This license is valid only when accompanied by a valid training course certificate.

If you have any questions or need further assistance, contact the Asbestos Program at (217)782-3517 or fax (217)785-5897.

Our WEB address is: dph.illinois.gov/topics-services/environmental-health-protection/asbestos
EMAIL Address: dph.asbestos@illinois.gov

7233 S. Adams Street | Willowbrook, IL 60527
(630) 655-3900 | www.otssafety.com

2022

OCCUPATIONAL TRAINING & SUPPLY, INC.

Asbestos Building Inspector Refresher

Occupational Training & Supply, Inc. certifies that

David Avila

has successfully completed the Asbestos Building Inspector Refresher course and has passed the competency exam with a minimum score of 70%. The course is accredited by the Illinois Department of Public Health and Indiana Department of Environmental Management for purposes of accreditation in accordance with EPA 40 CFR 763, Asbestos Hazard Emergency response Act (AHERA) and TSCA Title II.

Course Date: 9/9/2022

Exam Date: 9/9/2022

Expiration Date: 9/9/2023

Certificate Number: BIR2209092141

Kathy DeSalvo

Kathy DeSalvo, Director

CERTIFICATE OF ACHIEVEMENT

Lead Risk Assessment Recertification

Accredited by Illinois Department of Public Health

This is to certify that KYLE BOYD has completed the 8-HOUR LEAD RISK ASSESSMENT RECERTIFICATION course and successfully passed the examination on 07/25/2023 with a minimum score of 70%. Training was in accordance with Title X, U.S. EPA Model Training Course Curriculum, 1995 [illegible] HUD Guidelines 1995, and the Illinois Dept. of Public Health, 1998.

IDPH **LEAD RISK ASSESSOR LICENSE**

LEAD ID	ISSUED	EXPIRES
1001913	12/23/2022	1/31/2024

Kyle R Boyd
2942 W. VanBuren Street
Chicago, IL 60612

ILLINOIS LEAD PROGRAM
Environmental Health

PHS Environment[illegible]
Occupationa[illegible]

37 S Ashland Ave, Chicago, IL 60607 ● www.pub[illegible]

07/25/2023
Course Dates:

07/25/2026
Expires:

2307RAR01
Certificate Number:

Director of Training
Nicholas J. Peneff
Doctor of Public Health

Phone: 312-491-0081

FORM # L-017B

APPENDIX - G

LABORATORY LICENSES & ACCREDITATIONS

United States Department of Commerce
National Institute of Standards and Technology

Certificate of Accreditation to ISO/IEC 17025:2017

NVLAP LAB CODE: 101202-0

STAT Analysis Corporation

Chicago, IL

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

Asbestos Fiber Analysis

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2023-07-01 through 2024-06-30

Effective Dates

For the National Voluntary Laboratory Accreditation Program

National Voluntary Laboratory Accreditation Program

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

STAT Analysis Corporation
STAT Analysis Corporation
2242 W. Harrison St. Suite 200
Chicago, IL 60612
Carolyn Mazzuca
Phone: 312-733-0551
Email: cmazzuca@statanalysis.com
http://www.STATAnalysis.com

ASBESTOS FIBER ANALYSIS **NVLAP LAB CODE 101202-0**

Bulk Asbestos Analysis

Code	***Description***
18/A01	EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

Airborne Asbestos Analysis

Code	***Description***
18/A02	U.S. EPA's "Interim Transmission Electron Microscopy Analytical Methods-Mandatory and Nonmandatory-and Mandatory Section to Determine Completion of Response Actions" as found in 40 CFR, Part 763, Subpart E, Appendix A.

For the National Voluntary Laboratory Accreditation Program

Asbestos & Lead-Based Paint Survey Report

15328 S. Wood Ave.
Harvey, IL 60426

Inspection Date: 8/1/2023

SPC Project No.: I23-599.101

August 18, 2023

SPECIALTY CONSULTING, INC.
Architects, Engineers & Scientists
2942 West Van Buren
Chicago, IL – 60612
Phone: (312) 319-7575
www.spc-inc.com

SIGNATURE PAGE

Asbestos & Lead-Based Paint Survey Report

Project Site:

15328 S. Wood Ave.
Harvey, IL 60426

Prepared for:

City of Harvey
15320 Broadway Ave.
Harvey, IL 60426

SPC Project #: I23-599.101

Prepared By: Kyle Boyd — August 18, 2023
Kyle Boyd, MS, CHMM — Date:
Sr. Project Manager

Reviewed By: Jigar Shah — August 18, 2023
Jigar Shah, CIH, CSP, CHMM — Date:
Director of Industrial Hygiene

TABLE OF CONTENTS

EXECUTIVE SUMMARY

Scope and Objectives

Specialty Consulting, Inc. (SPC) was retained by the City of Harvey to conduct an asbestos and lead-based paint (LBP) survey of the structure located at 15328 S. Wood Ave. in Harvey, Illinois. The purpose of this survey was to identify asbestos-containing material (ACM) and lead-based paint (LBP) that may require removal, special handling, and/or disposal prior to planned renovation/ demolition activities.

This survey was conducted from *July 31, 2023* through *August 1, 2023* by *David Avilla* and *Kyle Boyd* who are both state-licensed asbestos and lead Inspectors. The Illinois Department of Public Health (IDPH) issued licenses of the inspectors are provided in **Appendix F** of this report.

Findings

Asbestos-Containing Materials: ACM **was identified** during this survey. The materials that were identified as ACM include: 9" x 9" Floor Tile and Mastic, Residual Mastic on Floor, exterior window caulking, and roof field.

Please refer to **Table 3.1** for a complete list of building materials that were sampled during this survey. The laboratory results are provided in **Appendix A**.

Lead-Based Paint: LBP **was not identified** on any of the painted components/surfaces tested during this survey.

The specific surfaces/components tested within the building are summarized in **Table 3.2**. XRF field data sheets are provided in **Appendix D**.

1.0 INTRODUCTION

Specialty Consulting, Inc. (SPC) was retained by the City of Harvey to conduct an asbestos and lead-based paint (LBP) survey of the structure located at 15328 S. Wood Ave. in Harvey, Illinois. The purpose of this survey was to identify asbestos-containing material (ACM) and lead-based paint (LBP) that may require removal, special handling, and/or disposal prior to planned renovation/ demolition activities.

1.1 Scope & Objectives

The purpose of the survey was to identify the locations, condition, and quantity of asbestos-containing material (ACM) and lead-based paint (LBP) materials that may require removal, special handling, and/or disposal prior to planned renovation/ demolition activities.

The asbestos survey was conducted to satisfy requirements of the United States Environmental Protection Agency (USEPA) regulations under 40 CFR Part 61, Subpart M, National Emission Standards for Hazardous Air Pollutants (NESHAP). The lead survey was conducted to comply with the Occupational Safety and Health Administration (OSHA) lead regulations.

1.2 General Qualifications

The results, findings, conclusions, and recommendations expressed in this report are based on conditions observed during SPC's survey of the proposed project areas associated with SPC project I23-599.101. The information contained in this report represents conditions at the time of the survey and may not accurately represent conditions at a later date. The possibility exists that suspect hazardous building materials may exist within wall cavities, voids, or other areas hidden from view which were not observed and cannot be ruled out. Any additional potential hazardous materials encountered during the demolition/renovation activities that differ from the components/surfaces tested during this survey, were hidden from view, or were located in the areas not accessible at the time of this survey will require further assessment prior to any disturbance. The estimated quantities provided herein should be considered approximate and are accurate to the extent allowable under the terms and conditions of our contract. This report has been prepared with generally accepted industry practices and procedures. No other warranty, either expressed or implied, is made.

1.3 Report Organization

The report is divided into five sections which discuss the survey activities and methodology, findings,

conclusions, and recommendations associated with the materials/areas addressed during this survey, as follows:

- Section 1.0 – Introduction
- Section 2.0 – Survey Methodology
- Section 3.0 – Summary of Findings
- Section 4.0 – Conclusions and Recommendations
- Section 5.0 – Certification

Supporting documentation is appended and referenced in each section as appropriate.

2.0 SURVEY METHODOLOGY

This section describes SPC's ACM & LBP survey approach and methodologies that were utilized during the field investigation activities. The building survey included performing the following tasks:

- ACM Inspection and Testing
- LBP Inspection and Testing

The following sections present an overview of the approach for each type of survey completed as part of this project.

2.1 Asbestos-Containing Materials

SPC began the asbestos sampling activities with a visual assessment, identification, and inventory of readily visible and accessible homogeneous areas of suspect ACM. A homogeneous area consists of building materials that are similar throughout in terms of color, texture, and age. Building materials identified as concrete (not including cement panels or pipe and soft concrete), glass (includes fiberglass), wood, masonry, metal, plastics are not considered suspect ACM and were not sampled.

A physical assessment of each homogeneous area of suspect ACM was conducted to assess the friability and condition of the materials. A friable material is defined by the USEPA as a material which can be crumbled, pulverized, or reduced to powder by hand pressure when dry. Friability was assessed by physically touching suspect materials.

Bulk samples of suspect ACM were collected in general accordance with NESHAP sampling protocols, based on the results of the visual observation. Random samples of suspect materials were collected of each homogeneous material. Samples were placed in new sealable containers and labeled with unique sample numbers using an indelible marker. All non-disposable sampling equipment was wet wiped and cleaned before and after each use.

A total of *thirty-nine (39)* bulk samples were collected from various homogeneous areas of suspect ACM for this project. Bulk samples were collected from the following materials:

- Drywall, Tape, Joint Compound
- Glue Puck
- Carpet Mastic
- 1' x 1' Spine Ceiling Tile

- Ceramic Tile
- 9” x 9” Floor Tile & Mastic
- Exterior Brick
- Exterior Mortar
- Exterior Window Caulk
- Roof Field

Refer to **Appendix A** for asbestos analytical testing results. Reference photographs are provided in **Appendix C**. Approximate sample location figure(s) can be found in **Appendix B**.

Bulk samples were submitted under chain-of-custody to STAT Analysis Corporation (STAT) in Chicago, Illinois for analysis by polarized light microscopy (PLM) with dispersion staining techniques per USEPA methodology 600/R-93-116. The percentage of asbestos, where applicable, was determined by microscopic visual estimation. Individual layers (when present) were analyzed, and the results were reported separately. Further analysis by Transmission Electron Microscopy (TEM) Methods was utilized for non-friable organically bound material (NOB) that tested negative by PLM (i.e., floor tiles).

STAT is accredited under the National Voluntary Laboratory Accreditation Program (NVLAP Accreditation No. 101202-0). Refer to **Appendix G** for laboratory accreditations.

2.2 Lead-Based Paint

The LBP survey was conducted in accordance with United Stated Department of Housing and Urban Development (HUD) and IDPH protocols. The survey included a visual inspection to identify suspect components/surfaces, analysis of suspect components/surfaces, and data recording. The objective of the testing was to identify painted/coated surfaces with a concentration of lead above 1.0 mg/cm^2 by x-ray fluorescence (XRF) analysis, the criteria established by the USEPA and HUD for classification of lead-based paint. The survey was performed by an IDPH-Licensed Lead Inspector using an XRF spectrum analyzer (Heuresis Model Pb200i, Serial Number 2710, manufactured by Viken Detection of Burlington, MA). A copy of the inspector’s licenses and training certificates are provided in **Appendix F**.

A portable XRF analyzer was used due to its demonstrated ability to determine if LBP is present on numerous types of surfaces, analyze the paint without destructive sampling or paint removal, and provide sample results immediately and at a relatively low cost per sample. Portable XRF instruments expose a building component to x-rays or gamma radiation, which causes lead to emit

x-rays with a characteristic frequency or energy. The intensity of this radiation is measured by the instrument. The inspector then compares the displayed value (reading) on the analyzer with the inconclusive range or threshold specified in the XRF Performance Characteristic Sheet (PCS) in **Appendix E** for the specific substrate being tested. If the reading is less than the lower boundary of the inconclusive range, or less than the threshold, then the reading is considered negative. If the reading is greater than the upper boundary of the inconclusive range, or greater or equal to the threshold, then the reading is considered positive. Readings within the inconclusive range, including its boundary values, are considered inconclusive. Because the inconclusive ranges and/or thresholds shown in the PCS are based on 1.0 mg/cm^2, positive and negative readings are consistent with the HUD definition of lead-based paint for identification purposes.

3.0 SUMMARY OF FINDINGS

3.1 Asbestos-Containing Materials

Bulk samples of suspect ACM were collected and analyzed for the presence of asbestos. Results are summarized in **Table 3.1** and include a description of each material, location, material type, test results, and estimated quantity. Each suspect material was placed into one of three material categories: thermal systems insulation (TSI), surfacing materials (SURF), or miscellaneous materials (MISC). Materials confirmed to contain greater than one percent (1%) asbestos by PLM analysis are indicated to have a "positive" result and are therefore classified as ACM.

For the purpose of this building survey, SPC derived its definition of ACM from the USEPA, which classifies ACM as "any product containing more than one percent (1%) asbestos by volume, when analyzed by Polarized Light Microscopy (PLM)". Materials located in different areas of the same homogeneous area, even though not specifically tested, are considered positive or negative for ACM depending on the laboratory sample test results of that particular homogeneous area.

Table 3. 1

Materials Samples for ACM

Material Description	Location	Material Type [1]	ACM Type & %	Friable	PLM Test Results	TEM Test Results	[2] Estimated Quantity
Drywall, Tape, Joint Compound	Throughout Building	Misc.	Asbestos Not Detected	No	Negative	N/A	N/A
Glue Pucks	1st FL	Misc.	Asbestos Not Detected	No	Negative	N/A	N/A
Carpet Mastic	Exterior West Entry	Misc.	Asbestos Not Detected	No	Negative	N/A	N/A
1' x 1' Spine Ceiling Tile	Basement	Misc.	Asbestos Not Detected	Yes	Negative	N/A	N/A
Ceramic Tile	Basement Kitchen	Misc.	Asbestos Not Detected	No	Negative	N/A	N/A
9" x 9" Floor Tile & Mastic	Basement Entry	Misc.	Chrysotile 1-5%	No	Positive	N/A	9 SF
Residual Mastic	Throughout Basement	Misc.	Chrysotile 1-5%	No	Positive	N/A	5800 SF

Material Description	Location	Material Type [1]	ACM Type & %	Friable	PLM Test Results	TEM Test Results	[2]Estimated Quantity
Exterior Brick	Exterior of Building	Misc.	Asbestos Not Detected	No	Negative	N/A	N/A
Exterior Mortar	Exterior of Building	Misc.	Asbestos Not Detected	No	Negative	N/A	N/A
Exterior Window Caulk	Exterior of Building	Misc.	Chrysotile 1-5%	No	Positive	N/A	900 LF
Roof Field	Exterior Roof	Misc.	Chrysotile 1-5%	No	Positive	N/A	8100 SF

Notes:

1 *TSI= Thermal System Insulation, Surf= Surfacing Material, and Misc. = Miscellaneous*

2 *Quantities are estimates only, all quantities must be field verify.*

Refer to **Appendix B** (sample location figures) for approximate location of samples collected, and **Appendix C** for reference photographs of materials surveyed in this project.

3.2 Lead-Based Paint

LBP **was not identified** on any of the painted surfaces/components tested during this survey. The surfaces/components tested for LBP are summarized in **Table 3.2**.

Table 3. 2

Surfaces/Components Tested for LBP

Room/Location	Component	Substrate	Color	XRF Reading mg/cm^2	Classification P= Positive N=Negative
West Elevation	Exterior Wall	Brick	Beige	0.2	N
	Column	Concrete	Whtie	0.3	N
	Ceiling Soffit	Concrete	White	0.1	N
	Window	Metal	Black	0.1	N
	Foundation	Concrete	Black	0.1	N
North Elevation	Exterior Wall	Brick	Beige	0.1	N
	Foundation	Concrete	Black	0.2	N
	Ceiling Soffit	Concrete	White	0.1	N
East Elevation	Exterior Wall	Brick	Beige	0.2	N
	Foundation	Concrete	Black	0.4	N
	Ceiling Soffit	Concrete	White	0.3	N
South Elevation	Exterior Wall	Brick	Beige	0.4	N
	Foundation	Concrete	Black	0.5	N
	Ceiling Soffit	Concrete	White	0.4	N
Open Room West	North Wall	Drywall	White	0.1	N
	East Wall	Drywall	White	0.2	N
	South Wall	Drywall	White	0.3	N
	West Wall	Drywall	White	0.4	N
	Handrail	Metal	Black	0.5	N
Room 1 NW	North Wall	Drywall	White	0.1	N
	East Wall	Drywall	White	0.2	N
	South Wall	Drywall	White	0.1	N
	West Wall	Drywall	White	0.3	N
Room 2 N	North Wall	Drywall	White	0.1	N
	East Wall	Drywall	White	0.4	N
	South Wall	Drywall	White	0.5	N
	West Wall	Drywall	White	0.1	N

Room/Location	Component	Substrate	Color	XRF Reading mg/cm^2	Classification P= Positive N=Negative
Room 3 NE	North Wall	Drywall	White	0.4	N
	East Wall	Drywall	White	0.2	N
	South Wall	Drywall	White	0.1	N
	West Wall	Drywall	White	0.1	N
Open Room East	North Wall	Drywall	White	0.4	N
	East Wall	Drywall	White	0.2	N
	South Wall	Drywall	White	0.3	N
	West Wall	Drywall	White	0.1	N
	Fireplace	Stone	White	0.2	N
Room 4 SW	North Wall	Drywall	Blue	0.1	N
	East Wall	Drywall	Blue	0.2	N
	South Wall	Drywall	Blue	0.4	N
	West Wall	Drywall	Blue	0.2	N
Room 5 S	North Wall	Drywall	White	0.2	N
	East Wall	Drywall	White	0.3	N
	South Wall	Drywall	White	0.1	N
	West Wall	Drywall	White	0.1	N
Room 6 SE	North Wall	Drywall	White	0.1	N
	East Wall	Drywall	White	0.1	N
	South Wall	Drywall	White	0.1	N
	West Wall	Drywall	White	0.4	N
Storage Closet N	North Wall	Drywall	White	0.2	N
	East Wall	Drywall	White	0.1	N
	South Wall	Drywall	White	0.2	N
	West Wall	Drywall	White	0.2	N
Storage Closet S	North Wall	Drywall	White	0.2	N
	East Wall	Drywall	White	0.3	N
	South Wall	Drywall	White	0.2	N
	West Wall	Drywall	White	0.1	N
	Ventilation Duct	Metal	White	0.1	N
Stair to basement	Wall	Drywall	White	0.1	N
	Wall	Concrete	White	0.1	N
	Wall	Drywall	White	0.1	N
	Wall	Concrete	White	0.2	N
Basement Kitchen	North Wall	Ceramic Tile	White	0.5	N

Room/Location	Component	Substrate	Color	XRF Reading mg/cm^2	Classification P= Positive N=Negative
Basement Kitchen	North Wall	Ceramic Tile	Pink	0.6	N
	East Wall	Ceramic Tile	White	0.7	N
	East Wall	Ceramic Tile	Pink	0.6	N
	South Wall	Ceramic Tile	White	0.6	N
	South Wall	Ceramic Tile	Pink	0.5	N
	West Wall	Ceramic Tile	White	0.5	N
	West Wall	Ceramic Tile	Pink	0.4	N
	Casework	Wood	Varnish	0.2	N
Storage Closet	North Wall	Drywall	Pink	0.3	N
	East Wall	Drywall	Pink	0.4	N
	South Wall	Drywall	Pink	0.1	N
	West Wall	Drywall	Pink	0.1	N
	Ceiling	Drywall	Pink	0.3	N
Room 1 NW	North Wall	Drywall	White	0.2	N
	East Wall	Drywall	White	0.1	N
	South Wall	Drywall	White	0.3	N
	West Wall	Drywall	White	0.1	N
Room 2 N	North Wall	Drywall	White	0.1	N
	East Wall	Drywall	White	0.2	N
	South Wall	Drywall	White	0.1	N
	West Wall	Drywall	White	0.1	N
Room 3 NE	North Wall	Drywall	White	0.2	N
	East Wall	Drywall	White	0.1	N
	South Wall	Drywall	White	0.1	N
	West Wall	Drywall	White	0.2	N
Room 4 S	North Wall	Drywall	White	0.3	N
	East Wall	Drywall	White	0.1	N
	South Wall	Drywall	White	0.2	N
	West Wall	Drywall	White	0.1	N
Room 5 S	North Wall	Drywall	White	0.1	N

Room/Location	Component	Substrate	Color	XRF Reading mg/cm^2	Classification P= Positive N=Negative
Room 5 S	East Wall	Drywall	White	0.2	N
	South Wall	Drywall	White	0.1	N
	West Wall	Drywall	White	0.1	N

4.0 CONCLUSIONS AND RECOMMENDATIONS

4.1 Asbestos-Containing Materials

The following ACM **were identified** during this survey: 9" x 9" Floor Tile and Mastic, Residual Mastic on Floor, exterior window caulking, and roof field.

SPC recommends the preparation of an asbestos abatement project design prior to any renovation/ demolition activities in which ACM may be impacted. An asbestos abatement design plan and specifications should include information regarding the location of containments and barriers, type of sealant, and air sampling requirements and clearance during the asbestos abatement activities. The asbestos design plan and specification shall be prepared and signed by an IDPH licensed asbestos project designer in accordance with Illinois regulations. Asbestos abatement work shall be conducted by a licensed abatement contractor under the supervision of a licensed asbestos project manager in accordance with all applicable Federal, state, and local regulations.

Any suspect material that is discovered during the renovation/demolition activities and is not listed in **Table 3.1**, was not assessed during this survey. Such material shall be assumed and treated as ACM until tested and proven otherwise.

4.2 Lead-Based Paint

LBP **was not identified** on any of the painted components/surfaces tested within this survey.

For the surfaces/components that tested negative during this survey, the Occupational Safety and Health Administration (OSHA) Lead in Construction Standard states that "negative" readings (i.e. those below the HUD/EPA definition of what constitutes LBP (1.0 mg/cm^2) DO NOT relieve contractors from performing exposure assessments (personal air monitoring) on their employees per the OSHA Lead Standard, and should not be interpreted as lead is not present. Although a reading may indicate "negative", airborne lead concentrations still may exceed the OSHA Action Level or the OSHA Permissible Exposure Limit (PEL) depending on the work activity. SPC recommends that prior to any renovation activities in the building, engineering control measures be implemented in the renovation area to minimize the generation of dust, and site worker and occupant exposures to lead.

For any surfaces/components that are not listed in **Table 3.2** were not assessed during this survey, such surfaces/components shall be assumed and treated as LBP until tested and proven otherwise.

5.0 CERTIFICATION

The undersigned hereby affirm that the conditions described herein are accurate to the best of our knowledge and belief and are subject to the limitations inherent in the investigative techniques used and any expressed limitations of this survey. Applicable licensing to perform the described survey activities were valid at the time of performance of services in accordance with applicable federal, state, and local laws, rules, and regulations.

Inspection Performed By:

David Avilla	*100-11093*	*Kyle Boyd*	*1001913*
Asbestos Inspector's Name	IDPH License #	Lead Inspector's Name	IDPH License #
David Avilla	8/17/2023	Kyle Boyd	8/17/2023
Asbestos Inspector's Signature	Date	Lead Inspector's Signature	Date

APPENDIX - A

ANALYTICAL TESTING RESULTS

(PLM)

STAT Analysis Corporation
2242 West Harrison St., Suite 200, Chicago, IL 60612-3766
Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

NVLAP Lab Code 101202-0

ASBESTOS ANALYSIS BY POLARIZED LIGHT MICROSCOPY

Method: EPA/600/R-93/116

SPC Specialty Consulting, Inc
2942 W Van Buren Street
Chicago, IL 60612
Phone: (312) 319-7575
Fax: (312) 319-7580

Reference:	I23-599.101	Date Received:	08/02/2023
Location:	15328 S. Wood	Date Analyzed:	08/10/2023
Batch No.:	366653	Date Reported:	08/10/2023
Customer No.:	4855	Turn Around Time:	5 Days

Laboratory Sample	Customer Sample Number	Asbestos Components (%)	Non-Asbestos Components (%)
366653001	DA080123-1 DW	ND	Cellulose 10-15% Binder 85-90%
366653002	DA080123-2 DW	ND	Cellulose 10-15% Binder 85-90%
366653003	DA080123-3 DW	ND	Cellulose 10-15% Binder 85-90%
366653004	DA080123-1 T	ND	Cellulose 60-65% Binder 35-40%
366653005	DA080123-2 T	ND	Cellulose 60-65% Binder 35-40%
366653006	DA080123-3 T	ND	Cellulose 60-65% Binder 35-40%
366653007	DA080123-1 JC	ND	Cellulose 1-5% Binder 95-99%
366653008	DA080123-2 JC	ND	Cellulose 1-5% Binder 95-99%
366653009	DA080123-3 JC	ND	Cellulose 1-5% Binder 95-99%
366653010	DA080123-4	ND	Cellulose 1-5% Binder 95-99%

ND = Asbestos Not Detected (Not Present) NA = Not Analyzed NS = Not Submitted

Components of inhomogeneous samples are analyzed per our Standard Operating Procedure, or per customer request.

The use of the NVLAP logo does not imply endorsement by NVLAP or any agency of the US Government.

Analyzed by Name : Daniel Mikos / Microscopist Date: 08/10/2023

STAT Analysis Corporation
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Reference:	I23-599.101	Date Received:	08/02/2023
Location:	15328 S. Wood	Date Analyzed:	08/10/2023
Batch No.:	366653	Date Reported:	08/10/2023
Customer No.:	4855	Turn Around Time:	5 Days

Laboratory Sample	Customer Sample Number	Asbestos Components (%)	Non-Asbestos Components (%)
366653011	DA080123-5	ND	Cellulose 1-5% Binder 95-99%
366653012	DA080123-6	ND	Cellulose 1-5% Binder 95-99%
366653013	DA080123-7	ND	Binder 15-20% Other 80-85%
366653014	DA080123-8	ND	Binder 15-20% Other 80-85%
366653015	DA080123-9	ND	Binder 15-20% Other 80-85%
366653016	DA080123-10	ND	Cellulose 80-85% Binder 15-20%
366653017	DA080123-11	ND	Cellulose 80-85% Binder 15-20%
366653018	DA080123-12	ND	Cellulose 80-85% Binder 15-20%
366653019	DA080123-13	ND	Cellulose 1-5% Binder 95-99%
366653020	DA080123-14	ND	Cellulose 1-5% Binder 95-99%

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Reference:	I23-599.101	Date Received:	08/02/2023
Location:	15328 S. Wood	Date Analyzed:	08/10/2023
Batch No.:	366653	Date Reported:	08/10/2023
Customer No.:	4855	Turn Around Time:	5 Days

Laboratory Sample	Customer Sample Number	Asbestos Components (%)	Non-Asbestos Components (%)
366653021	DA080123-15	ND	Cellulose 1-5% Binder 95-99%
366653022	DA080123-16	Chrysotile 1-5%	Binder 95-99%
366653023	DA080123-17	NA	
366653024	DA080123-18	NA	
366653025	DA080123-16 M	Chrysotile 1-5%	Binder 95-99%
366653026	DA080123-17 M	NA	
366653027	DA080123-18 M	NA	
366653028	DA080123-19	ND	Cellulose 1-5% Binder 95-99%
366653029	DA080123-20	ND	Cellulose 1-5% Binder 95-99%
366653030	DA080123-21	ND	Cellulose 1-5% Binder 95-99%
366653031	DA080123-22	ND	Cellulose 1-5% Binder 95-99%
366653032	DA080123-23	ND	Cellulose 1-5% Binder 95-99%
366653033	DA080123-24	ND	Cellulose 1-5% Binder 95-99%

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Analyzed by Name : Daniel Mikos / Microscopist Date: 08/10/2023

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ASBESTOS ANALYSIS BY POLARIZED LIGHT MICROSCOPY

Method: EPA/600/R-93/116

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Reference:	I23-599.101	Date Received:	08/02/2023
Location:	15328 S. Wood	Date Analyzed:	08/10/2023
Batch No.:	366653	Date Reported:	08/10/2023
Customer No.:	4855	Turn Around Time:	5 Days

Laboratory Sample	Customer Sample Number	Asbestos Components (%)	Non-Asbestos Components (%)
366653034	DA080123-25	Chrysotile 1-5%	Binder 95-99%
366653035	DA080123-26	NA	
366653036	DA080123-27	NA	
366653037	DA080123-28	Chrysotile 1-5%	Binder 95-99%
366653038	DA080123-29	NA	
366653039	DA080123-30	NA	

ND = Asbestos Not Detected (Not Present) NA = Not Analyzed NS = Not Submitted

Components of inhomogeneous samples are analyzed per our Standard Operating Procedure, or per customer request.

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Analyzed by Name : Daniel Mikos / Microscopist Date: 08/10/2023

SPECIALTY CONSULTING, INC.
Architects, Engineers & Scientists

2942 W. Van Buren Street
Chicago, IL 60612
312.319.7575 (O) 312.319.7580 (F)
www.spc-inc.com

366653

PLM BULK LABORATORY ANALYSIS FORM

Project Name: 15328 S. Wood	**Project Manager:** David Avila
Project Number: I23-599.101	**Building Inspector:** David Avila
Project Address: 15328 S. Wood	**IDPH Number:** 100-11093
City/ State: Harvey, IL	**Work Day:** S M T W TH F S
Client: City of Harvey	**Analyze by Method:** EPA/600/R-93-116
Date: 8/1/2023	

Field Number	HA Number	Type of material, specific sample location (i.e., Room Number, Building Construction Date)
DA080123-01		Drywall, Tape & Joint Compound – 1st Floor Corridor
DA080123-02		Drywall, Tape & Joint Compound – 1st Floor Corridor
DA080123-03		Drywall, Tape & Joint Compound – Basement Corridor
DA080123-04		Glue Pucks – 1st Floor
DA080123-05		Glue Pucks – 1st Floor
DA080123-06		Glue Pucks – 1st Floor
DA080123-07		Carpet – Exterior Walk-way
DA080123-08		Carpet – Exterior Walk-way
DA080123-09		Carpet – Exterior Walk-way
DA080123-10		1'x1' Spline Ceiling Tile – Basement
DA080123-11		1'x1' Spline Ceiling Tile – Basement
DA080123-12		1'x1' Spline Ceiling Tile – Basement

TURN AROUND TIME: 1 Day / 2 Days / 3 Days

5 Days

COMMENTS: E-mail Results to: davila@spc-inc.com & kboyd@spc-inc.com

Stop at 1st Positive

CHAIN OF CUSTODY RECORD

Collected by: (Signature) Dan Dud	*Date:* 8/1	*Time:*	Relinquished by (Signature) Dan Dud	*Date:* 8/1	*Time:*
Received by: (Signature)	*Date:*	*Time:*	Relinquished by: (signature)	*Date:*	*Time:*
Dispatched by: (Signature, if mailed)	*Date:*	*Time:*	Received for Laboratory by:	*Date:* 8-2-2023	*Time:* 11:35

Definitions: BLK-Bulk Sample, PLM-Polarized Light Microscopy, TEM-Transmission Electron Microscope.

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Architects, Engineers & Scientists

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366653

PLM BULK LABORATORY ANALYSIS FORM

Project Name: 15328 S. Wood	**Project Manager:** David Avila
Project Number: I23-599.101	**Building Inspector:** David Avila
Project Address: 15328 S. Wood	**IDPH Number:** 100-11093
City/ State: Harvey, IL	**Work Day:** S M T W TH F S
Client: City of Harvey	**Analyze by Method:** EPA/600/R-93-116
Date: 8/1/2023	

Field Number	HA Number	Type of material, specific sample location (i.e., Room Number, Building Construction Date)
DA080123-13		Ceramic Tile – Basement Kitchen
DA080123-14		Ceramic Tile – Basement Kitchen
DA080123-15		Ceramic Tile – Basement Kitchen
DA080123-16		9x9 Floor Tile & Mastic – Basement
DA080123-17		9x9 Floor Tile & Mastic – Basement
DA080123-18		9x9 Floor Tile & Mastic – Basement
DA080123-19		Exterior Brick
DA080123-20		Exterior Brick
DA080123-21		Exterior Brick
DA080123-22		Exterior Mortar
DA080123-23		Exterior Mortar
DA080123-24		Exterior Mortar

TURN AROUND TIME: 1 Day
2 Days
3 Days

5 Days

COMMENTS: E-mail Results to: davila@spc-inc.com & kboyd@spc-inc.com

Stop at 1st Positive

CHAIN OF CUSTODY RECORD

Collected by (Signature) Dan Avil	*Date:* 8/1	*Time:*	Relinquished by (Signature) Dan Avil	*Date:* 8/1	*Time:*
Received by: (Signature)	*Date:*	*Time:*	Relinquished by: (signature)	*Date:*	*Time:*
Dispatched by: (Signature, if mailed)	*Date:*	*Time:*	Received for Laboratory by:	*Date:* 8.2.2023	*Time:* 11:35

Definitions: BLK-Bulk Sample, PLM-Polarized Light Microscopy, TEM-Transmission Electron Microscope.

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366653

PLM BULK LABORATORY ANALYSIS FORM

Project Name: 15328 S. Wood	**Project Manager:** David Avila
Project Number: I23-599.101	**Building Inspector:** David Avila
Project Address: 15328 S. Wood	**IDPH Number:** 100-11093
City/ State: Harvey, IL	**Work Day:** S M T W TH F S
Client: City of Harvey	**Analyze by Method:** EPA/600/R-93-116
Date: 8/1/2023	

Field Number	HA Number	Type of material, specific sample location (i.e., Room Number, Building Construction Date)
DA080123-25		Exterior Window Caulk
DA080123-26		Exterior Window Caulk
DA080123-27		Exterior Window Caulk
DA080123-28		Roof Field
DA080123-29		Roof Field
DA080123-30		Roof Field

TURN AROUND TIME: 1 Day / 2 Days / 3 Days

5 Days

COMMENTS: E-mail Results to: davila@spc-inc.com & kboyd@spc-inc.com

Stop at 1st Positive

CHAIN OF CUSTODY RECORD

Collected by: (Signature) Dan Dud	*Date:* 8/1	*Time:*	Relinquished by (Signature) Dan Dud	*Date:* 8/1	*Time:*
Received by: (Signature)	*Date:*	*Time:*	Relinquished by: (signature)	*Date:*	*Time:*
Dispatched by: (Signature, if mailed)	*Date:*	*Time:*	Received for Laboratory by:	*Date:* 8-2-2023	*Time:* 11:35

Definitions: BLK-Bulk Sample, PLM-Polarized Light Microscopy, TEM-Transmission Electron Microscope.

APPENDIX - B

SAMPLE LOCATION FIGURE(S)
N/A

APPENDIX - C

REFERENCE PHOTOGRAPHS(S)

Material Description:
Drywall, Tape, Compound

Photo Location:
1st FL Corridor

City of Harvey 15328 S. Wood St. Harvey, IL 60426	Specialty Consulting, Inc. 2942 W. Van Buren St. Chicago, Illinois 60612	**Date:** 08/01/2023

Material Description:
Glue Puck

Photo Location:
Exterior East Entrance Walk way

City of Harvey 15328 S. Wood St. Harvey, IL 60426	Specialty Consulting, Inc. 2942 W. Van Buren St. Chicago, Illinois 60612	**Date:** 08/01/2023

Material Description:
Carpet Mastic

Photo Location:
Exterior East Entrance Walk way

City of Harvey 15328 S. Wood St. Harvey, IL 60426	Specialty Consulting, Inc. 2942 W. Van Buren St. Chicago, Illinois 60612	**Date:** 08/01/2023

Material Description:
1” x 1” Spine Ceiling Tile

Photo Location:
Basement

City of Harvey 15328 S. Wood St. Harvey, IL 60426	Specialty Consulting, Inc. 2942 W. Van Buren St. Chicago, Illinois 60612	**Date:** 08/01/2023

Material Description:
Ceramic Tile

Photo Location:
Basement Kitchen

City of Harvey 15328 S. Wood St. Harvey, IL 60426	Specialty Consulting, Inc. 2942 W. Van Buren St. Chicago, Illinois 60612	**Date:** 08/01/2023

Material Description:
9” x 9” Floor Tile & Mastic (ACM)

Photo Location:
Basement Stair landing

City of Harvey 15328 S. Wood St. Harvey, IL 60426	Specialty Consulting, Inc. 2942 W. Van Buren St. Chicago, Illinois 60612	**Date:** 08/01/2023

Material Description:
Residual Mastic (ACM)

Photo Location:
Basement

City of Harvey 15328 S. Wood St. Harvey, IL 60426	Specialty Consulting, Inc. 2942 W. Van Buren St. Chicago, Illinois 60612	**Date:** 08/01/2023

Material Description:
Exterior Brick

Photo Location:
Exterior

City of Harvey 15328 S. Wood St. Harvey, IL 60426	Specialty Consulting, Inc. 2942 W. Van Buren St. Chicago, Illinois 60612	**Date:** 08/01/2023

Material Description:
Exterior Mortar

Photo Location:
Exterior

City of Harvey 15328 S. Wood St. Harvey, IL 60426	Specialty Consulting, Inc. 2942 W. Van Buren St. Chicago, Illinois 60612	**Date:** 08/01/2023

Material Description:
Exterior Window Caulk (ACM)

Photo Location:
Exterior

City of Harvey 15328 S. Wood St. Harvey, IL 60426	Specialty Consulting, Inc. 2942 W. Van Buren St. Chicago, Illinois 60612	**Date:** 08/01/2023

Material Description:
Roof Field (ACM)

Photo Location:
Roof

City of Harvey 15328 S. Wood St. Harvey, IL 60426	Specialty Consulting, Inc. 2942 W. Van Buren St. Chicago, Illinois 60612	**Date:** 08/01/2023

APPENDIX - D

XRF FIELD DATA SHEET(S)

SPECIALTY CONSULTING, INC.
Architects, Engineers & Scientists
2942 West Van Buren
Chicago, IL – 60612
Tel: (312) 319 7575 • Fax: (312) 319 7580
www.spc-inc.com

XRF FIELD DATA SHEETS

Project Name:	City of Harvey ACM & LBP Survey	**Building Inspector:**	Kyle Boyd
Project Number:	I23-599.101	**IDPH Number:**	1001913
Project Address:	15328 S. Wood Ave.	**XRF Serial Number:**	2710
City/State:	Harvey, IL 60624	**Date:**	8/1/2023
Client:	City of Harvey	**Comments:**	

ROOM/LOCATION	Component	Substrate	Color	XRF Reading mg/cm2	Classification P= Positive N=Negative	Damage/Comments
CAL	N/A			1.0	P	
CAL	N/A			1.0	P	
CAL	N/A			1.0	P	
West Elevation	Exterior Wall	Brick	Beige	0.2	N	
	Column	Concrete	Whtie	0.3	N	
	Ceiling Soffit	Concrete	White	0.1	N	
	Window	Metal	Black	0.1	N	
	Foundation	Concrete	Black	0.1	N	
North Elevation	Exterior Wall	Brick	Beige	0.1	N	
	Foundation	Concrete	Black	0.2	N	
	Ceiling Soffit	Concrete	White	0.1	N	
East Elevation	Exterior Wall	Brick	Beige	0.2	N	
	Foundation	Concrete	Black	0.4	N	
	Ceiling Soffit	Concrete	White	0.3	N	
South Elevation	Exterior Wall	Brick	Beige	0.4	N	
	Foundation	Concrete	Black	0.5	N	
	Ceiling Soffit	Concrete	White	0.4	N	
Open Room West	North Wall	Drywall	White	0.1	N	
	East Wall	Drywall	White	0.2	N	
	South Wall	Drywall	White	0.3	N	
	Handrail	Metal	Black	0.5	N	
	West Wall	Drywall	White	0.4	N	
Room 1 NW	North Wall	Drywall	White	0.1	N	
	East Wall	Drywall	White	0.2	N	
	South Wall	Drywall	White	0.1	N	
	West Wall	Drywall	White	0.3	N	
Room 2 N	North Wall	Drywall	White	0.1	N	
	East Wall	Drywall	White	0.4	N	
	South Wall	Drywall	White	0.5	N	
	West Wall	Drywall	White	0.1	N	
Room 3 NE	North Wall	Drywall	White	0.4	N	
	East Wall	Drywall	White	0.2	N	
	South Wall	Drywall	White	0.1	N	
	West Wall	Drywall	White	0.1	N	
Open Room East	North Wall	Drywall	White	0.4	N	
	East Wall	Drywall	White	0.2	N	
	South Wall	Drywall	White	0.3	N	
	West Wall	Drywall	White	0.1	N	
	Fireplace	Stone	White	0.2	N	
Room 4 SW	North Wall	Drywall	Blue	0.1	N	
	East Wall	Drywall	Blue	0.2	N	
	South Wall	Drywall	Blue	0.4	N	
	West Wall	Drywall	Blue	0.2	N	
Room 5 S	North Wall	Drywall	White	0.2	N	
	East Wall	Drywall	White	0.3	N	
	South Wall	Drywall	White	0.1	N	
	West Wall	Drywall	White	0.1	N	
Room 6 SE	North Wall	Drywall	White	0.1	N	
	East Wall	Drywall	White	0.1	N	
	South Wall	Drywall	White	0.1	N	
	West Wall	Drywall	White	0.4	N	
Storage Closet N	North Wall	Drywall	White	0.2	N	
	East Wall	Drywall	White	0.1	N	
	South Wall	Drywall	White	0.2	N	
	West Wall	Drywall	White	0.2	N	
Storage Closet S	North Wall	Drywall	White	0.2	N	
	East Wall	Drywall	White	0.3	N	
	South Wall	Drywall	White	0.2	N	

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XRF FIELD DATA SHEETS

Project Name:	City of Harvey ACM & LBP Survey	**Building Inspector:**	Kyle Boyd
Project Number:	I23-599.101	**IDPH Number:**	1001913
Project Address:	15328 S. Wood Ave.	**XRF Serial Number:**	2710
City/State:	Harvey, IL 60624	**Date:**	8/1/2023
Client:	City of Harvey	**Comments:**	

ROOM/LOCATION	Component	Substrate	Color	XRF Reading mg/cm2	Classification P= Positive N=Negative	Damage/Comments
	West Wall	Drywall	White	0.1	N	
	Ventilation Duct	Metal	White	0.1	N	
Stair to basement	Wall	Drywall	White	0.1	N	
	Wall	Concrete	White	0.1	N	
	Wall	Drywall	White	0.1	N	
	Wall	Concrete	White	0.2	N	
Basement Kitchen	North Wall	Ceramic Tile	White	0.5	N	
	North Wall	Ceramic Tile	Pink	0.6	N	
	East Wall	Ceramic Tile	White	0.7	N	
	East Wall	Ceramic Tile	Pink	0.6	N	
	South Wall	Ceramic Tile	White	0.6	N	
	South Wall	Ceramic Tile	Pink	0.5	N	
	West Wall	Ceramic Tile	White	0.5	N	
	West Wall	Ceramic Tile	Pink	0.4	N	
	Casework	Wood	Varnish	0.2	N	
Storage Closet	North Wall	Drywall	Pink	0.3	N	
	East Wall	Drywall	Pink	0.4	N	
	South Wall	Drywall	Pink	0.1	N	
	West Wall	Drywall	Pink	0.1	N	
	Ceiling	Drywall	Pink	0.3	N	
Room 1 NW	North Wall	Drywall	White	0.2	N	
	East Wall	Drywall	White	0.1	N	
	South Wall	Drywall	White	0.3	N	
	West Wall	Drywall	White	0.1	N	
Room 2 N	North Wall	Drywall	White	0.1	N	
	East Wall	Drywall	White	0.2	N	
	South Wall	Drywall	White	0.1	N	
	West Wall	Drywall	White	0.1	N	
Room 3 NE	North Wall	Drywall	White	0.2	N	
	East Wall	Drywall	White	0.1	N	
	South Wall	Drywall	White	0.1	N	
	West Wall	Drywall	White	0.2	N	
Room 4 S	North Wall	Drywall	White	0.3	N	
	East Wall	Drywall	White	0.1	N	
	South Wall	Drywall	White	0.2	N	
	West Wall	Drywall	White	0.1	N	
Room 5 S	North Wall	Drywall	White	0.1	N	
	East Wall	Drywall	White	0.2	N	
	South Wall	Drywall	White	0.1	N	
	West Wall	Drywall	White	0.1	N	
CAL	N/A			1.0	P	
CAL	N/A			1.0	P	
CAL	N/A			1.0	P	

APPENDIX - E

HEURESIS MODEL Pb200i
PERFORMANCE CHARACTERISTICS SHEET(S)

Performance Characteristic Sheet

EFFECTIVE DATE: December 1, 2020

MANUFACTURER AND MODEL:

Make: ***Viken Detection*** (previously Heuresis)
Models: ***Model Pb200i***
Source: ***^{57}Co, 5 mCi (nominal – new source)***

FIELD OPERATION GUIDANCE

ACTION LEVEL SETTING:

0.5 mg/cm^2

OPERATING PARAMETERS:

Action Level mode

XRF CALIBRATION CHECK LIMITS:

0.8 to 1.2 mg/cm^2 (inclusive) at Action Level setting = 1.0 mg/cm^2

SUBSTRATE CORRECTION:

Not applicable

INCONCLUSIVE RANGE OR THRESHOLD:

ACTION LEVEL MODE READING DESCRIPTION	SUBSTRATE	INCONCLUSIVE RANGE (mg/cm^2)
Results not corrected for substrate bias on any substrate	Brick Concrete Drywall Metal Plaster Wood	0.4 – 0.6 0.4 – 0.6 0.4 – 0.6 0.4 – 0.6 0.4 – 0.6 0.4 – 0.6

BACKGROUND INFORMATION

EVALUATION DATA SOURCE AND DATE:

This sheet is supplemental information to be used in conjunction with Chapter 7 of the HUD *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing*, 2012 Edition ("HUD Guidelines"). Performance parameters shown on this sheet are calculated using test results on building components in the HUD archive. Testing was conducted on 146 test samples in January 2020, with two separate instruments running software version Pb200i 5.0 (DEBUG version) in Action Level test mode. The actual source strength of each instrument on the day of testing was approximately 2.9 mCi; source ages were approximately 9 months.

OPERATING PARAMETERS

Performance parameters shown in this sheet are applicable only when properly operating the instrument using the manufacturer's instructions and procedures described in Chapter 7 of the HUD Guidelines.

XRF CALIBRATION CHECK:

The calibration of the XRF instrument should be checked ***with the Action Level set to 1.0 mg/cm^2*** using the paint film nearest 1.0 mg/cm^2 in the NIST Standard Reference Material (SRM) used (e.g., for NIST SRM 2579, use the 1.02 mg/cm^2 film; for NIST SRM 2579a, use the 1.04 mg/cm^2 film).

If the average (rounded to 1 decimal place) of three readings is outside the acceptable calibration check range, follow the manufacturer's instructions to bring the instrument into control before XRF testing proceeds.

EVALUATING THE QUALITY OF XRF TESTING:

Randomly select ten testing combinations for retesting from each house or from two randomly selected units in multifamily housing.

Conduct XRF re-testing at the ten testing combinations selected for retesting.

Determine if the XRF testing in the units or house passed or failed the test by applying the steps below. Compute the Retest Tolerance Limit by the following steps:

Determine XRF results for the original and retest XRF readings. In single-family and multi-family housing, a result is defined as a single reading. Therefore, there will be ten original and ten retest XRF results for each house or for the two selected units.

Calculate the average of the original XRF result and the retest XRF result for each testing combination.

Square the average for each testing combination.

Add the ten squared averages together. Call this quantity C.

Multiply the number C by 0.0072. Call this quantity D.

Add the number 0.032 to D. Call this quantity E.

Take the square root of E. Call this quantity F.

Multiply F by 1.645. The result is the Retest Tolerance Limit.

Compute the average of all ten original XRF readings.

Compute the average of all ten re-test XRF readings.

Find the absolute difference of the two averages.

If the difference is less than the Retest Tolerance Limit, the inspection has passed the retest. If the difference of the overall averages equals or exceeds the Retest Tolerance Limit, this procedure should be repeated with ten new testing combinations. If the difference of the overall averages is equal to or greater than the Retest Tolerance Limit a second time, then the inspection should be considered deficient.

Use of this procedure is estimated to produce a spurious result approximately 1% of the time. That is, results of this procedure will call for further examination when no examination is warranted in approximately 1 out of 100 dwelling units tested.

TESTING TIMES:

The instrument time to take a reading varied within a narrow range from 5 to 6 seconds, with a small number (3%) of longer times from 7 to 11 seconds. The longer readings were almost all on wood substrates. This range of reading times applies only to instruments with the same source strength as those tested (2.9 mCi at the time of PCS testing). Instruments with stronger sources will have shorter reading times and those with weaker sources, longer reading times.

CLASSIFICATION OF RESULTS:

XRF results are classified as **positive** if they are **greater than or equal** to 0.6 mg/cm^2, ***negative*** if they are ***less than or equal*** *to* 0.4 mg/cm^2 and ***inconclusive*** if they are ***equal*** to 0.5 mg/ cm^2.

DOCUMENTATION:

This XRF Performance Characteristic Sheet (PCS) was developed by QuanTech, Inc., under a contract with the U.S. Department of Housing and Urban Development, Office of Lead Hazard Control and Healthy Homes.

A report titled *Methodology for XRF Performance Characteristic Sheets* (EPA 747-R-95-008) provides an explanation of the statistical methodology used to develop Performance Characteristic Sheets at the Federal standard (Action Level) of 1.0 mg/cm^2, and provides empirical results from using the recommended inconclusive ranges or thresholds for specific XRF instruments. The report may be downloaded at http://www2.epa.gov/lead/methodology-xrf-performance-characteristic-sheets-epa-747-r-95-008-september-1997. The methodology was subsequently generalized by QuanTech for application to other Action Levels.

APPENDIX - F

ASBESTOS & LEAD INSPECTOR / RISK ASSESSOR LICENSE(S) & CERTIFICATION(S)

IDPH

ILLINOIS DEPARTMENT OF PUBLIC HEALTH

525-535 West Jefferson Street • Springfield, Illin

IDPH ASBESTOS PROFESSIONAL LICENSE

ID NUMBER 100 - 11093 ISSUED 4/19/2023 EXPIRES 05/15/2024

DAVID AVILA
2942 W VAN BUREN ST
CHICAGO, IL 60612
Environmental Health

DAVID AVILA
2942 W VAN BUREN ST
CHICAGO, IL 60612

4/19/2023

ASBESTOS PROFESSIONAL LICENSE ID NUMBER: 11093

Enclosed is your Asbestos Professional License. Please note the expiration date on the card and in the image depicted below.

COPY OF THE ASBESTOS PROFESSIONAL LICENSE

Front of License

IDPH

ASBESTOS PROFESSIONAL LICENSE

ID NUMBER 100 - 11093 ISSUED **4/19/2023** EXPIRES 05/15/2024

DAVID AVILA
2942 W VAN BUREN ST
CHICAGO, IL 60612
Environmental Health

Back of License

ENDORSEMENTS	TC EXPIRES
INSPECTOR	9/9/2023
PROJECT MANAGER AIR SAMPLING PROFESSIONAL	9/10/2023

Alteration of this license shall result in legal action
This license issued under authority of the State of Illinois Department of Public Health
This license is valid only when accompanied by a valid training course certificate.

If you have any questions or need further assistance, contact the Asbestos Program at (217)782-3517 or fax (217)785-5897.

Our WEB address is: dph.illinois.gov/topics-services/environmental-health-protection/asbestos
EMAIL Address: dph.asbestos@illinois.gov

7233 S. Adams Street | Willowbrook, IL 60527
(630) 655-3900 | www.otssafety.com

2022

OCCUPATIONAL TRAINING & SUPPLY, INC.

Asbestos Building Inspector Refresher

Occupational Training & Supply, Inc. certifies that

David Avila

has successfully completed the Asbestos Building Inspector Refresher course and has passed the competency exam with a minimum score of 70%. The course is accredited by the Illinois Department of Public Health and Indiana Department of Environmental Management for purposes of accreditation in accordance with EPA 40 CFR 763, Asbestos Hazard Emergency response Act (AHERA) and TSCA Title II.

Course Date: 9/9/2022

Exam Date: 9/9/2022

Expiration Date: 9/9/2023

Certificate Number: BIR2209092141

Kathy DeSalvo

Kathy DeSalvo, Director

APPENDIX - G

LABORATORY LICENSES & ACCREDITATIONS

United States Department of Commerce
National Institute of Standards and Technology

Certificate of Accreditation to ISO/IEC 17025:2017

NVLAP LAB CODE: 101202-0

STAT Analysis Corporation

Chicago, IL

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

Asbestos Fiber Analysis

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2023-07-01 through 2024-06-30

Effective Dates

For the National Voluntary Laboratory Accreditation Program

National Voluntary Laboratory Accreditation Program

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

STAT Analysis Corporation
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Chicago, IL 60612
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Phone: 312-733-0551
Email: cmazzuca@statanalysis.com
http://www.STATAnalysis.com

ASBESTOS FIBER ANALYSIS **NVLAP LAB CODE 101202-0**

Bulk Asbestos Analysis

Code	***Description***
18/A01	EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

Airborne Asbestos Analysis

Code	***Description***
18/A02	U.S. EPA's "Interim Transmission Electron Microscopy Analytical Methods-Mandatory and Nonmandatory-and Mandatory Section to Determine Completion of Response Actions" as found in 40 CFR, Part 763, Subpart E, Appendix A.

For the National Voluntary Laboratory Accreditation Program

Appendix D. Price Proposal Form

Respondents must complete a return this Price Proposal Form with the RFP submittal.

#	ADDRESS	Abatement Costs	Demolition, Debris Removal, Site Restoration Cost	Subtotal
1	15328 Wood Avenue			
2	15303 Broadway Avenue			
3	15305 Broadway Avenue			
4	15307 Broadway Avenue			
5	15315 Broadway Avenue			

GRAND TOTAL:_____