BID SPECIFICATIONS
FOR

McCARTIN SCHOOL DEMOLITION

70 CANTERBURY STREET

BID NO. 24-027

OWNER
TOWN OF EAST HARTFORD
740 MAIN STREET
EAST HARTFORD, CT 06108

ADMINISTERED BY
CAPITOL REGIONAL DEVELOPMENT AUTHORITY
100 COLUMBUS BLVD; SUITE 500
HARTFORD, CT 06103

TABLE OF CONTENTS

DIVISION 32 – EXTERIOR IMPROVEMENTS

APPENDIX

END OF TABLE OF CONTENTS

LIST OF DRAWINGS

GENERAL

CIVIL

ARCHITECTURAL

END OF LIST OF DRAWINGS

Instructions to Bidders

Project: East Hartford McCartin School Abatement & Demolition
CRDA Project No. 24-027
Location 70 Canterbury Street, East Hartford, Connecticut

Table of Contents

LEGAL NOTICE – INVITATION TO BID

East Hartford McCartin School Abatement & Demolition
CRDA Project No. 24-027

The Capital Region Development Authority (CRDA) is undertaking Abatement and Demolition of the former McCartin School located at 70 Canterbury Street, East Hartford, CT on behalf of the Town of East Hartford. Sealed bids for this project must be received by the CRDA at 100 Columbus Boulevard, Suite 500, Hartford CT 06103 (Attention: Erica Levis), by **1:00 PM on December 17, 2024**, after which time they will be publicly opened and read.

This project will include the following:

- The demolition and removal of the entire one-story masonry building and specific associated site features.
- The entire building, including foundations, footings, slabs, underground utilities and contaminated soils will be removed, and legally disposed of.
- Excavations from foundation removals, underground utility removals and contaminated soil removals will be backfilled with clean imported/controlled fill.
- Site features will be demolished, with some remaining. The Town will advise on what site features will remain. All work shown on the Demolition Plan, Abatement Plan, Utility Plan and Final Site Plan is included.
- The site will be accessed and stabilized in accordance with Inland Wetlands regulations.
- All existing utilities will be terminated at the property lines and abandoned per Town regulations including but not limited to electric, gas, sewer, water, storm, and Tel/Com.
- Erosion controls and temporary construction fencing will be installed, maintained and removed as required.
- Hazardous material abatement is included in the scope of work. Specifications will be provided by TRC and incorporated into CWA's bid documents.
- Any and all coordination with TRC for testing and monitoring as required is included.
- Existing fire hydrants/fire hydrant connections will be used for the supply of water required during demolition, including but not limited to wash down and dust control.
- The Town of East Hartford will obtain all necessary municipal/Inland Wetland approvals and waive any permit fees required for work directly or indirectly associated with the abatement and demolition of the structure.

This Invitation to Bid including Plans, specifications and documents for the project are available for viewing and downloading on the State Contracting Portal at CTsource, and the CRDA website RFP's - Capital Region Development Authority (crdact.net), and may be examined at the Capital Region Development Authority, 100 Columbus Boulevard Suite 500, Hartford CT (contact Erica Levis at elevis@crdact.net).

Each Bid shall be accompanied by a Bid Guarantee in the form of a Bid Bond, certified in an amount not less than 5% of the base bid.

Bidders are advised that a good faith effort is required for participation in this contract by Small Business Enterprises (SBE) and Minority Business Enterprises (MBE). The SBE

goal is twenty-five (25) percent of the contract value, with twenty-five (25) percent of that amount (6.25 percent of the overall project) as the MBE goal.

Bidders are advised that this project is subject to the prevailing wage requirements of Connecticut General Statutes Section 31-53. Conformance to the prevailing wage rates is required. Wage rate certifications are to be submitted with all applications for progress payment. No payment will be made unless the wage rate certifications have been properly completed. Submission of certified payrolls is required.

A **mandatory pre-bid meeting** will be held at the former McCartin School located at 70 Canterbury Street, East Hartford at **10:00 AM on November 26, 2024.**

CRDA reserves the right to reject any or all bids and to waive any or all informalities or technical defects, if it is deemed to be in the best interest of CRDA.

An Affirmative Action/Equal Opportunity Employer. Minority/Women's Business Enterprises are encouraged to apply.

PART 1 – PROJECT DESCRIPTION

1.1 PROJECT: East Hartford McCartin School Abatement & Demolition
CRDA 24-027
70 Canterbury Street, East Hartford, CT

1.2 BID DUE DATE: Date: December 17, 2024

TIME: 1:00 PM

1.3 PROJECT DESCRIPTION

The former John J. McCartin School, which closed as an elementary school more than 40 years ago was constructed in 1960 and is approximately 25,380 square-foot, it had also served the Town of East Hartford as a senior center before the town completed a new one in 2021. The building's only remaining tenant was a YMCA daycare program, which was recently relocated in March 2023.

The project will generally require demolition of the existing building, clearing of trees and bushes, removal of existing concrete sidewalks, removal of hazardous materials interior and exterior of the building, removal of underground piping, removal of building foundations, site fill and regrading, top dressing with loam and planting of grass.

The Town of East Hartford is the current owner of the property. The project will be funded by the State of Connecticut. Funds will be administered by the CRDA. CRDA will hold the Abatement/Demolition Contract and oversee the project. Where "Owner" appears in the RFP and contract documents, it shall generally refer to CRDA, but when referencing meeting and inspections, may also include representatives of the Town of East Hartford.

1.4 PROJECT SCHEDULE

The Contractor shall mobilize within two weeks of execution of the Contract and Notice to Proceed and reach substantial completion within three months.

PART 2 – PROJECT SCOPE OF WORK

The Scope of Work is focused on building abatement and demolition. The Contractor shall use their experience in determining the appropriate efforts required to complete the specified work. All work shall be conducted in accordance with government regulations and industry standards. This project includes, but is not limited to all work shown on the Project Drawings, specified in the Project Manual, other hazardous material abatement documents and the following:

2.1 Bid Item #1 – General Provisions

A. Mobilization/Demobilization – Includes all work related to mobilizing all equipment and materials to the site, and removal of same upon completion.

B. General Requirements – Includes:

i. Provide a site office trailer, utilities and sanitary facilities for the Contractor's personnel, the Owner and Design Team.

ii. Site Security – Provide and maintain a site security fence with locked gates.

iii. Erosion and sedimentation control – Erosion controls shall be installed and maintained as necessary during site activities and will be installed at locations determined by the project team. Dirt and dust must be maintained within the Demolition Area and adjacent existing storm drainage within the runoff area must be protected with silt fence, sediment Traps and/or Straw/Hay Bale Dikes.

iv. Dust control – The demolition contractor shall take appropriate measures to control dust during abatement and demolition.

v. Project Sign – Provide a 4' x 8', pole mounted Project Sign. Include No Trespassing, Restricted Access, Hardhats Required signs etc.

vi. Includes preparation and adherence to a Site-Specific Health and Safety Plan that addresses all site activities, including alternate activities, and decontamination of equipment and removal and disposal of all materials at project end.

vii. Conduct and document weekly job meetings.

viii. Project Documentation – In addition to regulatory logs, manifests and reports, include RFIs, Submittals, daily reports documenting equipment and personnel on site and work performed, progress photos and minutes of meetings.

ix. Traffic Control as required.

x. Snow plowing as required is the responsibility of the Contractor.

C. Provision of Bonds and Insurance

2.2 Bid Item #2 –Abatement:

- The abatement and off-site disposal of all hazardous materials.
- The demolition contractor shall handle, store and transport all abated materials in accordance with all applicable regulations. All abated will be disposed of off-site by the demolition contractor.

2.3 Bid Item #3 –Demolition:

- The demolition and off-site disposal of the entire structure.
- Foundations and floor slabs will be removed in their entirety.
- The demolition contractor shall handle, store and transport all demolished materials in accordance with all applicable regulations. All demolished materials, including any equipment, fixtures and furnishings left in the

building, will be disposed of off-site by the demolition contractor.

- Sidewalks adjacent to the building within the Demolition area will be removed. Curbs, parking lot paving and drainage outside of the Demolition Area are to be selectively removed as shown in the drawings.
- The demolition contractor shall take appropriate measures to control dust during demolition.
- Foundation voids shall be backfilled with clean imported fill and the entire Demolition Area must be graded to preclude ponding, top-dressed with loam and seeded with grass.
- Foundation voids are assumed to be relatively minor as the structure does not have subsurface levels
- Utility disconnects with appropriate termination and capping will be required
- Existing fire hydrants will be used for the supply of water required during demolition. The Demolition Contractor shall be responsible for obtaining permission from the MDC for temporary use of water from the hydrants.
- All existing paving, curbing and finishes outside of the Demolition Area will remain. The contractor shall take reasonable measures to prevent damage to these areas.
- The Town of East Hartford will obtain all necessary municipal approvals and waive any permit fees required for work directly or indirectly associated with the demolition of the structure. The contractor will be responsible for all abatement permitting and paperwork.

PART 3 – GENERAL INFORMATION

3.1 Definitions

A. Addenda = are written or graphic instruments issued by the Engineer prior to the execution of the Contract which modify or interpret the Bidding Documents by additions, deletions, clarifications or corrections.

B. Architect/Engineer = Christopher Williams Architects, LLC (CWA) – 85 Willow Street, Building 54, New Haven, CT 06511

C. Base Bid = the total sum for which the Bidder offers to perform the Work described in the Bidding Documents.

D. Base Contract = the Scope of Work for all work identified in the Contract Documents.

E. Bid = the complete and properly signed proposal to do the Work for the sums stipulated therein. A bid is considered complete if it is submitted according to the terms of the Bidding Documents.

F. Bidder = a person or entity who submits a Bid. A Sub-bidder is a person or entity who submits a bid to a Bidder for materials, equipment and/or labor for a portion of the Work.

G. Bidding Requirements shall include:

1. The Invitation to Bid
2. The Instructions to Bidders (ITB) including all Attachments and Schedules
3. The Bid Form
4. Bid Bond
5. All Bid Documents and forms Listed in Attachment 1
6. Draft Contract attached here to as Attachment 7
7. Requirements of Schedule B
8. Prevailing Wage Rates, Schedule C
9. The Project Manual dated (10/31/23)
10. Project Drawings by CWA dated (11/10/23)

H. Contract Sum = equal to the Base Bid. The Contract Sum will be adjusted up or down by approved Contract Change Orders.

I. Contract Documents =

1. The form of Agreement between the Owner and Contractor is attached hereto as Attachment 7.
2. Conditions of the Contract (General, Supplementary and other Conditions).
3. Signed and Sealed Bid Submission Documents
3. Project Drawings by CWA dated (11/10/23)
4. Project Manual by CWA dated (10/31/23)
5. Addenda issued prior to execution of the Contract.

J. Contract Duration = The period of time defined as beginning on 1/25/25 ending on May 9, 2025, in which the Contract Scope of Work must be completed.

K. Contractor as used in the ITB = the Successful Bidder.

L. Invitation to Bid = The Invitation to Bid, abbreviated ITB, shall include the Legal Notice, Instruction to Bidders, Bid Form, Project Drawings and Project Manual (Specifications), Addenda issued prior to the Bid Due Date and all related Exhibits, Attachments, Schedules and other documents commonly referred to collectively as the Bid Documents.

M. Owner = The Town of East Hartford is the current owner of the property. The project will be funded by the State of Connecticut. Funds will be administered by the Capital Region Development Authority (CRDA), 100 Columbus Boulevard, Suite 500, Harford, CT 06103-2819, Phone: (860) 527-0100. CRDA will hold the Abatement/Demolition Contract and oversee the project. Where “Owner” appears in the RFP and contract documents, it shall generally refer to CRDA, but when referencing meeting and inspections, may also include representatives of the Town of East Hartford.

N. Owner's Designated Representative for Bid Administration, Erica Levis, elevis@crdact.net

O. Owner's Designated Representative for Construction Administration, Mark O'Connell, moconnell@crdact.net under the oversight of Robert Houlihan, rhouilhan@crdact.net

P. Detailed Schedule = a detailed critical path schedule of all work planned for all work sequences

Q. Project = East Hartford McCartin School Abatement & Demolition, CRDA Project No. 24-027

R. Successful Bidder – a qualified bidder who has complied with all of the requirements of the Bid Documents and is the apparent low Bidder to whom CRDA makes an award.

S. Definitions established in the General Conditions of the Contract for Construction, or in the other Contract Documents are applicable to the Bidding Documents.

3.2 Bidder's Representations

A. By making a Bid, the Bidder represents that:

1. The Bidder has carefully examined the Bidding Documents; the requirements are clear and concurs with them. The Bid is made in full agreement with those requirements.

2 The Bidder understands the requirements of the Bidding Documents to the extent that such documentation relates to the Work for which the Bid is submitted, for other portions of the Project, if any, being bid concurrently or presently under construction.

3 The Bidder and appropriate Sub-bidders have visited the site, have become familiar with local conditions under which the Work is to be performed, site conditions, logistics and have correlated the Bidder's personal observations with the requirements of the Bidding Documents.

4 The submission of a bid or proposal by a contractor for the whole or any part of the work contained in the specifications shall constitute an acceptance by such contractor of the terms and conditions of all duly promulgated ordinances and regulations of the Location (Town or City) that the Work is being performed at to the extent the same are applicable; and a contract awarded in response to such bid or proposal shall be deemed to incorporate all such pertinent ordinances and regulations.

5 The Bid is based upon the materials, equipment and systems required by the Bidding Documents without exception or qualification.

6 The Bidder has not colluded with any other person in regard to any Bid or sub-bid submitted.

3.3 Bidding Documents

A. Documents are available only in complete sets

2. Bidders shall use complete sets of Bidding Documents in preparing Bids. The Owner and Architect assume no responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.

3. Copies of the Bidding Documents are made available for the sole purpose of obtaining Bids on the Work. No license or permission is granted for any other use of the Bidding Documents.

4. The Invitation to Bid, Bid Documents and any Addendums will be posted on the Department of Administrative Services (DAS) website CTsource as well as the CRDA website, RFP's - Capital Region Development Authority (crdact.net)

5. Drawings, specifications and related bid documents may be examined at the Capital Region Development Authority, 100 Columbus Boulevard Suite 500, Hartford CT (Connecticut Convention Center 5th floor) contact Erica Levis at elevis@crdact.net

3.4 Interpretation or Correction of Bidding Documents

A. Bidders shall thoroughly examine and be familiar with the drawings and the specifications. The failure or omission of any Bidder to receive or examine any form, instrument, or document shall in no way relieve the Bidder from any obligation with respect to its bid.

B. Bidders shall carefully examine the contents of this Invitation to Bid (ITB) and related documents. Any ambiguities or inconsistencies shall be brought to the attention of CRDA in writing by **December 6 at 3:00 p.m.** Failure to do so will constitute your acceptance of any subsequent interpretation or decision made by CRDA.

C. No interpretation of the meaning of this ITB will be made orally. In the event that

CRDA provides any interpretation, only written interpretations will be binding upon CRDA. All questions, clarifications and other responses will be posted on the State Contracting Portal and the CRDA website in accordance with the Bid Timeline. Any addenda or amendments to this ITB will also be posted on the State Contracting Portal and the CRDA website. Bidders are strongly encouraged to return periodically to the CRDA website for updates and information related to this Invitation to Bid.

D. Requests for clarification or interpretation of the ITB or Bidding Documents shall be made in writing. The CRDA will accept requests for clarifications up until **December 6, 2024 at 3:00 p.m**. Clarification or Questions can be emailed to Erica Levis at elevis@crdact.net.

E. CRDA reserves the right to respond or not to respond to specific questions, clarifications or requests concerning the ITB process. CRDA acknowledges that information contained in the submission may be subject to the Freedom of

Information Act (FOIA).

F. CRDA may amend or cancel this bid or modify the schedule, prior to the due date and time, if CRDA deems it to be necessary, appropriate or otherwise in the best interest of CRDA.

3.5 Substitutions

A. The materials, products and equipment described in the Bidding Documents establish the standard required for the function, dimensions, appearance and quality to be met by any proposed substitution.

B. No substitution will be considered after receipt of Bids unless the written request for approval has been received by the Architect by the date stipulated in the ITB. Such requests shall include the name of the material or equipment for which it is to be substituted and a complete description of the proposed substitution including drawings, performance and test data, and other information necessary for an evaluation. A statement setting forth changes in other materials, equipment or other portions of the Work including changes in the work of other contracts that incorporation of the proposed substitution would require shall be included. The burden of proof of the merit of the proposed substitution is upon the proposer. The Architect's decision of approval or disapproval of a proposed substitution shall be final.

C. If the Architect approves a proposed substitution prior to receipt of Bids, such approval will be set forth in an Addendum. Bidders shall not rely upon approvals made in any other manner.

D. No substitutions will be considered after the Contract award unless specifically provided in the Contract Documents.

3.6 Addenda

A. Addenda will be delivered promptly by the issuing office to all Bidders.

B. Addenda concerning technical matters will not be issued later than the stipulated day prior to the date for receipt of Bids. The CRDA reserves the right to issue an Administrative Addendum at any time, withdrawing the request for Bids or postponing the date for receipt of Bids.

C. Each Bidder shall confirm, prior to submitting a Bid that the Bidder has received all Addenda issued. The Bidder shall list the Addenda in the Bid.

3.7 Performance and Payment Bond Requirements

A. Performance and Labor and Material Bonds to be furnished by the bidder awarded the contract shall be an amount not less than 100% of the contract price.

1. Such bonds are required after receipt of bids and before execution of the Contract. The bonds shall be rated A minus or better by A.M. Best. The CRDA is to be listed as the bond oblige.

2. If the Work is to be commenced prior to the execution of the contract, in response to a letter of intent or a limited notice to proceed, the Bidder shall, prior

to commencement of the Work, submit evidence satisfactory to CRDA that such bonds will be furnished and delivered in accordance with this Subparagraph.

i. It is preferred that the bonds be written on the AIA 312 forms. Both bonds shall be written in the amount of the Contract Sum.

ii. The bonds shall be dated on the date of the Contract.

iii. The Bidder shall require the attorney-in-fact who executes the required bonds on behalf of the surety to affix thereto a certified and current copy of the power of attorney.

B. The Bidder shall furnish with their Bid, evidence of its ability to obtain satisfactory Performance and Labor and Materials Payment Bonds in the full amount of the Contract Sum.

C. Obligees – All performance and payment bonds issued by the Contractor on the Project shall name CRDA as obligee.

D. Bond Adjustments for Change Order Work

1. Actual additional bonding costs associated with the value of the Change Order will be compensable only when supported by written documentation by the bonding company that the Change Order requires an increase to the original Performance, Payment, Labor or Material Bond.

2. The Contractor shall notify the bonding company at each $500,000 increase to the contract value as the cumulative result of change orders. A copy of the Consent of Surety must be provided to the Owner prior to the execution of any change order which exceeds each cumulative $500,000.

3. Mark-up for Overhead and Profit shall not be applied to Change Orders for Increase in Bonds due to Change Order Work.

3.8 Insurance

A. The Successful Bidder shall submit Insurance Liability Coverage as per Schedule B Section 7.

B. The cost of the Successful Bidder's insurance is to be included in Bid Item #1.B.

C. If the Work is to be commenced prior to the execution of the Contract, in response to a letter of intent or a limited notice to proceed, the Bidder shall, prior to commencement of the Work, Submit such Insurance.

3.9 Prevailing Wage

A. Prevailing Wage Rates: Prevailing wages are required on this project pursuant to Connecticut General Statutes Section 31-53 (a) through (h), as amended. Bidders are also advised to download the CT Department of Labor Prevailing Wage RFP Package at the link provided in Attachment 4.

B. Each contractor and subcontractor who is awarded a contract on or after October 1, 2002, shall be subject to the provisions of the Connecticut General Statutes, Section 31-55a concerning annual adjustments to prevailing wages.

C. Wage Rates will be posted each July 1 on the Department of Labor website: https://www.ctdol.state.ct.us/wgwkstnd/prevailwage.htm. Such prevailing wage adjustments shall not be considered a matter for any contract amendment.

D. The wages paid on an hourly basis to any mechanic, laborer or work person employed upon the work herein contracted to be done and the amount of payment or contribution paid or payable on behalf of each such employee to any employee welfare fund, as defined in subsection (h) of section 31-53 of the Connecticut General Statutes, shall be at a rate equal to the rate customary or prevailing for the same work in the same trade or occupation in the town in which such public works project is being constructed. Any subcontractor who is not obligated by agreement to make payment or contribution on behalf of such employees to any such employee welfare fund shall pay to each employee as part of his wages the amount of payment or contribution for his classification on each pay day.

E. Certified Payrolls: In accordance with Connecticut General Statutes, 31-53 Certified Payrolls with a statement of compliance shall be submitted monthly to CRDA. Certified payrolls for the Contractor and all subcontractors working during the period shall be submitted with each Contractor's Application for Payment, covering all activities relating to the Application. Pay scale verification may be required by the Connecticut Department of Labor.

F. The Bidder shall be responsible for managing all processes related to the prevailing wage requirements.

G. Forms and additional information can be found at http://www.ctdol.state.ct.us/wgwkstnd/BidPack.htm

3.10 State Labor Standards Provisions, Laws and Regulations

A. All provisions of all applicable State Labor Standards must be complied with under this Contract. The execution of the Contract by the Bidder binds him to all applicable State Labor Laws and Regulations. All such Standards, Laws and Regulations shall be binding to the same extent as if they were copied at length herein.

B. As a condition of contract, any out-of-state contractor who is awarded work must provide CRDA with a copy of the State of Connecticut Trade License for Employees working in the State of Connecticut.

C. Non-Resident Contractors – at the time of Contract signing, a certificate from the Commissioner of Revenue Services shall be provided which indicates that C.G.S. 12-430 for non-resident contractors has been met. For details, call the Department of Revenue Services at 1-800-541-3280, ext. 7. A link to the Department of Revenue Services is provided in the Document Appendix.

3.11 DAS Contractor Prequalification Certification

A. Bidders shall be prequalified by the Connecticut Department of Administrative Services (DAS) for a minimum of $2,000,000 for a single project. All bidders must be pre-qualified for the classification of work that they are bidding on. Each bidder shall hold a current "DAS Contractor Prequalification Certificate" (not a

predetermination letter) from the Department of Administrative Services of the State of Connecticut according to C.G.S§ 4a-100, C.G.S.§4b-101 and C.G.S.§4b-91. Bidders shall submit with their bids, unless noted otherwise, a "DAS Contractor Prequalification Certificate" along with a current "Update (bid) Statement". Any bid submitted without a copy of the DAS Prequalification Certificate and an Update (Bid) Statement shall be invalid. If you have any questions regarding these requirements, contact DAS at telephone number 860-713-5280 or visit their web site at www.das.ct.gov.

3.12 Incurring Cost

A. Bidders are solely responsible for any and all cost or expenses incurred in the preparation and submission of this bid.

PART 4 – COMPLIANCE REQUIREMENTS AND CERTIFICATIONS

4.1 Non-Discrimination in Employment

A. Each contractor, vendor, and supplier shall be subject to, and shall comply with the following requirements, included herein by reference, to insure through affirmative action that qualified employees, applicants for employment and subcontracting are not discriminated against because of race, creed, color, religion, age, sex, physical disability, or national origin. Said requirements shall include compliance with all applicable Federal, state and local statutes, ordinances and regulations relating to discrimination in employment. It shall be the responsibility of the bidder to be familiar with and knowledgeable about the above.

B. The apparent successful bidder may be required to undergo a pre-award compliance review for the purpose of ascertaining whether in the opinion of the Owner the bidder is willing and/or capable of complying with the above requirements.

C. Set-Aside Participation: The contract to be awarded is subject to contract compliance requirements mandated by Sections 4a-60 and 4a- 60a of the Connecticut General Statutes. Refer to the Commission on Human Rights and Opportunities Contract Compliance Regulations Notification to Bidders at http://www.ct.gov/chro/lib/chro/Notification_to_Bidders.pdf

D. All bidders must complete, sign, and return the CHRO Contract Compliance Regulations Notification to Bidders form to CRDA. Bids not included in this form will be considered incomplete and rejected. CHRO forms can be found at: http://www.ct.gov/chro/cwp/view.asp?a=2525&Q=315900

E. Nondiscrimination Certification: Prior to award the selected contractor must provide a Nondiscrimination Certification pursuant to Connecticut General Statutes §§ 4a-60(a)(1) and 4a-60a(a)(1), as amended. This Certification form can be found at: http://www.ct.gov/opm/cwp/view.asp?a=2982&q=390928&opmNav_GID=1806

F. Bidders are advised that CRDA has a goal of 25% Small Business Enterprise (SBE) participation and 6.25% Minority Business Enterprise (MBE) participation

from lower tier contractors/vendors in this contract. The Contractor is responsible for ensuring the SBE/MBE firms that have been selected are eligible contractors and must submit an Affirmative Action Plan to CHRO detailing their good faith efforts and processes for selecting these MBE/SBE companies.

G. All provisions of all applicable State Labor Standards must be complied with under this Contract. CRDA is an Affirmative Action Equal Opportunity Employer.

4.2 Ethics Affidavits and Certifications –

A. Bidders are required to provide the following certifications. Links to these forms are provided in the Document Appendix.

1. Campaign Contribution Certificate Form 1.

B. Campaign Contribution and Solicitation Ban: With regard to a State contract as defined in P.A. 07-01 having a value in a calendar year of $50,000 or more or a combinations or series of such agreements or contracts having a value of $100,000 or more, the authorized signatory to this submission in response to the State's solicitation expressly acknowledges receipt of the State Election Enforcement Commission's notice advising prospective state contractors of the state campaign contribution and solicitation prohibitions, and will inform its principals of the contents of the notice. See the Document Appendix for link to Notice to Executive Branch State Contractors and Prospective State Contractors of Campaign Contribution and Solicitation Limitations (SEEC Form 10)

C. A Gift and Campaign Certification form must be updated annually by the successful Bidder. Annually, on or within two (2) weeks of the anniversary date of the execution of this contract, the successful Bidder shall submit a completed Annual Certification with authorizing resolution to CRDA, 100 Columbus Blvd., Suite 500, Hartford, CT 06103-2819. For the purposes of this paragraph, the execution date of the contract will be the date CRDA signs the contract.

D. Conflict of Interest: All contractors must include a disclosure statement concerning any current business relationships (within the last three years) that pose a conflict of interest as defined by Connecticut General Statutes Section 1-85 (see the statute language in the Document Appendix).

E. The successful Bidders must submit a [Contractor/Consultant Certification] Gift and Campaign Contribution Certification (Form 1) for contracts with a value of $50,000 or more. This certification should be completed and submitted when requested. This Certification can be viewed at https://portal.ct.gov/OPM/Fin-PSA/Forms/Ethics-Forms.

F. All acquisitions, agreements and contracts are subject to the provisions of the Connecticut General Statues § 9-612 - regarding CAMPAIGN CONTRIBUTION RESTRICTION.

PART 5 – GENERAL AND SPECIAL CONDITIONS

5.1 Taxes:

A. Tax Exempt Project: This project is tax exempt. A certificate of tax exemption will be provided by the CRDA to the successful bidder. State sales and use taxes are excluded except for taxes on rentals, tools, and other incidentals as determined by the state Department of Revenue and for which the Contractor is responsible.

5.2 Miscellaneous:

A. OSHA Training – Pursuant to Connecticut General Statutes Sec. 31-53b (a) each contract entered into on or after July 1, 2007, for the construction, remodeling, refinishing, refurbishing, rehabilitation, alteration or repair of any public building project by the state or any of its agents, or by any political subdivision of the state or any of its agents, where the total cost of all work to be performed by all contractors and subcontractors in connection with the contract is at least one hundred thousand dollars, shall contain a provision requiring that, not later than thirty days after the date such contract is awarded, each contractor furnish proof to the Labor Commissioner that all employees performing manual labor on or in such public building, pursuant to such contract, have completed a course of at least ten hours in duration in construction safety and health approved by the federal Occupational Safety and Health Administration or, in the case of telecommunications employees, have completed at least ten hours of training in accordance with 29 CFR 1910.268.It is required that all on-site workers hold current OSHA 10-hour training certifications.

B. Contract Provisions: Contractor agrees to the provisions set forth below, which shall also be included in any subcontract issued by the Contractor, with the applicability of terms to be adjusted accordingly. Any duplication of provisions already provided in this Contract Agreement shall be disregarded. In the event of a conflict between the following provisions and those contained in this Contract Agreement, the more stringent shall apply:

1. All work is to be performed in accordance with the requirements of the Contract Documents for this Project.
2. The Contractor and all of its subcontractors agree to waive all rights to subrogation against CRDA and CRDA's agents, for damages caused by fire or other perils covered by insurance obtained for or in place upon the Project.
3. The Contractor and all of its subcontractors must carry and maintain insurance coverage in accordance with the Contract Documents and file certificates of such coverage with CRDA.
4. The Contractor and each of the Contractor's subcontractors must cooperate with, CRDA and permit a designated auditor or representative to review and audit the Contractor's books and records in connection with any costs charged to the Project and included in the price of any change orders.

C. Project Meetings

1. Pre-Construction Meeting - Soon after the actual award of the contract (but in any event prior to the start of construction), authorized representatives of the contractor shall attend a Pre-construction Conference. Participants at the conference shall be familiar with the Project and authorized to conclude matters relating to the work. The Owner's Representative will forward the agenda to the successful bidder. The location of this conference will be at the Project Site or another convenient location as directed by the Owner's Representative.
2. Project Meetings – Weekly or bi-weekly meetings will be scheduled as needed with CRDA, Designer and Contractor. The Bid shall include attendance by the Contractor's project manager.

D. Qualified Work Force – The Contractor shall confirm that workers meet the qualifications and are approved by the manufacturer if noted for the work to be performed.

E. Storage - The project site is approximately 2 acres +/- and has ample room for storage and layout of material and equipment.

F. Cleanup: The Contractor is responsible for keeping all contracted work areas in a neat and orderly condition. This includes all designated storage areas. This Contractor shall perform daily clean-up operations within contracted work and storage areas.

G. Waste Disposal: The bid shall include the removal and legal disposal of all construction waste/debris generated by the project including dumpsters.

H. Power & Water: Existing fire hydrants will be used for the supply of water required during demolition. The Contractor shall be responsible to obtain the required permits from the MDC and pay all costs associated with the use of the hydrants to supply temporary water. The contractor shall be required to provide electric power via temporary service or generator.

I. Dust Protection: The bid shall include dust control and must be adhered to on a daily basis.

J. Toilet Facilities: The Contractor shall provide temporary portable toilets as required.

K. Document Coordination: Should a discrepancy exist between the requirements outlined within the Bid Documents or between the Bid Documents and the plans or specifications, the bid shall include the more stringent requirement.

L. Hours of Operation: The normal hours of work shall be 7:00am until 3:30pm unless other arrangements are made in advance with the Owner.

PART 6 – BID PROCEDURES AND SUBMISSION REQUIREMENTS

6.1 TIMELINE

Documents Available	11/18/24	
Mandatory Pre-Bid Conference	11/26/24	10:00 AM
Last Day for Questions	12/06/24	3:00 PM
Last Addendum	12/11/24	
Bids Due (Bid Opening)	12/17/24	1:00 PM
Scope Reviews	12/19/24	
Contract Award	01/06/25	
Start Construction	01/21/25	

6.2 Pre-Bid Conference

A **mandatory** pre-bid meeting will be held at the McCartin School site on **November 26, 2024 at 10:00 AM**

6.3 Bidder Question Procedure

All technical and bid questions must be in writing and emailed to Erica Levis at the following email address: elevis@crdact.net. No questions shall be accepted after **December 6, 2024, at 3:00 PM**. Answers will be provided via addenda issued to all registered bidders and posted on the State Contracting Portal. Bidders may visit the site on their own time; however, the bidder must notify CRDA at least 48 hours in advance of the scheduled site visit for safety and security purposes.

6.4 Preparation and Submission of Bid

A. The form and style of Bids shall conform to the Bid Form located in the front of the Project Manual.

1. Bids shall be submitted on forms identical to the form supplied with the Bidding Documents. Any modifications, revisions, deletions, etc. to the Bid Forms except where information is requested of the Bidder may be grounds for rejection of the Bid.
2. Provide all requested information and completely fill in all blanks on the bid form. Use a typewriter or ink.
3. Interlineations, alterations and erasures must be clearly legible and initialed by the signer of the Bid.
4. On each copy of the Bid, include the legal name of the Bidder and a statement that defines the circumstance of ownership and control. The name of each person signing the proposal shall be typed or printed below the signature. When

the proposal is signed by an agent of the Bidder, include evidence of current power of attorney. In every case, the proposal shall show the present business address of the Bidder, at which address communications will be received and service of notices accepted.

a. If the Bidder is a corporation, the proposal shall be signed in the name of the corporation and sealed by a duly authorized officer of the corporation.

b. If the Bidder is a partnership, the proposal shall be signed in the name or title under which the organization is doing business by an officer whose official capacity shall be designated.

c. If the Bidder is an individual, that individual shall sign the proposal in person, stating the name or title, if any, under which that individual is doing business.

B. Bid Submission:

1. One (1) original Bid and other documents required to be submitted enclosed in a sealed envelope, as well as an electronic copy on thumb drive. The envelope shall be addressed to the party receiving the Bids and shall be identified with the Project name, and the Bidder's name and address. If the Bid is sent by mail, the sealed envelope shall be enclosed in a separate mailing envelope labeled SEALED BID ENCLOSED.

2. ALL BIDS MUST BE SUBMITTED IN A SEALED ENVELOPE CLEARLY IDENTIFIED AS FOLLOWS:

   East Hartford McCartin School Abatement and Demolition Project,

   CRDA Project No. 24-027

3. Bids may be submitted VIA: U.S. Mail, Overnight Mail or by Hand and must be deposited at the designated location prior to the Bid Closing time and date.

4. Bids shall be addressed to:

   Capital Region Development Authority (CRDA)
   100 Columbus Boulevard, Suite 500
   Hartford, CT. 06103-2819

   Attn: Erica Levis

   If you require assistance in locating CRDA's office call 860-924-8913

5. Bid Closing Date: Bids will be received on **December 17, 2024, at 1:00 PM,** at the location indicated above and then opened. Late bids will not be accepted and will be returned to bidder unopened. Extensions will not be granted. Bidders are invited to attend the bid opening.

C. Bid Package – the Bid Package shall include the Bid Form and all of the documents listed in Attachment 1, Bid Forms.

6.5 Bid Security

A. As security, each bid must be accompanied by a bid bond in the form attached hereto in an amount which shall be Five Percent (5%) of the Base Bid. The Bid Bond If the bidder is a small contractor or minority business enterprise pursuant to Connecticut General Statutes Section 4a-60g, it may provide in lieu of a bid bond, a letter of credit in an amount equal to Ten Percent (10%) of the bid if the estimated value is less than one hundred thousand dollars and in an amount equal to Twenty-Five Percent (25%) if the estimated value is one hundred thousand dollars or greater.

B. Failure of the successful Bidder to execute a contract in accordance with its bid shall result in the forfeiture of the bid bond.

6.6 Modification or Withdrawal of Bid

A. Bid Withdrawal: Bids may be withdrawn only by written request received from the Bidder prior to the deadline for submission. No bidder may withdraw its bid within ninety (90) days from the actual date of bid opening. Withdrawn Bids may be resubmitted up to the date and time designated for the receipt of Bids provided that they are then fully in conformance with these Instructions to Bidders.

B. Extension: Bids shall be valid for 90 days following the Bid Closing Date. If for some reason a contract cannot be awarded within the specified period, the time may be extended by mutual agreement between CRDA and the designated low bidder.

C. Bid Modification: Bids may not be changed after the deadline for submission. A Bid submitted prior to the time and date designated for receipt of Bids, may be modified or withdrawn by notice to the party receiving Bids at the place designated for receipt of Bids prior to the deadline for submission. Such notice shall be in writing and signed by the Bidder. If notice is sent by telegram, written confirmation shall be mailed and postmarked on or before the date and time set for receipt of Bids. Any change shall be so worded as not to reveal the amount of the original Bid.

D. Bid Clarification: CRDA reserves the right to request clarifications from any bidder, which shall be provided at the bidder's sole expense.

6.7 Post Bid Scope Review Meeting

A. After the public Bid opening there will be scope review meetings with the apparent low Bidder(s). These meetings will be held at CRDA Offices at the Connecticut Convention Center, 100 Columbus Boulevard, Hartford, CT. The purpose of these meetings is to review the apparent low bidder's proposals. The apparent low bidders will be notified by CRDA and shall be available to attend these meetings.

6.8 Consideration of Bids

A. The properly identified Bids received on time at CRDA's office, will be opened publicly.

B. CRDA reserves the right to do any of the following without liability, including but not limited to:

1. Award in part,

2. To reject any and all bids in whole or in part for misrepresentation or if the bidder is in default of any prior State contract, or if the bid or submission limits or modifies any of the terms and conditions and/or specifications of the bid;
3. Cancel the award or execution of any contract prior to the “Notice to Proceed;”
4. Advertise for new bids.

C. CRDA also reserves the right to waive technical defect, irregularities and omissions if, in its judgment, the best interest of CRDA would be served.

D. CRDA reserves the right to correct inaccurate awards resulting from clerical errors. This may include, in extreme circumstances, revoking the awarding of a contract already made to a bidder and subsequently awarding the contract to another bidder. Such action on the part of CRDA shall not constitute a breach of contract on the part of CRDA since the contract with the initial bidder is deemed to be void ab initio and of no effect as if no contract ever existed between CRDA and the bidder

E. Every bid which is conditional or obscure, or which contains any addition not called for, may be considered invalid, and CRDA may reject every such bid.

F. CRDA may reject a bid as non-responsive if the Bidder does not make all required pre-award submittals within the time designated by CRDA.

6.9 Acceptance of Bid

A. It is the intent of the Owner to award a Contract to the lowest qualified Bidder offering the optimum combination of cost, service and schedule, provided that the apparent Low Bid has been submitted in accordance with the requirements of the Bidding Documents and does not exceed the funds available within the budget established for this project by the Owner. The Owner reserves the right to accept or reject any or all bids and to award the contract to the bidder deemed to be in its best interest. Consideration will also be given to the bidder’s affirmative action plan.

C. The Bidder will be required to establish to the satisfaction of the Owner the reliability and responsibility of the persons or entities proposed to furnish and perform the Work described in the Bidding Documents.

D. Prior to the award of the Contract, the Owner will notify the Bidder in writing if the Owner has reasonable objection to a person or entity proposed by the Bidder. If the Owner has reasonable objection to a proposed person or entity, the Bidder may, at the Bidder's option, (1) withdraw the Bid, or (2) submit an acceptable substitute person or entity with an adjustment in the Base Bid to cover the difference in cost occasioned by such substitution. The Owner may accept the adjusted bid price or disqualify the Bidder.

E. Persons and entities proposed by the Bidder and to whom the Owner has made no reasonable objection must be used on the Work for which they were proposed and shall not be changed except with the written consent of the Owner.

An Affirmative Action/Equal Opportunity Employer. Minority/Women’s Business enterprises are encouraged to apply.

DOCUMENT APPENDIX

The following Ethics Forms are available at the website below:

Form 1 – Campaign Contribution Certification

Ethics Forms (ct.gov) Guide to the Code of Ethics for Current or Potential State Contractors is available at:
http://www.ct.gov/ethics/lib/ethics/guides/contractors_guide_10.pdf

CHRO Bidder Contract Compliance Monitoring Report is available at:
http://www.ct.gov/chro/lib/chro/pdf/notificationtobidders.pdf.

State Elections Enforcement Commission Form 10 is available at:
http://www.ct.gov/seec/lib/seec/forms/contractor_reporting_/seec_form_10_final.pdf

Internal Revenue Service Form W-9 is available at:
https://www.irs.gov/uac/About-Form-W9

Department of Revenue Services registration information for out of state contractors may be found at:
http://www.ct.gov/drs/cwp/view.asp?a=1454&q=506012

CONFLICT OF INTEREST STATUTE

Connecticut General Statutes Sec. 1-85; (Formerly Sec. 1-68), Interest in conflict with discharge of duties – A public official, including an elected state official, or state employee has an interest which is in substantial conflict with the proper discharge of his duties or employment in the public interest and of his responsibilities as prescribed in the laws of this state, if he has reason to believe or expect that he, his spouse, a dependent child, or a business with which he is associated will derive a direct monetary gain or suffer a direct monetary loss, as the case may be, by reason of his official activity. A public official, including an elected state official, or state employee does not have an interest which is in substantial conflict with the proper discharge of his duties in the public interest and of his responsibilities as prescribed by the laws of this state, if any benefit or detriment accrues to him, his spouse, a dependent child, or a business with which he, his spouse or such dependent child is associated as a member of a profession, occupation or group to no greater extent than any other member of such profession, occupation or group. A public official, including an elected state official or state employee who has a substantial conflict may not take official action on the matter.

_____

Signature

ATTACHMENT 1

REQUIRED BID FORMS

The following forms must be completed and submitted as part of the Bid Submission

1. Bid Form (including Addendum Acknowledgement, Subcontractor List and Bid Guarantee)
2. Standard Bid Bond Form
3. Contractors Price Itemization Form
4. Signed copy of Schedule B
5. DAS Contractor Prequalification Certification and current Update (bid) Statement
6. Surety Letter from bidders bonding company stating the bidder, if awarded a contract, can obtain the required Performance and Labor and Materials Payment Bonds in the full amount of the Base Bid.
7. Campaign Contribution Certification (OPM Ethics Form 1)
8. Disclosure statement concerning any current business relationships (within the last three years) that pose a conflict of interest as defined by Connecticut General Statutes Section 1-85.
9. CHRO Bidder Contract Compliance Monitoring Report
10. State Elections Enforcement Commission Form 10
11. Internal Revenue Service Form W-9
12. General Conditions Certification
13. Labor Rates for each Trade Classification that will be used for this project on form attached as Attachment #5
14. Department of Revenue Services registration information for out-of-state contractors if required. Forms may be found at: http://www.ct.gov/drs/cwp/view.asp?a=1454&q=506012
15. CRDA Disclosure Form A
16. State of CT Certificate of Compliance

ATTACHMENT 2 - STANDARD BID BOND FORM

CAPITAL REGION DEVELOPMENT AUTHORITY

KNOW ALL MEN BY THESE PRESENTS, That
we,_____, hereinafter called the Principal ,of _____, as Principal, and, _____ hereinafter called the Surety, a corporation organized and existing under the laws of the State of _____ , and duly authorized to transact a surety business in the State of Connecticut, as Surety, are held and firmly bound unto Capital Region Development Authority, as Oblige, in the penal sum of five (5) percent of the amount of the bid set forth in a proposal hereinafter mentioned, lawful money of the United States of America, for the payment of which, well and truly to be made to the Oblige, the Principal and the Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, That, whereas the Principal has submitted or is about to submit a proposal to the Oblige related to a contract for the **East Hartford McCartin School Abatement & Demolition, CRDA Project #24-027**

NOW, THEREFORE, if the said contract be awarded to the Principal and the Principal shall, within such time as may be specified, enter into the said contract in writing with the Capital Region Development Authority and give the required bonds, with surety acceptable to the Oblige, or if the Principal shall fail to do so, pay to the Oblige the damages which the Oblige may suffer by reason of such failure not exceeding the penalty of this bond, then this obligation shall be void, otherwise to remain in full force and effect.

SIGNED, SEALED AND DELIVERED this _____day of _____, 20____

_____	_____
Principal's Signature	Surety
_____	by_____
(Print name)	Its attorney in fact
_____	_____
Company Name	(Print name)

ATTACHMENT 3 - BID FORM **BF/1**

East Hartford McCartin School Abatement & Demolition, CRDA Project #24-027
East Hartford, Connecticut

TO: **CAPITAL REGION DEVELOPMENT AUTHORITY**
100 Columbus Boulevard, Suite 500
Hartford, CT 06103-2819

Date: _____

Bidder's Name: _____

The undersigned, having inspected the site and familiarized ourselves/myself with the local conditions affecting the cost of the work and the Contract Documents as prepared by **CWA** (as listed in Schedule A) and on file with **Capital Region Development Authority**, hereby propose to provide all labor, materials, tools, equipment, temporary facilities and transportation necessary to complete the **Abatement and Demolition of the former McCartin School** as defined in the Contract Documents for the Contract Price of:

_____
Dollars

($ _____)

This Bid Price shall include all charges such as overhead, profit, insurance, permits, etc.

Submitted herewith is the Bid Price Itemization including an amount for all project components required by the Bid Documents. The sum of all listed components shall equal the Bid Price.

Submitted herewith are all the forms as listed in the Instructions to Bidders, in accordance with these Instructions to Bidders.

We/I acknowledge that should conditions make it necessary to revise the scope of the project, the Bid Price Itemization shall serve as the basis for adjustments to the Bid Price.

BID FORM **BF/2**

East Hartford McCartin School Abatement & Demolition, CRDA Project #23-019
East Hartford, Connecticut

Bidder's Name: _____

CONTRACT PRICE ITEMIZATION

Bid Item 1A – Mobilization/Demobilization $ _____

Bid Item 1B – General Requirements $ _____

Bid Item 1C – Bonds & Insurance $ _____

Bid Item 2 – Abatement $ _____

Bid Item 3 – Demolition $ _____

Bid Total$ _____

CONTRACT ALTERNATES

There are no Bid Alternates

CONTRACT UNIT PRICES

There are no Bid Unit Prices

BID FORM **BF/3**

East Hartford McCartin School Abatement & Demolition, CRDA Project #24-027
East Hartford, Connecticut

Bidder's Name: _____

GENERAL REQUIREMENTS

The bidder shall, before submitting his Proposal, carefully examine the Contract Documents. He shall inspect in detail the site of the proposed work and familiarize himself with all the local conditions affecting The Work and the detailed requirements of construction. If his Proposal is accepted, he will be responsible for all errors in his Proposal resulting from his failure or neglect to comply with these instructions or errors in judgment arising from said inspections of the work site and examination of the Contract Documents. The Engineer and/or the Owner will, in no case, be responsible for any losses or change in Contractor's anticipated profits resulting from such failure or neglect.

If the bidder finds any language in the Contract inconsistent, vague or difficult to understand or interpret, for any reason, he shall request clarification in writing from the Engineer or Owner not less than 8 working days prior to the scheduled dates for response thereto in writing to all bidders known to the Owner. Unless the bidder seeks clarification in accordance with this paragraph, he will be deemed to have waived his rights, if any he had, to object to said Contract language as vague or misleading for any reason.

When the plans and Special Provisions include information pertaining to surface observations, material testing and other preliminary investigations, such information represents only the opinion of the Engineer as to the location, character, or quantity of the materials encountered and is only included for the convenience of the bidder. The Owner/Engineer assumes no responsibility whatever in respect to the sufficiency or accuracy of the information, and there is no guarantee, either expressed or implied, that the conditions indicated are accurate or unanticipated developments may not occur. Said information shall not be considered by the parties as a basis for the Contract award amount.

The Bidder agrees that adequate time was allowed for the bidder to inspect all work sites and, unless express written request has been made, the Engineer/Owner will be presumed to have supplied the bidder all the information and access required to adequately complete the Proposal. Work acceptance is to be made by the Engineer.

Any extra work beyond the scheduled quantities requiring additional cost to the Owner shall be approved by the Owner prior to taking such action. Claims for extra work which have not been authorized in writing by the Owner and approved by the Engineer will be rejected and the Contractor shall not be entitled to payment thereof.

BID FORM **BF/4**

Contractor shall reference the Instructions to Bidders for applicable requirements for

Construction Time. In submitting this Bid, it is understood that the right is reserved by the Owner to reject any and all bids, and/or negotiate with the selected bidder or bidders, including splitting the work into multiple contracts, all as may be in the best interest of the Owner. If written notice of acceptance of this bid is

mailed, delivered and/or otherwise transmitted to the undersigned within sixty (60) days after the opening thereof, or at any time thereafter before this bid is withdrawn by written notification, the undersigned agrees to execute and deliver a Contract in the prescribed form. The Work shall be commenced by the successful bidder within 14 days after the Notice to Proceed from the Owner.

BID FORM **BF/5**

East Hartford McCartin School Abatement & Demolition, CRDA Project #24-027
East Hartford, Connecticut

Bidder's Name: _____

ADDENDA ACKNOWLEDGMENT

The undersigned acknowledges receipt of the following addenda:

ADDENDUM NUMBER	DATE OF ADDENDUM
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

BID FORM **BF/6**

East Hartford McCartin School Abatement & Demolition, CRDA Project #24-027
East Hartford, Connecticut

Bidder's Name: _____

SUBCONTRACTOR'S LIST (If applicable)

(1) Name
_____

Address_____

Work
Scope_____

(2) Name
_____

Address_____

Work
Scope_____

(3) Name
_____

Address_____

Work
Scope_____

(4) Name
_____

Address_____

Work
Scope_____

BID FORM BF/7

East Hartford McCartin School Abatement & Demolition, CRDA Project #24-027
East Hartford, Connecticut

Bidder's Name: _____

GENERAL STATEMENT
The information in this Bid is correct to the best information, knowledge and belief of the undersigned. The undersigned has checked all the above figures and understands that the owner will not be responsible for any errors or omissions on the part of the undersigned in preparing this bid. In submitting this bid, it is understood that the right is reserved by the Owner to reject any or all bids and waive all technicalities and informalities in connection therewith, including negotiating with the selected bidder or bidders, all as may be in the best interest of the Owner. It is agreed that this Bid may not be withdrawn for a period of 60 days from the time of opening.

The undersigned declares that the person or persons signing this bid is/are fully authorized to sign on behalf of the firm listed to all the Bid's conditions and provisions thereof.

It is agreed that no persons or company other than the firm listed below or as otherwise indicated has any interest whatsoever in this Bid or the contract that may be entered into because of this Bid and that in all respects the Bid is legal and firm, submitted in good faith without collusion or fraud.

It is agreed that the undersigned has complied and/or will comply with all requirements of local, state or national laws, and that no legal requirements have been or will be violated in making or accepting this Bid, in awarding the contract to him and/or in the prosecution of the work required.

SIGNATURE OF BIDDER

Date _____ day of _____ 20 _____

Firm Name _____

Address _____

Signature _____

Name Typed _____

Witness _____ Telephone _____

State of _____, County of _____

On this _____day of, 20___ before me personally came to me known who did depose and say that he is_____, of _____ , the Corporation/Partner/Individual described in and which executed the foregoing instrument and that such instrument is duly submitted on behalf of _____Notary Public

ATTACHMENT 4 - GENERAL CONDITIONS CERTIFICATION

East Hartford McCartin School Abatement & Demolition, CRDA Project #24-027
East Hartford, Connecticut

The undersigned hereby affirms the Bidder shall adhere to the Conditions as contained in this ITB, the Sample Contract and the Project Manual.

Submitted:

Date: _____

_____ _____
(Signature of Official) (Print Name and Title of Official)

Attachment 5 - Labor Rates

East Hartford McCartin School Abatement & Demolition, CRDA Project #24-027
East Hartford, Connecticut

Labor Rates
For additional work not reflected in the Lump Sum Bid Items or Unit Price Bid Items, the following labor rates shall apply. Use one sheet for each classification. Do not include Overhead and Profit.

Contractor: _____

Trade Classification: _____

	Straight Time	Time & Half	Double Time
A. Base Rate	_____	_____	_____
B. FICA	_____	_____	_____
C. FUTA	_____	_____	_____
D. SUTA	_____	_____	_____
E. WC	_____	_____	_____
F. GL	_____	_____	_____
G. Benefits (list each)			
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
H. Total	_____	_____	_____

ATTACHMENT 6 - DRAFT CONTRACT

East Hartford McCartin School Abatement & Demolition, CRDA Project #24-027
East Hartford, Connecticut

The Contract for this project will be based on the AIA Document A104-2017, Standard Abbreviated Form of Agreement between Owner and Contractor.

The Contract Draft will be issued in a Bid Addendum.

SCHEDULE A

PLANS AND SPECIFICATIONS

Sheet #	Name	Date
A0	Cover Sheet	11/10/23
C101	Site Demolition & Erosion Control	11/10/23
C201	Site Utility Plan	11/10/23
C202	Site Improvement Plan	11/10/23
C501	Site Details	11/10/23
AD101	Existing First & Foundation Plan	11/10/23
AD201	Elevation	11/10/23
AD202	Existing Building Sections	11/10/23
AD401	Wall Sections & Structural Axon	11/10/23

Specifications

Project Manual by CWA (dated, October 31, 2023)

McCartin ACM PCB Hand-marked Location Drawings

ACM 1
ACM 2
ACM 3
ACM 4
PCB 1
PCB 2

SCHEDULE B

STANDARD VENDOR TERMS AND CONDITIONS
(June 7, 2024)

References herein to the "State" shall mean the Capital Region Development Authority ("CRDA") and/or the State of Connecticut, and references to "Contractor" or "Contractors" shall mean the entity [insert] with whom CRDA is contracting. References herein to "Contract" shall mean the agreement between CRDA and Contractors to which these terms ("T&Cs") are incorporated and made a part thereof.

1. **Statutory Authority.** Connecticut General Statutes § 32-602(b)(2) provides CRDA with the authority to enter into contracts in the pursuit of its mission.

2. **Governing Law.** The parties deem the Agreement to have been made in the City of Hartford, State of Connecticut. All parties agree that it is fair and reasonable for the validity and construction of the Agreement to be, and it shall be, governed by the laws and court decisions of the State of Connecticut, without giving effect to its principles of conflicts of laws. To the extent that any immunities provided by Federal law or the laws of the State of Connecticut do not bar an action against CRDA, and to the extent that these courts are courts of competent jurisdiction, for the purpose of venue, the complaint shall be made returnable to the Judicial District of Hartford only or shall be brought in the United States District Court for the District of Connecticut only, and shall not be transferred to any other court, provided, however, that nothing herein constitutes a waiver or compromise of the sovereign immunity of the State. The Contractors waive any objection which it may now have or will have to the laying of venue of any claims in any forum and further irrevocably submits to such jurisdiction in any suit, action or proceeding.

3. **Background Checks.** The Contractors warrant that they will not assign any employee, independent contractor or agent to perform services under the Contract unless that employee, independent contractor or agent has completed a background check and is deemed suitable by Contractor for performing such services. The background check must minimally include criminal conviction information for the past seven years, a check of the national and state sex offender registries and a social security number verification. In conducting such background check, the Contractor shall comply with all applicable federal and state laws. All fees associated with the background checks shall be the responsibility of the Contractor. The Contractor shall immediately remove any employee, independent contractor or agent performing services under the Contract: (i) if it becomes known to the Contractor that such person may be a danger to the health or safety of CRDA employees, directors, or its agents, , or (ii) at the request of CRDA, based on a concern of community or individual safety.

4. **Ethics and Compliance**. Contractors acknowledges that by doing business with or seeking to do business with the State it is subject to certain provisions of the Code of Ethics for Public Officials of the State of Connecticut (the "Code of Ethics") applicable to current or prospective state contractors. Contractor acknowledges receipt and review of the Code of Ethics as currently posted on the Web site of the Office of State Ethics www.ct.gov/ethics and agrees to comply with all provisions of the Code of Ethics applicable to Contractors as a current or potential state contractor. As required under C.G.S. §1-101qq, the Contractor will include the foregoing reference to the state ethics law summary in each subcontract entered into with Subcontractors in connection with the Project.

5. **Access to Contract and State Data**. The Contractors shall provide to the State access to any data, as defined in Conn. Gen Stat. Sec. 4e-1, concerning the Contract and CRDA that are in the possession or control of the Contractors upon demand and shall provide the data to the State in a format prescribed by the State and the State Auditors of Public Accounts at no additional cost.

6. **Executive Orders and Other Enactments.**
a. All references in this Contract to any Federal, State, or local law, statute, public or special act, executive order, ordinance, regulation or code (collectively, "Enactments") shall mean Enactments that apply to the Contract at any time during its term, or that may be made applicable to the Contract during its term. This Contract shall always be read and interpreted in accordance with the latest applicable wording and requirements of the Enactments. Unless otherwise provided by Enactments, the Contractor is not relieved of its obligation to perform under this Contract if it chooses to contest the applicability of the Enactments or CRDA's authority to require compliance with the Enactments.
b. This Contract is subject to the provisions of Executive Order No. Three of Governor Thomas J. Meskill, promulgated June 16, 1971, concerning labor employment practices, Executive Order No. Seventeen of Governor Thomas J. Meskill, promulgated February 15, 1973, concerning the listing of employment openings and Executive Order No. Sixteen of Governor John G. Rowland promulgated August 4, 1999, concerning violence in the workplace, all of which are incorporated into and are made a part of this Contract as if they had been fully set forth in it.

7. **Insurance**. To the extent that the insurance obligations of the Contractor set forth in the body of the Agreement (or the exhibits thereto other than this exhibit) require higher coverage limits or greater, broader and/or more expansive insurance coverage than that set forth in this Section 7, the higher coverage limits and greater, broader and/or more expansive insurance coverage requirements of the body of the Agreement (or the exhibits thereto other than this exhibit) shall apply, prevail and control. Contractor agrees to maintain insurance policies protecting its property interests at the project site covering the following risks in the following minimum amounts and named additional insureds:
a. **Workers' Compensation** - Contractor shall secure and deliver to CRDA evidence of workers' compensation (including occupational disease hazards) and Employer's Liability insurance, insuring their employees in amounts equal to or greater than required under Connecticut law. Provided that such required amounts are provided under Contractor's excess/umbrella coverage, the Employer's Liability insurance limits may be the minimum required by the excess/umbrella carrier as an underlying limit.
b. **Commercial General Liability** - Contractor shall secure and deliver to CRDA prior to the commencement of the term hereunder and shall keep in force at all times thereafter during the term of the Agreement, a commercial general liability insurance policy, including bodily injury, personal injury and property damage, covering Contractor's activities and loss and damage to the improvements at the project site and other facilities at the project site occurring in connection with Contractor's activities, in the amount of not less than One Million Dollars ($1,000,000.00) per occurrence and not less than Two Million Dollars ($2,000,000.00) in the aggregate per policy year, including products and completed operations, personal and advertising injury and blanket contractual liability coverage. Contractor shall also maintain umbrella liability insurance (following form) for the commercial general liability and employers' liability matters covered by the policies described in this Section hereof with a limit of Ten Million Dollars ($10,000,000) in the aggregate.
c. **Evidence of Insurance** - Contractor shall provide to CRDA and the City (or Town, as applicable) not later than the commencement date of this Agreement and annually thereafter, certificates of insurance evidencing the coverage's required by this Section, all in such form as CRDA and the City (or Town, as applicable) may reasonably require, with Contractor as the named

insured and with CRDA and the City (or Town, as applicable) as additional insured's. The policies for said coverages shall contain a provision covering Contractor's indemnification liabilities to CRDA and the City (or Town, as applicable) (to the extent that the loss is of a nature that it would otherwise be covered under such insurance). Notwithstanding the provisions of this Section, the above policies may contain exclusions from coverage which are reasonable and customary for policies of such type.

d. **Other Insurance Requirements** - (i) All insurance required to be maintained under this Agreement must be placed with insurance companies reasonably licensed to do business in the state of Connecticut with the financial rating of at least A-(VIII) or better by the latest edition of A.M. Best's Rating Guide or, if such guide is no longer available, any generally recognized replacement, therefore. All insurance required hereunder shall be written on an "occurrence" (as opposed to "claims made") basis. (ii) A certificate of insurance (evidencing renewal or replacement of coverage) shall be delivered to CRDA at least thirty (30) days before a policy's expiration date except for any policy expiring on the termination date of this Agreement or thereafter.

(iii) All insurance procured by Contractor in accordance with the requirements of the Agreement shall be primary over any insurance carried by CRDA, shall not require contribution by CRDA and shall provide that the insurer shall have no right of recovery or subrogation against CRDA.

8. **Nondiscrimination.**

a. For purposes of this Section, the following terms are defined as follows:

i. "Commission" means the Commission on Human Rights and Opportunities;

ii. "Contract" and "contract" include any extension or modification of the Contract or contract;

iii. "Contractor" and "contractor" include any successors or assigns of the Contractor or contractor;

iv. "Gender identity or expression" means a person's gender-related identity, appearance or behavior, whether or not that gender-related identity, appearance or behavior is different from that traditionally associated with the person's physiology or assigned sex at birth, which gender- related identity can be shown by providing evidence including, but not limited to, medical history, care or treatment of the gender-related identity, consistent and uniform assertion of the gender-related identity or any other evidence that the gender-related identity is sincerely held, part of a person's core identity or not being asserted for an improper purpose.

v. "good faith" means that degree of diligence which a reasonable person would exercise in the performance of legal duties and obligations;

vi. "good faith efforts" shall include, but not be limited to, those reasonable initial efforts necessary to comply with statutory or regulatory requirements and additional or substituted efforts when it is determined that such initial efforts will not be sufficient to comply with such requirements;

vii. "marital status" means being single, married as recognized by the State of Connecticut, widowed, separated or divorced;

viii. "mental disability" means one or more mental disorders, as defined in the most recent edition of the American Psychiatric Association's "Diagnostic and Statistical Manual of Mental Disorders", or a record of or regarding a person as having one or more such disorders;

ix. "minority business enterprise" means any small contractor or supplier of materials fifty-one percent or more of the capital stock, if any, or assets of which is owned by a person or persons: (1) who are active in the daily affairs of the enterprise, (2) who have the power to direct the management and policies of the enterprise, and (3) who are members of a minority, as such term is defined in subsection (a) of Conn. Gen. Stat. § 32-9n; and

x. "public works contract" means any agreement between any individual, firm or corporation and the State or any political subdivision of the State other than a municipality for construction, rehabilitation, conversion, extension, demolition or repair of a public building, highway or other

changes or improvements in real property, or which is financed in whole or in part by the State, including, but not limited to, matching expenditures, grants, loans, insurance or guarantees.

For purposes of this Section, the terms "Contract" and "contract" do not include a contract where each contractor is (1) a political subdivision of the state, including, but not limited to, a municipality, unless the contract is a municipal public works contract or quasi-public agency project contract, (2) any other state, including but not limited to any federally recognized Indian tribal governments, as defined in Conn. Gen. Stat. § 1-267, (3) the federal government, (4) a foreign government, or (5) an agency of a subdivision, agency, state or government described in the immediately preceding enumerated items (1), (2), (3), or (4).

b. (1) The Contractor agrees and warrants that in the performance of the Contract such Contractor will not discriminate or permit discrimination against any person or group of persons on the grounds of race, color, religious creed, age, marital status, national origin, ancestry, sex, gender identity or expression, status as a veteran, status as a victim of domestic violence, intellectual disability, mental disability or physical disability, including, but not limited to, blindness, unless it is shown by such Contractor that such disability prevents performance of the work involved, in any manner prohibited by the laws of the United States or of the State of Connecticut; and the Contractor further agrees to take affirmative action to ensure that applicants with job-related qualifications are employed and that employees are treated when employed without regard to their race, color, religious creed, age, marital status, national origin, ancestry, sex, gender identity or expression, status as a veteran, status as a victim of domestic violence, intellectual disability, mental disability or physical disability, including, but not limited to, blindness, unless it is shown by the Contractor that such disability prevents performance of the work involved; (2) the Contractor agrees, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, to state that it is an "affirmative action equal opportunity employer" in accordance with regulations adopted by the Commission; (3) the Contractor agrees to provide each labor union or representative of workers with which the Contractor has a collective bargaining Agreement or other contract or understanding and each vendor with which the Contractor has a contract or understanding, a notice to be provided by the Commission, advising the labor union or workers' representative of the Contractor's commitments under this section and to post copies of the notice in conspicuous places available to employees and applicants for employment; (4) the Contractor agrees to comply with each provision of this Section and Conn. Gen. Stat. §§ 46a-68e and 46a-68f and with each regulation or relevant order issued by said Commission pursuant to Conn. Gen. Stat. §§ 46a-56, 46a-68e, 46a-68f and 46a-86; and (5) the Contractor agrees to provide the Commission on Human Rights and Opportunities with such information requested by the Commission, and permit access to pertinent books, records and accounts, concerning the employment practices and procedures of the Contractor as relate to the provisions of this Section and Conn. Gen. Stat. § 46a-56. If the contract is a public works contract, municipal public works contract or contract for a quasi-public agency project, the Contractor agrees and warrants that he or she will make good faith efforts to employ minority business enterprises as subcontractors and suppliers of materials on such public works or quasi-public agency projects.

c. Determination of the Contractor's good faith efforts shall include, but shall not be limited to, the following factors: The Contractor's employment and subcontracting policies, patterns and practices; affirmative advertising, recruitment and training; technical assistance activities and such other reasonable activities or efforts as the Commission may prescribe that are designed to ensure the participation of minority business enterprises in public works projects.

d. The Contractor shall develop and maintain adequate documentation, in a manner prescribed by the Commission, of its good faith efforts.

e. The Contractor shall include the provisions of subsection (b) of this Section in every subcontract or purchase order entered into in order to fulfill any obligation of a contract with the State and in

every subcontract entered into in order to fulfill any obligation of a municipal public works contract for a quasi-public agency project, and such provisions shall be binding on a subcontractor, vendor or manufacturer unless exempted by regulations or orders of the Commission. The Contractor shall take such action with respect to any such subcontract or purchase order as the Commission may direct as a means of enforcing such provisions including sanctions for noncompliance in accordance with Conn. Gen. Stat. § 46a-56 as amended; provided if such Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the Commission regarding a State contract, the Contractor may request the State of Connecticut to enter into any such litigation or negotiation prior thereto to protect the interests of the State and the State may so enter. f. The Contractor agrees to comply with the regulations referred to in this Section as they exist on the date of this Contract and as they may be adopted or amended from time to time during the term of this Contract and any amendments thereto.

g. (1) The Contractor agrees and warrants that in the performance of the Contract such Contractor will not discriminate or permit discrimination against any person or group of persons on the grounds of sexual orientation, in any manner prohibited by the laws of the United States or the State of Connecticut, and that employees are treated when employed without regard to their sexual orientation; (2) the Contractor agrees to provide each labor union or representative of workers with which such Contractor has a collective bargaining Agreement or other contract or understanding and each vendor with which such Contractor has a contract or understanding, a notice to be provided by the Commission on Human Rights and Opportunities advising the labor union or workers' representative of the Contractor's commitments under this section, and to post copies of the notice in conspicuous places available to employees and applicants for employment; (3) the Contractor agrees to comply with each provision of this section and with each regulation or relevant order issued by said Commission pursuant to Conn. Gen. Stat. § 46a-56; and (4) the Contractor agrees to provide the Commission on Human Rights and Opportunities with such information requested by the Commission, and permit access to pertinent books, records and accounts, concerning the employment practices and procedures of the Contractor which relate to the provisions of this Section and Conn. Gen. Stat. § 46a-56.

h. The Contractor shall include the provisions of the foregoing paragraph in every subcontract or purchase order entered into in order to fulfill any obligation of a contract with the State and such provisions shall be binding on a subcontractor, vendor or manufacturer unless exempted by regulations or orders of the Commission. The Contractor shall take such action with respect to any such subcontract or purchase order as the Commission may direct as a means of enforcing such provisions including sanctions for noncompliance in accordance with Conn. Gen. Stat. § 46a-56 as amended; provided, if such Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the Commission regarding a State contract, the Contractor may request the State of Connecticut to enter into any such litigation or negotiation prior thereto to protect the interests of the State and the State may so enter.

i. Pursuant to subsection (c) of section 4a-60 and subsection (b) of section 4a-60a of the Connecticut General Statutes, the Contractor, for itself and its authorized signatory of this Contract, affirms that it understands the obligations of this section and that it will maintain a policy for the duration of the Contract to assure that the Contract will be performed in compliance with the nondiscrimination requirements of such sections. The Contractor and its authorized signatory of this Contract demonstrate their understanding of this obligation by (A) having provided an affirmative response in the required online bid or response to a proposal question which asks if the contractor understands its obligations under such sections or (B) signing this Contract.

9. **Large State Contract Representation for Contractor**. Pursuant to section 4-252 of the Connecticut General Statutes and Acting Governor Susan Bysiewicz Executive Order No. 21-2,

promulgated July 1, 2021, the Contractor, for itself and on behalf of all of its principals or key personnel who submitted a bid or proposal, represents:
(1) That no gifts were made by (A) the Contractor, (B) any principals and key personnel of the Contractor, who participate substantially in preparing bids, proposals or negotiating State contracts, or (C) any agent of the Contractor or principals and key personnel, who participates substantially in preparing bids, proposals or negotiating State contracts, to (i) any public official or State employee of the State agency or quasi- public agency soliciting bids or proposals for State contracts, who participates substantially in the preparation of bid solicitations or requests for proposals for State contracts or the negotiation or award of State contracts, or (ii) any public

official or State employee of any other State agency, who has supervisory or appointing authority over such State agency or quasi-public agency; (2) That no such principals and key personnel of the Contractor, or agent of the Contractor or of such principals and key personnel, knows of any action by the Contractor to circumvent such prohibition on gifts by providing for any other principals and key personnel, official, employee or agent of the Contractor to provide a gift to any such public official or State employee; and (3) That the Contractor is submitting bids or proposals without fraud or collusion with any person.

10. **Large State Contract Representation for Official or Employee of State Agency.** Pursuant to section 4-252 of the Connecticut General Statutes and Acting Governor Susan Bysiewicz Executive Order No. 21-2, promulgated July 1, 2021, the State agency official or employee represents that the selection of the person, firm or corporation was not the result of collusion, the giving of a gift or the promise of a gift, compensation, fraud or inappropriate influence from any person.

11. **Consulting Agreement Representations.** Pursuant to section 4a-81 of the Connecticut General Statutes, the person signing this Contract on behalf of the Contractor represents, to their best knowledge and belief and subject to the penalty of false statement as provided in section 53a-157b of the Connecticut General Statutes, that the Contractor has not entered into any consulting agreements in connection with this Contract, except for the agreements listed below or in an attachment to this Contract. "Consulting agreement" means any written or oral agreement to retain the services, for a fee, of a consultant for the purposes of (A) providing counsel to a contractor, vendor, consultant or other entity seeking to conduct, or conducting, business with the State, (B) contacting, whether in writing or orally, any executive, judicial, or administrative office of the State, including any department, institution, bureau, board, commission, authority, official or employee for the purpose of solicitation, dispute resolution, introduction, requests for information, or (C) any other similar activity related to such contracts. "Consulting agreement" does not include any agreements entered into with a consultant who is registered under the provisions of chapter 10 of the Connecticut General Statutes as of the date such contract is executed in accordance with the provisions of section 4a-81 of the Connecticut General Statutes.

Consultant's Name and Title Name of Firm (if applicable)

_____ _____ _____
Start Date End Date Cost

The basic terms of the consulting agreement are:

Description of Services Provided:

Is the consultant a former State employee or former public official? □ YES □ NO

If YES: Name of Former State Agency _____

_____ Termination Date of Employment

12. **Campaign Contribution Restrictions**. For all State contracts, defined in section 9-612 of the Connecticut General Statutes as having a value in a calendar year of $50,000 or more, or a combination or series of such agreements or contracts having a value of $100,000 or more, the authorized signatory to this Contract represents that they have received the State Elections Enforcement Commission's notice advising state contractors of state campaign contribution and solicitation prohibitions, and will inform its principals of the contents of the notice.

13. **Summary of State Ethics Laws.** Pursuant to the requirements of section 1-101qq of the Connecticut General Statutes (a) the State has provided to the Contractor the summary of State ethics laws developed by the State Ethics Commission pursuant to section 1-81b of the Connecticut General Statutes, which summary is incorporated by reference into and made a part of this Contract as if the summary had been fully set forth in this Contract; (b) the Contractor represents that the chief executive officer or authorized signatory of the Contract and all key employees of such officer or signatory have read and understood the summary and agree to comply with the provisions of state ethics law; (c) prior to entering into a contract with any subcontractors or consultants, the Contractor shall provide the summary to all subcontractors and consultants and each such contract entered into with a subcontractor or consultant on or after July 1, 2021, shall include a representation that each subcontractor or consultant and the key employees of such subcontractor or consultant have read and understood the summary and agree to comply with the provisions of state ethics law; (d) failure to include such representations in such contracts with subcontractors or consultants shall be cause for termination of the Contract; and (e) each contract with such contractor, subcontractor or consultant shall incorporate such summary by reference as a part of the contract terms.

14. **Iran Energy Investment Certification.**
a. Pursuant to section 4-252a of the Connecticut General Statutes, the Contractor certifies that it has not made a direct investment of twenty million dollars or more in the energy sector of Iran on or after October 1, 2013, as described in Section 202 of the Comprehensive Iran Sanctions, Accountability and Divestment Act of 2010, and has not increased or renewed such investment on or after said date.
b. If the Contractor makes a good faith effort to determine whether it has made an investment described in subsection (a) of this section then the Contractor shall not be deemed to be in breach of the Contract or in violation of this section. A "good faith effort" for purposes of this subsection includes a determination that the Contractor is not on the list of persons who engage in certain investment activities in Iran created by the Department of General Services of the State of California

pursuant to Division 2, Chapter 2.7 of the California Public Contract Code. Nothing in this subsection shall be construed to impair the ability of the State agency or quasi-public agency to pursue a breach of contract action for any violation of the provisions of the Contract.

15. **Freedom of Information.**
a. Contractor acknowledges that CRDA must comply with the Freedom of Information Act, C.G.S. §§ 1-200 et seq. ("FOIA") which requires the disclosure of documents in the possession of CRDA upon request of any citizen, unless the content of the document falls within certain categories of exemption.
b. Governmental Function. In accordance with C.G.S. § 1-218, if the amount of this Contract exceeds two million five hundred thousand dollars ($2,500,000), and the Contractor is a "person" performing a "governmental function", as those terms are defined in C.G.S. § 1-200, CRDA is entitled to receive a copy of the records and files related to the Contractor's performance of the governmental function, which may be disclosed by CRDA pursuant to the FOIA.

16. **Whistleblowing.** If this Contract is a "large state contract" (as defined in C.G.S. § 4-61dd) having a value of five million dollars ($5,000,000) or more, it is subject to the provisions of C.G.S. §

4-61dd. In accordance with such statute, if an officer, employee or appointing authority of the Contractor takes or threatens to take any personnel action against any employee of the Contractor in retaliation for such employee's disclosure of information to any employee of the contracting state or quasi-public agency or the Auditors of Public Accounts or the Attorney General under the provisions of subsection (a) of such statute, then in accordance with subsection (e) of such statute, the Contractor shall be liable for a civil penalty of not more than five thousand dollars for each offense, up to a maximum of twenty percent of the value of the Contract. Each violation shall be a separate and distinct offense and in the case of a continuing violation, each calendar day's continuance of the violation shall be deemed to be a separate and distinct offense. The State may request that the Attorney General bring a civil action in the Superior Court for the Judicial District of Hartford to seek imposition and recovery of such civil penalty. In accordance with subsection (f) of such statute, each large state contractor, as defined in the statute, shall post a notice of the provisions of the statute relating to large state contractors in a conspicuous place which is readily available for viewing by the employees of the Contractor.

17. **Contractor Certifications.** The Contractor certifies that the Contractor has not, within the three (3) years preceding the Contract, in any of its current or former jobs, been convicted of, or had a civil judgment rendered against it or against any person who would Perform under the Contract, for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a transaction or contract with any governmental entity. This includes, but is not limited to, violation of Federal or state antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property or made an admission of guilt of such conduct which is a matter of record.

Contractor certifies that it has not within past three (3) years preceding the Contract been suspended or disbarred from any federal, state, local or Tribal programs, business, awards, contracts, agreements, grants or procurements.
18. **Agent for Legal Service of Process.** If Contractor is an individual/sole proprietor and not domiciled in Connecticut, Contractor shall appoint a registered agent for legal service of process within the State of Connecticut ("Agent") to receive and route all service of process and legal mandates and notifications related to the Contract and the resulting business relationship. The

contractor shall provide such Agent's registered agent location address within Connecticut to CRDA prior to the execution of the Contract and shall maintain such Agent throughout the term of the Contract.

19. **Labor and Personnel.** At all times, Contractor shall utilize approved, qualified personnel and any CRDA approved subcontractors necessary to perform the services under this Contract. Contractor shall advise CRDA promptly, in writing, of any labor dispute or anticipated labor dispute or other labor related occurrence known to Contractor involving Contractor's employees or subcontractors which may reasonably be expected to affect Contractor's performance of services under this Contract. CRDA may then, at its option, ask Contractor to arrange for a temporary employee(s) or subcontractor(s) satisfactory to CRDA to provide the services otherwise performable by Contractor hereunder. The Contractor will be responsible to CRDA for any economic detriment caused CRDA by such subcontract arrangement. Contractor shall, if requested to do so by CRDA, reassign from CRDA's account any employee or authorized representatives whom CRDA, in its sole discretion, determines is incompetent, dishonest, or uncooperative. In requesting the reassignment of an employee under this paragraph, CRDA shall give ten (10) days' notice to Contractor of the CRDA's desire for such reassignment. Contractor will then have five (5) days to investigate the situation and attempt, if it so desires, to satisfy CRDA that the employee should not be reassigned; however, CRDA's decision in its sole discretion after such five (5)

day period shall be final. Should the CRDA still desire reassignment, then five (5) days thereafter, or ten (10) days from the date of the notice of reassignment, the employee shall be reassigned from CRDA's account.

20. **Americans with Disabilities Act.** The Contractor shall be and remain in compliance with the Americans with Disabilities Act of 1990 ("Act"), Public Law 101-336, to the extent applicable, during the term of the Contract. CRDA may Terminate the Contract if the Contractor fails to comply with the Act.

SCHEDULE C

PREVAILING WAGE RATES

Will be distributed via addendum

C•R•D•A

Capital Region
Development Authority

CAMPAIGN CONTRIBUTION AND SOLICITATION LIMITATIONS

No *state contractor, prospective state contractor, principal of a state contractor or principal of a prospective state contractor*, with regard to a *state contract* or *state contract solicitation* with or from a state agency in the executive branch or a quasi-public agency or a holder, or principal of a holder of a valid prequalification certificate, shall make a contribution to (i) an exploratory committee or candidate committee established by a candidate for nomination or election to the office of Governor, Lieutenant Governor, Attorney General, State Comptroller, Secretary of the State or State Treasurer, (ii) a political committee authorized to make contributions or expenditures to or for the benefit of such candidates, or (iii) a party committee (which includes town committees).

"**Principal of a state contractor or prospective state contractor**" means (i) any individual who is a member of the board of directors of, or has an ownership interest of five per cent or more in, a state contractor or prospective state contractor, which is a business entity, except for an individual who is a member of the board of directors of a nonprofit organization**,** (ii) an individual who is employed by a state contractor or prospective state contractor, which is a business entity, as president, treasurer or executive vice president, (iii) an individual who is the chief executive officer of a state contractor or prospective state contractor, which is not a business entity, or if a state contractor or prospective state contractor has no such officer, then the officer who duly possesses comparable powers and duties, (iv) an officer or an employee of any state contractor or prospective state contractor who has *managerial or discretionary responsibilities with respect to a state contract,* (v) the spouse or a *dependent child* who is eighteen years of age or older of an individual described in this subparagraph, or (vi) a political committee established or controlled by an individual described in this subparagraph or the business entity or nonprofit organization that is the state contractor or prospective state contractor.

Please list <u>all</u> Principals of contractor or prospective CRDA contractor (use an additional sheet of paper if necessary).

PRINCIPALS (as applicable)	NAME	TITLE/RELATIONSHIP
Members of Board of Directors		
President, Treasurer, and Executive Vice Presidents		
CEO or officer with comparable powers and duties		
Employee who has managerial or discretionary responsibilities with respect to the CRDA contract		
Applicable Spouses and/or Dependent Children		
Political Committees		

Sworn as true to the best of my knowledge and belief, subject to the penalties of false statement.

Name/Title: _____ Date _____

STATE OF CONNECTICUT

Certificate of Compliance with Connecticut General Statute Section 31 - 57b

I hereby certify that all of the statements herein contained below have been examined by me, and to the best of my knowledge and belief are true and correct.

The _____ **HAS / HAS NOT**
Company Name (Cross out Non-applicable)

been cited for three (3) or more willful or serious or serious violations of any Occupational Safety and Health Act (OSHA) or of any standard, order or regulation promulgated pursuant to such act, during the three year period preceding the bid, provided such violations were cited in accordance with the provisions of any State Occupational Safety and Health Act of 1970, and not abated within the time fixed by the citation and such citation has not been set aside following appeal to the appropriate agency of court having jurisdiction or **HAS / HAS NOT** (Cross out Non-applicable) received one or more criminal convictions related to the injury or death of any employee in the three-year period preceding the bid.

The list of violations (if applicable) is attached.

_____
(Name of Firm, Organization or Corporation)

Signed: _____
Written Signature:

_____
Name Typed: *(Corporation Seal)*

Title: _____
(Title of Above Person, typed)

Dated: _____

State of)

County of) ***ss:*** ***A.D., 20_____***

)

Sworn to and personally appeared before me for the above, _____,
(Name of Firm, Organization, Corporation)

Signer and Sealer of the foregoing instrument of and acknowledged the same to be the free act and deed of

_____, and his/her free act and deed as
(Name of Person appearing in front of Notary or Clerk)

_____.
(Title of Person appearing in front of Notary or Clerk)

My Commission Expires: _____
(Notary Public) *(Seal)*

SECTION 01 1000 - SUMMARY

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

1. Project information.
2. Work covered by Contract Documents.
3. Work by Owner.
4. Work under separate contracts.
5. Access to site.
6. Coordination with neighbors.
7. Work restrictions.
8. Specification and drawing conventions.
9. Miscellaneous provisions.

B. Related Requirements:

1. Section 01 5000 "Temporary Facilities and Controls" for limitations and procedures governing temporary use of Owner's facilities.

1.3 PROJECT INFORMATION

A. Project Identification: McCartin School Demolition.

1. Project Location: 70 Canterbury Street, East Hartford, CT 06118.

B. Owner: The East Hartford Redevelopment Agency; 740 Main Street, East Hartford, CT 06108

1. Owner's Representative: Douglas Wilson

C. Administrator on behalf of the Owner: Capitol Regional Development Authority; 100 Columbus Blvd Suite 500, Hartford, CT 06103

D. Architect: Christopher Williams Architects; 85 Willow Street, New Haven, CT 06511

E. Other Owner Consultants: The Owner has retained the following design professionals who have prepared designated portions of the Contract Documents:

1. Hazardous Materials Consultant: TRC; 21 Griffin Road North, Windsor, CT 06095 has prepared the following portions of the Contract Documents:

1.4 WORK COVERED BY CONTRACT DOCUMENTS

A. The Work of Project is defined by the Contract Documents and consists of the following:

1. Demolition, removal and legal disposal of the entire building, including foundation.

2. Site Demolition.

3. Site Restoration.

B. Type of Contract:

1. Project will be constructed under a single prime contract.

1.5 ACCESS TO SITE

A. General: Contractor shall have full use of Project site for construction operations during construction period. Contractor's use of Project site is limited only by Owner's right to perform work or to retain other contractors on portions of Project.

B. Use of Site: Limit use of Project site to work in areas indicated. Do not disturb portions of Project site beyond areas in which the Work is indicated.

1. Limits: Confine construction operations to areas outside of wetlands
2. Driveways, Walkways and Entrances: Keep driveways and entrances serving premises clear and available to Owner, Owner's employees, and emergency vehicles at all times. Do not use these areas for parking or storage of materials.

1.6 WORK RESTRICTIONS

A. Work Restrictions, General: Comply with restrictions on construction operations.

1. Comply with limitations on use of public streets and with other requirements of authorities having jurisdiction.

B. On-Site Work Hours: Limit work in the existing building to normal business working hours of 8:00 a.m. to 5:00 p.m., Monday through Friday, unless otherwise indicated.

C. Noise, Vibration, and Odors: Coordinate operations that may result in high levels of noise and vibration, odors, or other disruption to neighboring properties.

1. On-site crushing of materials will be strictly prohibited.

D. Employee Screening: Comply with Owner's requirements for drug and background screening of Contractor personnel working on Project site.

1. Maintain list of approved screened personnel with Owner's representative.

1.7 SPECIFICATION AND DRAWING CONVENTIONS

A. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:

1. Imperative mood and streamlined language are generally used in the Specifications. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.
2. Specification requirements are to be performed by Contractor unless specifically stated otherwise.

B. Division 01 General Requirements: Requirements of Sections in Division 01 apply to the Work of all Sections in the Specifications.

C. Drawing Coordination: Requirements for materials and products identified on Drawings are described in detail in the Specifications. One or more of the following are used on Drawings to identify materials and products:

1. Terminology: Materials and products are identified by the typical generic terms used in the individual Specifications Sections.
2. Abbreviations: Materials and products are identified by abbreviations published as part of the U.S. National CAD Standard.
3. Keynoting: Materials and products are identified by reference keynotes referencing Specification Section numbers found in this Project Manual.

1.8 MISCELLANEOUS PROVISIONS

A. Pest Control

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 1000

SECTION 01 3233 - PHOTOGRAPHIC DOCUMENTATION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes administrative and procedural requirements for the following:

1. Pre-demolition photographs.
2. Periodic photographs during demolition
3. Photographs of all excavations after removal of foundations before backfill begins.
4. Final completion photographs.

B. Related Requirements:

1. Section 02 4116 "Structure Demolition" for photographic documentation before building demolition operations commence.

1.3 UNIT PRICES

A. Basis for Bids: Base number of construction photographs on average of 20 photographs per week over the duration of Project.

1.4 INFORMATIONAL SUBMITTALS

A. Key Plan: Submit key plan of Project site and building with notation of vantage points marked for location and direction of each photograph. Indicate elevation or story of construction. Include same information as corresponding photographic documentation.

B. Digital Photographs: Submit image files within three days of taking photographs.

1. Digital Camera: Minimum sensor resolution of 8 megapixels.
2. Format: Minimum 3200 by 2400 pixels, in unaltered original files, with same aspect ratio as the sensor, uncropped, date and time stamped, in folder named by date of photograph, accompanied by key plan file.
3. Identification: Provide the following information with each image description in file metadata tag:

a. Name of Project.
b. Name and contact information for photographer.

c. Name of Architect.
d. Name of Contractor.
e. Date photograph was taken.
f. Description of vantage point, indicating location, direction (by compass point), and elevation or story of construction.
g. Unique sequential identifier keyed to accompanying key plan.

PART 2 - PRODUCTS

2.1 PHOTOGRAPHIC MEDIA

A. Digital Images: Provide images in JPG format, produced by a digital camera with minimum sensor size of 8 megapixels, and at an image resolution of not less than 3200 by 2400 pixels.

PART 3 - EXECUTION

3.1 DEMOLITION PHOTOGRAPHS

A. Photographer: Engage a qualified photographer to take construction photographs.

B. General: Take photographs using the maximum range of depth of field, and that are in focus, to clearly show the Work. Photographs with blurry or out-of-focus areas will not be accepted.

1. Maintain key plan with each set of construction photographs that identifies each photographic location.

C. Digital Images: Submit digital images exactly as originally recorded in the digital camera, without alteration, manipulation, editing, or modifications using image-editing software.

1. Date and Time: Include date and time in file name for each image.
2. Field Office Images: Maintain one set of images accessible in the field office at Project site, available at all times for reference. Identify images in the same manner as those submitted to Architect and Owner.

D. Preconstruction Photographs: Before commencement of demolition and before foundations are removed, take photographs of Project site and surrounding properties, including existing items to remain during construction, from different vantage points, as directed by Architect.

1. Flag excavation areas before taking construction photographs.
2. Take 20 photographs to show existing conditions adjacent to property before starting the Work.
3. Take 20 photographs of existing buildings either on or adjoining property to accurately record physical conditions at start of construction.

4. Take additional photographs as required to record settlement or cracking of adjacent structures, pavements, and improvements.
5. Photograph foundations and footings in place before removal. Flag locations so they appear in photographs.
6. Photograph excavations after foundations and footings are removed prior to backfill placement.

E. Periodic Construction Photographs: Take 20 photographs weekly, with timing each month adjusted to coincide with the cutoff date associated with each Application for Payment. Select vantage points to show status of construction and progress since last photographs were taken.

F. Architect-Directed Construction Photographs: From time to time, Architect will instruct photographer about number and frequency of photographs and general directions on vantage points. Select actual vantage points and take photographs to show the status of construction and progress since last photographs were taken.

G. Final Completion Construction Photographs: Take 20 color photographs after date of Substantial Completion for submission as project record documents. Architect will inform photographer of desired vantage points.

1. Include date stamp.

H. Additional Photographs: Architect may request photographs in addition to periodic photographs specified.

1. Three days' notice will be given, where feasible.
2. In emergency situations, take additional photographs within 24 hours of request.
3. Circumstances that could require additional photographs include, but are not limited to, the following:
    a. Immediate follow-up when on-site events result in construction damage or losses.
    b. Substantial Completion of a major phase or component of the Work.
    c. Extra record photographs at time of final acceptance.
    d. Owner's request for special publicity photographs.

END OF SECTION 01 3233

SECTION 01 5000 - TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes requirements for temporary utilities, support facilities, and security and protection facilities.

B. Related Requirements:

1. Section 01 1000 "Summary" for work restrictions and limitations on utility interruptions.

1.3 USE CHARGES

A. General: Installation and removal of and use charges for temporary facilities shall be included in the Contract Sum unless otherwise indicated. Allow other entities engaged in the Project to use temporary services and facilities without cost, including, but not limited to, Owner and Architect, testing agencies, and authorities having jurisdiction.

B. Sewer Service: Pay sewer-service abandonment charges for sanitary sewer removal and abandonment.

C. Water Service: Pay water-service abandonment charges for water removal and abandonment.

D. Electric Power Service: Pay electric-power-service removal charges for electrical service removal.

E. Water and Sewer Service from Existing System: Water from Owner's existing water system is available for use without metering and without payment of use charges. Provide connections and extensions of services as required for construction operations.

F. Electric Power Service from Existing System: Electric power from Owner's existing system is available for use without metering and without payment of use charges. Provide connections and extensions of services as required for construction operations.

1.4 INFORMATIONAL SUBMITTALS

A. Site Utilization Plan: Show temporary facilities, temporary utility lines and connections, staging areas, construction site entrances, vehicle circulation, and parking areas for construction personnel.

B. Implementation and Termination Schedule: Within 15 days of date established for commencement of the Work, submit schedule indicating implementation and termination dates of each temporary utility.

C. Project Identification and Temporary Signs: Show fabrication and installation details, including plans, elevations, details, layouts, typestyles, graphic elements, and message content.

D. Fire-Safety Program: Show compliance with requirements of NFPA 241 and authorities having jurisdiction. Indicate Contractor personnel responsible for management of fire-prevention program.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Portable Chain-Link Fencing: Minimum 2-inch, thick, galvanized-steel, chain-link fabric fencing; minimum 6 feet high with galvanized-steel pipe posts; minimum 2-3/8-inch- OD line posts and 2-7/8-inch- OD corner and pull posts, with 1-5/8-inch- OD top and bottom rails. Provide galvanized-steel bases for supporting posts.

B. Fencing Windscreen Privacy Screen: Polyester fabric scrim with grommets for attachment to chain link fence, sized to height of fence, in color selected by Architect from manufacturer's standard colors.

2.2 TEMPORARY FACILITIES

A. Field Offices, General: Prefabricated or mobile units with serviceable finishes, temperature controls, and foundations adequate for normal loading.

B. Storage and Fabrication Sheds: Provide sheds sized, furnished, and equipped to accommodate materials and equipment for construction operations.

1. Store combustible materials apart from building.

2.3 EQUIPMENT

A. Fire Extinguishers: Portable, UL rated; with class and extinguishing agent as required by locations and classes of fire exposures.

PART 3 - EXECUTION

3.1 TEMPORARY FACILITIES, GENERAL

A. Conservation: Coordinate construction and use of temporary facilities with consideration given to conservation of energy, water, and materials. Coordinate use of temporary utilities to minimize waste.

3.2 INSTALLATION, GENERAL

A. Locate facilities where they will serve Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required by progress of the Work.

B. Provide each facility ready for use when needed to avoid delay. Do not remove until facilities are no longer needed.

3.3 TEMPORARY UTILITY INSTALLATION

A. Sanitary Facilities: Provide temporary toilets, wash facilities, and drinking water for use of construction personnel. Comply with requirements of authorities having jurisdiction for type, number, location, operation, and maintenance of fixtures and facilities.

B. Electric Power Service: To the extent and duration necessary, connect to Owner's existing electric power service.

C. Lighting: Provide temporary lighting to the extent and duration necessary with local switching that provides adequate illumination for construction operations, observations, inspections, and traffic conditions.

1. Install and operate temporary lighting that fulfills security and protection requirements without operating entire system.

3.4 SUPPORT FACILITIES INSTALLATION

A. Temporary Roads and Paved Areas: Construct and maintain temporary roads and paved areas adequate for construction operations. Locate temporary roads and paved areas as indicated on Drawings.

1. Provide dust-control treatment that is nonpolluting and nontracking. Reapply treatment as required to minimize dust.

B. Traffic Controls: Comply with requirements of authorities having jurisdiction.

1. Protect existing site improvements to remain including curbs, pavement, and utilities.
2. Maintain access for fire-fighting equipment and access to fire hydrants.

C. Parking: Provide temporary parking areas for construction personnel.

D. Dewatering Facilities and Drains: Comply with requirements of authorities having jurisdiction. Maintain Project site, excavations, and construction free of water.

1. Dispose of rainwater in a lawful manner that will not result in flooding Project or adjoining properties or endanger permanent Work or temporary facilities.
2. Remove snow and ice as required to minimize accumulations.

E. Project Signs: Provide Project signs as indicated. Unauthorized signs are not permitted.

1. Identification Signs: Provide Project identification signs as indicated on Drawings.
2. Temporary Signs: Provide other signs as indicated and as required to inform public and individuals seeking entrance to Project.

a. Provide temporary, directional signs for construction personnel and visitors.

3. Maintain and touch up signs so they are legible at all times.

F. Waste Disposal Facilities: Comply with requirements specified in Section 01 7419 "Construction Waste Management and Disposal."

G. Waste Disposal Facilities: Provide waste-collection containers in sizes adequate to handle waste from construction operations. Comply with requirements of authorities having jurisdiction.

H. Lifts and Hoists: Provide facilities necessary for hoisting materials and personnel.

1. Truck cranes and similar devices used for hoisting materials are considered "tools and equipment" and not temporary facilities.

3.5 SECURITY AND PROTECTION FACILITIES INSTALLATION

A. Protection of Existing Facilities: Protect existing vegetation, equipment, structures, utilities, and other improvements at Project site and on adjacent properties, except those indicated to be removed or altered. Repair damage to existing facilities.

1. Where access to adjacent properties is required in order to affect protection of existing facilities, obtain written permission from adjacent property owner to access property for that purpose.

B. Environmental Protection: Provide protection, operate temporary facilities, and conduct construction as required to comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.

1. Comply with work restrictions specified in Section 01 1000 "Summary."

C. Temporary Erosion and Sedimentation Control: Comply with requirements of EPA Construction General Permit or authorities having jurisdiction, whichever is more stringent.

D. Temporary Erosion and Sedimentation Control: Provide measures to prevent soil erosion and discharge of soil-bearing water runoff and airborne dust to undisturbed areas and to adjacent properties and walkways, according to the erosion- and sedimentation-control designated wetlands, and the requirements of CT DEEP having jurisdiction, whichever is more stringent.

1. Verify that flows of water redirected from construction areas or generated by construction activity do not enter or cross tree- or plant-protection zones.
2. Inspect, repair, and maintain erosion- and sedimentation-control measures during construction until permanent vegetation has been established.
3. Clean, repair, and restore adjoining properties and roads affected by erosion and sedimentation from Project site during the course of Project.
4. Remove erosion and sedimentation controls and restore and stabilize areas disturbed during removal.

E. Tree and Plant Protection: Comply with requirements specified in Section 01 5639 "Temporary Tree and Plant Protection."

F. Tree and Plant Protection: Install temporary fencing located as indicated or outside the drip line of trees to protect vegetation from damage from construction operations. Protect tree root systems from damage, flooding, and erosion.

G. Pest Control: Engage pest-control service to recommend practices to minimize attraction and harboring of rodents, roaches, and other pests and to perform extermination and control procedures at regular intervals so Project will be free of pests and their residues at Substantial Completion. Perform control operations lawfully, using materials approved by authorities having jurisdiction.

H. Site Enclosure Fence: Before demolition operations begin. Comply with Section 01 5716 “Temporary Pest Control” and furnish and install site enclosure fence in a manner that will prevent people from easily entering site except by entrance gates.

1. Extent of Fence: As Indicated on Drawings and as determined by the contractor to accommodate demolition activities.
2. Maintain security by limiting number of keys and restricting distribution to authorized personnel. Furnish one set of keys to Owner.

I. Barricades, Warning Signs, and Lights: Comply with requirements of authorities having jurisdiction for erecting structurally adequate barricades, including warning signs and lighting.

J. Temporary Fire Protection: Install and maintain temporary fire-protection facilities of types needed to protect against reasonably predictable and controllable fire losses. Comply with NFPA 241; manage fire-prevention program.

1. Prohibit smoking in construction areas. Comply with additional limits on smoking specified in other Sections.
2. Supervise sources of fire ignition according to requirements of authorities having jurisdiction.
3. Develop and supervise an overall fire-prevention and -protection program for personnel at Project site. Review needs with local fire department and establish procedures to be followed. Instruct personnel in methods and procedures. Post warnings and information.

3.6 OPERATION, TERMINATION, AND REMOVAL

A. Supervision: Enforce strict discipline in use of temporary facilities. To minimize waste and abuse, limit availability of temporary facilities to essential and intended uses.

B. Maintenance: Maintain facilities in good operating condition until removal.

1. Maintain operation of temporary enclosures, heating, cooling, humidity control, ventilation, and similar facilities on a 24-hour basis where required to achieve indicated results and to avoid possibility of damage.

C. Temporary Facility Changeover: Do not change over from using temporary security and protection facilities to permanent facilities until Substantial Completion.

D. Termination and Removal: Remove each temporary facility when need for its service has ended, when it has been replaced by authorized use of a permanent facility, or no later than Substantial Completion. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with temporary facility. Repair damaged Work, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired.

1. Materials and facilities that constitute temporary facilities are property of Contractor. Owner reserves right to take possession of Project identification signs.
2. Remove temporary roads and paved areas not intended for or acceptable for integration into permanent construction. Where area is intended for landscape development, remove soil and aggregate fill that do not comply with requirements for fill or subsoil. Remove materials contaminated with road oil, asphalt and other petrochemical compounds, and other substances that might impair growth of plant materials or lawns. Repair or replace street paving, curbs, and sidewalks at temporary entrances, as required by authorities having jurisdiction.
3. At Substantial Completion, repair, renovate, and clean permanent facilities used during construction period.

END OF SECTION 01 5000

SECTION 01 5639 - TEMPORARY TREE AND PLANT PROTECTION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes general protection and pruning of existing trees and plants that are affected by execution of the Work, whether temporary or permanent construction.

1.3 DEFINITIONS

A. Caliper: Diameter of a trunk measured by a diameter tape at 6 inches above the ground for trees up to, and including, 4-inch size; and 12 inches above the ground for trees larger than 4-inch size.

B. Plant-Protection Zone: Area surrounding individual trees, groups of trees, shrubs, or other vegetation to be protected during construction, as indicated on Drawings.

C. Tree-Protection Zone: Area surrounding individual trees or groups of trees to be protected during construction, and defined by a circle concentric with each tree with a radius 1.5 times the diameter of the drip line, with a minimum of a 5 feet clearance barrier between drip line and fence, unless otherwise indicated on Logistic Plan.

D. Vegetation: Trees, shrubs, groundcovers, grass, and other plants.

1.4 ACTION SUBMITTALS

A. Product Data: For each type of product indicated.

B. Samples for Verification: For each type of the following:

1. Protection-Zone Fencing: Assembled Samples of manufacturer's standard size made from full-size components.

C. Tree Pruning Schedule: Written schedule detailing scope and extent of pruning of trees to remain that interfere with or are affected by construction.

1. Species and size of tree.
2. Location on site plan. Include unique identifier for each.
3. Reason for pruning.

4. Description of pruning to be performed.
5. Description of maintenance following pruning.

1.5 INFORMATIONAL SUBMITTALS

A. Qualification Data: For qualified tree service firm.

B Existing Conditions: Documentation of existing trees and plantings indicated to remain, which establishes construction conditions that might be misconstrued as damage caused by construction activities.

1. Use sufficiently detailed photographs or videotape
2. Include plans and notations to indicate specific wounds and damage conditions of each tree or other plants designated to remain.

1.6 QUALITY ASSURANCE

A. Tree Service Firm Qualifications: An experienced tree service firm that has successfully completed temporary tree and plant protection work similar to that required for this Project and that will assign an experienced, qualified arborist to Project site during execution of the Work.

B. Preinstallation Conference: Conduct conference at Project site with Project Manager and Arborist.

1. Review methods and procedures related to temporary tree and plant protection including, but not limited to, the following:

a. Construction schedule. Verify availability of materials, personnel, and equipment needed to make progress and avoid delays.
b. Enforcing requirements for protection zones.
c. University Arborist's responsibilities.
d. Field quality control.

1.7 PROJECT CONDITIONS

A. The following practices are prohibited within protection zones:

1. Storage of construction materials, debris, or excavated material.
2. Parking vehicles or equipment.
3. Foot traffic, (exception: providing lawn mowing maintenance).
4. Erection of sheds or structures.
5. Impoundment of water.
6. Excavation or other digging unless otherwise indicated.
7. Attachment of signs to or wrapping materials around trees or plants unless otherwise indicated.

B. Do not direct vehicle or equipment exhaust toward protection zones.

C. Prohibit heat sources, flames, ignition sources, and smoking within or near protection zones and organic mulch.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Protection-Zone Fencing: Fencing fixed in position and meeting the following requirements. Previously used materials may be used when approved by Project Manager.

1. Plastic Protection-Zone Fencing: Plastic construction fencing constructed of high-density extruded and stretched polyethylene fabric with 2-inch maximum opening in pattern and weighing a minimum of 0.4 lb./ft; remaining flexible from minus 60 to plus 200 deg F; inert to most chemicals and acids; minimum tensile yield strength of 2000 psi and ultimate tensile strength of 2680 psi; secured with plastic bands or galvanized-steel or stainless-steel wire ties; and supported by tubular or T-shape galvanized-steel posts spaced not more than 8 feet apart.

    a. Height: 4 feet.
    b. Color: High-visibility orange, nonfading.

B. Plywood Wood for Protection Zone Vehicle Crossing: 1.¾ inch thick, exterior grade plywood veneer sheathing.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Erosion and Sedimentation Control: Examine the site to verify that temporary erosion and sedimentation-control measures are in place. Verify that flows of water redirected from construction areas or generated by construction activity do not enter or cross protection zones.

3.2 PREPARATION

A. Locate and clearly identify trees, shrubs, and other vegetation to remain or to be relocated. Tie a 1-inch blue-vinyl tape around each tree trunk at 54 inches above the ground.

B. Protect tree root systems from damage caused by runoff or spillage of noxious materials while mixing, placing, or storing construction materials. Protect root systems from ponding, eroding, or excessive wetting caused by dewatering operations.

3.3 TREE AND PLANT-PROTECTION ZONES

A. Protection-Zone Fencing: Install protection-zone fencing along edges of protection zones before materials or equipment are brought on the site and construction operations begin in a manner that will prevent people and animals from easily entering protected area except by entrance gates. Construct fencing so as not to obstruct safe passage or visibility at vehicle intersections where fencing is located adjacent to pedestrian walkways or in close proximity to street intersections, drives, or other vehicular circulation.

   1. Posts: Set or drive posts into ground one-third the total height of the fence without concrete footings. Where a post is located on existing paving or concrete to remain, provide appropriate means of post support acceptable to Owner and Consultant.
   2. Post to be set in vertical plumb position with top of posts aligning with adjacent post where grades allow. Fence to be kept tight and neat.

B. Maintain protection zones free of weeds and trash.

C. Repair or replace trees, shrubs, and other vegetation indicated to remain or be relocated that are damaged by construction operations, in a manner approved by consultant.

D. Maintain protection-zone fencing in good condition as acceptable to consultant and remove when construction operations are complete and equipment has been removed from the site.

   1. Do not remove protection-zone fencing, even temporarily, to allow deliveries or equipment access through the protection zone.
   2. Temporary access is permitted subject to preapproval in writing by University Arborist if a root buffer effective against soil compaction is constructed as directed by Arborist. Maintain root buffer so long as access is permitted.

E. Vehicle Crossing of Protection Zone:
   1. Plywood shall be laid down over root zone to distribute weight of construction vehicle. Review with Project Manager prior to proceeding.

3.4 EXCAVATION

A. General: Excavate at edge of protection zones and for trenches indicated within protection zones according to requirements in Division 31 Specification Sections.

B. General: Review required trenching through protection zone with University Arborist prior to starting work.

C. Trenching near Trees: Where utility trenches are required within protection zones, hand excavate under or around tree roots or tunnel under the roots by drilling, auger boring, or pipe jacking. Do not cut main lateral tree roots or taproots; cut only smaller roots that interfere with installation of utilities. Cut roots as required for root pruning.

D. Redirect roots in backfill areas where possible. If encountering large, main lateral roots, expose roots beyond excavation limits as required to bend and redirect them without

breaking. If encountered immediately adjacent to location of new construction and redirection.
practical, cut roots approximately3 inches back from new construction and as required for root pruning.

E. Do not allow exposed roots to dry out before placing permanent backfill. Provide temporary earth cover or pack with peat moss and wrap with burlap. Water and maintain in a moist condition. Temporarily support and protect roots from damage until they are permanently relocated and covered with soil.

3.5 ROOT PRUNING

A. Prune roots that are affected by temporary and permanent construction. Prune roots by hand as directed by Arborist and as follows:

1. Cut roots manually by digging a trench and cutting exposed roots with sharp pruning instruments; do not break, tear, chop, or slant the cuts. Do not use a backhoe or other equipment that rips, tears, or pulls roots.
2. Cut Ends: Paint root ends if directed by Arborist. Coat cut ends of roots with an emulsified asphalt or other coating formulated for use on damaged plant tissues and that is acceptable to arborist.
3. Temporarily support and protect roots from damage until they are permanently redirected and covered with soil.
4. Cover exposed roots with burlap and water regularly.
5. Backfill as soon as possible according to requirements in Section 31 2000 "Earth Moving."

B. Root Pruning at Edge of Protection Zone: Prune roots 12 inches outside of the protection zone, by cleanly cutting all roots to the depth of the required excavation.

C. Root Pruning within Protection Zone: Clear and excavate by hand to the depth of the required excavation to minimize damage to roots systems. Use narrow-tine spading forks, comb soil to expose roots, and cleanly cut roots as close to excavation as possible.

3.6 CROWN PRUNING

A. Prune branches that are affected by temporary and permanent construction and as approved by the Arborist. Prune branches as follows:

1. Prune trees to remain to compensate for root loss caused by damaging or cutting root system. Provide subsequent maintenance during Contract period as recommended by arborist.
2. Pruning Standards: Prune trees according to ANSI A300 (Part1).

B. Chip removed branches and dispose of off-site.

3.7 FIELD QUALITY CONTROL

A. Inspections: Engage the Arborist to direct plant-protection measures in the vicinity of trees, shrubs, and other vegetation indicated to remain and to prepare inspection reports.

3.8 REPAIR AND REPLACEMENT

A. General: Repair or replace trees, shrubs, and other vegetation indicated to remain or be relocated that are damaged by construction operations, in a manner approved by Consultant and Project Manager.

1. Submit details of proposed root cutting and tree and shrub repairs to University Arborist.
2. Have arborist perform the root cutting, branch pruning, and damage repair of trees and shrubs.
3. Treat damaged trunks, limbs, and roots according to arborist's written instructions.
4. Perform repairs within 24 hours.
5. Replace vegetation that cannot be repaired and restored to full-growth status, as determined by consultant.

B. Trees: Remove and replace trees indicated to remain that are more than 25 percent dead or in an unhealthy condition that were damaged during construction operations that Consultant or Arborist determines are incapable of restoring to normal growth pattern.

1. Provide new trees of same size (match existing caliper) and species as those being replaced.
2. Plant and maintain new trees as specified in Division 32 Specification Sections.

C. Soil Aeration: Where directed by Consultant or University Arborist, aerate surface soil compacted during construction. Aerate 10 feet beyond drip line and no closer than 36 inches to tree trunk. Drill 2-inch diameter holes a minimum of 12 inches deep at 24 inches o.c. Backfill holes with an equal mix of augured soil and sand.

3.9 DISPOSAL OF SURPLUS AND WASTE MATERIALS

A. Disposal: Remove excess excavated material, displaced trees, trash and debris, and legally dispose of them off Owner's property.

END OF SECTION 01 5639

SECTION 01 5716 - TEMPORARY PEST CONTROL

PART 1 - GENERAL

1.1 DESCRIPTION

A. Under these items the Contractor shall perform and satisfy the rodent and vermin control (extermination) and site sanitation requirements within demolition areas as designated by the architect.

B. The contractor shall maintain a cooperative dialogue with appropriate agencies and management representatives of neighborhood properties. activities

C. The contractor shall perform the rodent and vermin control tasks described herein prior to starting any demolition activities and also respond to other pest control needs when directed by the architect.

1.2 SUMMARY

A. This work is to be performed prior to the start of construction and also throughout construction, so that Rodents (rats and mice) and Vermin (cockroaches, beetles, and other insects) do not disperse from or infest construction area or adjacent residential areas.

1.5 SUBMITTALS

A. Submit to the Architect copies of pesticide applicators certification and licenses within ten (10) days of their issuance or renewal for the duration of this Contract.

B After performing the survey described under Construction Details Section 6 and before initiating baiting, submit to the Engineer a written description of proposed pest control procedures, indicating materials, quantities, methods, and time schedule. For all pesticide be used, submit a copy of pesticide manufacture's EPA - approved pesticide label with application directions.

C. Submit to the Architect documentation of pest control activities and results as follows:

1. Monthly: Submit data sheets with location of sites treated, methods and data application, amounts and types of bait used, pesticides dosage, number and types of traps set, survey and inspection results, sanitation condition complaints calls investigated, any problems that occurred and signature of applicator.
2. Monthly: Submit a map that shows bait station, manholes and catch basins where baits are being maintained.

D. At least 10 days prior to occupancy of Contract area, submit to the Engineer for review a written description of the sanitation procedures to be used.

1.6 QUALITY ASSURANCE

A. The Contractor shall perform this work at all times in accordance with the following minimum standards and as acceptable to the Architect.

B. The Contractor, key personnel and applicator shall have experience and/or training in vertebrate pest management and integrated pest management; have experience with various rodent and vermin control techniques, equipment, and strategies; and have knowledge of and experience with techniques to reduce non-targets hazards.

C. Applicators shall be licensed and certified by Connecticut DEEP.

D. Before proceeding with the work, all pest control personnel shall attend a two-hour orientation session held by the Architect and discuss planned pest control methods and coordination.

1.7 PROJECT CONDITIONS

A. The contractor shall not proceed with the construction designated on the Plans until written release is issued by the Architect, after successful completion of the initial phase of rodent and vermin control.

B. Initiate the work before field mobilization begins for the construction designated on the Plans and within adequate timing to achieve control before environmental disruption and site work. Provide a maintenance program until construction is completed and all equipment and materials are removed, as determined by the Architect.

C. Perform this work in such a manner and post warning signs such that toxicants or other control tools do not pose hazards to persons, domestic animals, or non- targets wildlife.

D. Obtain and maintain in coordination with the Architect appropriates permit(s) from town or state agencies for pest control activities associated with this work.

E. Obtain and maintain in coordination with the Architect all right of entry permits required for the performance of this work. This includes all utilities and private properties to which entrance is requited.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Furnish and use only pesticide formulations registered by the U.S Environmental Protection Agency (EPA) and CT Department of Environmental Protection (DEEP) where appropriate, according to label directions and as acceptable to the Engineer.

B. Furnish and use devices and supplies (e.g., traps and bait stations) to facilitate the effectiveness and safety of the pest control program as appropriate and as acceptable to the Engineer.

C. Use heavy duty refuse containers with tight-fitting domed lids, with a spring-loaded flap, for disposal of all garbage and trash associated with food. Maintain these containers so there are no opening that allow access by rodents or vermin.

D. If a dumpster is necessary for the temporary storage of garbage and trash associated with food, it shall not have openings that allow access by rodents or vermin. The dumpster shall have a drain plug if a drain is present, and the doors shall be maintained tightly closed.

PART 3 - EXECUTION

3.1 SURVEY

A. Prior to baiting, survey the proposed construction area with representatives of adjacent buildings and record signs of rodent and vermin activity and sanitation conditions.

B. Thoroughly inspect construction areas and accessible or observable bordering area designated herein, and any nearby area designated by the Engineers, for rodent and vermin activity and sanitation deficiencies monthly throughout the duration of this contract and in accordance with the work schedule.

3.2 APPLICATION OF RODENT AND VERMIN CONTROL

A. Apply rodenticide and insecticide in strict accordance with EPA-approved label directions and DEEP regulations.

B. Where appropriate, use properly secured and tamper-resistant bait stations consistent with EPA regulations, remove manhole covers and ventilate manholes according to requirements of appropriate municipal agencies and utility companies. Use police, or utilities details as appropriates. Coordinate the work with appropriate municipal agencies and utility companies. Individually number and property identify all bait stations.

C. Baited area must be posted with warning signs advising the public that bait has been placed in the area. The signs are to be large (425mm X 550mm) and clearly printed at all baits stations.

D. Surface Applications.

1. Initial Surface Baiting.

   Rid the construction area of all detectable rodents and vermin before construction begins, as acceptable to the Architect. Bait all observable rodent burrows and areas of vermin infestation. Install and secure bait stations at regular and appropriate intervals and locations, and document rodent or vermin activity (burrows, dropping, bait consumed, dead rodents). Replenish bait and shift stations as necessary to ensure complete control of rodent and vermin populations. Bait edge and accessible bordering areas designated on the Plans as necessary to ensure that rodents and vermin shall not infest work areas.

2. Maintenance Surface Baiting.

   Establish a maintenance baiting program prior to the start of construction. This includes construction areas and accessible bordering areas designated herein, as acceptable to the Architect. Check bait placements weekly. Use survey and baiting data to determine the most effective distribution of baiting locations and bait quantities. Shift and distribute bait and bait stations as appropriates to ensure continuous control.

E. Subsurface Applications.

1. Initial Subsurface baiting

   Apply appropriate baits to control rodent and vermin populations in manholes and catch basins, this shall involve suspending and securing bait using noncorrosive wire (e.g., 24 gauge plastic coated). Place bait in all accessible manholes and catch basins within the construction work area. In addition, bait an appropriate set of manholes and catch basins in the blocks bordering the work area as designated herein and as acceptable to the Architect. Identify all baited manholes and catch basins with a standardized paint mark on the street and, a numbered tag to be attached to the suspending wire. Approximately seven days after completion of the first baiting, check all manhole and catch basin baits and record estimates on the amount of bait consumed. Replenish or increase the amount of bait applied according to the amount consumed and as acceptable to the Architect. Repeat this process again approximately fourteen days later and until there is little or no bait consumed. Check manholes and catch basins weekly when they repeatedly have 100 percent of the bait consumed.

2. Maintenance Subsurface Baiting

   Prior to the start the construction, establish a maintenance baiting program appropriate for the rodent or vermin infestation patterns identified during initial program appropriate for the rodent or vermin infestation patterns identified during initial subsurface baiting. This program shall ensure continued control and shall be performed acceptable to the Architect. Maintain bait in manholes and catch basins that have rodent or vermin activity and those that had activity during initial baiting as necessary. Check each bait weekly or more often according to rodent or vermin activity levels and the recent history of bait consumption. Use utility maps and baiting data to determine the most effective distribution of baiting locations and bait quantities. Shift and distribute bailing locations as necessary to ensure adequate interception option points for controlling immigrating rodents or vermin.

F. Cleanup

1. Remove visible rodent carcasses and dispose of them daily consistent with the pesticide label directions and applicable codes, laws, and regulations

2. Upon completion of any pest control operations at the site, remove remaining bait and dispose of it according to the pesticide label and applicable codes, laws, and regulations. Also remove all wires used for subsurface baiting and any bait stations or traps

G. Sanitation

1. Prior to demolition and throughout the duration of this Contract, identify and document harborage and food sources available to rodents on the site and in observable bordering areas designated herein. This includes any littering or improper or insufficient use of trash receptacles in construction or structural deficiencies that violate City or State sanitation codes.

a. Maintain Construction and laydown areas and their perimeters free of trash, garbage, weeds, debris and unnecessary or deteriorated hay and straw bales. Provide and enforce proper use of refuse containers to ensure that rodents and other pests are not harbored or attracted.

b. Designate specific locations as lunch and coffee break areas to prevent random disposal of garbage and trash. Keep those areas free of litter and garbage, and provide refuse containers. Keep refuse containers upright with their lids shut tight.

c. Have all refuse containers emptied daily to maintain site sanitation. If a dumpster is used empty it at least weekly and keep the area under and around it clean.

d. Notify the Architect within 24 hours whenever rodents (rats or mice) or signs of rodent activity (burrows or droppings) or vermin are observed in construction or laydown areas.

3.3 COMPLIANT CALLS

A. During demolition, respond to pest-related complaints from the adjacent neighborhood within 12 hours when directed by Architect. Inspect the particular premises and adjacent areas for sanitation and structural deficiencies and also signs of historic and recent pest activity. Provide sanitation and structural maintenance information to the property owner or manager. Use pesticides or traps as necessary and appropriate to resolve the complaint when there is a relationship between the pest infestation and construction activities, or when directed by the Architect.

B. Maintain records of all complaints investigated, including location, contact person, inspection results, and actions taken. Document the relatedness of the pest infestation to construction activities.

3.7 RECORD KEEPING

A. Use standard data sheets provided or approved by the Engineer to maintain accurate records of date, placement, type, and amount of pesticides or other control tools (e.g.. traps) applied. Similarly, maintain records of surveys, inspections, changes in pest activity, and sanitation conditions when directed by Architect.

3.8 METHOD OF MEASUREMENT

A. The quantity to be paid for under the item Initial Survey, Baiting and Sanitation, Will be on a lump sum basis for the initial work completed in accordance with the plans, specifications and direction of the Architect.

B. The quantity to be paid for under the item, Maintenance Program, will be on a per month basis for the maintenance program completed in accordance with the plans, specifications and direction of the Architect.

3.9 BASIS OF PAYMENT

A. The lump sum price bid for the item, Initial Survey, Baiting and Sanitation, shall cover the cost of all labor, material and equipment necessary to complete the initial survey, planning, documentation, baiting and inspection of the construction and adjacent areas both surface and subsurface as well as sanitation inspection, documentation and corrective measures.

The unit price bid per month for the item, Maintenance Program, shall cover the cost of all labor, materials and equipment necessary to complete the weekly inspections, rebaiting, cleanup and rodent and vermin control documentation, garbage disposal cleanup and sanitation documentation as well as to receive, document and respond to complaints.

END OF SECTION 01 5716

SECTION 01 7419 - CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes administrative and procedural requirements for the following:

1. Salvaging nonhazardous demolition waste.
2. Recycling nonhazardous demolition waste.
3. Disposing of nonhazardous demolition waste.

B. Related Requirements:

1. Section 02 4000 "Site Preparation"
2. Section 02 8213 "Asbestos Abatement"
3. Section 02 8313 "Lead Paint Activity"
4. Section 02 8433 "Removal & Disposal of Polychlorinated Biphenyls"

1.3 DEFINITIONS

A. Construction Waste: Building, structure, and site improvement materials and other solid waste resulting from construction, remodeling, renovation, or repair operations. Construction waste includes packaging.

B. Demolition Waste: Building, structure, and site improvement materials resulting from demolition operations.

C. Disposal: Removal of demolition or construction waste and subsequent salvage, sale, recycling, or deposit in landfill, incinerator acceptable to authorities having jurisdiction, or designated spoil areas on Owner’s property.

D. Recycle: Recovery of demolition or construction waste for subsequent processing in preparation for reuse.

E. Salvage: Recovery of demolition or construction waste and subsequent sale or reuse in another facility.

F. Salvage and Reuse: Recovery of demolition or construction waste and subsequent incorporation into the Work.

1.4 MATERIALS OWNERSHIP

A. Unless otherwise indicated, demolition and construction waste becomes property of Contractor.

B. Historic items, relics, antiques, and similar objects including, but not limited to, cornerstones and their contents, commemorative plaques and tablets, and other items of interest or value to Owner that may be uncovered during demolition remain the property of Owner.

1. Carefully salvage in a manner to prevent damage and promptly return to Owner.

1.5 ACTION SUBMITTALS

A. Waste Management Plan: Submit plan within 7 days of date established for the Notice of Award.

1.6 INFORMATIONAL SUBMITTALS

A. Waste Reduction Progress Reports: Concurrent with each Application for Payment, submit report. Use Form CWM-8 for demolition waste. Include the following information:

1. Material category.
2. Generation point of waste.
3. Total quantity of waste in tons.
4. Quantity of waste salvaged, both estimated and actual in tons.
5. Quantity of waste recycled, both estimated and actual in tons.
6. Total quantity of waste recovered (salvaged plus recycled) in tons.
7. Total quantity of waste recovered (salvaged plus recycled) as a percentage of total waste.

B. Waste Reduction Calculations: Before request for Substantial Completion, submit calculated end-of-Project rates for salvage, recycling, and disposal as a percentage of total waste generated by the Work.

C. Records of Donations: Indicate receipt and acceptance of salvageable waste donated to individuals and organizations. Indicate whether organization is tax exempt.

D. Records of Sales: Indicate receipt and acceptance of salvageable waste sold to individuals and organizations. Indicate whether organization is tax exempt.

E. Recycling and Processing Facility Records: Indicate receipt and acceptance of recyclable waste by recycling and processing facilities licensed to accept them. Include manifests, weight tickets, receipts, and invoices.

F. Landfill and Incinerator Disposal Records: Indicate receipt and acceptance of waste by landfills and incinerator facilities licensed to accept them. Include manifests, weight tickets, receipts, and invoices.

G. Refrigerant Recovery: Comply with requirements in Section 02 4116 "Structure Demolition" for refrigerant recovery submittals.

1.7 QUALITY ASSURANCE

A. Refrigerant Recovery Technician Qualifications: Universal certified by EPA-approved certification program.

B. Regulatory Requirements: Comply with transportation and disposal regulations of authorities having jurisdiction.

C. Waste Management Conference(s): Conduct conference(s) at Project site. Review methods and procedures related to waste management including, but not limited to, the following:

1. Review and discuss waste management plan including responsibilities of each contractor and waste management coordinator.
2. Review requirements for documenting quantities of each type of waste and its disposition.
3. Review and finalize procedures for materials separation and verify availability of containers and bins needed to avoid delays.
4. Review procedures for periodic waste collection and transportation to recycling and disposal facilities.
5. Review waste management requirements for each trade.

1.8 WASTE MANAGEMENT PLAN

A. General: Develop a waste management plan according to requirements in this Section. Plan shall consist of waste identification, waste reduction work plan, and cost/revenue analysis. Indicate quantities by weight or volume, but use same units of measure throughout waste management plan.

B. Waste Identification: Indicate anticipated types and quantities of demolition waste generated by the Work. Include estimated quantities and assumptions for estimates.

C. Waste Reduction Work Plan: List each type of waste and whether it will be salvaged, recycled, or disposed of in landfill or incinerator. Use Form CWM-4 for demolition waste. Include points of waste generation, total quantity of each type of waste, quantity for each means of recovery, and handling and transportation procedures.

1. Salvaged Materials for Sale: For materials that will be sold to individuals and organizations, include list of their names, addresses, and telephone numbers.
2. Salvaged Materials for Donation: For materials that will be donated to individuals and organizations, include list of their names, addresses, and telephone numbers.
3. Recycled Materials: Include list of local receivers and processors and type of recycled materials each will accept. Include names, addresses, and telephone numbers.

4. Disposed Materials: Indicate how and where materials will be disposed of. Include name, address, and telephone number of each landfill and incinerator facility.
5. Handling and Transportation Procedures: Include method that will be used for separating recyclable waste including sizes of containers, container labeling, and designated location where materials separation will be performed.

D. Cost/Revenue Analysis: Indicate total cost of waste disposal as if there were no waste management plan and net additional cost or net savings resulting from implementing waste management plan. Use Form CWM-6 for demolition waste Include the following:

1. Total quantity of waste.
2. Estimated cost of disposal (cost per unit). Include transportation and tipping fees and cost of collection containers and handling for each type of waste.
3. Total cost of disposal (with no waste management).
4. Revenue from salvaged materials.
5. Revenue from recycled materials.
6. Savings in transportation and tipping fees by donating materials.
7. Savings in transportation and tipping fees that are avoided.
8. Handling and transportation costs. Include cost of collection containers for each type of waste.
9. Net additional cost or net savings from waste management plan.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. General: Achieve end-of-Project rates for salvage/recycling of 50 percent by weight of total nonhazardous solid waste generated by the Work. Practice efficient waste management in the use of materials in the course of the Work. Use all reasonable means to divert construction and demolition waste from landfills and incinerators. Facilitate recycling and salvage of materials including the following:

1. Demolition Waste:

a. Asphalt paving.
b. Concrete.
c. Concrete reinforcing steel.
d. Brick.
e. Concrete masonry units.
f. Wood studs.
g. Wood joists.
h. Plywood and oriented strand board.
i. Wood paneling.
j. Wood trim.
k. Structural and miscellaneous steel.
l. Rough hardware.
m. Roofing.
n. Insulation.

o. Doors and frames.
p. Door hardware.
q. Windows.
r. Glazing.
s. Metal studs.
t. Gypsum board.
u. Acoustical tile and panels.
v. Carpet.
w. Carpet pad.
x. Demountable partitions.
y. Equipment.
z. Cabinets.
aa. Plumbing fixtures.
bb. Piping.
cc. Supports and hangers.
dd. Valves.
ee. Sprinklers.
ff. Mechanical equipment.
gg. Refrigerants.
hh. Electrical conduit.
ii. Copper wiring.
jj. Lighting fixtures.
kk. Lamps.
ll. Ballasts.
mm. Electrical devices.
nn. Switchgear and panelboards.
oo. Transformers.

2. Construction Waste:

a. Masonry and CMU.
b. Lumber.
c. Wood sheet materials.
d. Wood trim.
e. Metals.
f. Roofing.
g. Insulation.
h. Carpet and pad.
i. Gypsum board.
j. Piping.
k. Electrical conduit.
l. Packaging: Regardless of salvage/recycle goal indicated in "General" Paragraph above, salvage or recycle 100 percent of the following uncontaminated packaging materials:

1) Paper.
2) Cardboard.
3) Boxes.
4) Plastic sheet and film.
5) Polystyrene packaging.

6) Wood crates.
7) Wood pallets.
8) Plastic pails.

PART 3 - EXECUTION

3.1 PLAN IMPLEMENTATION

A. General: Implement approved waste management plan. Provide handling, containers, storage, signage, transportation, and other items as required to implement waste management plan during the entire duration of the Contract.

1. Comply with operation, termination, and removal requirements in Section 01 5000 "Temporary Facilities and Controls."

B. Training: Train workers, subcontractors, and suppliers on proper waste management procedures, as appropriate for the Work.

1. Distribute waste management plan to everyone concerned within three days of submittal return.
2. Distribute waste management plan to entities when they first begin work on-site. Review plan procedures and locations established for salvage, recycling, and disposal.

C. Site Access and Temporary Controls: Conduct waste management operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.

1. Designate and label specific areas on Project site necessary for separating materials that are to be salvaged and recycled.
2. Comply with Section 01 5000 "Temporary Facilities and Controls" for controlling dust and dirt, environmental protection, and noise control.

3.2 SALVAGING DEMOLITION WASTE

A. Comply with requirements in Section 02 4116 "Structure Demolition" for salvaging demolition waste.

B. Salvaged Items for Reuse in the Work: Salvage items for reuse and handle as follows:

1. Clean salvaged items.
2. Pack or crate items after cleaning. Identify contents of containers with label indicating elements, date of removal, quantity, and location where removed.
3. Store items in a secure area until installation.
4. Protect items from damage during transport and storage.
5. Install salvaged items to comply with installation requirements for new materials and equipment. Provide connections, supports, and miscellaneous materials necessary to make items functional for use indicated.

C. Salvaged Items for Sale and Donation: Not permitted on Project site.

D. Doors and Hardware: Brace open end of door frames. Except for removing door closers, leave door hardware attached to doors.

E. Equipment: Drain tanks, piping, and fixtures. Seal openings with caps or plugs. Protect equipment from exposure to weather.

F. Plumbing Fixtures: Separate by type and size.

G. Lighting Fixtures: Separate lamps by type and protect from breakage.

H. Electrical Devices: Separate switches, receptacles, switchgear, transformers, meters, panelboards, circuit breakers, and other devices by type.

3.3 RECYCLING DEMOLITION WASTE, GENERAL

A. General: Recycle paper and beverage containers used by on-site workers.

B. Preparation of Waste: Prepare and maintain recyclable waste materials according to recycling or reuse facility requirements. Maintain materials free of dirt, adhesives, solvents, petroleum contamination, and other substances deleterious to the recycling process.

C. Procedures: Separate recyclable waste from other waste materials, trash, and debris. Separate recyclable waste by type at Project site to the maximum extent practical according to approved construction waste management plan.

1. Provide appropriately marked containers or bins for controlling recyclable waste until removed from Project site. Include list of acceptable and unacceptable materials at each container and bin.

    a. Inspect containers and bins for contamination and remove contaminated materials if found.

2. Stockpile processed materials on-site without intermixing with other materials. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.
3. Stockpile materials away from construction area. Do not store within drip line of remaining trees.
4. Store components off the ground and protect from the weather.
5. Remove recyclable waste from Owner's property and transport to recycling receiver or processor as often as required to prevent overfilling bins.

3.4 RECYCLING DEMOLITION WASTE

A. Asphalt Paving: Break up and transport paving to asphalt-recycling facility.

B. Concrete: Remove reinforcement and other metals from concrete and sort with other metals. Breakup and transport concrete to a recycling facility.

C. Masonry: Remove metal reinforcement, anchors, and ties from masonry and sort with other metals.

1. Break up and transport Masonry to a recycling facility.

2. Clean and stack undamaged, whole masonry units on wood pallets.

D. Wood Materials: Sort and stack members according to size, type, and length. Separate lumber, engineered wood products, panel products, and treated wood materials.

E. Metals: Separate metals by type.

1. Structural Steel: Stack members according to size, type of member, and length.
2. Remove and dispose of bolts, nuts, washers, and other rough hardware.

F. Asphalt Shingle Roofing: Separate organic and glass-fiber asphalt shingles and felts. Remove and dispose of nails, staples, and accessories.

G. Gypsum Board: Stack large clean pieces on wood pallets or in container and store in a dry location. Remove edge trim and sort with other metals. Remove and dispose of fasteners.

H. Acoustical Ceiling Panels and Tile: Stack large clean pieces on wood pallets and store in a dry location.

I. Metal Suspension System: Separate metal members, including trim and other metals from acoustical panels and tile, and sort with other metals.

J. Carpet and Pad: Roll large pieces tightly after removing debris, trash, adhesive, and tack strips.

K. Carpet Tile: Remove debris, trash, and adhesive.

1. Stack tile on pallet and store clean, dry carpet in a closed container or trailer provided by carpet reclamation agency or carpet recycler.

L. Piping: Reduce piping to straight lengths and store by material and size. Separate supports, hangers, valves, sprinklers, and other components by material and size.

M. Conduit: Reduce conduit to straight lengths and store by material and size.

N. Lamps: Separate lamps by type and store according to requirements in 40 CFR 273.

3.5 RECYCLING CONSTRUCTION WASTE

A. Packaging:

1. Cardboard and Boxes: Break down packaging into flat sheets. Bundle and store in a dry location.
2. Polystyrene Packaging: Separate and bag materials.
3. Pallets: As much as possible, require deliveries using pallets to remove pallets from Project site. For pallets that remain on-site, break down pallets into component wood pieces and comply with requirements for recycling wood.
4. Crates: Break down crates into component wood pieces and comply with requirements for recycling wood.

B. Wood Materials:

1. Clean Cut-Offs of Lumber: Grind or chip into small pieces offsite at a recycling facility.

C. Gypsum Board: Stack large clean pieces on wood pallets or in container and store in a dry location.

1. Clean Gypsum Board: Grind scraps of clean gypsum board offsite at a recycling facility.

D. Paint: Seal containers and store by type.

3.6 DISPOSAL OF WASTE

A. General: Except for items or materials to be salvaged or recycled, remove waste materials from Project site and legally dispose of them in a landfill or incinerator acceptable to authorities having jurisdiction.

1. Except as otherwise specified, do not allow waste materials that are to be disposed of accumulate on-site.
2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.

B. General: Except for items or materials to be salvaged or recycled, remove waste materials and legally dispose of at designated spoil areas on Owner’s property.

C. Burning: Do not burn waste materials.

D. Burning: Burning of waste materials is permitted only at designated areas on Owner's property, provided required permits are obtained. Provide full-time monitoring for burning materials until fires are extinguished.

3.7 ATTACHMENTS

A. Form CWM-2 for demolition waste identification.

B. Form CWM-4 for demolition waste reduction work plan.

C. Form CWM-6 for cost/revenue analysis of demolition waste reduction work plan.

D. Form CWM-8 for demolition waste reduction progress report.

END OF SECTION 01 7419

SECTION 02 0900 - SITE RELATED DUST CONTROL

PART 1 - GENERAL

1.1 SUMMARY

A. This section includes measures for controlling dust from the following sources:

1. Disturbed land and soil movement
2. Demolition of existing structures
3. Cutting, grinding, and sanding of materials
4. Transportation of materials across the site.

B. Types of Dust that are anticipated include the following:

1. Silca dust from concrete, brick and tile
2. Wood dust
3. Soil and organic matter
4. Metals and plastic particles

1.2 RELATED DOCUMENTS

1. Section 02 4116 “Structure Demolition”
2. Section 02 8213 “Asbestos Abatement

1.3 PLANNING AND PREPARATION

A. Dust Control Plan

Develop a site-specific dust control plan that identifies potential dust sources and establishes control measures. Schedule operations to minimize dust generation, like planning for wetter seasons

B. Dust Control Plan

Comply with local, state, and federal regulation regarding dust emissions.

C. Regulatory Compliance

Notify adjacent residents and businesses about the project and how the site will manage dust. Establish a point of contact for complaints or concerns related to dust.

1.5 CONTROL MEASURES

A. Water Sprays and Mists

Use water trucks to dampen surfaces, especially in dry and windy conditions. Provide misting systems to capture airborne dust particles.

B. Windbreaks and Barriers

Erect barriers such as fencing or hoarding to prevent dust from spreading off-site. Use natural windbreaks or construct temporary barriers to reduce wind across site.

C. Vegetative Cover

As soon as practical, establish a vegetative cover to stabilize the soil. Use hydroseeding, mulching, or other forms of temporary vegetation for bare areas.

D. Chemical Stabilizers and Palliatives

Apply chemical dust suppressants to stabilize surfaces when water is not sufficient or practical. Provide environmentally safe and appropriate chemicals for the specific site conditions. Submit to Architect/Owner for review prior to implementation.

E. Surface Stabilization

Provide specified anti-tracking apron, or other coverings on frequently traveled paths to reduce dust.

F. Equipment and Vehicle Management

Limit the speed of vehicles on=site to reduce dust generation. Maintain vehicles and equipment to reduce track-out dust onto public roads. If site becomes muddy, provide tire wash stations or similar systems to minimize carry-out.

1.6 MAINTENANCE AND MONITORIING

A. Regular Inspections

Conduct regular site inspections to identify areas of concern and take corrective actions promptly.

B. Monitoring and Record-Keeping

Monitor dust levels using appropriate equipment and techniques. Keep records of dust control measures and their effectiveness for regulatory compliance and future reference.

C. Training and Awareness

Train staff and workers on dust control techniques and the importance of adhering to dust control plan.

1.7 RESPONDING TO ISSUES

A. Adaptive Measures

Be prepared to adjust dust control strategies if current measures prove insufficient. Have a contingency plan for unanticipated events, such as extreme weather, that may exacerbate dust problems.

B. Community Feedback

Respond to community feedback and adjust dust control measures as needed. Notify the owner/Architect of any community complaints; include an adjustment plan for your response.

1.8 CLOSURE AND REHABILITATION

A. Post-Construction

After completion of demolition, rehabilitate disturbed areas promptly to minimize long-term dust issues. Implement landscaping and replanting strategies that will help stabilize the soil

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 02 0900

SECTION 02 3000 - SUBSURFACE INVESTIGATIONS

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes

1. Soils subsurface investigation at the site, the use of data resulting from the investigation, and conditions warranting additional soils investigation.

2. Pipe and utility subsurface investigations that are required in order to properly locate utilities that may conflict with proposed construction.

3. Work item includes all saw cutting, excavation, backfilling, and restoration.

B. Related Sections

1. Section 31 23 00 - Excavation, Backfill, Compaction, and Dewatering.

2. Section 32 12 16 - Bituminous Concrete Pavement,

1.2 REFERENCES

A. 29 CFR Part 1926 Subpart P - OSHA Excavation Regulations 1926.560 through 1926.562 including Appendices A through F

1.3 PIPELINE AND UTILITY INVESTIGATIONS

A. The Drawings show available data relative to existing underground pipe and utilities.

B. During the course of the Work, excavate to locate various existing pipelines and utilities, where they are involved in the Work.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION

3.1 PREPARATORY WORK

A. Obtain all available information on buried structures and utilities in the vicinity of the investigation.

B. Coordinate Work such that all affected property, structure, and utility owners are aware of the Work prior to its commencement.

C. Schedule subsurface investigations such that they do not interfere with other Work or traffic and in advance of other Work in that location.

D. Provide the Engineer with 24-hour notice prior to commencement of subsurface investigations.

3.2 TEST PITS

A. Excavate test pits as indicated, or as requested by the Owner. Expose the top of the utility, and adjacent utilities, at each test pit location.

B. Perform test pits in accordance with the requirements of Section 31 23 00. Excavate the bottom 2 feet of the test pit (or in close proximity to known or anticipated utilities) by hand. Excavate to top of utilities by hand. Test pits shall be braced, sheeted and dewatered or as otherwise required for safe excavation and examination of the structure or utility to be exposed.

C. Measure the depth to the top of the pipeline, as well as to adjacent utilities, from the ground surface, at each test pit location. Record location, depth and size of pipelines and utilities uncovered during the test pits. Record any other pertinent information which is learned as a result of excavating the test pit. Furnish measurements and drawings to Engineer.

D. Prior to test pitting operations, delineate the general scope of the excavation or boring on the paved surface of the ground using white paint, or stakes or other suitable white markings on non-paved surfaces and notify Call Before You Dig. Premarking will not be acceptable if such marks can interfere with traffic or pedestrian control or are misleading to the general public.

E. Excavate test pits of an appropriate size with equipment suitable for the location and character of the pit to be excavated.

F. All subsurface investigations shall be conducted in accordance 29 CFR Part 1926 Subpart P - OSHA Excavation Regulations 1926.650 through 1926.652 including Appendices A through F.

G. After examination by the Engineer, backfill and compact the test pits in accordance with Section 31 23 00.

H. Repair damage to any structure, property or site feature to the satisfaction of the Engineer.

END OF SECTION 02 3000

SECTION 02 4000 - SITE PREPARATION

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Clearing and grubbing
2. Grading
3. Stripping and stockpiling of soil and sod
4. Excavating, removing, and legally disposing of all on-site items identified for removal. In general, surface demolition items include chain link fences, gates, footings, site lighting, bituminous concrete pavement, bituminous concrete curbing, concrete sidewalk, concrete curb, concrete stairs, guardrail, transformer pads and footings, metal railings, catch basins, manholes, piping, reinforced concrete retaining walls, footings, concrete loading docks, bollards, concrete pads, etc.
5. Excavating, removing and legally disposing of all on-site utilities identified for removal. In general, utility demolition items include catch basins, yard drains, storm sewers, storm manholes, storm sewers, sanitary manholes, ductbanks, valves, valve boxes, risers and covers, wiring, piping, monitoring wells, transformers, and all other items indicated to be removed.
6. See Environmental Specifications for environmental controls and procedures.

1.2 SUBMITTALS

A. Submit construction methods and equipment that will be utilized for the clearing, grubbing, and waste material disposal specified within this Section.

PART 2 - PRODUCTS – NOT USED

PART 3 - EXECUTION

3.1 CLEARING AND GRUBBING

A. Except as otherwise directed, cut, grub, remove and dispose of all trees, stumps, brush, shrubs, roots and any other objectionable material within the limits of the Work on the site and where required to construct the work.

B. Protect trees or groups of trees, designated by the Engineer to remain, from damage by all construction operations by erecting suitable barriers, or by other approved means. Conduct clearing operations to prevent falling trees from damaging trees designated to remain.

1. All damage done to the trees by the Contractor’s operation shall be trimmed and painted where cut as directed or as necessary to provide

adequate vertical clearance for construction activities. The dressing or paint shall be applied no later than two days after the cuts are made.

2. Use all necessary precautions to prevent injury to other desirable growth in all areas. Contractor shall assume full responsibility for any damage.

C. Protect areas outside the limits of clearing from damage. No equipment or materials shall be stored in these areas.

D. No stumps, trees, limbs, or brush shall be buried in fills or embankments.

E. Notify the respective utility company prior to any utility demolition operations. Coordinate exact utility demolition procedures and limits with the respective utility company. Pay all fees and coordinate all work.

3.2 DISPOSAL OF MATERIALS

A. Remove all tree trunks, limbs, roots, stumps, brush, foliage, other vegetation and objectionable material from the site and dispose of in a legal manner.

B. Burning or direct burial of cleared and grubbed materials on-site will not be permitted.

C. Legally dispose of all demolished and removed items off-site. Comply with project environmental specifications and requirements.

3.3 GRADING

A. In preparation for placing loam, paved drives and appurtenances, perform grading to the lines, grades and elevations shown on the Drawings, and otherwise directed by the Engineer and perform in such a manner that the requirements for formation of embankments can be followed. All material encountered, regardless of its nature, within the limits indicated, shall be removed and disposed of as directed. During the process of grading, maintain the subgrade in such condition that it will be well drained at all times. Install temporary drains and drainage ditches to intercept or divert surface water that may affect the work when necessary.

B. If at the time of grading it is not possible to place material in its final location, stockpile material in approved areas for later use. No extra payment will be made for the stockpiling or double handling of excavated material.

C. The right is reserved to make minor adjustments or revisions in lines or grades if found necessary as the work progresses.

D. Stones or rock fragments larger than 4 inches in their greatest dimensions will not be permitted in the top 12 inches of the finished subgrade of all fills or embankments except along the access roadways and rip-rap where shown on the Drawings.

E. In cuts, loose or protruding rocks on the excavated slopes shall be barred loose or otherwise removed to line or finished grade of slope. Cut and fill slopes shall be uniformly dressed to the slope, cross-section and alignment shown on the Drawings or as directed by the Engineer.

END OF SECTION 02 4000

SECTION 02 4116 - STRUCTURE DEMOLITION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

1. Demolition and removal of buildings and site improvements.
2. Abandoning in-place and removing below-grade construction.
3. Disconnecting, capping or sealing, and abandoning in-place and removing site utilities.
4. Salvaging items for reuse by Owner.

B. Related Requirements:

1. Section 01 1000 "Summary" for use of the premises and phasing requirements.
2. Section 01 3200 "Photographic Documentation"
3. Division 31 “Earthwork"

1.3 DEFINITIONS

A. Remove: Detach items from existing construction and dispose of them off-site unless indicated to be salvaged.

1.4 MATERIALS OWNERSHIP

A. Unless otherwise indicated, demolition waste becomes property of Contractor.

B. Historic items, relics, antiques, and similar objects including, but not limited to, cornerstones and their contents, commemorative plaques and tablets, and other items of interest or value to Owner that may be uncovered during demolition remain the property of Owner.

1. Carefully salvage in a manner to prevent damage and promptly return to Owner.

1.5 PREINSTALLATION MEETINGS

A. Predemolition Conference: Conduct conference at Project site.

1. Inspect and discuss condition of construction to be demolished.
2. Review structural load limitations of existing structures.
3. Review and finalize building demolition schedule and verify availability of demolition personnel, equipment, and facilities needed to make progress and avoid delays.
4. Review and finalize protection requirements.
5. Review procedures for noise control and dust control.
6. Review procedures for protection of adjacent buildings.
7. Review items to be salvaged and returned to Owner.

1.6 INFORMATIONAL SUBMITTALS

A. Qualification Data: For refrigerant recovery technician.

B. Engineering Survey: Submit engineering survey of condition of building.

C. Proposed Protection Measures: Submit report, including Drawings, that indicates the measures proposed for protecting individuals and property, for environmental protection, dust control and, noise control. Indicate proposed locations and construction of barriers.

D. Schedule of Building Demolition Activities: Indicate the following:

1. Detailed sequence of demolition work, with starting and ending dates for each activity.
2. Temporary interruption of utility services.
3. Shutoff and capping of utility services.

E. Predemolition Photographs or Video: Show existing conditions of adjoining construction and site improvements, including finish surfaces, that might be misconstrued as damage caused by demolition operations. Comply with Section 01 3233 "Photographic Documentation." Submit before the Work begins.

F. Statement of Refrigerant Recovery: Signed by refrigerant recovery technician responsible for recovering refrigerant, stating that all refrigerant that was present was recovered and that recovery was performed according to EPA regulations. Include name and address of technician and date refrigerant was recovered.

1.7 CLOSEOUT SUBMITTALS

A. Inventory: Submit a list of items that have been removed and salvaged.

1.8 QUALITY ASSURANCE

A. Refrigerant Recovery Technician Qualifications: Certified by EPA-approved certification program.

1.9 FIELD CONDITIONS

A. Buildings to be demolished will be vacated and their use discontinued before start of the Work.

B. Buildings immediately adjacent to demolition area will be occupied. Conduct building demolition so operations of occupied buildings will not be disrupted.

1. Provide not less than 72 hours' notice of activities that will affect operations of adjacent occupied buildings.
2. Maintain access to existing walkways, exits, and other facilities used by occupants of adjacent buildings.

a. Do not close or obstruct walkways, exits, or other facilities used by occupants of adjacent buildings without written permission from authorities having jurisdiction.

C. Conditions existing at time of inspection for bidding purpose will be maintained by Owner as far as practical.

D. Hazardous Materials: Present in buildings and structures to be demolished. A report on the presence of hazardous materials is on file for review and use. Examine report to become aware of locations where hazardous materials are present.

1. Hazardous material remediation is specified elsewhere in the Contract Documents.
2. Do not disturb hazardous materials or items suspected of containing hazardous materials except under procedures specified elsewhere in the Contract Documents.
3. Owner will provide material safety data sheets for materials that are known to be present in buildings and structures to be demolished because of building operations or processes performed there.

E. On-site storage or sale of removed items or materials is not permitted.

1.10 COORDINATION

A. Arrange demolition schedule so as not to interfere with operations of adjacent occupied buildings.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. Regulatory Requirements: Comply with governing EPA notification regulations before beginning demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.

B. Standards: Comply with ASSE A10.6 and NFPA 241.

2.2 SOIL MATERIALS

A. Satisfactory Soils: Comply with requirements in Division 31 "Earthwork."

PART 3 - EXECUTION

3.1 EXAMINATION

A. Verify that utilities have been disconnected and capped before starting demolition operations.

B. Review Project Record Documents of existing construction or other existing condition and hazardous material information provided by Owner. Owner does not guarantee that existing conditions are same as those indicated in Project Record Documents.

C. Steel Tendons: None known.

D. Verify that hazardous materials have been remediated before proceeding with building demolition operations.

E. Inventory and record the condition of items to be removed and salvaged. Provide photographs or video of conditions that might be misconstrued as damage caused by salvage operations. Comply with Section 01 3233 "Photographic Documentation.

3.2 PREPARATION

A. Refrigerant: Before starting demolition, remove refrigerant from mechanical equipment according to 40 CFR 82 and regulations of authorities having jurisdiction.

3.3 UTILITY SERVICES AND MECHANICAL/ELECTRICAL SYSTEMS

A. Existing Utilities to be Disconnected: Locate, identify, disconnect, and seal or cap off utilities serving buildings and structures to be demolished.

1. Owner will arrange to shut off utilities when requested by Contractor.
2. Arrange to shut off utilities with utility companies.
3. If removal, relocation, or abandonment of utility services will affect adjacent occupied buildings, then provide temporary utilities that bypass buildings and structures to be demolished and that maintain continuity of service to other buildings and structures.
4. Cut off pipe or conduit a minimum of 24 inches below grade. Cap, valve, or plug and seal remaining portion of pipe or conduit after bypassing according to requirements of authorities having jurisdiction.

5. Do not start demolition work until utility disconnecting and sealing have been completed and verified in writing.

3.4 PROTECTION

A. Existing Facilities: Protect adjacent walkways, loading docks, building entries, and other building facilities during demolition operations. Maintain exits from existing buildings.

B. Temporary Shoring: Provide and maintain interior and exterior shoring, bracing, or structural support to preserve stability and prevent unexpected movement or collapse of construction being demolished.

1. Strengthen or add new supports when required during progress of demolition.

C. Existing Utilities to Remain: Maintain utility services to remain and protect from damage during demolition operations.

1. Do not interrupt existing utilities serving adjacent occupied or operating facilities unless authorized in writing by Owner and authorities having jurisdiction.
2. Provide temporary services during interruptions to existing utilities, as acceptable to Owner and authorities having jurisdiction.

a. Provide at least 72 hours' notice to occupants of affected buildings if shutdown of service is required during changeover.

D. Temporary Protection: Erect temporary protection, such as walks, fences, railings, canopies, and covered passageways, where required by authorities having jurisdiction and as indicated. Comply with requirements in Section 01 5000 "Temporary Facilities and Controls."

1. Protect adjacent buildings and facilities from damage due to demolition activities.
2. Protect existing site improvements, appurtenances, and landscaping to remain.
3. Erect a plainly visible fence around drip line of individual trees or around perimeter drip line of groups of trees to remain.
4. Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities to remain.
5. Provide protection to ensure safe passage of people around building demolition area and to and from occupied portions of adjacent buildings and structures.
6. Protect walls, windows, roofs, and other adjacent exterior construction that are to remain and that are exposed to building demolition operations.
7. Erect and maintain dustproof partitions and temporary enclosures to limit dust, noise, and dirt migration to occupied portions of adjacent buildings.

E. Remove temporary barriers and protections where hazards no longer exist. Where open excavations or other hazardous conditions remain, leave temporary barriers and protections in place.

3.5 DEMOLITION, GENERAL

A. General: Demolish indicated buildings and site improvements completely. Use methods required to complete the Work within limitations of governing regulations and as follows:

1. Do not use cutting torches until work area is cleared of flammable materials. Maintain portable fire-suppression devices during flame-cutting operations.
2. Maintain fire watch during and for at least 2 hours after flame-cutting operations.
3. Maintain adequate ventilation when using cutting torches.
4. Locate building demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.

B. Site Access and Temporary Controls: Conduct building demolition and debris-removal operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.

1. Do not close or obstruct streets, walks, walkways, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction. Provide alternate routes around closed or obstructed trafficways if required by authorities having jurisdiction.
2. Use water mist and other suitable methods to limit spread of dust and dirt. Comply with governing environmental-protection regulations. Do not use water when it may damage adjacent construction or create hazardous or objectionable conditions, such as ice, flooding, and pollution.

C. Explosives: Use of explosives is not permitted.

3.6 DEMOLITION BY EXPLOSIVES

A. Explosives: NOT PERMITTED

3.7 DEMOLITION BY MECHANICAL MEANS

A. Proceed with demolition of structural framing members systematically, from higher to lower level. Complete building demolition operations above each floor or tier before disturbing supporting members on the next lower level.

B. Remove debris from elevated portions of the building by chute, hoist, or other device that will convey debris to grade level in a controlled descent.

1. Remove structural framing members and lower to ground by method suitable to minimize ground impact and dust generation.

C. Below-Grade Construction: Completely remove foundation walls, footings and other below-grade construction. Approximate depths and sizes are indicated on the drawings.

D. Existing Utilities: Abandon existing utilities and below-grade utility structures. Cut utilities flush with grade.

E. Existing Utilities: Demolish existing utilities and below-grade utility structures that are within and outside the footprint of the demolished structures. Abandon utilities below this area.

1. Fill abandoned utility structures with satisfactory soil materials according to backfill requirements in Division 31 "Earthwork."

3.8 SITE RESTORATION

A. Below-Grade Areas: Rough grade below-grade areas ready for further excavation or new construction.

B. Below-Grade Areas: Completely fill below-grade areas and voids resulting from building demolition operations with satisfactory soil materials according to backfill requirements in Division 31 "Earthwork."

C. Site Grading: Uniformly rough grade area of demolished construction to a smooth surface, free from irregular surface changes. Provide a smooth transition between adjacent existing grades and new grades.

3.9 REPAIRS

A. Promptly repair damage to adjacent buildings caused by demolition operations.

3.10 DISPOSAL OF DEMOLISHED MATERIALS

A. Remove demolition waste materials from Project site and dispose of them in an EPA-approved construction and demolition waste landfill acceptable to authorities having jurisdiction and recycle or dispose of them according to Section 01 7419 "Construction Waste Management and Disposal."

1. Do not allow demolished materials to accumulate on-site.
2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.

B. Do not burn demolished materials.

3.11 CLEANING

A. Clean adjacent structures and improvements of dust, dirt, and debris caused by building demolition operations. Return adjacent areas to condition existing before building demolition operations began.

1. Clean roadways of debris caused by debris transport.

END OF SECTION 02 4116

SECTION 026123 – REMOVAL AND DISPOSAL OF POLYCHLORINATED BIPHENYL CONTAMINATED SOIL

PART 1 GENERAL

1.1 APPLICABLE PUBLICATIONS

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.

UNITED STATES ARMY CORPS OF ENGINEERS (COE)

EM-385-1-1 Safety and Health Requirements Manual

ENVIRONMENTAL PROTECTION AGENCY (EPA)

EPA SW-846 Test Methods for Evaluating Solid Waste, Current Edition.

CODE OF FEDERAL REGULATIONS (CFR)

40 CFR Part 761 Polychlorinated Biphenyls Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions

REGULATION OF CONNECTICUT STATE AGENCIES

Sections 22a-133k-1 through 22a-133k-3, inclusive, Remediation Standard

Sections 22a-463 through 469

PUBLICATIONS

- Drawing and General Provisions of Contract
- Section 028433 Removal and Disposal of Polychlorinated Biphenyls

1.2 DESCRIPTION

The project SITE encompasses the Former McCartin School located in East Hartford, Connecticut. The SITE is OWNED by the Town of East Hartford. Site remediation tasks on the exterior of this facility are being performed prior to the demolition of the structure and redevelopment of the property.

Remedial action at the SITE includes excavation and off-site disposal of soil surface cover adjacent to the building with total PCB concentrations ≥1 mg/kg contaminated by PCB window caulks classified as state/CTDEEP Regulated PCB containing materials.

This section includes requirements for excavating and handling PCB contaminated soil surface cover from the proposed surface soil cover remediation areas as shown on the hand marked PCB location drawing (PCB1) as well as back fill/compaction of the excavated areas with clean soil. In general, these locations include:

FORMER McCARTIN SCHOOL-70 Canterbury Street:

- **Sample locations 13-14: East side of the 1962 wing below window system**
    - **Remove soil 5 feet out from foundation to a depth of 12", under the entire length of the window, extending the length of the excavation 2 feet past the North end of the window. Extend the length of the South end of the excavation to the corner of the building.**
- **Sample location 15: North side/East end of the 1962 wing below window system**
    - **Remove soil 5 feet out from foundation to a depth of 12", extending the excavation 10 feet to the West of the sample location and extending the excavation to the East, stopping at the corner of the building.**
- **Sample location 18: North side/East end of the 1962 wing below the window system**
    - **Remove soil 5 feet out from foundation to a depth of 12", extending 10 feet on both the East and West sides of the sample location.**

NOTES:

- **Refer to hand-marked PCB drawing PCB1 in TRC's *Pre-Demolition Investigative Survey for Hazardous Building Materials* dated April 2023, for PCB contaminated soil locations listed above.**
- **Excavation equipment shall be smooth edge blade without ripping teeth. Excavation shall be carried out in such a manner to minimize the mixing of surface soils with underlying soils.**
- **Verification samples shall be collected and analytical data reviewed by the PCB Engineer. If the remedial action level is exceeded, the Contractor shall be instructed to excavate additional material as directed by the PCB Engineer.**
- **Additional soil characterization sampling which may be required by the disposal facility will be performed by TRC once the facility's sampling criteria is understood.**

The work shall be performed by persons who are knowledgeable, qualified, trained and licensed in the removal, treatment, handling, and disposal of PCB contaminated wastes and the subsequent cleaning of the affected environment.

The Owner shall hire an independent PCB Engineer for the duration of the PCB excavation/abatement work. The PCB Engineer shall provide a Project Monitor to oversee the activities of the Contractor. After removal, final visuals and verification sampling shall be performed by the Project Monitor.

1.3 DEFINITIONS

1.3.1 Contaminant Zones

Contaminant zones are those areas of active excavation and the waste storage area.

1.3.2 Excavation

The removal of soil, surface cover, rock, or hard material to obtain a specified depth or elevation.

1.3.3 PCB Bulk Product Wastes

PCB bulk product waste means waste derived from manufactured products containing PCBs in a non-liquid state, at any concentration where the concentration at the time of designation for disposal was ≥50 ppm PCBs.

1.3.4 PCB Remediation Waste with ≥50 ppm PCBs

PCB remediation waste means waste containing PCBs as a result of a spill, release, or other unauthorized disposal, at concentrations ≥ 50 ppm PCBs, regardless of the concentration of the original spill.

1.3.5 PCB Remediation Waste with <50 ppm PCBs

PCB remediation waste means waste containing PCBs as a result of a spill, release, or other unauthorized disposal which are currently at any concentration if the PCBs are spilled or released from a source not authorized for use under this part.

1.3.6 Non-federally or State/CTDEEP Regulated PCB Waste

Non-federally or state regulated PCB waste means waste derived from manufactured products containing PCBs in a non-liquid state, at any concentration where the concentration at the time of designation for disposal is >1 mg/kg and < 50 mg/kg PCBs.

1.3.7 PCB Impacted Waste (>1 ppm but <50 ppm)

PCB impacted waste means waste containing PCBs as a result of a spill, release, or other unauthorized disposal which are currently at any concentration of the PCBs spilled or released from a PCB Excluded Product/State Regulated (>1 ppm but <50 ppm) source.

1.3.8 PCB Engineer

To be retained by the Owner, responsible for overseeing excavation work and for performing and evaluating verification sample data.

1.3.9 Owner

The SITE is OWNED by the Town of East Hartford.

1.3.10 Project Monitor

The onsite representative for the PCB Engineer responsible for overseeing daily work activities. The Project Monitor shall oversee site preparation and excavation/abatement

activities, perform air monitoring and verification sampling and verify completion of site work.

1.3.11 Remedial Action Level

Concentration to which PCB contaminated soil and/or surface cover must be removed to verify completion of excavation work.

1.3.12 Soil

The loose surface material of the earth's crust resulting from the chemical and mechanical weathering of rock and organic material.

1.3.13 Suitable Waste Storage Container

A container in which soil/surface cover is placed for storage prior to transport offsite for disposal that is water tight, lined, and equipped with a cover that prevents the infiltration of rainwater into the container per EPA 40 CFR 761.

1.3.14 Excavated Soil Stockpile

An area where excavated soil/surface cover is placed following excavation and prior to loading into a waste storage container. *At no time will the Contractor create an excavated soil stockpile. All excavated soil is to be placed directly into a suitable waste storage container.*

1.3.15 Verification Sampling

Sampling performed to determine the completion of excavation activities *as a modified version* of Subpart O of 40 CFR Part 761 *as the soil is considered a state/CTDEEP regulated PCB Impacted Waste.*

1.3.16 Waste Storage Area

The secured location in which the Contractor shall store excavated soil/surface cover prior to offsite transport for disposal. The Contractor shall consult with the Owner and the PCB Engineer to identify the location of Waste Storage Areas prior to generating any wastes. This area shall be secured and signed by the Contractor.

1.4 SUBMITTALS

Prior to performance of the work described in this section, the Contractor shall submit to the Owner and Construction Administrator the following on the schedule indicated:

1.4.1 Key Personnel

The Contractor shall submit a list of the key personnel of the Contractor and subcontractors (including addresses and telephone numbers) for use in the event of an emergency. As

changes occur and additional information becomes available, the Contractor shall correct and change the information contained in previous lists. The Contractor's Representative shall be identified on this list.

Hazard communication training and initial 40 hour OSHA health and safety training (HAZWOPER) certifications (along with current 8 hour refresher certification) shall be submitted for all personnel to be actively engaged in the work.

1.4.2 Waste Profiles and Disposal Approval

The Contractor shall submit all waste profiles prior to submittal to any proposed waste disposal facility. The Contractor shall submit all Disposal Approvals a minimum of seven (7) days prior to performing excavation work.

1.4.3 Site PCB Work Plan

The Contractor shall submit a Site PCB Work Plan describing the regulated excavation work areas and air monitoring that will be employed during excavation activities. The Site PCB Work Plan may be consolidated and included with the Site PCB Work Plan from *Section 028433 Removal and Disposal of Polychlorinated Biphenyls* as long as the described items are part of the plan.

1.4.3 Equipment Decontamination Plan

The Contractor shall submit a decontamination plan for all materials and equipment that shall contact PCB Impacted Wastes and that are to be removed from the site following the completion of work. The decontamination plan shall conform to the requirements of §761.79(c). The Contractor shall submit proof of decontamination to the PCB Engineer as required.

1.4.4 Clean Soil Backfill Testing Data

If required to backfill, the Contractor shall submit testing data certifying clean soil to be used as backfill to the PCB Engineer for review and approval prior to beginning excavation/backfill activities. Backfill soils will be obtained from a known borrow source and will be analyzed prior to use on site. One sample per 250 cubic yards of material will be analyzed for VOCs, SVOCs, ETPH, CT RSR Metals (total and SPLP), pesticides, herbicides and PCBs (total and SPLP). Analytical results will be compared to the CTDEEP RSR, RES DEC and GA PMC standards.

1.5 REGULATORY REQUIREMENTS

All soil/surface cover is to be handled and stored in accordance with the provision of 40 CFR Part 761 Subpart D. The Contractor shall be responsible for all costs associated with investigation and remediation of any releases due to their failure to handle excavated soil/surface cover in accordance with the regulatory requirements.

1.6 DELIVERY AND STORAGE

The Contractor shall deliver and store materials in a manner to prevent contamination, segregation, freezing, and other damage.

1.7 PROTECTION

1.7.1 Utility Location

The Contractor shall contact Connecticut's Call Before You Dig for underground utility markouts in accordance with applicable regulations, and provide a confirmation number for the Owner's/PCB Engineer's records. The Contractor shall verify the location of all utilities shown on the Contract Drawings or identified during utility mark-outs.

Movement of construction machinery and equipment over pipes and utilities during construction shall be at the Contractor's risk. The Contractor shall perform all work adjacent to utilities as indicated in accordance with procedures outlined by utility company. For work immediately adjacent to or for excavations exposing a utility or other buried obstruction, use hand excavation. Start hand excavation on each side of the indicated obstruction and continue until the obstruction is uncovered or until all contaminated soil is removed. Support uncovered lines or other existing work affected by the contract excavation as required. The Contractor shall report damage to utility lines or subsurface construction immediately to the utility company and the PCB Engineer. The Contractor shall be responsible for the repair of all damaged utilities that were previously shown on Contract Drawings or identified during utility mark-outs.

1.7.2 Overhead Utilities

If excavation or backfilling equipment (excavator arms, lifts, dump truck beds, etc.) at the site can potentially come within a 15 foot radius of the overhead electrical lines, a dedicated spotter must be used for each such piece of equipment. The spotter must be in continuous radio and line of sight communication with the equipment operator and be capable of immediately stopping the equipment operation if any portion of the equipment is in danger of penetrating the 15 foot radius overhead electrical line safety zone. The spotter shall be an experienced and qualified equipment operator.

1.7.3 Structures and Surfaces

The Contractor shall protect adjacent structures and surfaces from traffic, erosion settlement, or any other damage. The Contractor shall repair and reestablish damaged or eroded grades and slopes and restore surface construction prior to acceptance.

PART 2 PRODUCTS - NONE

PART 3 EXECUTION

3.1 SITE PREPARATION

Prior to performing excavations, the Contractor shall secure the excavation area with temporary fencing. The Contractor may move temporary fencing sections to allow for work progress while actively working in an excavation area. However, if no work is actively being performed in an excavation area the temporary fencing will be reinstalled.

3.1.1 Excavation Layout

The Contractor shall mark the limits of proposed initial excavations of contaminated soils/surface covers prior to performing any excavations. The limits of the excavations shall correspond to those shown on the Contract Drawings and the dimensions indicated in this specification.

3.1.2 Sedimentation, Erosion and Run-On Controls

The Contractor shall install Erosion and Sediment Control in conformance with the CTDEEP Erosion and Sediment Control Pocket Guide and any relevant specification sections and the contract drawings.

3.1.3 Waste Storage Areas

If the Contractor chooses to store excavated soil/surface cover onsite prior to transport offsite for disposal, the Contractor shall construct a secured Waste Storage Area at a location agreed to by the Contractor and the PCB Engineer within contract limit lines. The contract limit lines are to be secured as described elsewhere in these specifications and entry shall be limited to Contractor Personnel only. The Waste Storage Area shall enclose all Suitable Waste Storage Containers actively in use with temporary fencing. The fence shall be marked with a Large M_L mark as specified in 40 CFR Part 761 Subpart C.

3.1.4 Waste Storage

The Contractor shall not store waste onsite in a Suitable Waste Container for a period of more than 30 days. The start of the period of waste storage for each container will start on the day in which wastes are first loaded into a container and will terminate when the container is transported offsite.

The Contractor shall store waste onsite in Suitable Waste Containers. No stockpiling shall be allowed and the Contractor shall be responsible for all costs associated with investigation and remediation of any areas contaminated due to the failure of the Contractor to comply with waste storage requirements.

3.1.5 Decontamination

The Contractor shall decontaminate all moveable equipment that contacts PCB Impacted Wastes in accordance with the procedures specified in §761.79(c). The Contractor shall not remove any equipment from the Contaminant Zone until it has been properly decontaminated.

Specifically, the Contractor shall employ double wash/rinse procedures as specified in 40 CFR Part 761 Subpart S or swab non-porous surfaces that have contacted PCB wastes with a

solvent as specified in §761.79(c)(2)(i). The Contractor shall segregate all liquid waste streams and be responsible for characterizing these wastes for disposal purposes. Solid wastes generated during decontamination shall be stored for disposal with the other PCB wastes generated during remediation activities.

The PCB Engineer shall be responsible for ensuring that decontamination procedures are followed and that wastes are appropriately characterized and disposed of properly.

3.2 SURFACE PREPARATION

3.2.1 Clearing and Grubbing

The soil removed from any root structure that has been grubbed from an excavation area must remain in the excavation or be placed directly into a Suitable Waste Container. Unless suitably decontaminated and tested as clean, all roots grubbed from an area must be considered to be *PCB Impacted Wastes.*

3.3 EXCAVATION AND HANDLING OF CONTAMINATED GROUND COVER

3.3.1 Contaminant Zone Operations

Construction equipment such as excavators, front end loaders, dozers and hauling vehicles, used within a Contaminant Zone that have contacted PCB Impacted Wastes shall not be permitted to move outside of the area until they have been properly decontaminated.

All soil within the excavations shall be assumed to be PCB Impacted Wastes unless the Contractor is otherwise instructed by the PCB Engineer. All waste handling and storage procedures, equipment decontamination procedures, and other Contaminant Zone Operations shall conform to the requirements of 40 CFR Part 761 Subpart D.

3.3.2 Dust Control

The Contractor will be responsible for providing temporary water and appropriate hose for dust control. Water shall be applied to keep fugitive dust under control as needed and as directed by the PCB Engineer.

3.3.3 Excavation

Excavation shall be shallow and performed in lift intervals no greater than one foot unless otherwise approved by the PCB Engineer. Excavation areas shall be clearly marked with stakes and labels.

Excavation equipment shall be smooth edge blade without ripping teeth. Excavation shall be carried out in such a manner so as to minimize the mixing of soils to underlying soils. No ripping, plowing, harrowing or mixing of soils shall be permitted. Only excavation equipment that provides precise depth control will be permitted. No crane mounted clamshell or dragline excavators will be allowed.

Excavation shall be carried out so as to remove contaminated soils/surface cover from the edge farthest away from the edge where hauling vehicles will approach the Contaminant Zone. Contaminated soils/surface cover shall not be moved over areas excavated and tested as below action levels and ready for backfilling, unless hauling vehicles move across the clean area to the edge of the Contaminant Zone. Excavation equipment shall not overfill their buckets so as to allow spillage of soil/surface cover across other contaminated or clean areas. The loose or excess soil/surface cover shall be removed from the bucket within the active excavation area prior to moving the soil/surface cover to the hauling vehicles. The Contractor shall be solely responsible for the cost of excavating, handling, storage, testing and disposal of soils/surface covers that were previously clean and have tested as contaminated due to deficient Contractor operation practices and methods.

3.3.4 Personal Protective Equipment

The Contractor shall assume that all personnel working within a contaminant zone shall be required to be equipped with Personal Protective Equipment (PPE). The Contractor's health and safety officer will be responsible for determining the appropriate level of personal protection. That determination must be evaluated by a certified industrial hygienist and shall be based on actual laboratory data and monitoring from site operations. All personnel shall be required to go through an approved decontamination procedure. All personal protective garments shall be containerized and not reused after removal. The personal protective garments shall be disposed of as contaminated waste in an approved manner.

3.3.5 Remedial Action Levels

The remedial action level for PCB contaminated surface cover/soil shall be <1.0 mg/kg as specified in the Regulations of Connecticut State Agencies Sections 22a-133k-1 through 22a-133k-3, inclusive, and the High Occupancy Standard without further restrictions in §761.61(a)(4) of 40 CFR Part 761.

3.4 EXCAVATION COMPLETION

Each excavation shall be considered complete after sufficient verification samples, per *a modified sampling strategy similar to* Subpart O, have been collected by the PCB Engineer and analyzed and determined to meet remedial action levels. Verification samples shall be collected and analytical data reviewed by the PCB Engineer. Samples shall be analyzed using EPA Methods 5035 and 8082. If the remedial action level is exceeded, the Contractor shall be instructed to excavate additional material as instructed by the Project Monitor. Allow seven (7) days for verification samples to be analyzed.

Following the completion of an excavation, the Contractor shall decontaminate their equipment as required and remove from the area. The Contractor may remove temporary security fencing if the excavation is deemed by the PCB Engineer not to be a site hazard.

Once the verification samples meet the remedial action levels, if the soil excavations are required to be backfilled they will be backfilled with certified clean soil if backfilling is required. Backfill soils will be obtained from a known borrow source and will be analyzed prior to use on site. One sample per 250 cubic yards of material will be analyzed for VOCs,

SVOCs, ETPH, CT RSR Metals (total and SPLP), pesticides, herbicides and PCBs (total and SPLP). Analytical results will be compared to the CTDEEP RSR, RES DEC and GA PMC standards. The Contractor shall supply test sample data to the PCB Engineer for review and approval prior to beginning excavation/backfill activities. Soils will be placed and compacted in 12-inch lifts.

After the completion of backfill activities, a grass cover shall be applied to all excavation areas for erosion prevention. At a minimum, grass seed with appropriate fertilizer and hay to protect (if required) will be applied to all locations.

3.5 REMEDIAL ACTION REPORT / COMPLIANCE REPORT

A Remedial Action Report (RAR) or a Project Compliance Report will be prepared upon receipt of all analytical data confirming that the removal action was complete and receipt of certifications of treatment/disposal from the treatment/disposal facility. The RAR/Compliance Report report will be prepared by the PCB Engineer and will include the following.

3.20.1 Site description
3.20.2 A description of field procedures
3.20.3 Verification sample locations and analytical results
3.20.4 Figures showing the extent of excavations and restorations
3.20.5 Waste characterization sample data
3.20.6 Waste transport and treatment disposal information
3.20.7 Copies of waste manifests and bills of lading

This RAR report may be consolidated and included with the RAR report from *Section 028433 Removal and Disposal of Polychlorinated Biphenyls* as long as all the above listed items are part of the report and when associated with EPA Regulated PCB containing materials. When only non-federally / state regulated PCB containing materials are remediated, all above information will be included in an all-encompassing hazardous building material Compliance Report at the end of the project.

3.6 METHOD OF PAYMENT

The lump sum bid price for PCB abatement shall include the specialty services of the PCB Removal Contractor including: labor, materials, equipment, insurance, permits, notifications, submittals, personal air sampling, personal protection equipment, temporary enclosures, utility costs, incidentals, fees and labor incidental to the removal of PCB Wastes, including close out documentation, providing adequate containers for storage of PCB wastes until they are removed from the site and the transport and disposal of these materials at an appropriate facility. Payment for the removal and disposal of PCB's shall not be made until the Contractor submits manifests with the mass of waste disposed and signed by the receiving facility and the Certificates of Disposal provided by the waste disposal facility for each manifested load to the Engineer. Once the manifest and Certificate of Disposal has been received, the Owner shall make payment to the Contractor.

END OF SECTION 026123

SECTION 028100 - TRANSPORT AND DISPOSAL OF HAZARDOUS MATERIALS

PART 1 GENERAL

1.1 SCOPE

A. Work under this item shall include the management (handling and disposal) of regulated items and all associated work by persons who are employed by a CTDEEP permitted Spill Contractor and trained/certified in accordance with OSHA hazard communication requirements. Regulated items include hazardous and other materials and wastes the disposal of which is restricted by Federal and/or State laws and regulations and which may be a component of equipment or other items located on-site. Regulated items include those listed herein, or additional similar items identified on site by the Engineer/Construction Manager. Work under this item does not include asbestos containing materials, lead paint, contaminated or hazardous soils.

B. Activities shall be performed in accordance with, but not limited to, the current revision of the USEPA & CTDEEP Hazardous Waste Regulations (40 CFR 260-282, 22a-209 and 22a-449(c)), USEPA PCB Regulations (40 CFR 761), CTDEEP PCB Regulations (22a-463 through 469), USEPA Protection of Stratospheric Ozone (40 CFR 82), OSHA Hazard Communication (29 CFR 1910.1200), OSHA Hazardous Waste & Emergency Response Regulations (29 CFR 1910.120), USDOT Hazardous Materials Regulation (49 CFR 171-180), OSHA, RCRA, CERCLA, CAA, TSCA, and all other laws and regulations.

C. The work activities include the removal, handling, packing, labeling, transport, manifesting, and recycling or disposal of various regulated items at the Project site prior to beginning planned renovation/demolition activities.

D. The Contractor is responsible for verifying actual locations and quantities of the items with hazardous/regulated material/waste constituents and for their proper handling and disposal. The recycling or proper disposal, as appropriate, of all regulated items shall be completed prior to the initiation of any demolition or renovation activities.

E. Deviations from the Specifications require the written approval of the Engineer/Owner.

1.2 DESCRIPTION OF WORK

A. Prior to demolition, properly remove, handle, pack, label, transport, manifest and recycle or dispose of the regulated items from those listed below:

The following hazardous/regulated materials, wastes, items have been identified and inventoried at the Former McCartin School in East Hartford. Identified items are listed below under their potential hazard category. The contractor shall verify quantities. All items must be properly removed, handled, packed, labeled, transported, manifested, and recycled or disposed. Items include, but are not limited to:

FORMER McCARTIN SCHOOL - 70 Canterbury Street

- **Connecticut Regulated Waste (CRW)**
  - **PCB or DEHP lamp ballasts**
  - **Waste chemical solids-fire extinguishers, cement, abrasive media, joint compound etc.**
  - **Waste chemical liquids-paints, cleaners, soaps, boiler system solution, transformers etc.**

- **Universal Waste (UW)**
  - **Hg lamps – fluorescent bulbs, CFLs, halogen lights, fire alarm strobes, exit signs, emergency lights etc.**
  - **Hg ampoules/switches-pressure gauges, thermostats, fire pulldowns etc.**
  - **Batteries – emergency lighting, exit signs, control panel/boxes, remotes, etc.**
  - **Used electronics-printed circuit boards/CRTs, control pads/panels/boxes, electronic thermostats, data boxes, security cameras, exit signs, emergency lights, fire alarms (pull boxes/strobes), motion sensors/heat sensors, smoke detectors, ballasts etc.**

- **Low-Level Radioactive source**
  - **Smoke detectors**

- **CFCs/Freon**
  - **A/C units**
  - **Water fountains**
  - **Refrigerators**

Note: Refer to Table 6 in TRC's *Pre-Demolition Investigative Survey for Hazardous Building Materials* dated April 2023, for items inventoried by TRC. Please note items such as computers, office equipment, telephones, miscellaneous paints, cleaners, chemicals, etc., were not quantified by TRC as most of these items were to be salvaged by the Town. It is the Contractor's responsibility to verify actual locations and quantities of hazardous/regulated materials, wastes, items which will need to be handled in accordance with CTDEEP/EPA regulations.

Contractor shall make every effort to recycle hazardous materials rather than dispose of them to promote waste minimization efforts required under RCRA and LEEDS (Leadership in Energy and Environmental Design)

B. Upon discovery of any previously unidentified regulated items during demolition/renovation activities, the Contractor shall immediately notify the Engineer and work shall cease in that area until the Engineer can determine the extent of any impact and proper handling procedures are implemented.

1.3 SUBMITTALS AND NOTICES

A. Seven (7) days prior to commencement of work involving the management of regulated items, the Contractor shall submit to the Engineer/Owner for approval, the following documentation:

1. Regulated Items Handling and Disposal Work Plan and Schedule, to include:
2. Spill prevention, containment, and cleanup contingency measures to be implemented.
3. Copy of Spill Contractor Permit registration issued by the CTDEEP.
4. Ozone depleting substance service technician certification (as applicable).
5. Hazard communication training for all employees performing this work.
6. List of waste handling equipment to be used in performing the work, to include cleaning, volume reduction, storage and transport equipment.
7. Requirements for acceptance of wastes at the facilities, and confirmation from the treatment or disposal facility that the materials have met the acceptance requirements and have been properly classified.
8. A program and schedule for waste containment, removal and disposal. Wastes shall be cleaned up and containerized daily.
9. Provisions for submitting detailed delivery tickets and/or waste manifests, signed and dated by an agent of the landfill, certifying the amount of materials delivered to the landfill, and within 30 days of delivery of the regulated materials.
10. A program for ensuring documentation of accurate disposal quantities, including recording of scale calibration and truck weight.
11. Names, locations, qualifications and 24-hour points of contact of the treatment facilities, recycling facilities and/or disposal facilities the Contractor intends to use to receive each type of regulated item.
12. Names, locations, qualifications, and 24-hour points of contact of the Hazardous Material Transporter(s) the Contractor intends to use to transport hazardous materials from this Project.
13. Treatment, Recycling and/or Disposal facilities permits and USEPA ID#’s for accepting the waste Contractor intends to transport to that destination.
14. Hazardous Material Transporter USDOT Certificate of Registration for each transporter.
15. Hazardous Waste Transporter Permit for the State of Connecticut, the destination state(s), and all other applicable states for each transporter.

B. At least seven (7) days prior to the start of work that will generate RCRA hazardous waste above conditionally exempt small quantities, the Contractor shall obtain from the Engineer/CTDEEP a temporary EPA Hazardous Waste Generators ID number, for use in manifesting the waste.

C. Within thirty (30) days after completion of the on-site project work, the Contractor shall submit to the Engineer copies of the following completed documents:

1. Certified Hazardous Waste Manifests
2. Waste Shipment Records/Bills of Lading
3. Recycling Receipts
4. Certificates of Destruction

D. Documents 1 through 4 must include the signature of an authorized disposal facility representative acknowledging receipt of hazardous materials.

PART 2 PRODUCTS

2.1 MATERIALS

A. All materials shall be suitable for the management of regulated items and shall meet all applicable federal, state and local regulations. Such materials include, but are not limited to, proper containers, packing materials, labels, signs, shipping papers, personal protective equipment (PPE) and spill kits.

B. The Contractor shall provide fire retardant polyethylene sheet in roll size to minimize the frequency of joints shall be delivered to job site with factory label indicating four (4) or six (6) mil.

C. The Contractor shall provide containers that are impermeable and both air and watertight.

D. The Contractor shall provide labels and signs that shall conform to OSHA, USEPA, CTDEEP and DOT Standards.

E. The Contractor shall provide DOT approved containers for proper transport and disposal/recycling of hazardous materials.

2.2 TOOLS AND EQUIPMENT

A. The Contractor shall provide tools and equipment that are suitable for hazmat removal.

B. The Contractor shall maintain a spill kit for cleaning up spills that occur during handling of hazardous materials.

PART 3 EXECUTION

3.1 GENERAL REQUIREMENTS

A. The Contractor’s OSHA Competent Person shall be in control on the job site at all times during hazardous material management work activities. This person must be capable of identifying existing hazards, possess the authority to implement corrective measures to reduce/eliminate the hazards, comply with applicable Federal, State and Local regulations that mandate work practices, and be capable of performing the work of this contract. All

employees who perform regulated material management related work shall be properly trained and qualified to perform such duties.

B. All labor, materials, tools, equipment, services, testing, insurance, and incidentals which are necessary or required to perform the work in accordance with applicable governmental regulations, industry standards and codes, and these specifications, shall be provided by the Contractor.

C. Ladders and/or scaffolds shall be in compliance with OSHA requirements, and of adequate length, strength and sufficient quantity to support the scope of work. Use of ladders/scaffolds shall be in conformance with OSHA 29 CFR 1926 Subpart L and X requirements.

D. Work performed at heights exceeding six feet (6') shall be performed in accordance with the OSHA Fall Protection Standard 29 CFR 1926 Subpart M including the use of fall arrest systems as applicable.

E. Inventory data from investigative surveys throughout the buildings are included herein and are presented for informational purposes only. ***Under no circumstances shall this information be the sole means used by the Contractor for determining the quantities or extent of the regulated items to be managed.*** The Contractor shall be responsible for verification of all field conditions affecting performance of the work. The Contractor shall submit to the Engineer for concurrence any additional items not listed herein that it believes to be regulated items included under this item. However, compliance with applicable requirements is solely the responsibility of the Contractor.

F. The Engineer will provide a Project Monitor to monitor the activities of the Contractor and inspect the work required. Environmental sampling shall be conducted as deemed necessary by the Engineer. Spill areas shall be cleaned by the Contractor until accepted by the Engineer. The Engineer may sample the spill area to demonstrate Contractor compliance with an acceptable standard.

3.2 PERSONNEL PROTECTION

A. Prior to commencing work, the Contractor shall provide hazard communication training to all employees as necessary in accordance with OSHA 29 CFR 1926.59 and 29 CFR 1910.1200 and instruct all workers in all aspects of personnel protection, work procedures, emergency procedures and use of equipment including procedures unique to this project. Worker health and safety protocols that address potential and/or actual risk of exposure to site specific hazards are solely the responsibility of the Contractor.

B. The Contractor shall provide respiratory protection that meets the requirements of OSHA as required in 29 CFR 1910.134 and 29 CFR 1926.1000. A formal respiratory protection program, including appropriate medical surveillance, must be implemented in accordance with OSHA standards. The Contractor shall, as necessary, conduct exposure assessment air sampling, analysis and reporting to ensure the workers are afforded appropriate respiratory protection.

C. The Contractor shall provide and require all workers to wear appropriate personnel protective equipment, including protective clothing, gloves, eye protection and respiratory

protection, as required, within regulated work areas which exceed OSHA Personnel Exposure Limits (PELs) or when handling hazardous materials.

3.3 REGULATED ITEM MANAGEMENT WORK PRACTICES - GENERAL

A. The Contractor shall not begin work until the Project Monitor is on-site.

B. Prior to beginning work on-site, the Contractor shall prepare waste characterization profile forms for each type of waste stream to be generated and forward such forms to the Engineer for review, approval and signature. Upon approval, the Contractor shall forward such forms to the appropriate disposal facilities for acceptance.

C. The Contractor shall utilize all appropriate engineering controls and safety and protective equipment while performing the work in accordance with OSHA, USEPA, USDOT, CTDEEP and Connecticut Department of Public Health DPH regulations.

D. The Contractor shall employ work practices so as to minimize the disturbance of the constituents in the regulated items, and prevent breakage and spills. In the event of a spill, the Contractor shall cordon off the area and notify the Engineer. The Contractor is responsible to have spills and the effected areas decontaminated to the acceptance of the Engineer by personnel trained in hazardous waste operator emergency response.

E. The Contractor shall carefully and properly remove, handle, pack, label and manifest all of the regulated items in waste containers specified and suitable to contain the waste in accordance with all federal and state regulations.

F. Prior to transportation and recycling and/or disposal, all proper USEPA, OSHA, CTDEEP and USDOT labels and placards shall be affixed to the waste containers and hazardous materials shipping papers such as waste manifests/bills of lading shall be completed.

3.4 MERCURY SWITCHES/GAUGES – SPECIAL REQUIREMENTS

A. Mercury switches/gauges and other assorted controls may contain a small quantity of mercury in an ampoule. Mercury ampoules are regulated under the Resource Conservation and Recovery Act (RCRA), which is administered by the USEPA and mercury thermostats are considered a Universal Waste according to 40 CFR Part 273.

B. The Contractor shall remove the ampoules from switches/gauges without breaking and dispose of whole ampoules at an approved recycling facility. Damaged ampoules shall be disposed of as a hazardous waste at an approved TSD facility for destruction, or an approved recycling facility.

C. To prevent mercury-containing ampoules from breaking, ampoules must be properly packed for storage and transportation by the Contractor in DOT approved containers.

D. The containers containing the universal waste mercury ampoules must be properly labeled by the Contractor with the words “Universal Waste – Mercury Ampoules” in accordance with USEPA 40 CFR Part 273. Pre-printed labels that meet USEPA/DOT regulations are recommended for high-volume disposal.

E. The Contractor shall prepare a non-hazardous waste manifest or bill of lading for each shipment, and shall ensure the Engineer receives a copy of the completed manifest verifying that the mercury ampoules were properly recycled or destroyed.

3.5 FLUORESCENT LAMPS – SPECIAL REQUIREMENTS

A. Fluorescent, neon, mercury vapor, halogen and high-intensity discharge (HID) lamps contain a small quantity of mercury. Mercury is regulated under the Resource Conservation and Recovery Act (RCRA), which is administered by the USEPA and mercury lamps are considered a Universal Waste according to 40 CFR Part 273.

B. The Contractor shall remove lamps from fixtures without breaking and dispose of whole lamps at an approved recycling facility. Damaged lamps shall be disposed of as a hazardous waste at an approved TSD facility for destruction, or an approved recycling facility.

C. To prevent used lamps from breaking, lamps must be properly packed for storage and transportation by the Contractor in crush-proof boxes. When stacking boxes of used lamps for storage the contractor should avoid crushing the bottom boxes. Broken lamps are considered Hazardous Waste and shall be placed into a UN approved poly drum, rather than Universal Waste, and shall be treated as such.

D. The boxes or containers containing the universal hazardous waste lamps must be properly labeled by the Contractor with the words “Universal Waste – Lamps” in accordance with USEPA 40 CFR Part 273. Pre-printed labels that meet USEPA/DOT regulations are recommended for high-volume disposal.

E. The Contractor shall prepare a non-hazardous waste manifest or bill of lading for each shipment, and shall ensure the Engineer receives a copy of the completed manifest verifying that the lamps were properly recycled or destroyed.

3.6 BALLASTS - SPECIAL REQUIREMENTS

A. Retain the services of a licensed electrician to disconnect the power from active lights prior to ballast removal. Conform to all OSHA lock-out/tag-out procedures.

B. Ballasts that contain PCBs are regulated under TSCA (40 CFR 761.60(b)(2)(ii)).

C. Inspect each light ballast for a label. Oil filled ballasts without a “No PCB” label shall be assumed to contain PCBs and managed as such. Fluorescent and HID oil filled ballasts which are labeled “No PCBs” may contain DEHP and shall be managed the same way as PCB ballasts, properly packed for recycling/destruction as hazardous waste. All other oil filled ballasts shall be assumed to be PCB containing. Newer non-oil filled ballasts are electronic and shall be segregated for management as universal waste – used electronics as described below.

D. Inspect each light fixture/ballast for evidence of PCB leakage. Leaking PCB units can be identified typically by a clear to yellow, oily liquid, the PCB oil itself, or an oily tar-like substance, the liquefied potting material of the ballast. All materials (fixture housing, wires, etc.) including the ballast that contact this substance are considered PCB waste, and are subject to TSCA requirements and must be removed for proper disposal in accordance with

EPA 40 CFR 761. Where leaking ballasts are identified ensure the space is properly ventilated when removing the ballasts and impacted materials and proper PPE is employed. Place 6-mil poly sheeting beneath the light fixtures to ensure no further contamination of the spaces while dismantling the affected ballast/lighting fixture.

E. Intact fluorescent and HID PCB ballasts that are not leaking shall be recycled by an approved TSCA recycling facility. Leaking PCB-containing ballasts must be incinerated at a USEPA-approved high-temperature incinerator.

F. Ballasts shall be placed in DOT approved drums containing a sorbent material for proper transport, with segregation maintained between intact ballasts and leaking ballasts and associated impacted materials.

G. All waste drums shall be identified with the following yellow label:

CAUTION
Contains PCBs
(Polychlorinated Biphenyls)

H. A uniform Hazardous Waste Manifest must be prepared by the Contractor and accompany the waste wherever it travels. Each handler of the waste must sign the manifest and keep one copy. When the waste reaches its destination, the owner of that facility returns a copy of the manifest to the generator to confirm that the waste arrived. The Contractor shall ensure the Engineer receives a completed copy of the waste manifest as well as provide the Engineer with documents verifying destruction of the PCBs whether they are incinerated at high temperatures or recycled.

I. Any spills of PCB liquid/oil shall be immediately reported to the Engineer and cleaned up, along with assessment of impact to affected substrates/soils and decontamination in accordance with EPA 40 CFR 761 at no cost to the Engineer/Owner.

3.7 PCB CAPACITORS – SPECIAL REQUIREMENTS

A. Equipment with PCB containing capacitors shall have the capacitors removed for proper disposal prior to the disposal of the bulk equipment.

B. Procedures for handling, packing and disposal of PCB containing capacitors shall be equivalent to those listed in Section 3.6.

3.8 "MISC. HOUSEHOLD HAZARDOUS WASTES" – SPECIAL REQUIREMENTS

A. Many "miscellaneous household hazardous waste" products contain regulated or hazardous wastes due to their constituents. These products may be either USEPA listed hazardous wastes (F, K, U & P wastes), exhibit a characteristic of USEPA hazardous waste (ignitable – D001, corrosive – D002, reactive – D003, or toxic – D004 to D043), or be defined as Universal Wastes (certain pesticides) or Connecticut Regulated or Special Wastes. (CR01 to CR05).

B. The Contractor shall properly gather, pack, label, transport, manifest and recycle/dispose of the "household hazardous waste" products at the site in accordance with USEPA and CTDEEP Hazardous Waste Regulations.

3.9 REFRIGERANTS (CFCs) – SPECIAL REQUIREMENTS

A. Equipment with refrigerants (Freon, CFCs, HCFCs, etc.) shall have the refrigerant recovered in accordance with USEPA 40 CFR Part 82 (Protection of Stratospheric Ozone) by persons trained in the performance of this work as an EPA Ozone Depleting Substance (ODS) Service Technician prior to disposal of the equipment. This may entail the removal of the equipment off-site for refrigerant recovery on recovery on-site.

B. The Contractor shall provide documentation that the refrigerant has been properly recovered and recycled or treated.

3.10 PRESSURIZED CYLINDER – SPECIAL REQUIREMENTS

A. The Contractor shall securely transport the pressurized cylinders to a recycling facility following DOT transportation regulations for recovery of any remaining gas/chemical and proper cylinder reuse/disposal.

B. The Contractor shall complete a bill of lading for the transport of such cylinders.

3.11 SMOKE/CO DETECTORS – SPECIAL REQUIREMENTS

A. Ionization smoke and carbon monoxide (CO) detectors contain a low-level radioactive source which emits alpha particles, and also may contain electronic circuit boards.

B. The Contractor shall securely pack and transport the smoke/CO detectors to a recycling facility and/or manufacturer following DOT transportation regulations for recovery/reuse of any remaining radioactive source and used electronic circuit boards.

C. The Contractor shall prepare a bill of lading for each shipment.

3.12 USED ELECTRONICS – SPECIAL REQUIREMENTS

A. Used electronic equipment containing cathode ray tubes (CRTs) and/or circuit boards often contain various quantities of heavy metals such as lead, silver and cadmium which are regulated under RCRA. Used electronics are considered a Universal Waste according to CTDEEP 22a-449(c)-113.

B. The Contractor shall remove the used electronic equipment, securely pack, transport, and dispose of whole at an approved reclamation/recycling facility for recovery/reuse of any remaining components in accordance with USEPA RCRA and CTDEEP waste management requirements.

C. The containers containing the used electronics must be properly labeled by the Contractor with the words "Universal Waste – Used Electronics" in accordance with CTDEEP 22a-449(c)-113.

C. The Contractor shall prepare a non-hazardous waste manifest or bill of lading for each shipment and shall ensure the Engineer receives a copy of the completed manifest verifying that the used electronics were properly recycled or destroyed.

3.13 BATTERIES – SPECIAL REQUIREMENTS

A. Batteries containing nickel-cadmium, lithium-ion and/or lead acids are regulated under the USEPA RCRA Hazardous Waste Regulations as Universal Waste under 40 CFR Part 273.

B. The Contractor shall properly gather, pack, label, transport, manifest and dispose of the Universal Waste Batteries at the site in accordance with USEPA and CTDEEP Hazardous Waste Regulations in approved DOT containers.

C. Batteries showing evidence of leakage, spillage, or damage shall be contained in closed containers compatible with the contents of the battery.

D. Batteries must be sorted by type in order to send them to the appropriate destination facilities for recycling or treatment.

E. The Contractor shall label the containers in accordance with USEPA 40 CFR Part 273 with the words “Universal Waste – Batteries”.

3.14 TRANSFORMER/HYDRAULIC FLUIDS/OILS – SPECIAL REQUIREMENTS

A. The Contractor shall remove the hydraulic fluid/oil from the transformer/hydraulic piston/equipment item for proper disposal using personnel appropriately trained for such duties, including cutting open the container to ensure all residual fluids, products and sludges are properly cleaned out.

B. Hydraulic fluids/oils may contain PCBs. The Contractor shall be responsible for determining if PCBs are present in the fluid.

C. If PCBs are present in the fluid, the Contractor shall dispose of the fluid in accordance with the USEPA PCB Regulations (40 CFR Part 761).

D. If no PCBs are present in the fluid, the Contractor shall dispose of the fluid as CTDEEP Regulated Waste Oil in accordance with CTDEEP Regulations and USEPA Waste Oil Regulations (40 CFR Part 279).

E. If a spill of PCB fluid occurs, the Contractor shall be responsible for having the spill and the affected areas decontaminated by personnel trained in emergency hazmat response. The Engineer shall then conduct clearance sampling at the Contractors expense following the USEPA Guidance Document “Verification of PCB Spill Cleanup by Sampling and Analysis”, and in accordance with EPA 40 CFR 761.

3.15 WASTE DISPOSAL/RECYCLING

A. Efforts shall be made to recycle the constituents of the regulated items rather than dispose of them in accordance with the waste minimization efforts required under RCRA.

B. RCRA hazardous waste shall not be stored on the job site in excess of 90 calendar days from the accumulation start date.

C. Connecticut Regulated Waste shall not be transported to a RCRA or TSCA permitted facility for disposal, unless otherwise allowed by the Engineer in writing.

D. All non-RCRA hazardous waste materials, regulated waste materials and recyclable waste items shall be manifested separately from RCRA and TSCA hazardous waste, and documented properly on non-hazardous waste manifests, waste shipment records, bills of lading or other appropriate shipping papers for transportation to the recycling and/or disposal facility.

E. The Contractor shall prepare each lab pack list and shipping document (manifests, waste shipment records, bills of lading, etc.) with all of the required information completed (including types of waste, proper shipping name, categories, packing numbers, amounts of waste, etc.) in accordance with applicable federal and state regulations. The document will be signed by an authorized agent representing the Owner as the Generator for each load that is packed to leave the site.

F. All waste containers shall be appropriately labeled following applicable USEPA and USDOT standards, including the date the items were placed into the container.

G. The Contractor shall forward the appropriate original copies of shipping papers to the Engineer/Owner the same day the regulated items leave the project site.

H. All vehicles departing the site transporting hazardous materials shall display proper USDOT placards, as appropriate for the type of waste being transported.

END OF SECTION 028100

SECTION 028213 – ASBESTOS ABATEMENT

PART 1 GENERAL

1.1 SCOPE

A. Work under this item shall include the abatement of asbestos containing materials (ACM) and associated work by persons who are knowledgeable, qualified, trained and licensed in the removal, treatment, handling, and disposal of ACM and the subsequent cleaning of the affected environment. ACM shall include material composed of any type of asbestos in amounts greater than one percent (1%) by weight. The Contractor performing this work shall possess a valid Asbestos Abatement Contractor license issued by the Connecticut Department of Public Health (CTDPH).

B. These Specifications govern all work activities that disturb asbestos containing materials. All activities shall be performed in accordance with, but not limited to, the current revision of the OSHA General Industry Standard for Asbestos (29 CFR 1926.1001), the OSHA Asbestos in Construction Regulations (29 CFR 1926.1101), the USEPA Asbestos National Emission Standards for Hazardous Air Pollutants (NESHAP) Regulations (40 CFR Part 61 Subpart M), the CTDPH Standards for Asbestos Abatement, Licensure and Training (19a-332a-1 through 16, 20-440-1 through 9 & 20-441), and the CTDEEP Special Waste Disposal Regulations (22a-209-8(i)).

C. The asbestos abatement work shall include the removal and disposal of all ACM as identified on the Contract Drawings and Specifications prior to the planned renovation project. The Owner will retain the services of a State of Connecticut licensed Project Monitor for protection of its interests and those using the building.

D. Deviations from these Specifications require the written approval of the Engineer and Owner.

E. The Contractor may elect to utilize an Alternative Work Practice (AWP), if approved by the CTDPH and the Engineer/Owner prior to the initiation of the abatement activities. An AWP is a variance from certain CTDPH asbestos regulatory requirements, which must provide the equivalent or a greater measure of asbestos emission control than the standard work practices prescribed by the CTDPH.

1.2 DESCRIPTION OF WORK

A. The following details the extent of each phase of operation designated for this project. Phase areas may be combined or divided at the direction of the Engineer/Construction Manager. Proceed through the sequencing of the work phases under the direction of the Engineer/Construction Manager.

B. The asbestos abatement work shall include the removal of asbestos-containing materials as specified herein. This abatement project was designed by Mr. Michael Kostruba, a State of Connecticut licensed Asbestos Project Designer (#000314).

FORMER McCARTIN SCHOOL – 70 Canterbury Street:

Interior - Original Construction (1959 wing of school)

Includes the removal of:

- **Grey door window glaze (DWG1)**
- **Black sticky door window glaze (DWG4)**
- **Interior components of electrical on/off switches (assumed)**

Asbestos removal shall be performed by removing the entire door/switch unit intact without disturbance of the ACM in accordance with the CTDPH Regulatory Interpretation Memo of April 7, 2003 Regarding Intact Removal of Non-Friable Asbestos Containing Materials, OSHA Class II and USEPA Asbestos NESHAP requirements. No containment or air clearances are required. Material will be disposed of intact in two layers of 6-mil poly waste bags (or equivalent).

NOTES:

- **Refer to hand-marked asbestos drawing ACM2 in TRC's *Pre-Demolition Investigative Survey for Hazardous Building Materials* dated April 2023 for locations of ACM listed above.**
- **Contractor may subdivide into multiple sub-phases per concurrence from the Engineer/Construction Manager and the on-site Project Monitor.**

Interior - Original Construction (1959 wing of school)

Includes the removal of:

- **Floor tile and associated mastic (various types of 9" x 9" and 12" x 12")**
- **Residual mastic under carpeting where 9" x 9" floor tile was previously removed (RM1-assumed)**
- **Glue daubs behind blackboards (BB1)**
- **Silver/grey light fixture insulation paper (LP1)**
- **Light brown ceiling tile glue daubs (GD1)**
- **White hardpack mag pipe insulation and associated grey mudded fittings (PI1, MF1)**
- **Grey pipe insulation paper and associated grey mudded fittings (PI2, MF1)**
- **Pipe insulation in Boiler Room floor slab (assumed-continues out to exterior)**
- **Interior boiler insulations/materials (assumed)**

Contractor shall be responsible for removal of all walls, counters, cabinets, sinks, appliances, trim work, carpeting, etc., necessary in order to access the ACM. Asbestos removal shall be performed under full containment conditions with a pressure differential and contiguous decontamination system in accordance with CTDPH 19a-332a-5, 6 and 7, OSHA Class I & II and USEPA NESHAP requirements. Re-occupancy air clearance testing shall utilize Phase Contrast Microscopy (PCM) or Transmission Electron Microscopy (TEM) analysis, as applicable per CTDPH 19a-332a-12.

NOTES:

- **Refer to hand-marked asbestos drawings ACM1 and ACM2 in TRC's *Pre-Demolition Investigative Survey for Hazardous Building Materials* dated April 2023 for locations of ACM listed above.**
- **Pipe insulation & mudded fitting locations are not marked on the drawings. These materials are assumed to be present inside walls/pipe chases, above drop/fixed ceilings and in floors - associated with bathrooms, sinks, radiators, water fountains, boilers etc. It is the Contractor's responsibility to perform careful select exploratory demolition to chase insulated piping and to identify all locations of these materials to be removed.**
- **Contractor shall be responsible for dismantling boilers within containment to access any presumed ACM under the newer exterior insulation or within the boiler unit for removal.**
- **Due to inconsistent results for the black mastic associated with floor tiles, all black mastic associated with an asbestos containing floor tile is to be considered an ACM and shall be removed as such.**
- **Contractor may subdivide into multiple sub-phases per concurrence from the Engineer/Construction Manager and the on-site Project Monitor.**

<u>Interior - Addition (1962 wing of school)</u>

Includes the removal of:

- **Black sticky door window glaze (DWG4)**
- **Interior components of electrical on/off switches (assumed)**

Asbestos removal shall be performed by removing the entire door/switch unit intact without disturbance of the ACM in accordance with the CTDPH Regulatory Interpretation Memo of April 7, 2003, Regarding Intact Removal of Non-Friable Asbestos Containing Materials, OSHA Class II and USEPA Asbestos NESHAP requirements. No containment or air clearances are required. Material will be disposed of intact in two layers of 6-mil poly waste bags (or equivalent).

NOTES:

- **Refer to hand-marked asbestos drawing ACM2 in TRC's *Pre-Demolition Investigative Survey for Hazardous Building Materials* dated April 2023 for locations of ACM listed above.**
- **Contractor may subdivide into multiple sub-phases per concurrence from the Engineer/Construction Manager and the on-site Project Monitor.**

<u>Interior - Addition (1962 wing of school)</u>

Includes the removal of:

- **Floor tile and associated mastic (various types of 9" x 9" and 12" x 12")**
- **Glue daubs behind blackboards (BB1)**
- **Glue in between and behind bulletin boards (BBG1-assumed)**

- **Tan brittle caulking between vertical CMU joints and CMU/tectum roof deck joint (C2*)**
- **Interior components of the "Destructor' unit (assumed)**

Contractor shall be responsible for removal of all walls, counters, cabinets, sinks, appliances, trim work, carpeting, etc., necessary in order to access the ACM. Asbestos removal shall be performed under full containment conditions with a pressure differential and contiguous decontamination system in accordance with CTDPH 19a-332a-5, 6 and 7, OSHA Class I & II and USEPA NESHAP requirements. Re-occupancy air clearance testing shall utilize Phase Contrast Microscopy (PCM) or Transmission Electron Microscopy (TEM) analysis, as applicable per CTDPH 19a-332a-12.

NOTES:

- **Refer to hand-marked asbestos drawings ACM1 and ACM2 in TRC's *Pre-Demolition Investigative Survey for Hazardous Building Materials* dated April 2023 for locations of ACM listed above.**
- ***Caulk type C2 is also identified as a CTDEEP regulated PCB containing material, therefore abatement and disposal of this material will also coincide with PCB remediation as outlined in Section 028433.**
- **Due to inconsistent results for the black mastic associated with floor tiles, all black mastic associated with an asbestos containing floor tile is to be considered an ACM and shall be removed as such.**
- **Contractor shall be responsible for dismantling "Destructor" unit within containment to access any presumed interior ACM within the unit for removal.**
- **Contractor may subdivide into multiple sub-phases per concurrence from the Engineer/Construction Manager and the on-site Project Monitor.**

<u>Exterior – Original Construction (1959 wing of school)</u>

Includes the removal of:

- **Grey sticky door window / door light window system glazing (DWG2)**
- **Black sticky door window glazing (DWG4)**

Asbestos removal shall be performed by removing the entire units intact without disturbance of the ACM in accordance with the CTDPH Regulatory Interpretation Memo of April 7, 2003, Regarding Intact Removal of Non-Friable Asbestos Containing Materials, OSHA Class II and USEPA Asbestos NESHAP requirements. No containment or air clearances are required. Material will be disposed of intact in two layers of 6-mil poly waste bags (or equivalent).

NOTES:

- **Refer to hand-marked asbestos drawing ACM2 in TRC's *Pre-Demolition Investigative Survey for Hazardous Building Materials* dated April 2023 for locations of ACM listed above.**
- **DWG2, when associated with the door itself, may be removed intact. Where removal of DWG2 is associated with the window system around the door it must be removed from the exterior as described below in the next section.**

- **Contractor may subdivide into multiple sub-phases per concurrence from the Engineer/Construction Manager and the on-site Project Monitor.**

Exterior – Original Construction (1959 wing of school)

Includes the removal of:

- **Tan brittle window caulk around large and small older windows (WC2)**
- **Light grey brittle caulk under metal windowsills (WSC1)**
- **Grey sticky door window / door light window system glazing (when associated with windows) (DWG2)**

A regulated area(s) shall be established at the perimeter of the work area(s), and access shall be controlled by the Contractor. A remote personnel decontamination unit shall be utilized. Removal shall be undertaken in accordance with OSHA Class II and USEPA Asbestos NESHAP requirements. Visual inspection shall be performed by project monitor prior to work area being deregulated. No containment required for exterior abatements.

NOTES:

- **Refer to hand-marked asbestos drawings ACM2 and ACM3 in TRC's *Pre-Demolition Investigative Survey for Hazardous Building Materials* dated April 2023 for locations of ACM listed above.**
- **Contractor may subdivide into multiple sub-phases per concurrence from the Engineer/Construction Manager and the on-site Project Monitor.**

Exterior – Addition (1962 wing of school)

Includes the removal of:

- **Tan brittle caulk around exterior doors and louvre (DC1*)**
- **Dark grey brittle caulk under metal windowsills (WSC2*)**

A regulated area(s) shall be established at the perimeter of the work area(s), and access shall be controlled by the Contractor. A remote personnel decontamination unit shall be utilized. Removal shall be undertaken in accordance with OSHA Class II and USEPA Asbestos NESHAP requirements. Visual inspection shall be performed by project monitor prior to work area being deregulated. No containment required for exterior abatements.

NOTES:

- **Refer to hand-marked asbestos drawing ACM3 in TRC's *Pre-Demolition Investigative Survey for Hazardous Building Materials* dated April 2023 for locations of ACM listed above.**
- ***Caulk types DC1 & WSC2 are also identified as a CTDEEP regulated PCB containing material, therefore abatement and disposal of these materials will also coincide with PCB remediation as outlined in Section 028433.**
- **Contractor may subdivide into multiple sub-phases per concurrence from the Engineer/Construction Manager and the on-site Project Monitor.**

Exterior – Roofs

Includes the removal of:

- **Black/brown penetration flashing tar/paper (PNF1)**
- **Black perimeter flashing system/tar (PRF1, PRF2)**
- **Black tar flashing cements on hoods (RFL1)**

A regulated area(s) shall be established at the perimeter of the work area(s), and access shall be controlled by the Contractor. A remote personnel decontamination unit shall be utilized. Removal shall be undertaken in accordance with OSHA Class II and USEPA Asbestos NESHAP requirements. Visual inspection shall be performed by project monitor prior to work area being deregulated. No containment required for exterior abatements.

NOTES:

- **Refer to hand-marked asbestos drawing ACM4 in TRC's *Pre-Demolition Investigative Survey for Hazardous Building Materials* dated April 2023 for locations of ACM listed above.**
- **Contractor may subdivide into multiple sub-phases per concurrence from the Engineer/Construction Manager and the on-site Project Monitor.**

Exterior - Buried Piping-from outside of Boiler Room (Room V-1959) to Electrical Room (Room E-1962)

Includes removal of:

- **Buried asbestos containing pipe insulation and associated mudded fittings (assumed)**

A regulated area(s) shall be established at the perimeter of the work area(s), and access shall be controlled by the Contractor. A contiguous or remote personnel decontamination unit shall be utilized. Removal shall be undertaken in accordance with OSHA Class I, Class II and USEPA Asbestos NESHAP requirements. Visual inspection shall be performed by the Project Monitor prior to work area being deregulated. For removal of friable materials, the use of additional engineering controls, including but not limited to, HEPA cowled tools, negative air machines and poly enclosures around the work area may be required to ensure no visible emissions. Re-occupancy air clearance sampling is not required for exterior containment/enclosures.

NOTES:

- **Refer to hand-marked asbestos drawing ACM3 in TRC's *Pre-Demolition Investigative Survey for Hazardous Building Materials* dated April 2023 for the ASSUMED locations of ASSUMED ACM listed above.**
- **Working with the Project Monitor, the Contractor shall perform careful exploratory excavation of soils to expose the heating and water pipes believed to be buried underground, extending from the Boiler Room V in the 1959 wing to Electrical Room E in the 1962 addition. The Contractor shall provide safe access to any discovered pipes so**

that the Project Monitor can safely sample any suspect materials which may be present.

- **The Contractor will be responsible for the removal of any ACM identified including any soils contaminated with asbestos containing materials associated with the buried piping. Upon discovery of any asbestos contaminated soils, all work will stop so that a determination of the extent of contamination can be made by the Project Monitor/Engineer.**

1.3 SUBMITTALS AND NOTICES

A. The Contractor shall submit, in accordance with CTDPH Standard 19a-332a-3 and EPA 40 CFR 61.145 (b), proper notification using the prescribed form, to the Commissioner, State of Connecticut, Department of Public Health and EPA Region 1 not fewer than ten (10) days (10 business days) prior to the commencement of work as follows:

1. Asbestos abatement projects involving greater than ten (10) linear feet (LF) or twenty-five (25) square feet (SF) of ACM (friable or non-friable) within a facility (i.e. interior abatement) and/or greater than 10 LF or 25 SF of friable ACM outside a facility, require an CTDPH Asbestos Abatement Notification. Also, abatement projects greater than one hundred sixty (160) SF, two hundred sixty (260) LF of interior/exterior or 35 cubic feet (CF) of interior/exterior Regulated Asbestos containing materials (RACM) require Notification of Demolition & Renovation to EPA Region 1.

2. At sites scheduled for demolition, asbestos abatement of exterior non-friable ACM or interior abatement involving less than 10 LF or 25 SF of ACM (friable or non-friable), and/or exterior abatement involving less than 10 LF or 25 SF of friable ACM require a Demolition Notification. In most cases, the Demolition Contractor is responsible for filing the Demolition Notification not fewer than ten (10) days prior to the commencement of demolition. However, if a portion of the demolition activities are scheduled to be conducted in conjunction with and/or under the supervision of an Asbestos Abatement Contractor (i.e. in the event of a structure which has been condemned, structurally damaged, and/or deemed unsafe for asbestos abatement activities); then it is the responsibility of the Asbestos Abatement Contractor to submit the Demolition Notification.

3. In the event that an Asbestos Abatement Notification has been submitted and the subject facility is scheduled for demolition, a separate Demolition Notification form does not need to be submitted. In such cases, the submission of the Asbestos Abatement Notification form shall be deemed as satisfying the requirement for the notification of the demolition of the facility.

4. The Contractor filing the proper notification is responsible for all associated fees.

5. If the Contractor intends to dispose of ACM waste within the State of Connecticut, a copy of the Asbestos Abatement/Demolition Notification must also be submitted

to the Department of Environmental Protection, Solid Waste Management Unit, and the Contractor must obtain a CTDEEP Special Waste Disposal authorization.

B. Any Alternative Work Practice (AWP) specifically described in these Specifications is pre-approved and is to be utilized at all times. Additional AWP methods may be used if approved by CTDPH and the Engineer/Owner. Should the Contractor desire to use AWP procedures that have not been pre-approved, the Contractor shall submit in writing a description of the proposed methods to the Engineer/Owner and CTDPH for review and approval. Alternative procedures shall provide equivalent or greater protection than procedures which they replace. The Contractor is responsible for all fees associated with filing AWP applications which have not been pre-approved. Submission of AWP applications requires a CTDPH Project Designer License. The Contractor shall not proceed with any AWP other than those listed in this Specification without approval from both the CTDPH and the Engineer/Owner.

C. Seven (7) working days prior to the commencement of asbestos abatement work (Pre-abatement Meeting), the Contractor shall submit to the Engineer/Owner for review and acceptance and/or acknowledgment of the following:

1. Copies of all required notifications.

2. AWP applications/approvals.

3. Permits and licenses for the removal, transport, and disposal of asbestos-containing or contaminated materials, including a CTDPH valid asbestos removal contractor's license.

4. Documentation dated within the previous twelve (12) months, certifying that all employees have received USEPA Model Accreditation Plan approved asbestos worker/supervisor training in the proper handling of materials that contain asbestos; understand the health implications and risks involved, including the illnesses possible from exposure to airborne asbestos fibers; understands the use and limits of respiratory equipment to be used; and understands the results of monitoring of airborne quantities of asbestos as related to health and respiratory equipment as indicated in 29 CFR 1926.1101 on an initial and annual basis, and copies of all employees CTDPH asbestos worker and/or supervisor licenses.

5. Documentation from the Contractor, typed on company letterhead and signed by the Contractor, certifying that all employees listed herein have received the following:

    a. Medical monitoring within the previous twelve (12) months, as required in 29 CFR 1926.1101
    b. Respirator fit testing within the previous twelve (12) months, as detailed in 29 CFR 1910.134 (for all employees who must also don a tight-fitting face piece respirator)

6. Copies of the EPA/State-approved certificates for the proposed asbestos landfill.

7. Name and qualifications of the Asbestos Abatement Site Supervisor. This individual shall be the OSHA Competent Person for the abatement activities, shall have a minimum of three years working experience as an Asbestos Abatement Site Supervisor, shall be capable of identifying existing asbestos hazards and shall have the authority to implement corrective measures to eliminate such hazards. The Asbestos Abatement Site Supervisor shall be on-site at all times asbestos abatement is occurring, shall comply with applicable Federal, State and Local regulations which mandate work practices, and shall be capable of performing the work of this contract.

D. No abatement shall commence until a copy of all required submittals have been received and found acceptable to the Engineer. Those employees added to the Contractor's original list will be allowed to perform work only upon submittal to, and receipt of, all required paperwork by the Engineer.

E. Provide the Engineer/Owner, within 30 days of completion of asbestos abatement, a compliance package; which shall include, but not be limited to, the following:

1. Asbestos Abatement Site Supervisor job log;
2. OSHA personnel air sampling data and exposure assessments;
3. Completed waste shipment records.

1.4 SEQUENCE OF WORK

A. The Contractor shall proceed in accordance with the sequence of work as directed by the Engineer/Construction Manager. Work shall be divided into convenient Work Areas, each of which is to be completed as a separate unit.

B. The Contractor shall use the following sequence for the asbestos abatement work:

1. Release of work area to Contractor.

2. A visual inspection of the work area to determine pre-existing damage to facility components.

3. Removal of all moveable objects from the Work Areas undergoing abatement by the Contractor.

4. All temporary utilities required for the project shall be on site and operational prior to the initiation of asbestos work.

5. Abatement of all asbestos-containing materials by the Contractor.

6. Final visual inspections by the Project Monitor.

7. Air sampling by the Project Monitor for re-occupancy.

8. Cleanup by the Contractor. Work Areas must be returned to their original condition or as directed by the Engineer/Project Monitor.

9. Removal of waste from the site.

PART 2 PRODUCTS

2.1 MATERIALS

A. All materials shall be delivered to the job site in the original packages, containers, or bundles bearing the name of the manufacturer, the brand name and product technical description.

B. No damaged or deteriorating materials shall be used. If material becomes contaminated with asbestos, the material shall be decontaminated or disposed of as asbestos-containing waste material. The cost to decontaminate and dispose of this material shall be at the expense of the Contractor.

C. Fire retardant polyethylene sheet shall be in roll size to minimize the frequency of joints, with factory label indicating four (4) or six (6) mil thickness.

D. Six (6) mil polyethylene disposable bags shall have pre-printed OSHA/EPA/DOT labels and shall be transparent.

E. Tape (or equivalent) capable of sealing joints in adjacent polyethylene sheets and for the attachment of polyethylene sheets to finished or unfinished surfaces must be capable of adhering under both dry and wet conditions.

F. Surfactant is a chemical wetting agent added to water to improve penetration and shall consist of fifty (50) percent polyoxyethylene ether and fifty (50) percent polyoxyethylene ester, or equivalent. The surfactant shall be mixed with water to provide a concentration one (1) ounce surfactant to five (5) gallons of water, or as directed by the manufacturer.

G. Spray equipment must be capable of mixing necessary chemical agents with water, generating sufficient pressure and volume; and equipped with adequate hose length to access all necessary work areas.

H. Mechanical mastic removal equipment shall be suitable for the application and shall be operated in a manner which prevents damage to the underlying floor. Sanders, grinders, wire brushes and needle-gun type removal equipment shall be equipped with a High Efficiency Particulate Air (HEPA) filtered vacuum dust collection system.

I. Containers for storage, transportation and disposal of asbestos containing waste material shall be impermeable and both air and watertight.

J. Labels and warning signs shall conform to OSHA 29 CFR 1926.1101, USEPA 40 CFR Part 61.152, and USDOT 49 CFR Part 172 as appropriate.

K. Encapsulant, a material used to chemically entrap asbestos fibers to prevent these fibers from becoming airborne, shall be of the type which has been approved by the Engineer. Use shall be in accordance with manufacturer's printed technical data. The encapsulant shall be clear and must be compatible with new materials being installed, if any.

L. Glovebag assembly shall be manufactured of six (6) mil transparent polyethylene or PVC with two (2) inward projecting long sleeve gloves, an internal pouch for tools, and an attached labeled receptacle for waste.

M. Mastic removal chemicals shall be low odor and non-citrus based, with a flash point in excess of 140° F.

N. Any planking, bracing, shoring, barricades and/or temporary sheet piling, necessary to appropriately perform work activities shall conform to all applicable federal, state and local regulations.

O. Air filtration devices and vacuum units shall be equipped with HEPA filters.

2.2 TOOLS AND EQUIPMENT

A. Air monitoring equipment of the type and quantity required to monitor operations and conduct personnel exposure surveillance shall conform to OSHA requirements.

B. Protective clothing, respirators, filter cartridges, air filters and sample filter cassettes shall be provided in sufficient quantities for the project.

C. Electrical equipment, protective devices and power cables shall conform to all applicable codes.

D. Shower stalls and plumbing shall include sufficient hose length and drain system or an acceptable alternate. Showers shall be equipped with hot and cold or warm running water. One shower stall shall be provided for each eight workers. Water is filtered through a 5 micron and a 10 micron filter prior to being discharged into the city sewer/sanitary system.

E. The Contractor may need to supply electrical power to the site by either fuel operated generator(s) or temporary restoration of electrical service. Electrical power supply will be sufficient for maintaining in operation all equipment required for this project throughout the duration of the project.

F. Exhaust air filtration units shall be equipped with HEPA filters capable of providing sufficient air exhaust to create a minimum pressure differential of 0.02 inches of water column, and to allow a sufficient flow of air through the area providing 4 air changes per hour. An automatic warning system shall be incorporated into the equipment to indicate pressure drop or unit failure. No air movement system or air filtering equipment shall discharge unfiltered air outside the Regulated Area. The Contractor shall provide actual airflow measurement of filtration units while the unit is in place and calculate actual air exchange rates.

G. Pressure differential monitoring equipment shall be provided to ensure exhaust air filtration devices provide the minimum pressure differential required between the Work Area and occupied areas of the facility.

H. Vacuum units, of suitable size and capabilities for the project, shall have HEPA filters capable of trapping and retaining at least 99.97 percent of all monodispersed particles of three micrometers in diameter or larger.

I. Ladders and/or scaffolds shall be of adequate length, strength and sufficient quantity to support the work schedule.

J. Other materials such as lumber, nails and hardware necessary to construct and dismantle the decontamination enclosures and the barriers that isolate the Work Area shall be provided as appropriate for the work.

K. Spray equipment shall be capable of mixing wetting agent with water and capable of generating sufficient pressure and volume. Hose length shall be sufficient to reach all of the Regulated area.

L. Mechanical mastic removal equipment shall be suitable for the application and shall be operated in a manner which prevents excessive damage to the underlying floor.

PART 3 EXECUTION

3.1 GENERAL REQUIREMENTS

A. The Abatement Contractor/Subcontractor shall possess a valid State of Connecticut Asbestos Contractor License. Should any portion of the work be subcontracted, the subcontractor must also possess a valid State of Connecticut Asbestos Contractor License. The Asbestos Abatement Site Supervisor employed by the Contractor shall be in control on the job site at all times during asbestos abatement work. All employees of the Contractor who shall perform work (i.e. Asbestos Abatement Site Supervisor, Asbestos Abatement Worker) shall be properly certified/licensed by the State of Connecticut to perform such duties.

B. All labor, materials, tools, equipment, services, testing, insurance (with specific coverage for work on asbestos), and incidentals which are necessary or required to perform the work in accordance with applicable governmental regulations, industry standards and codes, and these Specifications shall be provided by the Contractor. The Contractor shall be prepared to work all shifts and weekends throughout the course of this project.

C. Prior to beginning work, the Engineer and Contractor shall perform a visual survey of each work area and review conditions at the site for safety reasons. In addition, the Contractor shall instruct all workers in all aspects of personnel protection, work procedures, emergency evacuation procedures and use of equipment including procedures unique to this project.

D. The Contractor shall:

1. Shutdown and isolate heating, cooling, and ventilating air systems to prevent contamination and fiber dispersal to the other areas of the building.

2. Shut down and lock out electrical power, including all receptacles and light fixtures, when feasible. The use or isolation of electrical power will be coordinated with all other ongoing uses of electrical power at the site.

3. Coordinate all power and fire alarm isolation with the appropriate representatives.

4. When necessary, provide temporary power and adequate lighting and ensure safe installation of electrical equipment, including ground fault protection and power cables, in compliance with applicable electrical codes and OSHA requirements. The Contractor is responsible for proper connection and installation of electrical wiring.

E. If sufficient electrical service is unavailable, the Contractor may need to supply electrical power to the site by fuel operated generator(s). Electrical power supply shall be sufficient for all equipment required for this project in operation throughout the duration of the project. If the Contractor elects to supply electrical power to the work site through the use of generators, the Contractor shall ensure that each work area is a manageable size such that removal, final cleaning and re-occupancy testing can be accomplished within one work shift while negative air machines are operating.

F. Negative pressure must be continuously maintained in each work area, until the area achieves satisfactory re-occupancy criteria and is approved by the Project Monitor to be deregulated. Negative air pressure must be maintained twenty-four (24) hours per day and the Contractor shall establish temporary electrical service to the site, rather than utilize generators.

G. Water service may not be available at the site. Contractor shall supply sufficient water for each shift to operate the decontamination shower units as well as to maintain the work areas adequately wet.

H. Ladders and/or scaffolds shall be in compliance with OSHA requirements, and of adequate length, strength and sufficient quantity to support the scope of work. Use of ladders/scaffolds shall be in conformance with OSHA 29 CFR 1926 Subpart L and X requirements.

I. Work performed at heights exceeding six feet (6') shall be performed in accordance with the OSHA Fall Protection Standard 29 CFR 1926 Subpart M including the use of fall arrest systems as applicable.

J. Data provided regarding asbestos sampling conducted throughout the structure(s) is for informational purposes only. Under no circumstances shall this information be the sole means used by the Contractor for determining the presence and location of all asbestos containing materials. The Contractor shall verify all field conditions affecting performance of the work as described in these Specifications in accordance with OSHA, USEPA,

USDOT, CTDPH and CTDEEP standards. Compliance with the applicable requirements is solely the responsibility of the Contractor.

K. The Engineer will provide a Project Monitor to oversee the activities of the Contractor. No asbestos work shall be performed until the Project Monitor is on-site. Pre-abatement, during abatement and post-abatement air sampling will be conducted as deemed necessary by the Project Monitor. Waste stream testing will be performed, as necessary, by the Project Monitor prior to waste disposal.

3.2 PREPARATION OF WORK AREA ENCLOSURE SYSTEM

A. Pre-clean the work areas using HEPA filtered equipment (vacuum) and/or wet methods as appropriate, collecting and properly containing all dust and debris as asbestos-containing/asbestos contaminated waste. Vacuum units, of suitable size and capabilities for the project, shall have HEPA filters capable of trapping and retaining at least 99.97 percent of all monodispersed particles of three micrometers in diameter or larger. Do not use methods that raise dust, such as dry sweeping or vacuuming with equipment not equipped with HEPA filters.

B. After pre-cleaning, movable objects shall be removed from the work areas with the utmost care to prevent damage of any kind and relocated to a temporary storage location coordinated with the Engineer. The Contractor is responsible for protecting all fixed objects that are permanent fixtures or are too large to remove and remain inside the Regulated Area. Fixed objects shall be enclosed with one layer of six (6) mil polyethylene sheeting sealed with tape.

C. Where non-ACM insulation exists within a Regulated Area, the Contractor has the option of removing the non-ACM insulation material and disposing of as ACM debris, or decontaminating and protecting non-ACM insulation material with two (2) layers of six (6) mil polyethylene sheeting. Any non-ACM insulation removed shall be replaced with new material of equal or better quality at the Contractor's expense.

3.3 WORKER DECONTAMINATION ENCLOSURE SYSTEM

A. The Contractor shall establish contiguous to the Regulated Area, a Worker Decontamination Enclosure System consisting of Equipment Room, Shower Room and Clean Room in series, as detailed below. Access to the Regulated Area shall only be through this enclosure.

B. Access between rooms in the Worker Decontamination Enclosure System shall be through airlocks. Other effective designs are permissible. The Clean Room, Shower Room and Equipment Room located within the Worker Decontamination Enclosure, shall be contiguously connected with taped airtight edges, thus ensuring the sole source of airflow originates from outside the regulated areas, once the negative pressure differential within the Regulated Area is established.

C. The Clean Room shall be adequately sized to accommodate workers and shall be equipped with a suitable number of hooks, lockers, shelves, etc., for workers to store personal articles

and clothing. Changing areas of the Clean Room shall be suitably screened from areas occupied by the public.

D. The Shower Room shall be of sufficient capacity to accommodate the number of workers. One shower stall shall be provided for each eight (8) workers. Showers shall be equipped with hot and cold or warm running water through the use of electric hot water heaters supplied by the Contractor. No worker or other person shall leave a Regulated Area without showering. Shower water shall be collected and filtered using best available technology and dumped down an approved sanitary drain. Shower stalls and plumbing shall include sufficient hose length and drain system or an acceptable alternate.

3.4 EQUIPMENT DECONTAMINATION ENCLOSURE SYSTEM

A. The Contractor shall establish contiguous to the Regulated Area an Equipment/Waste Removal Decontamination Enclosure System consisting of two (2) totally enclosed chambers divided by a double flap curtained opening. Other effective designs are permissible. This enclosure must be constructed so as to ensure that no personnel enter or exit through this unit.

B. The Contractor shall ensure that no personnel or equipment be permitted to leave the Regulated Area until proper decontamination procedures (including HEPA vacuuming, wet wiping and showering) to remove all asbestos debris have occurred. No asbestos-contaminated materials or persons shall enter the Clean Room.

3.5 SEPARATION OF WORK AREAS FROM OCCUPIED AREAS

A. Seal off all windows, doorways, skylights, ducts, grilles, diffusers, vents, light fixtures, electrical receptacles, suspended ceiling tile systems and any other openings between the Regulated Area and the uncontaminated areas outside of the Regulated Area, including the outside of the building, with critical barriers consisting of a minimum of one (1) layer of six (6) mil polyethylene sheeting securing the edges with tape. Doorways and corridors which will not be used for passage during work and separate the regulated areas from occupied areas must be sealed with fixed critical barriers constructed of 2" x 4" wood or metal framing 16" O.C., with ½" plywood on the occupied side and two layers of six (6) mil polyethylene sheeting on the Regulated Area side to prevent unauthorized access or air flow.

B. The Contractor shall create a negative pressure differential in the range of 0.02 to 0.04 inches of water column between the Regulated Area and surrounding areas by the use of acceptable negative air pressure equipment. Exhaust air filtration units shall be equipped with HEPA filters capable of providing sufficient air exhaust to create a minimum pressure differential of 0.02 inches of water column, and to allow a sufficient flow of air through the area providing 4 air changes per hour. The Contractor shall provide a sufficient quantity of HEPA air filters to maintain the pressure differential throughout the duration of the project. An automatic warning system shall be incorporated into the equipment to indicate pressure drop or unit failure. Continuously monitor the pressure differential between the Regulated Area and surrounding area to ensure exhaust air filtration equipment maintains a minimum pressure differential of 0.02 inches of water column. The Contractor shall

provide actual air flow measurement of filtration units while the unit is in place and calculate actual air exchange rates. No air movement system or air filtering equipment shall discharge unfiltered air outside the Regulated Area.

C. A Negative Pressure Enclosure (NPE) shall be constructed via covering of floor and wall surfaces with polyethylene sheeting sealed with tape. Polyethylene shall be applied alternately to floors and walls. Cover floors first, with a layer of six (6) mil polyethylene sheeting, so that polyethylene extends at least twelve (12) inches up on wall. Cover wall with a layer of four (4) mil polyethylene sheeting to twelve (12) inches beyond the wall/floor intersection, thus overlapping the floor material by a minimum of twenty-four (24) inches. Repeat the process for the second layer of polyethylene. There shall be no seams at wall-to-floor joints. Protect carpet and floor tile with two additional layers of six (6) mil reinforced polyethylene in addition to the prior two layers required.

D. Conspicuously label and maintain emergency and fire exits from the Regulated Area satisfactory to fire officials.

E. Post warning signs meeting the specifications of OSHA 29 CFR 1910.1001 and 29 CFR 1926.1101 at each Regulated Area. In addition, signs shall be posted at all approaches to Regulated Areas so that an employee or building occupant may read the sign and take the necessary protective steps before entering the area. Additional signs may require posting following construction of workplace enclosure barriers.

3.6 ALTERNATE EXTERIOR NON-FRIABLE ASBESTOS SET-UP PROCEDURES

A. In lieu of the establishment of a negative pressure enclosure (NPE) system as described by CTDPH Sections 19a-332a-5(c), 5(d), 5(e), and 5(h), non-friable ACM will be removed from exterior work areas within an outdoor Regulated Area(s). The regulated work area will be established by the use of appropriately labeled barrier tape and postings in compliance with CTDPH 19a-332a-5(a) as well as OSHA 29 CFR 1926.1101. A remote personnel decontamination unit as specified in Section 19a-332a-6 will be required. This method shall only be utilized provided exposure assessment air sampling data collected during the removal of the exterior non-friable materials indicates that the exposure levels during removal of such materials do not exceed 0.1 asbestos f/cc. Should exposure assessment air sampling data exceed this level, and engineering efforts to reduce the airborne fiber levels not be successful in reducing the levels to less than 0.1 f/cc, removal shall occur within these areas under full containment conditions.

3.7 ALTERNATE “SPOT REPAIR” ASBESTOS PROCEDURES

A. In lieu of the establishment of a negative pressure enclosure (NPE) system as described by CTDPH Sections 19a-332a-5(c), 5(d), 5(e), and 5(h), less than 3 LF or 3 SF of ACM will be removed as a “spot repair” in accordance with CTDPH Section 19a-332a-10. A regulated area will be established by the use of appropriately labeled barrier tape and postings in compliance with CTDPH 19a-332a-5(a) as well as OSHA 29 CFR 1926.1101. A remote personnel decontamination unit as specified in Section 19a-332a-6 will be required. Air-tight barriers will be constructed to assure that asbestos fibers released during abatement activities are contained within the work area. (Glovebags are permitted, as

specified below.) ACM will be adequately wet prior to disturbance and remain wet until placed in leak-tight container. Following abatement, clean-up methods within the work area will include HEPA-filtered vacuuming or wet cleaning techniques until no visible residue remains.

B. Glovebags utilized to perform "spot repair" activities on asbestos containing pipe insulation/mudded fitting insulation, in conformance with OSHA 29 CFR 1926.1101(g)(5)(ii), shall be:

1. constructed of 6 mil poly, seamless at bottom, unmodified
2. installed so that it completely covers the circumference of pipe or other structure where work is to be done, with impermeable dropcloths placed on all surfaces beneath the work area
3. smoke-tested for leaks and sealed, as needed
4. used only once, may not be moved
5. used only on surfaces with temperatures <150°F
6. collapsed by removing air via HEPA-vacuum, prior to disposal
7. adhered to surfaces which are intact, surfaces with loose and friable material shall be sealed in two layers of 6 mil poly or otherwise rendered intact
8. capable of sustaining integrity at connection site to attached waste bag, which must have equivalent of sliding valve for disconnection (as applicable)
9. performed by a minimum of two (2) persons

C. Glovebags may also be used for "spot repair" abatement procedures involving additional materials (e.g. floor tile/linoleum, transite, etc.) provided that the glovebag is capable of fully enclosing the material to be removed.

3.8 PERSONNEL PROTECTION

A. The Contractor shall utilize all appropriate engineering controls and safety and protective equipment while performing the work in accordance with OSHA, USEPA, USDOT, CTDEEP and CTDPH regulations.

B. The Contractor shall provide and require all workers to wear protective clothing in the Regulated Areas where asbestos fiber concentrations may reasonably be expected to exceed the OSHA established Permissible Exposure Limits (PEL) or where asbestos contamination exists. Protective clothing shall include impervious coveralls with elastic wrists and ankles, head covering, gloves and foot coverings.

C. Respiratory protection shall be provided and selection shall conform to the requirements of OSHA 29 CFR 1910.134 and 29 CFR 1926.1101 as well as the requirements of the CTDPH regulations and 42 CFR Part 84. A formal respiratory protection program must be implemented in accordance with 29 CFR 1926.1101 and 29 CFR 1910.134.

D. All other necessary personnel protective equipment (i.e. hardhat, work boots, safety glasses, hearing protection, etc.) required to perform the asbestos abatement work activities shall conform to all applicable federal, state and local regulations.

E. All other qualified and authorized persons entering into a Regulated Area (i.e. Project Monitor, Regulatory Agency Representative) shall adhere to the requirements of personnel protection as stated in this section.

3.9 ASBESTOS ABATEMENT PROCEDURES

A. The Asbestos Abatement Site Supervisor, as the OSHA Competent Person shall be at the site at all times.

B. The Contractor shall not begin abatement work until authorized by the Project Monitor, following a pre-abatement visual inspection.

C. All workers and authorized persons shall enter and leave the Regulated Area through the Worker Decontamination Enclosure System, leaving contaminated protective clothing in the Equipment Room for reuse or disposal of as asbestos contaminated waste. No one shall eat, drink, smoke, chew gum or tobacco, or apply cosmetics while in a Regulated Area.

D. During removal, the Contractor shall spray asbestos materials with amended water using airless spray equipment capable of providing a "mist" application to reduce the release of airborne fibers. Spray equipment shall be capable of mixing wetting agent with water and capable of generating sufficient pressure and volume. Hose length shall be sufficient to reach all of the Regulated Area. Do not “flood” the area with hose type water supply equipment with the potential to create water releases from the regulated area.

E. The Contractor shall continue to spray the asbestos materials with amended water, as necessary, throughout removal activities to ensure the asbestos materials remain adequately wet. The asbestos materials shall not be allowed to dry out.

F. In order to minimize airborne asbestos concentrations inside the Regulated Area, the Contractor shall remove the adequately wetted asbestos in manageable sections. In addition, asbestos materials removed from any elevated level shall be carefully lowered to the floor.

G. The Contractor shall promptly place the adequately wet asbestos material in disposal containers (six (6) mil polyethylene bags/fiber drum/poly-lined dumpsters, etc.) as it is removed. Large components removed intact may be wrapped in two (2) layers of six (6) mil polyethylene sheeting secured with tape. As the disposal containers are filled, the Contractor shall promptly seal the containers, apply caution labels and clean the containers before transportation to the equipment decontamination area. Bags shall be securely sealed to prevent accidental opening and leakage by taping in gooseneck fashion. Small components and asbestos-containing waste with sharp-edged components (e.g. nails, screws, metal lath, tin sheeting) which could tear polyethylene bags and sheeting shall be placed in clean drums and sealed with locking ring tops. All waste containers shall be leak-tight, (typically consisting of two layers of 6 mil poly (or bags)), and shall be properly labeled and placarded with OSHA Danger labels, DOT shipping labels, markings and placards and USEPA NESHAP generators labels. Containers shall be decontaminated by wet cleaning and HEPA vacuuming within the equipment decontamination area prior to

exiting the regulated area. Wet clean each container thoroughly before moving to Holding Area.

H. If at any time during asbestos removal, the Project Monitor should suspect contamination of areas outside the Regulated Area, the Contractor shall immediately stop all abatement work and take steps to decontaminate these areas and eliminate causes of such contamination. Unprotected individuals shall be prohibited from entering contaminated areas until air sampling and/or visual inspections determine decontamination.

I. After completion of abatement work, all surfaces from which asbestos has been removed shall be wet brushed, using a nylon brush, wet wiped and sponged or cleaned by an equivalent method to remove all visible material (wire brushes are not permitted). During this work the surfaces being cleaned shall be kept wet. Cleaning shall also include the use of HEPA filtered vacuum equipment.

3.10 CLEAN-UP PROCEDURES

A. The Contractor shall also remove and containerize all visible accumulations of asbestos-containing and/or asbestos-contaminated debris which may have splattered or collected on the polyethylene engineering controls/barriers.

B. The Contractor shall clean surfaces of contaminated containers and equipment thoroughly by vacuuming with HEPA filtered equipment and wet sponging or wiping before moving such items into the Equipment Decontamination Enclosure System for final cleaning and removal to uncontaminated areas.

C. The Contractor shall remove contamination from the exteriors of the air filtration devices, scaffolding, ladders, extension cords, hoses and other equipment inside the Regulated Area. Cleaning may be accomplished by brushing, HEPA vacuuming and/or wet cleaning. The Contractor shall wet wipe the Regulated Area beginning at the point farthest away from the negative air filtration units using cotton rags or lint free paper towels. Rags and towels shall be disposed of after each use. Workers should avoid the use of dirty rags to insure proper cleaning of surfaces. Mop the entire floor with a clean mop head and amended water. Water shall be changed frequently. For those Regulated Areas where lead is also disturbed, the cleaning shall also include a wet washing with a high phosphate detergent solution and HEPA vacuuming. Waste water shall be filtered using best available technology into leak-proof containers prior to being transported to a sanitary sewer for discharge.

D. Once the Regulated Area surfaces have dried, the Project Monitor shall perform a thorough post abatement visual inspection utilizing protocols from the ASTM Standard E1368-90 *Standard Practice for Visual Inspection of Asbestos Abatement Projects*. All surfaces within the Regulated Area, including but not limited to ledges, beams, and hidden locations shall be inspected for visible residue. Evidence of asbestos contamination identified during this inspection will necessitate further cleaning as heretofore specified. The area shall be re-cleaned at the Contractor's expense, until the standard of cleaning is achieved.

E. Once the area has received a satisfactory post-abatement visual inspection, any equipment, tools or materials not required for completion of the work, shall be removed by the Contractor from the Regulated Area. Negative air filtration devices shall remain in place and operating for the remainder of the clean-up operation.

F. Following the post-abatement visual, the Contractor shall apply a lock-down encapsulant to all surfaces within the Regulated Area from which asbestos has been removed and the cleaned inner layer of polyethylene.

3.11 AIR MONITORING REQUIREMENTS

A. The Contractor shall:

1. Provide air monitoring equipment including sample filter cassettes of the type and quantity required to properly monitor operations and personnel exposure surveillance throughout the duration of the project.

2. Conduct personnel exposure assessment air sampling, as necessary, to assure that workers are using appropriate respiratory protection in accordance with OSHA Standard 1926.1101. Documentation of air sampling results must be recorded at the work site within twenty-four (24) hours and shall be available for review until the job is complete.

B. The Project Monitor, acting as the representative of the Engineer during abatement activities, will:

1. Collect air samples in accordance with the current revision of the NIOSH 7400 Method of Air Sampling for Airborne Asbestos Fibers while overseeing the activities of the Abatement Contractor. Frequency and duration of the air sampling during abatement will be representative of the actual conditions at the abatement site. The size and configuration of the asbestos project will be a factor in the number of samples required to monitor the abatement activities and shall be determined by the Project Monitor. The following schedule of samples may be collected by the Project Monitor:

a. Pre-Abatement (Optional)
   i. Background areas
   ii. Area(s) adjacent to Work Area(s)
   iii. Work Area(s)

b. During Abatement (Optional)
   i. At the exhaust of air filtering device
   ii. Within Regulated Area(s)
   iii. Area(s) adjacent to Regulated Areas(s) (exterior to critical barriers)
   iv. At the Decontamination Enclosure System

c. Post-Abatement (re-occupancy air clearance testing) (**REQUIRED)**

i. Interior Regulated NPE Area - At least five (5) per homogenous area

Abatement Activity	Pre-Abatement	During Abatement	Post-Abatement
Greater than 160 SF/260 LF – Interior	PCM	PCM	TEM
Greater than 3 LF/3 SF and Less than 160 SF/260 LF – Interior	PCM	PCM	PCM
Spot Removal and Glovebag Procedures (<3 LF/3 SF)	---	PCM	---
Exterior Friable/Non-Friable	---	PCM	---

C. If air samples collected outside of the Regulated Area during abatement activities indicate airborne fiber concentrations greater than original background levels, or greater than 0.1 f/cc, as determined by Phase Contrast Microscopy, whichever is larger, an examination of the Regulated Area perimeter shall be conducted and the integrity of barriers shall be restored. Cleanup of surfaces outside the Regulated Area using HEPA vacuum equipment or wet cleaning techniques shall be done prior to resuming abatement activities.

3.12 POST-ABATEMENT RE-OCCUPANCY PROCEDURES

A. For interior NPE Regulated Areas, clearance air sampling will be performed by the Project Monitor as specified in the Air Sampling Schedule. Clearance sampling will be undertaken using aggressive sampling techniques. Sampling and analysis of clearance samples will follow State of Connecticut Regulations, Section 19a-332a-12. Areas which do not comply shall continue to be cleaned by and at the Contractors expense, until the specified Standard of Cleaning is achieved as evidenced by results of air testing. When the Regulated Area passes the re-occupancy clearance, controls established by these Specifications may be removed.

1. Air sampling will not begin until after the area has received an acceptable post abatement visual inspection, encapsulation has been completed, and no visible water, liquid encapsulant or condensation remain in the Regulated Area.

2. Sampling equipment will be placed at random throughout the Regulated Area.

3. The following aggressive air sampling procedures will be used within the Regulated Area during all air clearance monitoring:

   a. Before starting the sampling pumps, direct the exhaust from forced air equipment (such as a 1 horsepower leaf blower) against all walls, ceilings, floors, ledges and other surfaces in the Regulated Area.
   b. Pre-calibrate the sampling pump flow rates through the use of a rotameter calibrated to a primary standard.
   c. Start the sampling pumps and sample for the required time.
   d. Post-calibrate the sampling pump flow rates.

4. Air volumes taken for clearance sampling shall be sufficient to accurately determine (to a 95 percent probability) fiber concentrations to 0.010 f/cc of air (1,200 liters).

5. Analysis shall follow the requirements of CTDPH 19a-332a-12.

6. Each homogeneous Regulated Area which does not meet the clearance criteria shall be thoroughly recleaned using HEPA vacuuming and/or wet cleaning, with the negative pressure ventilation system in operation. New samples shall be collected in the Regulated Area as described above. The process shall be repeated until the Regulated Area passes the test, with the cost of repeat sampling being borne entirely by the Contractor.

7. For an asbestos abatement project with more than one homogeneous Regulated Area, the release criterion shall be applied independently to each Regulated Area.

8. These clearance sampling procedures may also be implemented for exterior NPE work areas at the discretion of the Engineer.

3.13 POST ABATEMENT WORK AREA DEREGULATION

A. The Contractor shall remove all remaining polyethylene, including critical barriers, and Decontamination Enclosure Systems leaving negative air filtration devices in operation. HEPA vacuum and/or wet wipe any visible residue which is uncovered during this process. All waste generated during this disassembly process shall be discarded as ACM waste.

B. A final visual inspection of the work area shall be conducted by the Competent Person and the Project Monitor to ensure that all visible accumulations of suspect materials have been removed and that no equipment or materials associated with the abatement project remain.

C. The Contractor shall restore all work areas and auxiliary areas utilized during work to conditions equal to or better than original. Any damage caused during the performance of the work activity shall be repaired by the Contractor at no additional expense to the Engineer.

3.14 WASTE DISPOSAL

A. Unless otherwise specified, all removed materials and debris resulting from execution of this project shall become the responsibility of the Contractor and removed from the premises. Materials not scheduled for reuse shall be removed from the site and disposed of in accordance with all applicable Federal, State and Local requirements.

B. Waste removal dumpsters and cargo areas of transport vehicles shall be lined with a layer of six (6) mil polyethylene sheeting to prevent contamination from leaking or spilled containers. Floor sheeting shall be installed first, and shall be extended up sidewalls 12-inches. Wall sheeting shall overlap floor sheeting 24-inches and shall be taped into place.

C. OSHA "Danger" signs must be attached to vehicles used to transport asbestos-containing waste prior to loading ACM waste. The signs must be posted so that they are plainly visible.

D. Waste haulers and disposal facilities utilized shall match those indicated on the submitted CTDPH notification.

E. Ensure all waste containers (bags, drums, etc.) are properly packed, sealed and labeled with USEPA NESHAP generator labels, OSHA danger labels and DOT shipping labels. For each shipment of ACM waste, the Contractor shall complete an EPA-approved asbestos waste shipment record.

F. Authorized representatives signing waste shipment records on behalf of the generator must have USDOT Shipper Certification training in accordance with HMR 49 CFR Parts 171-180.

G. Transport vehicles hauling ACM waste shall have appropriate USDOT placards visible on all four (4) sides of the vehicle.

H. The Contractor shall dispose of asbestos-containing and/or asbestos contaminated material at an EPA authorized site and must be in compliance with the requirements of the Special Waste Provisions of the Office of Solid Waste Management, Department of Environmental Protection, State of Connecticut, or other designated agency having jurisdiction over solid waste disposal.

I. Any asbestos-containing and/or asbestos-contaminated waste materials which also contain other hazardous contaminants shall be disposed of in accordance with the EPA's Resource Conservation and Recovery Act (RCRA), CTDEEP and ConnDOT requirements. Materials may be required to be stored on-site and tested by the Project Monitor to determine proper waste disposal requirements.

END OF SECTION 02 82 13

SECTION 028313 – LEAD PAINT ACTIVITY

PART 1: GENERAL

1.1 SCOPE

A. Work under this item shall include the special handling measures and work practices required for renovation and demolition (construction) activities impacting various materials containing or covered by lead paint, including the loading, transportation and final off-site disposal of non-hazardous and/or hazardous lead construction and demolition waste, the recycling of metallic components covered with lead paint, and the subsequent cleaning of the affected environment. Lead paint includes paint found to contain **any** detectable amount of lead by Atomic Absorption Spectrophotometry (AAS) or X-Ray Fluorescence (XRF).

B. All activities shall be performed in accordance with, but not limited to, the current revision of the OSHA Lead in Construction Regulations (29 CFR 1926.62), the USEPA RCRA Hazardous Waste Regulations (40 CFR Parts 260 through 274), the CTDEEP Hazardous Waste Regulations (22a-209-1 and 22a-449(c)) and the USDOT Hazardous Materials Regulations (49 CFR Parts 171 through 180).

C. All activities shall be performed by individuals with appropriate levels of OSHA lead awareness and hazard communication training and shall supervised by the Contractors Competent Person on the job site at all times. The Contractors Competent Person is one who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.

D. Hazardous lead debris shall be transported from the Project by a licensed hazardous waste transporter and disposed of at an EPA permitted hazardous waste facility within 90 days from the date of generation.

E. Deviations from these Specifications require the written approval of the Engineer/Owner.

1.2 DESCRIPTION OF WORK

A. All work impacting the lead painted materials identified below shall be conducted within an established Regulated Area with a remote wash facility/decontamination system and the OSHA Lead in Construction Standard. In accordance with 29 CFR 1926.62, engineering controls and work practices shall be utilized to prevent the spread of lead dust and debris beyond the Regulated Area and limit the generation of airborne lead. All wastes containing lead paint shall be properly contained and secured for storage, transportation and disposal.

B. Data for random lead testing conducted on surfaces throughout the buildings as well as any waste characterization results are available from the Engineer for informational purposes only. Under no circumstances shall this information be the sole means used by the Contractor for determining the extent of lead painted materials. The Contractor shall

be responsible for verification of all field conditions affecting performance of the work as described in these Specifications in accordance with OSHA, USEPA, USDOT and CTDEEP standards. Compliance with the applicable requirements is solely the responsibility of the Contractor.

C. The Contractor shall conduct exposure assessments for all tasks which impact lead paint in accordance with OSHA 29 CFR 1926.62(d) and shall implement appropriate personal protective equipment until negative exposure assessments are developed.

D. The following details the extent of each phase of operation designated for this project. Phase areas may be combined or divided at the direction of the Engineer/Construction Manager. Proceed through the sequencing of the work phases under the direction of the Engineer/Construction Manager.

Non-metallic Components to Be Impacted-OSHA-CTDEEP-EPA

Elevated levels of lead paint (>1.0 mg/cm^2) have been identified on non-metallic components such as the wood soffit on both the 1959 & 1962 wings of the building and a wood cabinet in the 1959 wing. Additionally, lower levels of lead paint (<1.0 mg/cm^2) have been identified on various non-metallic components including wood cabinets/shelving, CMU walls and the concrete slab. All work impacting these materials shall be conducted within an established lead control (regulated) area with a remote handwash facility/decontamination system in accordance with OSHA Lead in Construction Standards. In accordance with OSHA 29 CFR 1926.62, engineering controls and work practices shall be utilized to prevent the spread of lead dust and debris beyond the Regulated Area and limit the generation of airborne lead. All wastes containing lead paint shall be properly contained and secured for storage, transportation and disposal.

The Engineer conducted TCLP testing utilizing mass balance calculations on a representative sample of the non-metal/non-masonry waste materials (including the wood soffit/cabinet with elevated levels of lead) to determine if the waste stream of all non-metal/non-masonry demolition debris could be disposed of as hazardous or non-hazardous construction waste. TCLP results indicate the non-metal/non-masonry demolition waste stream is characterized as non-hazardous for lead content and may be disposed of as non-hazardous construction and demolition (C&D) bulky waste at an approved CTDEEP Solid Waste landfill.

The Engineer also conducted TCLP testing utilizing mass balance calculations on a representative sample of the exterior waste stream that includes the portion (above window systems only) of the wood soffit being removed of and disposed with CTDEEP regulated PCB waste (entire metal/glass window systems) in accordance with Specification 028433. TCLP results indicate the waste stream of the metal/glass window system combined with the associated wood soffit is characterized as non-hazardous for lead content and may be disposed of as CTDEEP regulated PCB waste only as Specification 028433 dictates.

No TCLP sample for Lead was warranted on the projected interior painted masonry and concrete waste building material demolition debris at McCartin School as XRF readings on painted masonry/concrete components were all below 1.0 mg/cm^2 and therefore the debris is presumed as non-hazardous for lead content per CTDEEP/USEPA clarification memo of January 26, 2004 and may be disposed of as non-hazardous construction and demolition (C&D) bulky waste at an approved CTDEEP Solid Waste landfill.

Metal Components to Be Impacted - OSHA

Lead paint has been identified on various metal interior and exterior components throughout the facility including structural beams/columns, window/door components, radiator enclosures, cabinets, stairs, trusses, bathroom stalls, vent hoods, and railings. All work impacting these materials shall be conducted within an established lead control (regulated) area with a remote handwash facility/decontamination system in accordance with OSHA Lead in Construction Standards. In accordance with OSHA 29 CFR 1926.62, engineering controls and work practices shall be utilized to prevent the spread of lead dust and debris beyond the Regulated area and limit the generation of airborne lead. All steel and metal waste generated from the work shall be segregated and recycled as scrap metal at an approved scrap metal recycling facility. The recycling of scrap metal (regardless of LBP concentration) is exempt from USEPA RCRA and CTDEEP Hazardous Waste Regulation.

Surface Preparations - OSHA

Surface preparation techniques such as sanding, sandblasting, scraping, etc. which are utilized on surfaces coated with lead paint must be conducted in accordance with the OSHA worker protection and USEPA RCRA/CTDEEP waste disposal standards. All work impacting those materials shall be conducted within an established lead control (regulated) area with a remote handwash facility/decontamination system in accordance with OSHA Lead in Construction Standards. In accordance with OSHA 29 CFR 1926.62, engineering controls and work practices shall be utilized to prevent the spread of lead dust and debris beyond the Regulated Area and limit the generation of airborne lead. All wastes containing lead paint shall be properly contained and secured for storage, transportation and disposal.

E. **Segregate all steel and metal components generated from the demolition of the building, regardless of lead content, for recycling as scrap metal. Recycling of lead painted metal is exempt from regulation by the USEPA and CTDEEP as hazardous waste.**

NOTES:

- **Refer to TRC's *Pre-Demolition Investigative Survey for Hazardous Building Materials* dated April 2023 for additional information.**

1.3 SUBMITTALS AND NOTICES

A. Prior to the start of **any** work that will generate hazardous lead waste above conditionally exempt small quantities (greater than 100 kg/month or greater than 1000 kg at any time), the Contractor shall obtain from the Engineer/CTDEEP a temporary EPA Hazardous Waste Generators ID, unless otherwise directed by the Engineer.

B. Prior to the generation of any hazardous waste, provide a copy of the USEPA permit for disposal of hazardous lead bearing waste for each proposed hazardous waste treatment storage disposal facility. Also provide a copy of each proposed hazardous waste transporters current USDOT Certificate of Registration and current Hazardous Waste Transporter permits for the State of Connecticut, the hazardous waste destination state and any other applicable states.

C. Fifteen (15) working days prior to beginning work that impacts lead paint, the Contractor shall submit the following to the Engineer:

1. Work plan for work impacting lead paint including engineering controls, methods of containment of debris and work practices to be employed, as needed, to minimize employee exposure and prevent the spread of lead contamination outside the Regulated Area.

2. For projects when the intent is to mitigate lead hazards and provide lead-safe conditions for building occupants, a valid CTDPH Lead Abatement Contractor License.

3. Copies of all employee certificates, dated within the previous twelve (12) months, relating to OSHA lead awareness and hazard communication training and training in the use of lead-safe work practices. SSPC, HUD LSWP and USEPA RRP training programs may be deemed acceptable as meeting these requirements if it can be demonstrated that such training addressed all required OSHA topics.

4. Name and qualifications of Contractor's OSHA Competent Person under 29 CFR 1926.62.

5. Documentation from the Contractor, typed on company letterhead and signed by the Contractor, certifying that all employees listed therein have received the following:

a. medical monitoring within the previous twelve (12) months, as required in 29 CFR 1926.62;
b. biological monitoring within the previous six (6) months, as required in 29 CFR 1926.62;
c. respirator fit testing within the previous twelve (12) months, as required in 29 CFR 1910.134 (for those who don a tight-fitting face piece respirator)

6. Name of proposed waste recycling facility for lead-painted asphalt, brick, stone, and concrete that meets CT Remediation Standard Regulations (RSR) GA/Residential Criteria. If these materials do not meet GA/Residential Criteria, they will be disposed of as a non-hazardous construction and demolition (C&D) waste.

7. Names of the proposed non-hazardous construction and demolition (C&D) lead debris bulky waste disposal facility (CTDEEP-permitted Solid Waste landfill)

8. Names of the proposed scrap metal recycling facilities. The Contractor shall submit to the Engineer all documentation necessary to demonstrate the selected facility is able to accept lead-painted scrap metal.

9. Negative exposure assessments conducted within the previous 12 months documenting that employee exposure to lead for each task is below the OSHA Action Level of 30 $\mu g/m^3$. If a negative exposure assessment has not been conducted, the Contractor shall submit its air monitoring program for the work tasks.

D. No activity shall commence until all required submittals have been received and found acceptable to the Engineer/Owner. Those employees added to the Contractor's original list will be allowed to perform work only upon submittal of acceptable documentation to, and review by, the Engineer/Owner.

E. Provide the Engineer/Owner, within thirty (30) days of completion of the project site work, a compliance package; which shall include, but not be limited to, the following:

1. Competent persons (supervisor) job log;
2. OSHA-compliant personnel air sampling data and exposure assessments;
3. Completed waste shipment papers for non-hazardous lead construction and demolition (C&D) bulky waste disposal and scrap metal recycling
4. Completed certified hazardous waste manifests for hazardous lead debris. (if applicable)

1.4 MEASUREMENT AND PAYMENT

The Contractor’s cost proposal shall be based on the following criteria:

Measurement for payment shall be based on a lump sum price for the lead hazard control construction activities. Measurement of payment shall be based on a per ton price for transport and disposal of hazardous and non-hazardous lead waste.

No extra payment shall be made for the construction and removal of containments, any required barrier installation and removal, decontamination, dust control, site preparation, site restoration or waste disposal areas. The cost for these items shall be included in the base bid.

PART 2: PRODUCTS

2.1 MATERIALS

A. All materials shall be delivered to the job site in the original packages, containers, or bundles bearing the name of the manufacturer, the brand name and product technical description, with MSDS sheets as applicable.

B. No damaged or deteriorating materials shall be used. If material becomes contaminated with lead, the material shall be decontaminated or disposed of as lead-containing waste material. The cost to decontaminate and dispose of this material shall be at the expense of the Contractor.

C. Fire retardant polyethylene sheet shall be in roll size to minimize the frequency of joints, with factory label indicating six (6) mil thickness.

D. Polyethylene disposable bags shall be six (6) mils thick.

E. Tape (or equivalent) capable of sealing joints in adjacent polyethylene sheets and for the attachment of polyethylene sheets to finished or unfinished surfaces must be capable of adhering under both dry and wet conditions.

F. Cleaning agents and detergent shall be lead specific, such as TriSodium Phosphate (TSP).

G. Any chemical strippers and chemical neutralizers to be utilized shall be compatible with the substrate as well as with each other. Such chemical strippers shall contain less than 50% volatile organic compounds (VOCs) in accordance with RCSA 22a-174-40 Table 40-1.

H. Labels and warning signs shall conform to OSHA 29 CFR 1926.62, USEPA 40 CFR 745, USEPA 40 CFR 260 through 274 and USDOT 49 CFR 172 as appropriate.

I. Any planking, bracing, shoring, barricades and/or temporary sheet piling, necessary to appropriately perform work activities shall conform to all applicable federal, state and local regulations.

J. Air filtration devices and vacuum units shall be equipped with HEPA filters.

2.2 TOOLS AND EQUIPMENT

A. The Contractor shall provide tools and equipment that are suitable for lead paint related activity:

1. Air monitoring equipment of the type and quantity required to monitor operations and conduct personnel exposure surveillance in accordance with OSHA requirements.

2. Electrical equipment, protective devices and power cables shall conform to all applicable codes.

3. Where lead exposures are above the OSHA Action Level or PEL, the Contractor shall provide wash facilities/shower stalls and plumbing that include sufficient hose length and drain system or an acceptable alternate. One shower stall shall be provided for each eight workers.

4. Where lead exposures are above the OSHA PEL, the Contractor shall provide exhaust air filtration units that are equipped with HEPA filters to provide local exhaust ventilation at the work area to reduce airborne lead emissions.

5. The Contractor shall provide vacuum units of suitable size and capabilities for the project which have HEPA filters capable of trapping and retaining at least 99.97 percent of all monodispersed particles of three micrometers in diameter or larger. HEPA vacuums shall also be equipped with a beater bar.

6. The Contractor shall provide ladders and/or scaffolds of adequate length, strength and sufficient quantity to support the work schedule. Scaffolds shall be equipped with safety rails and kick boards in compliance with OSHA requirements.

7. Protective clothing, respirators, and HEPA P100 filter cartridges shall be provided in sufficient quantities for the project.

8. Equipment suitable for building renovation/demolition and proper waste/debris collection/packing/removal, (e.g. excavators, grapples, backhoes, roll-offs, etc.) shall be provided by the Contractor as required.

PART 3: EXECUTION

3.1 GENERAL REQUIREMENTS

A. All employees of the Contractor who perform work impacting lead paint shall be properly trained to perform such duties. In addition, the Contractor shall instruct all workers in all aspects of personnel protection, work procedures, emergency evacuation procedures and use of equipment including procedures unique to this project.

B. Contractor shall provide all labor, materials, tools, equipment, services, testing, insurance (with specific coverage for work on lead), and incidentals which are necessary or required to perform the work in accordance with applicable governmental regulations, industry standards and codes, and these Specifications.

C. Prior to beginning work, the Engineer and Contractor shall perform a visual survey of each work area and review conditions at the site.

D. As necessary, the Contractor shall:

1. Shutdown and isolate heating, cooling, and ventilating air systems to prevent contamination and particulate dispersal to the other areas of the building.

2. Shut down and lock out electrical power, including all receptacles and light fixtures, when feasible. The use or isolation of electrical power will be coordinated with all other ongoing uses of electrical power at the site.

3. Coordinate all power and fire alarm isolation with the appropriate representatives.

4. When necessary, provide temporary power and adequate lighting and ensure safe installation of electrical equipment, including ground fault protection and power cables, in compliance with applicable electrical codes and OSHA requirements. The Contractor is responsible for proper connection and installation of electrical wiring.

E. Ladders and/or scaffolds to be utilized throughout this project shall be in compliance with OSHA requirements, and of adequate length, strength and sufficient quantity to support the scope of work. Use of ladders/scaffolds shall be in conformance with OSHA 29 CFR 1926 Subpart L and X requirements.

F. Work performed at heights exceeding six feet (6') shall be performed in accordance with the OSHA Fall Protection Standard 29 CFR 1926 Subpart M including the use of fall arrest systems as applicable.

G. If adequate electrical supply is not available at the site, the Contractor shall supply temporary power. Such temporary power shall be sufficient to provide adequate lighting and power the Contractor's equipment. The Contractor is responsible for proper connection and installation of electrical wiring and shall ensure safe installation of electrical equipment in compliance with applicable electrical codes and OSHA requirements.

H. If water service is not be available at the site for Contractor's use, the Contractor shall supply sufficient water for each shift to operate the wash facility/decontamination shower units in addition to the water needed at the work area.

I. The Engineer may provide a Project Monitor to monitor compliance of the Contractor. In such cases no activity impacting lead paint shall be performed until the Project Monitor is on-site. Environmental sampling, including ambient air sampling, TCLP waste stream sampling and/or dust wipe sampling, will be conducted by the Engineer/Project Monitor as deemed necessary throughout the project. Air monitoring to comply with the Contractor's obligations under OSHA remains solely the responsibility of the Contractor.

J. If air samples collected outside of the Regulated Area during activities impacting lead paint indicate airborne lead concentrations greater than original background levels or 30 ug/m^3, whichever is larger, or if at any time visible emissions of lead paint extend out from the Regulated Area, an examination of the Regulated Area shall be conducted and the cause of such emissions corrected. Cleanup of surfaces outside the Regulated Area using HEPA vacuum equipment or wet cleaning techniques shall be done prior to resuming work.

K. Work outside the initial designated area(s) will not be paid for by the Engineer. The Contractor will be responsible for all costs incurred from these activities including repair of any damage.

3.2 ESTABLISHMENT OF REGULATED WORK AREAS

A. The Contractor shall establish a Regulated Area, through the use of appropriate barrier tape, or other means to control unauthorized access into the area when activities impacting lead paint are occurring.

B. Warning signs meeting the requirements of OSHA 29 CFR 1926.62 shall be posted at all approaches to Regulated Areas. These signs shall read:

WARNING
LEAD WORK AREA
POISON
NO SMOKING OR EATING

C. The Contractor shall implement appropriate engineering controls such as critical barriers, poly drop cloths, negative pressure, local exhaust ventilation, wet dust suppression methods, etc. as necessary, and as approved by the Engineer, to prevent the spread of lead contamination beyond the Regulated Area in accordance with the Contractor's approved work plan. Should the previously submitted work plan prove to be insufficient to contain the contamination, the Contractor shall modify its plan and submit it for review by the Engineer.

D. For exterior work areas, the Contractor shall use a High Efficiency Particulate Air (HEPA) filtered vacuum dust collection system to remove any visible existing paint chips from the ground to a distance of 20' out from the base of the exterior surface scheduled for lead paint activity prior to commencement of work and extend a 6 mil polyethylene sheet drop cloth on the ground adjacent to the exterior surface scheduled for lead paint activity to contain debris/contamination.

3.3 WASH FACILITIES

A. The Contractor shall provide handwash facilities in compliance with 29 CFR 1926.51(f) and 29 CFR 1926.62 regardless of airborne lead exposure.

B. If employee exposure to airborne lead exceeds the OSHA Permissible Exposure Limit (PEL) of 50 micrograms per cubic meter of air ($\mu g/m^3$), shower rooms must be provided. The Shower Room shall be of sufficient capacity to accommodate the number of workers. One shower stall shall be provided for each eight (8) workers. Showers shall be equipped with hot and cold or warm running water. Shower water shall be collected and filtered using best available technology and disposed of in accordance with all federal, state and local laws, regulations and ordinances.

3.4 PERSONNEL PROTECTION

A. Exposure Assessments: The Contractor shall initially determine if any employee performing construction tasks impacting lead paint may be exposed to lead at or above

the OSHA Action Level of 30 micrograms per cubic meter (30 µg/m^3). Assessments shall be based on initial air monitoring results as well as other relevant information. The Contractor may rely on historical air monitoring data obtained within the past 12 months under workplace conditions closely resembling the process, type of material, control methods, work practices and environmental conditions used and prevailing in the Contractors current operations to satisfy the exposure assessment requirements. Monitoring shall continue as specified in the OSHA standard until a negative exposure assessment is developed.

B. Until a negative exposure assessment is developed for each task impacting lead paint, the Contractor shall ensure that all workers and authorized person entering the Regulated Area wear protective clothing and respirators in accordance with OSHA 29 CFR 1926.62. Protective clothing shall include impervious coveralls with elastic wrists and ankles, head covering, gloves and foot coverings. Sufficient quantities shall be provided to last throughout the duration of the project.

C. Protective clothing provided by the Contractor and used during chemical removal operations shall be impervious to caustic materials. Gloves provided by the Contractor and used during chemical removal shall be of neoprene composition with glove extenders.

D. Respiratory protective equipment shall be provided and selection shall conform to 42 CFR Part 84, 29 CFR Part 1910.134, and 29 CFR Part 1926.62. A formal respiratory protection program must be implemented in accordance with 29 CFR Part 1926.62 and 29 CFR Part 1910.134.

3.5 AIR MONITORING REQUIREMENTS

A. The Contractor shall:

1. Provide air monitoring equipment including sample filter cassettes of the type and quantity required to properly monitor operations and personnel exposure surveillance throughout the duration of the project.

2. Conduct initial exposure monitoring to determine if any employee performing construction tasks impacting lead paint may be exposed to lead at or above the OSHA Action Level of 30 micrograms per cubic meter. Monitoring shall continue as specified in the OSHA standard until a negative exposure assessment is developed.

3. Conduct personnel exposure assessment air sampling, as necessary, to assure that workers are using appropriate respiratory protection in accordance with OSHA Standard 1926.62. Documentation of air sampling results must be recorded at the work site within twenty-four (24) hours and shall be available for review until the job is complete.

3.6 LEAD PAINT ACTIVITY PROCEDURES

A. The Contractor's Competent Person shall be at the job at all times during work impacting lead.

B. Work impacting lead paint shall not begin abatement work until authorized by the Engineer, following a pre-abatement visual inspection by the Project Monitor.

C. Any activity impacting lead painted surfaces shall be performed in a manner which minimizes the spread of lead dust contamination and generation of airborne lead.

D. The Contractor shall ensure proper entry and exit procedures for workers and authorized persons who enter and leave the Regulated Area. All workers and authorized persons shall leave the Regulated Area and proceed directly to the wash or shower facilities where they will HEPA vacuum gross debris from work suit, remove and dispose of work suit, wash and dry face and hands, and vacuum clothes. Do not remove lead chips or dust by blowing or shaking of clothing. Wash water shall be collected, filtered, and disposed of in accordance with federal, state and local water discharge standards. Any permit required for such discharge shall be the responsibility of the Contractor.

E. No one shall eat, drink, smoke, chew gum or tobacco, or apply cosmetics while in the Regulated Area.

F. Utilize appropriate engineering controls and work practices (e.g. wet methods) as directed by 29 CFR 1926.62 (and 40 CFR 745.85 as applicable) to control lead emissions and contamination.

G. Properly contain wastes containing lead paint for appropriate storage, transport and disposal.

H. Stop all work in the regulated area and take steps to decontaminate non-work areas and eliminate causes of such contamination should lead contamination be discovered in areas outside of the regulated area.

I. Special Requirements:

1. Demolition/Renovation:

    a. Demolish/renovate in a manner which minimizes the spread of lead contamination and generation of lead dust.

    b. Implement dust suppression controls, such as misters, local exhausts ventilation, etc. to minimize the generation of airborne lead dust.

    c. Segregate work areas from non-work areas through the use or barrier tape, poly criticals, etc.

    d. Clean up immediately after renovation/demolition has been completed

2. Chemical Removal:

a. Apply chemical stripper in quantities and for durations specified by manufacturer.

b. Where necessary scrape lead paint from surface down to required level of removal (i.e. stabilized surface, bare substrate with no trace of residual pigment, etc.). Use sanding, hand scraping, and dental picks to supplement chemical methods as necessary.

c. Apply neutralizer compatible with substrate and chemical agent to substrate following removal in accordance with manufacturer's instructions.

d. Protect adjacent surfaces from damage from chemical removal.

e. Maintain a portable eyewash station in the work area.

f. Wear respirators that will protect workers from chemical vapors.

g. Do not apply caustic agents to aluminum surfaces.

3. Paint Stabilization/Liquid Encapsulation:

a. Remove surface dust, dirt, mildew, scale, rust or other debris by scrubbing with detergent (lead-specific detergent solution) and rinsing. Remove loose paint using wet scraping methods until a sound surface is achieved. Remove unsound substrate not firmly adhered and repair with an appropriate patching material.

b. Remove and reinstall or protect electrical receptacles, hardware, and wall mounted objects from being painted-over by encapsulant. Protect adjacent finishes from paint splatter or other damage.

c. Apply encapsulant in a continuous coat. Number of coats is as specified in the manufacturer’s instructions for application. Encapsulant shall be approved by the CTDPH for use. Use encapsulants only on substrates and locations approved for use in the manufacturers instructions.

d. Prior to application of encapsulants, perform the tape, X-cut tape and patch tests in accordance with the CTDPH guidance document information on Applying Liquid Encapsulants to Interior Surfaces for Property Owners and Lead Professionals to determine if the surface is suitable for encapsulation.

4. Mechanical Paint Removal:

a. Provide sanders, grinders, rotary wire brushes, or needle gun removers equipped with a HEPA filtered vacuum dust collection system. Cowling on the dust collection system for orbital-type tools must be capable of maintaining a continuous tight seal with the surface being abated. Cowling on the dust collection system for reciprocating-type tools shall promote an effective vacuum

flow of loosened dust and debris. Inflexible cowlings may be used on flat surfaces only. Flexible contoured cowlings are required for curved or irregular surfaces.

b. Provide HEPA vacuums that are high performance designed to provide maximum static lift and maximum vacuum system flow at the actual operating vacuum condition with the shroud in use. The HEPA vacuum shall be equipped with a pivoting vacuum head.

c. Remove lead paint from surface down to required level of removal (i.e. stabilized surface, bare substrate with no trace of residual pigment, etc.). Use chemical methods, hand scraping, and dental picks to supplement abrasive removal methods as necessary.

d. Protect adjacent surfaces from damage from abrasive removal techniques.

e. "Sandblasting" type removal techniques should be performed within full containment negative pressure enclosures.

5. Component Removal/Replacement:

a. Wet down components which are to be removed to reduce the amount of dust generated during the removal process.

b. Remove components utilizing hand tools, and follow appropriate safety procedures during removal. Remove the building components by approved methods which will provide the least disturbance to the substrate material. Do not damage adjacent surfaces.

c. Clean up immediately after component removals have been completed. Remove any dust located behind the component removed.

3.7 PROHIBITED REMOVAL METHODS

A. The use of heat guns in excess of 700 degrees Fahrenheit to remove lead paint is prohibited.

B. The use of sand, steel grit, water, air, CO_2, baking soda, or any other blasting media to remove lead or lead paint without the use of a HEPA ventilated contained negative pressure enclosure is prohibited.

C. Power tool assisted grinding, sanding, cutting, needle gun, power planning or wire brushing of lead paint without the use of cowled HEPA vacuum dust collection systems is prohibited.

D. Lead paint burning, busting of rivets painted with lead paint, welding of materials painted with lead paint, and torch cutting of materials painted with lead paint is prohibited.

Where cutting, welding, busting, or torch cutting of materials is required, pre-remove the lead paint in the area affected.

E. Use of chemical strippers containing Methylene Chloride is prohibited.

F. Compressed air shall not be utilized to remove lead paint.

G. Power/Pressure washing shall not be used to remove paint.

3.8 CLEAN-UP AND VISUAL INSPECTION/VERIFICATION

A. The Contractor shall remove and containerize all lead waste material and visible accumulations of debris, paint chips and associated items.

B. During clean up the Contractor shall utilize rags and sponges wetted with lead-specific detergent and water as well as HEPA filtered vacuum equipment.

C. The Engineer will conduct a visual inspection of the work areas in order to document that all surfaces have been maintained as free as practicable of accumulations of lead in accordance with OSHA 29 CFR 1926.62(h). If visible accumulations of waste, debris, lead paint chips or dust are found in the work area, the Contractor shall repeat the cleaning, at the Contractor's expense, until the area is in compliance. The visual inspection will detect incomplete work, damage caused by the abatement activity, and inadequate clean up of the work site.

D. Dust wipe clearance testing, in accordance with CTDPH/USEPA/HUD protocols, will also be performed by the Engineer if so detailed in Section 1.2 Description of Work. If lead dust wipe levels are above CTDPH/EPA/HUD clearance criteria, the Contractor shall re-clean the work area and retesting shall be conducted at the Contractors expense. The testing and cleaning sequence shall be repeated until the clearance criteria levels have been achieved.

3.9 POST ABATEMENT WORK AREA DEREGULATION

A. Following the visual inspection, (and clearance/verification testing if appropriate/specified), any engineering controls and warning signs implemented may be removed.

B. A final visual inspection of the work area shall be conducted by the Competent Person and the Project Monitor to ensure that all visible accumulations of suspect materials have been removed and that no equipment or materials associated with the abatement project remain. If this final visual is acceptable, the Contractor shall reopen the Regulated Area and remove all signage.

C. The Contractor shall restore all work areas and auxiliary areas utilized during work to conditions equal to or better than original. Any damage caused during the performance

of the work activity shall be repaired by the Contractor at no additional expense to the Engineer/Owner.

3.10 NON-HAZARDOUS WASTE DISPOSAL/RECYCLING

A. Non-metallic building debris waste materials tested and found to be non-hazardous Construction and Demolition (C&D) bulky waste shall be disposed of properly at a CTDEEP approved Solid Waste landfill.

B. Metallic debris shall be segregated and recycled as scrap metal at an approved metal recycling facility. The Contractor shall submit to the Engineer all documentation necessary to demonstrate the selected recycling facility is able to accept lead-painted scrap metal.

C. Concrete, brick, stone, cured asphalt, etc. coated with any amount of lead paint cannot be crushed, recycled or buried on-site to minimize waste disposal unless representatively tested and found to meet the CTDEEP RSR GA/Residential Standards. Only CTDEEP defined “clean fill” can be recycled on-site or sent to a recycling facility.

3.11 HAZARDOUS LEAD WASTE DISPOSAL

A. If required to dispose of any hazardous waste, the Contractor shall utilize a certified/permitted transporter for hazardous waste in compliance with DOT 49 CFR Part 172 and USEPA 40 CFR 260-274 and a permitted hazardous waste treatment storage disposal facility (TSDF) in compliance with USEPA 40 CFR 260-274.

B. Hazardous lead bearing material must be offered for transportation and transported in compliance with the Code of Federal Regulations, Title 49, Chapter 1, Part 173, Subparts A, B, C, and D and Paragraph 178.118. Transport vehicles (hopper or dump type) must be free from leaks and discharge openings must be securely closed during transportation. All storage containers (roll offs or drums) shall have a protective liner and removable lid. These containers shall not have any indentations or damage that would allow seepage of the contained material.

C. The disposal of hazardous lead bearing material must be in compliance with the requirements of, and authorized by, the Office of Solid Waste Management, Department of Environmental Protection, State of Connecticut, and the USEPA.

D. The disposal of hazardous lead bearing waste shall comply with the requirements of the Resource Conservation and Recovery Act (RCRA).

E. Unless previous waste characterizations have been completed by the Engineer, all generated waste shall be containerized and stored on-site for hazardous waste determination via TCLP testing. TCLP testing and analysis shall be the responsibility of the Engineer.

G. The dumpsters/containers containing hazardous waste are to be kept closed and covered and locked when not in active use for the loading of materials.

H. All containers of hazardous lead bearing material shall be labeled in accordance with 29 CFR 1926.62 and EPA 40 CFR 260-270.

I. All hazardous lead-bearing waste removed from the site by the Contractor shall be containerized in lined roll-offs or barrels. Store waste materials in U.S. Department of Transportation (49 CFR 178) approved containers. Properly label and placard each container to identify the type of waste (49 CFR 172) and the date the container was filled. The disposal containers shall be labeled with a six inch square, yellow, weatherproof, hazardous waste sticker in accordance with U.S. DOT regulations, by the Contractor.

J. The Contractor may not store containerized hazardous lead waste on the job site for in excess of 90 calendar days from the accumulation start date.

K. When required to dispose of hazardous waste, the Contractor shall utilize a certified/permitted transporter for hazardous waste in compliance with USDOT 49 CFR Part 172 and USEPA 40 CFR 260-274 and a permitted hazardous waste treatment storage disposal facility (TSDF) in compliance with USEPA 40 CFR 260-274.

L. The Contractor shall complete a Uniform Hazardous Waste Manifest, EPA Form 8700-22, and submit to the Engineer for review and generator sign-off prior to each load of hazardous waste scheduled to leave the site. Completed copies of the manifest shall be delivered by the Contractor to the Engineer within 30 calendar days following the date the load leaves the site.

M. When all necessary procedures have been completed, then the hazardous waste shall be shipped to the hazardous waste disposal facility.

N. Any spillage of debris during disposal operation, i.e., loading, transport and unloading, shall be cleaned up in accordance with the Code of Federal Regulations, Title 40, Chapter 1, Part 265, Subparts C and D, at the Contractor’s expense.

O. The Contractor is liable for any fines, costs or remediation costs incurred as a result of the failure to be in compliance with this special provision and all federal, state and local laws.

P. Final payment requisitions for the contract will not be processed until a signed copy of the manifest from the treatment or disposal facility certifying the amount of lead-containing materials delivered is returned and a copy is furnished to the Engineer.

END OF SECTION 02 83 13

SECTION 028433 – REMOVAL AND DISPOSAL OF POLYCHLORINATED BIPHENYLS

PART 1 GENERAL

1.1 APPLICABLE PUBLICATIONS

General provisions of Contract, including General and Supplementary Conditions and Division-1 Specification sections, apply to this work.

EPA PCB Regulations 40 CFR Part 761

CTDEEP PCB Statutes 22a-463 through 469

1.2 DESCRIPTION

Work under this item shall include the abatement of: non-federally/state regulated PCB-containing caulk and the removal of abutting building materials (e.g. metal door and window components as identified in the Contract Plans) that are coated with PCB-containing caulk ("PCB Waste").

The work shall be performed by persons who are knowledgeable, qualified, trained and licensed in the removal, treatment, handling, and disposal of PCB contaminated wastes and the subsequent cleaning of the affected environment. In addition, where areas to be abated contain materials with PCBs and asbestos or lead the workers shall also have all the required asbestos/lead licensing/training as required in Specification Sections 028213 & 028313.

1.2.1 REQUIREMENTS

FEDERALLY REGULATED PCB-CONTAINING MATERIALS

Federally regulated PCB-containing materials such as caulks and glazings (classified as PCB Bulk Product Waste) are defined as any building material manufactured with total PCB concentrations ≥50 mg/kg by weight.

***NO* federally regulated PCB-containing materials were identified at McCartin School.**

NON-FEDERALLY / STATE REGULATED PCB-CONTAINING MATERIALS

Non-federally/state regulated PCB-containing materials such as caulks and glazings are defined as any building material manufactured with total PCB concentrations >1 mg/kg and < 50 mg/kg. All non-federally regulated materials shall be removed from the site and disposed of per these Specifications by the Contractor.

Interior - Addition (1962 wing of school)

The building material found to be >1 mg/kg and <50 mg/kg PCBs inside the 1962 wing of the school was:

- **Tan brittle caulking (C2*) between vertical CMU joints and CMU wall/tectum roof deck joint (in contact with CMU & tectum decking)**

NOTES:

- **Refer to the hand-marked PCB drawing PCB1 in TRC's *Pre-Demolition Investigative Survey for Hazardous Building Materials* dated April 2023 for material locations listed above.**
- **The Engineer previously determined that *NO* adjacent porous substrate removal is required.**
- ***NO* verification samples are required of the porous substrates (tectum & CMU) abutting state regulated caulk. However, caulking must be removed from the CMU & tectum entirely and pass a visual inspection by the Project Monitor.**
- ***Caulk type C2 also contains asbestos. The Contractor shall handle this as required in Specification Section 028213 in addition to 028433.**

Exterior - Original Construction (1959 wing of school)

The building materials found to be >1 mg/kg and <50 mg/kg PCBs on the exterior of the the 1959 wing of the school were:

- **White sticky soffit caulking (C4) above all large window systems where window frame meets soffit (in contact with metal window & wood soffit**)**
- **Light grey window frame caulk (WC3) on large window systems and around framing of large window systems (in contact with brick, metal framing & metal sill)**

NOTES:

- **Refer to the hand-marked PCB drawing PCB1 in TRC's *Pre-Demolition Investigative Survey for Hazardous Building Materials* dated April 2023 for material locations listed above.**
- **The Engineer previously determined that *NO* adjacent porous substrate removal is required.**
- ***NO* verification samples are required of the porous substrates (brick) abutting state regulated caulk. However, caulking must be removed from the brick entirely and pass a visual inspection by the Project Monitor.**
- **The entire window system and the associated wood soffit section (directly above the window system only) shall be removed and disposed of as State Regulated CTDEEP PCB containing waste.**
- ****The wood soffit contains elevated levels of lead paint (>1 mg/cm^2), therefore, handling of this material will also coincide with requirements as outlined in Specification 028313.**

Exterior - Addition (1962 wing of school)

The building materials found to be >1 mg/kg and <50 mg/kg PCBs on the exterior of the 1962 wing of the school were:

- **Tan brittle caulking (DC1*) around door frames and louvre vent (in contact with metal door frame & brick)**
- **Dark grey window frame caulk (WC5) on large window systems and around framing of large window systems (in contact with brick, metal framing & metal sill)**
- **White sticky soffit caulking (C4) above all large window systems where window**

frame meets soffit (in contact with metal window & wood soffit)**

- **Dark grey brittle caulking (WSC2*) under metal windowsills (in contact with metal sill & brick).**

NOTES:

- **Refer to the hand-marked PCB drawing PCB1 in TRC's *Pre-Demolition Investigative Survey for Hazardous Building Materials* dated April 2023 for material locations listed above.**
- **The Engineer previously determined that *NO* adjacent porous substrate removal is required.**
- ***NO* verification samples are required of the porous substrates (brick) abutting state regulated caulk. However, caulking must be removed from the brick entirely and pass a visual inspection by the Project Monitor.**
- **The entire window system and the associated wood soffit section (directly above the window system only) shall be removed and disposed of as State Regulated CTDEEP PCB containing waste.**
- ****The wood soffit contains elevated levels of lead paint (>1 mg/cm^2), therefore, handling and disposal of this material will also coincide with requirements as outlined in Specification 028313.**
- ***Caulk types DC1 & WSC2 also contain asbestos. The Contractor shall handle DC1 & WSC2 as required in Specification Section 028213 in addition to 028433.**
- **Any non-porous components (metal) abutting caulk type DC1 will be removed and disposed of as ACM/CTDEEP regulated PCB waste or the caulk will be removed to visual standards consistent with NACE Standard No.2, Near-White Blast Cleaned Surface Finish, for unrestricted use, in accordance with 40 CFR 761.79.**

Building materials in contact with the federally regulated OR non-federally/state regulated materials shall be appropriately cleaned by the Contractor as per these Specifications. The Owner shall hire an independent PCB Engineer for the duration of the PCB abatement work. The PCB Engineer shall provide a Project Monitor to oversee the activities of the Contractor. The Project Monitor will be responsible for performing final visuals within the work area once removal has been completed. The work area shall be considered cleaned when no visible caulking/glazing/dust residue remains.

These Specifications govern all work activities that disturb PCB-containing caulk or glazing and associated building material. All activities shall be performed in accordance with, but not limited to, OSHA Regulation 29 CFR 1926, EPA PCB Regulation 40 CFR Part 761 and RCSA 22a-463 through -469 inclusive, where applicable.

This Specification will be utilizing the *PCB Bulk Product Waste Reinterpretation Memorandum* issued October 24, 2012 to designate building material (i.e. substrate) "coated or serviced" with PCB Bulk Product Waste at the time of designation for disposal to be managed as a PCB Bulk Product Waste. Therefore, PCB Remediation Waste (>1 mg/kg) generated during this abatement (metal) will be disposed of as PCB Bulk Product Waste (>50 mg/kg) as these building materials are still "coated or serviced" with the PCB Bulk Product Waste.

Abatement work shall include the removal, transportation, and disposal of all PCB Wastes as identified on the Contract Documents and Specifications prior to any phased or planned renovation/demolition work involving the subject PCB areas.

Deviations from these Specifications require written approval from the Owner.

1.3 DEFINITIONS

1.3.1 Contaminant Zones

Contaminant zones are those areas of active abatement and the waste storage area.

1.3.2 Abatement

The removal of PCB contaminated caulks/glazes and associated building materials in the manner specified in this section.

1.3.3 Federally-Regulated PCB Bulk Product Wastes

Federally-regulated PCB Bulk Product Waste, as defined in §761.3, means waste derived from manufactured products containing PCBs in a non-liquid state, at any concentration where the concentration at the time of designation for disposal is ≥50 ppm PCBs.

1.3.4 Non-federally or State Regulated PCB Waste

Non-federally or state regulated PCB waste means waste derived from manufactured products containing PCBs in a non-liquid state, at any concentration where the concentration at the time of designation for disposal is >1 mg/kg and < 50 mg/kg PCBs.

1.3.5 PCB Waste

PCB waste means PCB-containing caulk and glazing (Federally-regulated and non-federally or state regulated PCBs) and impacted abutting building materials (>1 mg/kg) to the subject caulk or glazing.

1.3.6 Remedial Action Level

Concentration to which PCB contaminated building materials must be removed to verify completion of the abatement work.

1.3.7 PCB Contaminated Building Materials

Consists of those caulks or glazings identified as PCB Bulk Product Wastes and/or non-federally regulated materials. Also may include the building materials in which the caulks or glazing are in contact with; which includes, but not limited to, window frames/sills, window glass, door frames, brick, concrete, mortar, metal and stone.

1.3.8 Suitable Waste Storage Container

A container in which PCB wastes are placed for storage prior to transport offsite for disposal that is water tight, lined, and equipped with a cover that prevents the infiltration of rainwater into the container.

1.3.9 Verification and Reoccupancy Sampling

Sampling performed by the Project Monitor to determine the completion of abatement activities as per this specification.

1.3.10 Waste Storage Area

The secured location in which the Contractor shall store PCB wastes prior to offsite transport for disposal. The Contractor shall consult with the Owner and the PCB Engineer to identify the location of Waste Storage Areas prior to generating any wastes. Security and signage are the responsibilities of the Contractor.

1.3.11 PCB Engineer

Responsible for overseeing PCB abatement work and for performing and evaluating verification and reoccupancy sample data on behalf of the Owner. The PCB Engineer shall be represented daily onsite by the Project Monitor.

1.3.12 Project Monitor

The onsite representative for the PCB Engineer responsible for overseeing daily work activities. The Project Monitor shall approve all containments prior to performance of abatement work; perform sampling during and after abatement activities, and verify that abatement has been successfully performed and allow containments to be removed for reoccupancy.

1.3.13 M_L (Large PCB Mark)

Mark M_L, shown in §761.45, has letters and striping on a white or yellow background and shall be sufficiently durable to equal or exceed the life (including storage for disposal) of the PCB Article, PCB Equipment, or PCB Container. The size of the mark shall be at least 15.25 cm (6 inches) on each side. If the PCB Article or PCB Equipment is too small to accommodate this size, the mark may be reduced in size proportionately down to a minimum of 5 cm (2 inches) on each side.

1.4 SUBMITTALS

Prior to the performance of the work described in this section the Contractor shall submit to the Owner and Construction Administrator the following on the schedule indicated:

1.4.1 The following must be provided to the Owner, Construction Administrator, and the PCB Engineer within seven (7) days after execution of the Contract.

As related to the PCB abatement work, site-specific Health and Safety Plan including the Emergency Response Plan and provisions for decontamination and a contingency plan for unforeseen emergencies. The PCB Engineer shall review such plan only to determine if the plan meets basic regulatory requirements and the minimum requirements of these Specifications. The review will not determine the adequacy of the plan to address all potential hazards, as that remains the sole responsibility of the Contractor.

A Contractor Site PCB Work Plan describing removal methods, work areas/containments and air monitoring that will be employed during abatement activities. This work plan should also

include information on how and where wastes will be stored and disposed of, and on how field equipment will be decontaminated.

Current certification of employee's OSHA health and safety training (HAZWOPER).

Certification of additional required health and safety training for Supervisors.

Qualifications and experience of the Site Safety Officer (SSO).

1.4.2 Prior to any worker accessing the site to perform the work described in this section, the Contractor shall provide documentation, typed on company letterhead and signed by the Contractor, certifying that all employees assigned to the PCB abatement work listed therein have received the following:

Medical monitoring within the previous twelve (12) months, as required in 29 CFR 1910.120 & 1910.134;

Respirator fit testing within the previous twelve (12) months as detailed in 29 CFR 1910.134 (for all employees who must also don a tight-fitting face piece respirator).

1.4.3 At least seven (7) days prior to performing any abatement work that shall generate PCB wastes, the Contractor shall submit copies of the EPA/State-approved permits for the proposed Chemical Waste landfill and a waste profile approved by the proposed landfill indicating that the waste materials to be generated are acceptable to the facility.

1.4.4 Seven (7) days prior to the start of abatement work, material information for any proposed encapsulant indicating that these materials conform to the specifications contained within, if applicable shall be submitted.

1.4.5 No abatement shall commence until a copy of all required submittals have been received and found acceptable to the Owner and the PCB Engineer. Those employees added to the Contractor's original list will be allowed to perform work only upon submittal, and receipt of, all the above required paperwork to the Owner and PCB Engineer.

1.4.6 Copies of all permits, licenses, certifications, including but not limited to, manifests and/or bill of lading for the removal, transport, and disposal of PCB waste material shall be submitted to the Owner and PCB Engineer no later than seven (7) business days after the Contractor receives such documents.

1.4.7 Notice shall be provided to the Owner and the PCB Engineer at least seven (7) business days prior to the start of work under this Specification. Such notice shall include an estimated completion date. If this work is phased over the duration of the project, then such notification requirements shall apply to each phase.

1.5 REGULATORY REQUIREMENTS

1.5.1 All abatement and decontamination wastes are to be handled and stored in accordance with the provision of 40 CFR Part 761 Subpart D. The Contractor shall be responsible for all costs associated with investigation and remediation of any releases due to their failure to handle abatement wastes in accordance with the regulatory requirements.

1.6 DELIVERY AND STORAGE

1.6.1 The Contractor shall deliver and store materials in a manner to prevent contamination, segregation, freezing, and other damage.

1.7 PROTECTION

1.7.1 Structures and Surfaces

The Contractor shall protect adjacent structures and surfaces from traffic or any other damage. The Contractor shall repair and reestablish damaged building materials that are to remain in place prior to acceptance of the work.

PART 2 PRODUCTS

2.1 All materials shall be delivered to the job site in the original packages, containers, or bundles bearing the name of the manufacturer, the brand name and product technical description.

2.2 No damaged or deteriorating materials shall be used. If material becomes contaminated with PCBs, the material shall be disposed of as PCB waste material. The cost to dispose of this material shall be at the expense of the Contractor.

2.3 Fire retardant polyethylene sheet shall be in roll size to minimize the frequency of joints, with factory label indicating six (6) mil thickness.

2.4 Tape (or equivalent) capable of sealing joints in adjacent polyethylene sheets and for the attachment of polyethylene sheets to finished or unfinished surfaces must be capable of adhering under both dry and wet conditions.

2.5 Containers for storage, transportation and disposal of PCB-containing waste material shall be impermeable and both air and watertight.

2.6 Labels and warning signs shall conform to OSHA 29 CFR 1926, USEPA 40 CFR Part 761, CTDEEP 22a-463 through 469, and USDOT 49 CFR Part 172 as appropriate.

2.7 Any planking, bracing, shoring, barricades and/or temporary sheet piling, necessary to appropriately perform work activities shall conform to all applicable federal, state and local regulations.

2.8 Air filtration devices and vacuum units shall be equipped with HEPA filters.

PART 3 EXECUTION

3.1 General Requirements for PCB Containing Building Material Abatement.

All labor, materials, tools, equipment, services, testing, insurance, and incidentals which are necessary or required to perform the work in accordance with applicable governmental regulations, industry standards and codes, and these Specifications shall be provided by the Contractor. The Contractor shall be prepared to work all shifts and weekends throughout the course of this work.

Prior to beginning work per these Specifications, the PCB Engineer and Contractor shall perform a visual survey of each work area and review conditions at the site for safety reasons.

In addition, the Contractor shall instruct all workers in all aspects of personnel protection, work procedures, emergency evacuation procedures and use of equipment including procedures unique to this work.

3.2 Prior to the performance of any abatement work, the Contractor shall perform the following tasks.

Shutdown and isolate heating, cooling, and ventilating air systems to prevent contamination to the other areas of the buildings, if applicable.

Shut down and lock out electrical power, including all receptacles and light fixtures, when feasible. The use or isolation of electrical power will be coordinated with all other ongoing uses of electrical power at the site.

Coordinate all power and fire alarm isolation with the appropriate representatives.

When necessary, provide temporary power and adequate lighting and ensure safe installation of electrical equipment, including ground fault protection and power cables, in compliance with applicable electrical codes and OSHA requirements. The Contractor is responsible for proper connection and installation of electrical wiring.

3.3 If sufficient electrical service is unavailable, the Contractor may need to supply electrical power to the site by fuel operated generator(s). Electrical power supply shall be sufficient for all equipment required for this work in operation throughout the duration of the work.

3.4 Negative pressure must be maintained in each active interior work area, until the area achieves satisfactory verification and reoccupancy criteria and is approved by the Project Monitor to be deregulated.

3.5 Water service may not be available at the site. Contractor shall supply sufficient water for each shift to operate the decontamination units as well as to maintain the work areas adequately wet.

3.6 Ladders and/or scaffolds shall be in compliance with OSHA requirements, and of adequate length, strength and sufficient quantity to support the scope of work. Use of ladders/scaffolds shall be in conformance with OSHA 29 CFR 1926 Subpart L and X requirements.

3.7 Work performed at heights exceeding six feet (6') shall be performed in accordance with the OSHA Fall Protection Standard 29 CFR 1926 Subpart M including the use of fall arrest systems as applicable.

3.8 Data provided regarding PCB sampling conducted throughout the structure(s) is for informational purposes only. Under no circumstances shall this information be the sole means used by the Contractor for determining the presence and location of all PCB Waste. The Contractor shall verify all field conditions affecting performance of the work as described in these Specifications in accordance with applicable OSHA, USEPA, USDOT, and CTDEEP standards. Compliance with the applicable requirements is solely the responsibility of the Contractor.

3.9 The PCB Engineer will provide a Project Monitor to oversee the activities of the Contractor. No PCB abatement work shall be performed until the Project Monitor is on-site.

3.10 All interior and exterior abatement areas are to be established in largely the same manner.

The abatement Contractor shall establish a Control Area around each area where removal actions are being performed. Only properly trained personnel associated with the removal or abatement will be allowed within the Control Areas that will be established by placing barriers with signs indicating that access to the area is restricted. The Contractor's site supervisor will maintain the Control Areas and escort unauthorized personnel from the area promptly. Only those personnel actively working on the removal or abatement, will be allowed within the Regulated/Containment Area and they shall be equipped with appropriate Personal Protective Equipment (PPE).

The Contractor shall pre-clean the work areas using HEPA filtered equipment (vacuum) and/or wet methods as appropriate, collecting and properly containing all dust and debris identified as PCB Waste. Vacuum units, of suitable size and capabilities for the project, shall have HEPA filters capable of trapping and retaining at least 99.97 percent of all monodispersed particles of three micrometers in diameter or larger. Do not use methods that raise dust, such as dry sweeping or vacuuming with equipment not equipped with HEPA filters.

After pre-cleaning, movable objects shall be removed from the work areas with the utmost care to prevent damage of any kind and relocated to a temporary storage location coordinated with the PCB Engineer. The Contractor is responsible for protecting all fixed objects that are permanent fixtures or are too large to remove and remain inside the Regulated Area. Fixed objects shall be enclosed with one layer of six (6) mil polyethylene sheeting sealed with tape.

The Contractor shall establish remote to the Regulated Area but within the Control Area, a Worker Decontamination Enclosure System consisting of Equipment Room, Shower Room and Clean Room in series.

The Shower Room shall be of sufficient capacity to accommodate the number of workers. One shower stall shall be provided for each eight (8) workers. Showers shall be equipped with hot and cold or warm running water through the use of electric hot water heaters supplied by the Contractor. No worker or other person shall leave a Regulated Area without showering. Shower water shall be collected.

The Contractor shall ensure that no personnel or equipment be permitted to leave the Control Area until proper decontamination procedures (including HEPA vacuuming, wet wiping and showering) to remove all PCB debris have occurred. No PCB-contaminated materials or persons shall enter the Clean Room.

The Contractor shall seal off all windows, doorways, skylights, ducts, grilles, diffusers, vents, light fixtures, electrical receptacles, suspended ceiling tile systems and any other openings between the Regulated Area and the uncontaminated areas outside of the Regulated Area, including the outside of the building, with critical barriers consisting of a minimum of one (1) layer of six (6) mil polyethylene sheeting securing the edges with tape. Doorways and corridors which will not be used for passage during work and separate the regulated areas from occupied areas must be sealed with fixed critical barriers constructed of 2" x 4" wood or metal framing 16" O.C., with ½" plywood on the occupied side and two layers of six (6) mil polyethylene sheeting on the Regulated Area side to prevent unauthorized access or air flow.

For exterior work areas where federally regulated and/or state regulated PCB caulk, glazing or paint are being removed and uncontaminated building substrates are remaining, a

Regulated Area will be established and ground surfaces will be covered with 2 layers of 6 mil polyethylene sheeting to capture/collect any debris generated, and secured to prevent movement. The sheeting will extend a minimum of ten feet beyond the building area to be remediated and will be adhered to the building to prevent it from moving during the course of abatement. Barrier tape will be used to delineate this as the regulated area.

For exterior work areas where federally regulated and/or state regulated PCB caulk, glazing or paint AND contaminated building substrates are being removed, a Containment Enclosure shall be constructed by the Contractor via covering of floor and wall surfaces with polyethylene sheeting sealed with tape. Polyethylene shall be applied alternately to floors and walls. Cover floors first, with a layer of six (6) mil polyethylene sheeting, so that polyethylene extends at least twelve (12) inches up on wall. Cover walls with a layer of six (6) mil polyethylene sheeting to twelve (12) inches beyond the wall/floor intersection, thus overlapping the floor material by a minimum of twenty-four (24) inches. Repeat the process for the second layer of polyethylene. There shall be no seams at wall-to-floor joints. Contiguous to the containment, construct a single chamber airlock from six (6) mil polyethylene sheeting for entry/exit purposes into the regulated area. Where no walls exist (such as exterior work spaces) or a room is to be divided in half, the polyethelyne sheeting itself shall comprise the containment structure and shall be supported with materials which will form the containment structure and which shall maintain such integrity throughout the duration of use. In lieu of a containment enclosure, the contractor may use grinding or cutting tools with local HEPA cowled ventilation as long as there are no visible emissions (must be approved by engineer). If a containment enclosure is not used, a Regulated Area will be established and ground surfaces will be covered with 2 layers of 6 mil polyethylene sheeting to capture/collect any debris generated, and secured to prevent movement. The sheeting will extend a minimum of ten feet beyond the building area to be remediated and will be adhered to the building to prevent it from moving during the course of abatement. Barrier tape will be used to delineate this as the regulated area.

If the Contractor determines to perform some of the required work from the interior side of the building a Containment Enclosure shall be constructed by the Contractor via covering of floor and wall surfaces with polyethylene sheeting sealed with tape. Polyethylene shall be applied alternately to floors and walls. Cover floors first, with a layer of six (6) mil polyethylene sheeting, so that polyethylene extends at least twelve (12) inches up on wall. Cover walls with a layer of six (6) mil polyethylene sheeting to twelve (12) inches beyond the wall/floor intersection, thus overlapping the floor material by a minimum of twenty-four (24) inches. Repeat the process for the second layer of polyethylene. There shall be no seams at wall-to-floor joints. Contiguous to the containment, construct a single chamber airlock from six (6) mil polyethylene sheeting for entry/exit purposes into the regulated area. Where no walls exist (such as exterior work spaces) or a room is to be divided in half, the polyethylene sheeting itself shall comprise the containment structure and shall be supported with materials which will form the containment structure and which shall maintain such integrity throughout the duration of use.

Conspicuously label and maintain emergency and fire exits from the Regulated Area satisfactory to fire officials.

For interior work areas, the Contractor shall create a negative pressure differential within the containment in the range of 0.02 to 0.04 inches of water column between the Regulated Area and surrounding areas by the use of acceptable negative air pressure equipment to establish a Negative Pressure Enclosure (NPE). Exhaust air filtration units shall be equipped with HEPA filters capable of providing sufficient air exhaust to create a minimum pressure

differential of 0.02 inches of water column, and to allow a sufficient flow of air through the area providing 4 air changes per hour. The Contractor shall provide a sufficient quantity of HEPA air filters to maintain the pressure differential throughout the duration of the project. An automatic warning system shall be incorporated into the equipment to indicate pressure drop or unit failure. Continuously monitor the pressure differential between the Regulated Area and surrounding area to ensure exhaust air filtration equipment maintains a minimum pressure differential of 0.02 inches of water column. The Contractor shall provide actual air flow measurement of filtration units while the unit is in place and calculate actual air exchange rates. No air movement system or air filtering equipment shall discharge unfiltered air outside the Regulated Area.

The Contractor shall post warning signs to deter unauthorized personnel from entry. Additional signs may require posting following construction of workplace enclosure barriers.

3.11 Personnel Protection

The Contractor shall utilize all appropriate engineering controls and safety and protective equipment while performing the work in accordance with applicable OSHA, USEPA, USDOT, CTDEEP, CTDPH regulations, and other Contract provisions.

The Contractor shall provide and require all workers to wear protective clothing in the Regulated Areas where PCB contamination exists or is likely to exist. At a minimum, protective clothing shall include impervious coveralls with elastic wrists and ankles, head covering, gloves and foot coverings.

Respiratory protection shall be provided and selection shall conform to the requirements of OSHA 29 CFR 1910.134 and 42 CFR Part 84. A formal respiratory protection program must be implemented in accordance with 29 CFR 1910.134.

All other necessary personnel protective equipment (i.e. hardhat, steel toe work boots, safety glasses, hearing protection, etc.) required to perform the PCB abatement work activities shall conform to all applicable federal, state and local regulations and other applicable provisions of the Contract.

All other qualified and authorized persons by the Owner and/or Contractor entering into a Regulated Area shall be required to adhere to the requirements of personnel protection as stated in this section and all other applicable provisions of the Contract. All unqualified and unauthorized persons shall be escorted outside of the Regulated Area and if due to other provisions of the Contract, escorted outside of the project site during the PCB work.

3.12 PCB Abatement Procedures

The Contractor’s Site Supervisor, as the OSHA Competent Person shall be at the site at all times during the performance of abatement work.

The Contractor shall not begin abatement work until authorized by the Project Monitor, following a pre-abatement visual inspection.

All workers and authorized persons shall enter and leave the Regulated Area through the contiguous airlock, leaving contaminated protective clothing in the airlock for disposal of as PCB contaminated waste. No one shall eat, drink, smoke, chew gum or tobacco, or apply cosmetics while in a Regulated Area.

Phasing of the work areas is to be coordinated with the Construction Manager. Phase areas may be combined or divided at the direction of the PCB Engineer/GC. Proceed through the sequencing of the work phases under the direction of the PCB Engineer/GC.

During removal, the Contractor shall spray PCB containing building materials with water using airless spray equipment capable of providing a "mist" application to reduce airborne dust. Hose length shall be sufficient to reach all of the Regulated Area. Do not “flood” the area with hose type water supply equipment with the potential to create water releases from the regulated area.

The Contractor shall employ mechanical methods such as cutting, grinding, and pneumatic hammers to remove PCB contaminated wastes in a manner which minimizes the generation of dust and spread of PCB contamination. The methods employed must not damage the integrity of the containment structure and shall not create a breach through which contaminated dust may escape. The Contractor shall be responsible for all costs associated with decontamination and remediation in the case of a containment breach.

In order to minimize PCB concentrations inside the Regulated Area, the Contractor shall remove the materials in manageable sections. In addition, PCB Waste materials removed from any elevated level shall be carefully lowered to the floor.

The Contractor shall promptly place the PCB Waste material in disposal containers (six (6) mil polyethylene bags/ poly-lined dumpsters, etc.) as it is removed. Large components removed intact may be wrapped in one (1) layer of six (6) mil polyethylene sheeting secured with tape. As the disposal containers are filled, the Contractor shall promptly seal the containers, apply caution labels and clean the containers before transportation to the airlock. Bags shall be securely sealed to prevent accidental opening and leakage by taping in gooseneck fashion. Small components and PCB Waste material with sharp-edged components (e.g. nails, screws, metal lath, tin sheeting) which could tear polyethylene bags and sheeting shall be placed in clean drums and sealed with locking ring tops. Drums may not be placed intact into final waste disposal containers intact and may be reused by the Contractor after the contents have been emptied. However, any drums use to handle wastes must be broken down and disposed of properly with other PCB wastes.

All waste containers shall be leak-tight. Containers shall be decontaminated by wet cleaning and HEPA vacuuming within the airlock prior to exiting the regulated area. Wet clean each container thoroughly before moving to a Waste Holding Area.

If at any time during PCB Waste removal, the Project Monitor should suspect contamination of areas outside the Regulated Area, the Contractor shall immediately stop all abatement work and take steps to decontaminate these areas and eliminate causes of such contamination. Unprotected individuals shall be prohibited from entering contaminated areas.

After completion of abatement work, all surfaces from which PCB Waste has been removed shall be wet brushed, using a nylon brush, wet wiped and sponged or cleaned by an equivalent method to remove all visible material. Cleaning shall also include the use of HEPA filtered vacuum equipment.

The Contractor shall also remove and containerize all visible accumulations of PCB Waste and/or PCB contaminated debris which may have splattered or collected on the polyethylene engineering controls/barriers.

The Contractor shall clean surfaces of contaminated containers and equipment thoroughly by vacuuming with HEPA filtered equipment and wet sponging or wiping before moving such items into the airlock for final cleaning and removal to uncontaminated areas.

The Contractor shall remove contamination from the exteriors of the air filtration devices, scaffolding, ladders, extension cords, hoses and other equipment inside the Regulated Area. Cleaning may be accomplished by brushing, HEPA vacuuming and/or wet cleaning. The Contractor shall wet wipe the Regulated Area beginning at the point farthest away from the negative air filtration units using cotton rags or lint free paper towels. Rags and towels shall be disposed of after each use. Workers should avoid the use of dirty rags to insure proper cleaning of surfaces. Mop the entire floor with a clean mop head and amended water. Water shall be changed frequently.

Once the Regulated Area surfaces have dried, the Project Monitor shall perform a thorough post abatement visual inspection. The Project Monitor will visually inspect the Regulated Area and the surrounding Control Area to determine that the Contractor has sufficiently decontaminated and removed any dust that might contain PCBs. All surfaces within the Regulated Area, including but not limited to ledges, beams, and hidden locations shall be inspected for visible residue. Evidence of dust contamination that would be indicative of PCB contamination identified during this inspection will necessitate further cleaning as heretofore specified. The area shall be re-cleaned at the Contractor's expense, until the standard of cleaning is achieved.

Once the area has received a satisfactory post-abatement visual inspection, any equipment, tools or materials not required for completion of the work, shall be removed by the Contractor from the Regulated Area. For interior work areas, negative air filtration devices shall remain in place and operating for the remainder of the clean-up operation.

3.13 Phased PCB Abatement Procedures

Should the potential exist for an unsafe condition to be produced by removing PCB contaminated building materials prior to removing clean materials, then the Contractor shall notify the Owner and the PCB Engineer of such concerns and mitigate potentially unsafe conditions.

Should PCB contaminated building material need to remain to prevent an unsafe situation, the PCB Engineer shall collect the required verification samples prior to the performance of any demolition in the area. The Contractor shall then physically demark the line of clean building materials as determined by the verification sampling on the structure by painting or otherwise marking the structure so that it is clearly visible.

Once the area is marked, the Contractor may remove clean building materials as described elsewhere in the Contract Document. After the clean building materials have been removed to the marked line, PCB Contaminated building materials shall be abated according to the procedures stated in section 3.12 of this specification.

3.14 Post-Abatement Verification/Reoccupancy Procedures (where applicable)

<u>Federally-Regulated PCB-Containing Materials</u>

In work areas where federally regulated PCB caulks/glazes have been removed and no associated building materials substrate impact has been identified, such that all of the associated building material substrates are to remain in place, or all associated impacted substrates are to be removed, the remedial standard to be achieved is appropriate cleaning of the substrate such no visible caulking/glazing/paint/dust residue remains. The Project Monitor shall perform the visual inspection to verify appropriate cleaning.

The remedial standard to be achieved by all verification samples of the remaining building substrate is <1 mg/kg total PCBs. Verification testing will be performed as described below. If the remedial standard is exceeded, the Contractor will be instructed to remove additional building materials as instructed by the PCB Engineer; after which additional verification sampling will be required.

The PCB Engineer shall collect verification samples as per the EPA Region 1 Standard Operating Procedure for Sampling Concrete at the frequency specified in 40 CFR 761 Subpart O. The verification samples will be analyzed for PCBs using EPA Methods 3540 and 8082. Analysis of verification samples will be expedited but the Contractor shall expect 48 to 72 hours (these hours do not include weekend and/or holiday hours) delay until analytical results are available.

Each homogeneous Regulated Area which does not meet the clearance criteria shall be thoroughly recleaned using HEPA vacuuming and/or wet cleaning, (with the negative pressure ventilation system in operation for interior containment areas). The Project Monitor will then perform a final visual to verify appropriate cleaning. The process shall be repeated until the Regulated Area passes the final visual, with the cost of repeat cleaning being borne entirely by the Contractor.

For a PCB Waste abatement project with more than one homogeneous Regulated Area, the release criterion shall be applied independently to each Regulated Area.

Non-Federally/State Regulated PCB-Containing Materials

In work areas where Non-Federally/State Regulated PCB caulks and glazing have been removed and no associated building materials substrate impact has been identified, such that all of the associated building material substrates are to remain in place or all associated impacted substrates are to be removed, the remedial standard to be achieved is appropriate cleaning of the substrate such no visible caulking/glazing/paint/dust residue remains. The Project Monitor shall perform the visual inspection to verify appropriate cleaning.

Each homogeneous Regulated Area which does not meet the clearance criteria shall be thoroughly recleaned using HEPA vacuuming and/or wet cleaning, (with the negative pressure ventilation system in operation for interior containment areas). The Project Monitor will then perform a final visual to verify appropriate cleaning. The process shall be repeated until the Regulated Area passes the final visual, with the cost of repeat cleaning being borne entirely by the Contractor.

For a PCB Waste abatement project with more than one homogeneous Regulated Area, the release criterion shall be applied independently to each Regulated Area.

3.15 Post Abatement Work Area Deregulation

The Contractor shall remove all remaining polyethylene, including critical barriers and airlocks with the negative air filtration devices in operation. HEPA vacuum and/or wet wipe any visible residue which is uncovered during this process. All waste generated during this disassembly process shall be discarded as PCB Bulk Product Waste.

A final visual inspection of the work area shall be conducted by the Contractors Site Supervisor and the Project Monitor to ensure that all visible accumulations of PCB Waste materials have been removed and that no equipment or materials associated with the abatement work remain.

The Contractor shall restore all work areas and auxiliary areas utilized during work to conditions equal to or better than original. Any damage caused during the performance of the work activity shall be repaired by the Contractor at no additional expense to the Owner.

3.16 Encapsulation Procedures (where applicable)

As applicable, the Contractor shall encapsulate building materials located in areas where renovation/demolition is not being performed as indicated (if any) on the Contract Drawings and these Specifications with an elastomeric, crack bridging, anti-carbonation, protective coating to be applied as the encapsulant.

The Contractor shall install materials in accordance with all safety and weather conditions required by manufacturer or as modified by applicable rules and regulations of local, state and federal authorities having jurisdiction. Consult Material Safety Data Sheets for complete handling recommendations.

All encapsulant materials shall be delivered in original, unopened containers with the manufacturer's name, labels, product identification, and batch numbers. Damaged material shall be removed from the site immediately. All materials shall be stored off the ground and protect from rain, freezing or excessive heat until ready for use.

The Contractor shall not apply material if it is raining or snowing or if such conditions appear to be imminent. Minimum application temperature are 45ºF (7ºC) and rising. Precautions shall be taken by the Contractor to avoid damage to any surface near the work zone due to mixing and handling of the specified material.

The encapsulant shall be Sikagard 670W Clear, as manufactured by Sika Corporation, 1682 Marion Williamsport Road, Marion, Ohio, or equivalent. The Contractor shall provide submittals for the encapsulant to be used prior to bringing the materials onsite for use.

Elastomeric Acrylic Coating shall be one hundred percent (100%) Acrylic Emulsion with the following properties:

3.16.1 Water vapor permeable

3.16.2 Can bridge dynamically moving cracks

3.16.3 Crack bridging properties maintained at low temperatures

3.16.4 The material shall be resistant to dirt pick-up and mildew

3.16.5 Pot Life: indefinite

3.16.6 Tack Free Time 6 Hours @ 73ºF, 50% Relative Humidity. Final Cure < 24 Hours

3.16.7 Carbon Dioxide Diffusion: μCO2 214,000 Carbon Dioxide Diffusion Resistance at 16 mils (400 microns)

3.16.8 SdCO2 = 299 ft. (equivalent air thickness) i.e. Approx. 9-in. of standard concrete cover.

3.16.9 Water Vapor Diffusion: μH2O 2,146 Water Vapor Diffusion Resistance at 16 mils SdH2O = 2.6 ft. (0.8m)

3.16.10 Moisture Vapor permeability (ASTM E96) 14.5 perms

3.16.11 Tensile Properties (ASTM D-412 Modified)

3.16.12 7 day-Tensile strength 190 psi (1.3 MPa) - Elongation at break 820% - 340% @ 0°F (-18°C)

3.16.13 Crack Bridging (at 16 mils = 400 microns DFT

3.16.14 Static (at –4°F/-20°C) 30 mils (0.75mm)

3.16.15 Dynamic>1000 cycles (at –4°F/-20°C) 12 mils (0.30mm)

3.16.16 Resistance to wind driven rain (TT-C-555B): No passage of water through coating

3.16.17 Weathering (ASTM G-23) 10,000 hours excellent, no chalking or cracking.

3.16.18 Solids Content: by weight – 62% by volume – 55%

3.16.19 Flame Spread and Smoke Development (ASTM E-84-94)

3.16.20 Flame Spread 5 Smoke Development 5 Class Rating A

Note: Tests above were performed with the material and curing conditions @ 71°F – 75°F and 45-55% relative humidity.

Building substrate to which the encapsulant coating is to be applied must be clean, sound, and free of surface contaminants. Remove dust, laitance, grease, oils, curing compounds, form release agents and all foreign particles by mechanical means. Substrate shall be in accordance with ICRI Guideline No. 03732 for coatings and fall within CSP1 to CSP3.

The Contractor shall stir materials to ensure uniformity using a low speed (400-600 rpm) drill and paddle. To minimize color variation, blend two batches of material. For small defects and cracks the Contractor shall apply Surface Filler by “Brush Grade” encapsulant generously over the center of the cracks. The Contractor shall feather material over a two-inch wide area and allow a minimum 24 hours to cure before overcoating. For large defects and cracks (cracks >20mils) the Contractor shall blow out the cut with oil-free compressed air and fill the crack with joint sealant conforming to specifications allowing for a small crest to remain as this will compensate for any shrinkage that might occur. The Contractor shall allow 24 hours-minimum cure before over coating with encapsulant.

For the final coating application, the Contractor shall apply by brush or roller over the entire area to be encapsulated by moving in one direction. The Contractor shall apply a minimum of two coats. Each coat should be applied at a rate not to exceed 100 sq. ft. per gallon. The total dry film thickness shall be minimum 8 - 10 dry mils per coat. Allow a minimum of 2 hours prior to re-coating. When applying the coating, never stop the application until the entire surface has been coated. Always stop application at an edge, corner, or joint.

3.17 Waste Disposal

If the Contractor chooses to store PCB Waste onsite prior to transport offsite for disposal, the Contractor shall construct a secured Waste Storage Area at a location agreed to by the Contractor and the PCB Engineer within contract limit lines. The contract limit lines are to be secured as described elsewhere in these Specifications and entry shall be limited to Contractor Personnel only. The Waste Storage Area shall enclose all Suitable Waste Storage Containers actively in use with temporary fencing. The fence shall be marked with a Large M_L mark as specified in 40 CFR Part 761 Subpart C.

Unless otherwise specified by the Owner, all removed materials and debris resulting from execution of this work shall become the responsibility of the Contractor and removed from the premises. Materials not scheduled for reuse shall be removed from the site and disposed of in accordance with all applicable Federal, State and Local requirements.

Waste removal dumpsters and cargo areas of transport vehicles shall be lined with a single layer of six (6) mil polyethylene sheeting to prevent contamination from leaking or spilled containers. Floor sheeting shall be installed first, and shall be extended up sidewalls 12-inches. Wall sheeting shall overlap floor sheeting 24-inches and shall be taped into place. A single liner may be employed as long as it entirely covers the interior of the waste container.

All containers used to transport PCB Waste for disposal must be marked with a Large M_L mark as specified in 40 CFR Part 761 Subpart C. The signs must be posted so that they are plainly visible.

Ensure all waste containers (bags, etc.) are properly packed, sealed and labeled with USEPA and USDOT shipping labels. For each shipment of PCB Waste, the Contractor shall complete a PCB waste shipment manifest.

Authorized representatives signing waste shipment records on behalf of the generator must have USDOT Shipper Certification training in accordance with HMR 49 CFR Parts 171-180.

Transport vehicles hauling PCB Waste shall have appropriate USDOT placards visible on all four (4) sides of the vehicle.

The Contractor shall dispose of federally regulated PCB Waste as performance based removal of PCB Bulk Product Waste per 40 CFR 761.62 and the *PCB Bulk Product Waste Reinterpretation Memorandum* issued October 24, 2012 at a solid waste landfill permitted under RCRA Title D or at a landfill permitted to receive such wastes (ex. RCRA hazardous landfill, facilities permitted to manage non-hazardous waste subject to 40 CFR 257.5-257.30 & a TSCA approved landfill). State regulated PCB Waste (>1 but <50 mg/kg) will be disposed of at a landfill that is permitted to receive such wastes (ex. solid waste landfill permitted under RCRA Title D, RCRA hazardous landfill & facilities permitted to manage non-hazardous waste subject to 40 CFR 257.5-257.30).

Any PCB Waste materials which also contain other hazardous contaminants shall be disposed of in accordance with the EPA's Resource Conservation and Recovery Act (RCRA), Toxic Substance Control Act (TSCA), and CTDEEP requirements. Materials may be required to be stored on-site and tested by the Project Monitor to determine proper waste disposal requirements.

3.18 Decontamination

The Contractor shall decontaminate all moveable equipment that contacts PCB Wastes in accordance with the procedures specified in §761.79(c). The Contractor shall not remove any equipment from the Contaminant Zone until it has been properly decontaminated.

Specifically, the Contractor shall employ double wash/rinse procedures as specified in 40 CFR Part 761 Subpart S or swab non-porous surfaces that have contacted PCB wastes with a solvent as specified in §761.79(c)(2)(i). The Contractor shall segregate all liquid waste streams and be responsible for characterizing these wastes for disposal purposes. Solid wastes generated during decontamination shall be stored for disposal with the other PCB wastes generated during remediation activities.

The PCB Engineer shall be responsible for ensuring that decontamination procedures are followed and that wastes are appropriately characterized and disposed of properly.

3.19 Project Closeout Data:

Provide the Owner and PCB Engineer, within 30 days after PCB Waste has been disposed of, a compliance package; which shall include, but not be limited to, the following:

3.19.1 Site Supervisor job log;
3.19.2 Completed waste shipment records and certificates of disposal.

The Contractor shall submit the original completed waste shipment records to the PCB Engineer.

3.20 Remedial Action Report

The Remedial Action Report (RAR) will be prepared upon receipt of all analytical data confirming that the removal action was complete and receipt of certifications of treatment/disposal from the treatment/disposal facility. The RAR report will be prepared by the PCB Engineer and will include the following.

3.20.1 Site description
3.20.2 A description of field procedures
3.20.3 Verification and Reoccupancy sample locations and analytical results
3.20.4 Waste characterization sample data
3.20.5 Waste transport and treatment disposal information
3.20.6 Copies of waste manifests and bills of lading

3.21 Method of Payment:

No measurement will be made for the abatement work in this Section. The completed work shall be paid as a lump sum. The lump sum bid price for PCB abatement shall include the specialty services of the PCB Removal Contractor including: labor, materials, equipment, insurance, permits, notifications, submittals, personal air sampling, personal protection equipment, temporary enclosures, utility costs, incidentals, fees and labor incidental to the removal of PCB Wastes, including close out documentation providing adequate containers for storage of PCB wastes until they are removed from the site and the transport and disposal of these materials at an appropriate facility. Payment for the removal and disposal of PCBs shall not be made until the Contractor submits manifests with the mass of waste disposed and signed by the receiving facility and the Certificates of Disposal provided by the waste

disposal facility for each manifested load to the Engineer. Once the manifest and Certificate of Disposal has been received, the Owner shall make payment to the Contractor.

Pay Item	Pay Unit
Removal and Disposal of PCBs	Lump Sum

END OF SECTION 028433

SECTION 31 2300 - EXCAVATION, BACKFILL, COMPACTION AND DEWATERING

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Excavation, backfill and compaction for subsurface utilities
2. Removal, handling and disposal of rock
3. Earth retention systems
4. Excavation, backfill and compaction for the abandonment of existing pipe and structures
5. Temporary dewatering systems

B. Related Sections:

1. Section 32 2500, Temporary Controls
2. Section 02 3000, Subsurface Investigations
3. Section 31 2323, Borrow Materials
4. Section 31 2316, Rock Excavation
5. Section 32 1216, Bituminous Concrete Pavement

1.2 REFERENCES

A. ASTM D1557-07 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft3 (2,700 kN-m/m3))

B. ASTM D1556-07 - Standard Test Method for Density and Unit Weight of Soil in Place by the Sand-Cone Method

C. ASTM D2487-06e1 - Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System)

D. ASTM D6938-08a - Standard Test Method for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth)

E. 29 CFR Part 1926 Subpart P - OSHA Excavation Regulations 1926.650 through 1926.652 including Appendices A through F

1.3 DEFINITIONS

A. Benching - A method of protecting employees from cave-ins by excavating the sides of an excavation to form one or a series of horizontal levels or steps, usually with vertical or near-vertical surfaces between levels.

B. Earth Retention Systems - Any structural system, such as sheeting and bracing or cofferdams, designed to retain in-situ soils in place and prevent the

collapse of the sides of an excavation in order to protect employees and adjacent structures.

C. Excavation - Any man-made cut, cavity, trench, or depression in an earth surface, formed by earth removal.

D. Protective System - A method of protecting employees from cave-ins, from material that could fall or roll from an excavation face or into an excavation, or from the collapse of adjacent structures. Protective systems include earth retention systems, sloping and benching systems, shield systems, and other systems that provide the necessary protection.

E. Registered Professional Engineer - A person who is registered as a professional engineer in the state where the work is to be performed. However, a professional engineer, registered in any state is deemed to be a "registered professional engineer" within the meaning of this standard when approving designs for "manufactured protective systems" or "tabulated data" to be used in interstate commerce.

F. Shield System - A structure that is designed to withstand the forces imposed on it by a cave-in and thereby protects employees within the structure. Shields can be permanent structures or can be designed to be portable and moved along as work progresses. Additionally, shields can be either pre-manufactured or job-built in accordance with 29 CFR 1926.652(c)(3) or (c)(4). Shields used in trenches are usually referred to as "trench boxes" or "trench shields."

G. Sloping - A method of protecting employees from cave-ins by excavating to form sides of an excavation that are inclined away from the excavation so as to prevent cave-ins. The angle of incline required to prevent a cave-in varies with differences in such factors as the soil type, environmental conditions of exposure, and application of surcharge loads.

H. Temporary Dewatering System – A system to lower and control water to maintain stable, undisturbed subgrades at the lowest excavation levels. Dewatering shall be provided for all pipelines, structures and for all other miscellaneous excavations.

I. Trench - A narrow excavation (in relation to its length) made below the surface of the ground, of at least three feet in depth. In general, the depth is greater than the width, but the width of a trench (measured at the bottom) is not greater than 15 feet (4.6 m).

1.4 SUBMITTALS

A. Drawings and calculations for each Earth Retention System required in the Work. The submittal shall be in sufficient detail to disclose the method of operation for each of the various stages of construction required for the completion of the Earth Retention Systems.

1. Submit calculations and drawings for Earth Retention Systems prepared, signed and stamped by a Professional Engineer registered in the state where the work is performed.

B. Performance data for the compaction equipment to be utilized.

C. Construction methods that will be utilized for the removal of rock.

D. Dewatering plan for the excavation locations.

1.5 QUALITY ASSURANCE

A. All Excavation, Trenching, and related Earth Retention Systems shall comply with the requirements of OSHA excavation safety standards (29 CFR Part 1926 Subpart P), and other State and local requirements. Where conflict between OSHA and State regulations exists, the more stringent requirements shall apply.

B. The following test procedures will be performed by the Owner's inspection agency. Results will be submitted to the Engineer for review.

1. Modified Proctor Test (ASTM D1557) results and soil classification (ASTM D2487) for all proposed backfill materials at the frequency specified below:

a. For suitable soil materials removed during excavation, perform one test for every 1,000 cubic yards of similar soil type. Similarity of soil types will be as determined by the Engineer.

b. For borrow materials; perform tests at frequency specified in Section 31 23 23 - Borrow Materials.

2. Compaction test results (i.e. ASTM D6938 or ASTM D1556) at a frequency of one test for every 100 cubic yards of material backfilled. The Engineer will determine the locations and lifts to be tested.

a. The Engineer may specify additional compaction testing when there is evidence of a change in the quality of moisture control or the effectiveness of compaction.

b. If all compaction test results within the initial 25% of the total anticipated number of tests indicate compacted field densities equal to or greater than 95% of maximum dry density at optimum moisture content, the Engineer may reduce frequency of compaction testing. In no case will the frequency be reduced to less than one test for every 500 cubic yards of material backfilled.

c. The Contractor is cautioned that compaction testing by nuclear methods may not be effective where excavation sidewalls impact the attenuation of the gamma radiation or where oversize particles (i.e. large cobbles or coarse gravels) are present. In these cases, other field density testing methods may be required.

C. Employ the services of a dewatering specialist or firm when well points, deep wells, recharge systems, or equal systems are required. Specialist shall have completed at least 5 successful dewatering projects of equal size and complexity and with equal systems.

1.6 PROJECT CONDITIONS

A. Notify Call Before You Dig (CBYD) at 1-800-922-4455 or 811 and obtain CBYD identification numbers.

B. Notify utility owners in reasonable advance of the work and request the utility owner to stake out on the ground surface the underground facilities and structures. Notify the Engineer in writing of any refusal or failure to stake out such underground utilities after reasonable notice.

C. Make explorations and Excavations to determine the location of existing underground structures, pipes, house connection services, and other underground facilities in accordance with Paragraph 3.2.D of this Section.

PART 2 - PRODUCTS

2.1 SOIL MATERIALS

A. Fill material is subject to the approval of the Engineer and may be either material removed from excavations or borrow from off site. Fill material, whether from the excavations or from borrow, shall be of such nature that after it has been placed and properly compacted, it will make a dense, stable fill.

B. Satisfactory fill materials shall include materials classified by ASTM D 2487 as GW, GP, GM, GP-GM, GW-GM, GC, GP-GC, SW, and SP.

C. Satisfactory fill materials shall not contain trash, refuse, vegetation, masses of roots, individual roots more than 18 inches long or more than 1/2 inch in diameter, or stones over 6 inches in diameter. Unless otherwise stated in the Contract Documents, organic matter shall not exceed minor quantities and shall be well distributed.

D. Satisfactory fill materials shall not contain frozen materials nor shall backfill be placed on frozen material.

E. Excavated surface and/or pavement materials such as gravel or trap rock that are salvaged may be used as a sub-grade material, if processed to the required gradation and compacted to the required degree of compaction. In no case shall salvaged materials be substituted for the required gravel base.

F. A Certificate of Clean Fill must be provided to Engineer and Owner for approval prior to delivery of any and all fill material including but not limited to, mineral soil, borrow material, structural fill, processed fill material, loam, or top soil to be placed on site during the course of the Work. The Certificate must include laboratory analytical reports for all material to be used at the site on a basis of one sample per every 500 cubic yards or lesser portions thereof. Analytical reports must demonstrate that the proposed material does not contain detectable concentrations of contaminants including but not limited to; petroleum hydrocarbons, semi volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), volatile organic compounds (VOCs), pesticides, and/or herbicides and that metals listed in the Connecticut Remediation Standard Regulations do not exceed minimal concentrations deemed allowable by Engineer and Owner. No fill material shall be placed on site until Contractor has received approval from Engineer and/or Owner. Engineer and Owner reserves the right to collect and analyze samples from

any proposed fill material prior to or after delivery to the site and to allow use of off-specification material at their sole discretion.

The Certificate must clearly state the following and be signed by an authorized signatory employed by the Contractor:

1. Volume of material to be used
2. Process by which the material was obtained
3. Location of origin and summary of current and past site uses of the location of origin
4. Statement from Contractor that the analytical reports included with the Certificate represent the specific material to be used at the site
5. Statement that the Contractor does not know or have reason to believe that the proposed fill material contains foreign materials or contaminants.

2.2 DEWATERING MATERIALS

A. Provide haybales and silt fence in accordance with Section 31 25 00.

B. Provide silt filter bags (Dandy Dewatering Bag, Dirtbag, JMP Environ-Protection Filter Bag, or equal) of adequate size to match flow rate.

PART 3 - EXECUTION

3.1 PREPARATION

A. Public Safety and Convenience

1. Take precautions for preventing injuries to persons or damage to property in or about the Work.
2. Provide safe access for the Owner's and Engineer’s representatives at site during construction.
3. Do not obstruct site drainage, natural watercourses or other provisions made for drainage.

3.2 CONSTRUCTION

A. Earth Retention Systems

1. Provide Earth Retention Systems necessary for safety of personnel and protection of the Work, adjacent work, utilities and structures.
2. Maintain Earth Retention Systems for the duration of the Work.
3. Systems shall be constructed using interlocking corner pieces at the four corners. Running sheet piles by at the corners, in lieu of fabricated corner pieces, will not be allowed.
4. Drive sheeting ahead of and below the advancing trench excavation to avoid loss of materials from below and from in front of the sheeting.

5. Sheeting is to be driven to at least the depth specified by the designer of the earth retention system, but no less than 2 feet below the bottom of the Excavation.

6. Remove sheeting, unless designated to be left in place, in a manner that will not endanger the construction or other structures. Backfill and properly compact all voids left or caused by the withdrawal of sheeting.

7. Remove earth retention systems, which have been designated by the Engineer to be left in place, to a depth of 3 feet below the established grade.

B. Excavation

1. Perform excavation to the lines and grades indicated on the Drawings. Backfill unauthorized over-excavation in accordance with the provisions of this Section, at no additional cost to the Owner.

2. Excavate with equipment selected to minimize damage to existing utilities or other facilities. Hand excavate as necessary to locate utilities or avoid damage.

3. Sawcut the existing pavement in the vicinity of the excavation prior to the start of excavation in paved areas, so as to prevent damage to the paving outside the requirements of construction.

4. During excavation, material satisfactory for backfill shall be stockpiled in an orderly manner at a distance from the sides of the excavation equal to at least one half the depth of the excavation, but in no case closer than 2 feet.

   a. Excavated material not required or not suitable for backfill shall be removed from the site.

   b. Perform grading to prevent surface water from flowing into the excavation.

   c. Pile excavated material in a manner that will endanger neither the safety of personnel in the trench nor the Work itself. Avoid obstructing sidewalks and driveways.

   d. Hydrants under pressure, valve pit covers, valve boxes, manholes, curb stop boxes, fire and police call boxes, or other utility controls shall be left unobstructed and accessible until the Work is completed.

5. Make pipe trenches as narrow as practicable and keep the sides of the trenches undisturbed until backfilling has been completed. Provide a clear distance of 12 inches on each side of the pipe.

6. The final 6 inches of excavation and grading of the trench bottom shall be performed by hand so as not to disturb the material below the grade required for setting the pipe or appurtenances.

a. Where suitable bedding materials will be placed and compacted throughout the length of the trench, hand excavation of the final 6 inches will not be required.

b. Grade the trench bottom to provide uniform bearing and support for the bottom quadrant of each section of pipe.

c. Excavate bell holes at each joint to eliminate point bearing.

d. Remove stones greater than 6 inches in any dimension from the bottom of the trench to avoid point bearing.

7. If satisfactory materials are not encountered at the design subgrade level, excavate unsatisfactory materials to the depth directed by the Engineer and properly dispose of the material. Backfill the resulting extra depth of excavation with satisfactory fill materials and compact in accordance with the provisions of this Section.

8. Where trenching and backfilling for a new pipe in place of an existing pipe along the same route, removal of the existing pipe shall be included under this item.

C. Backfill and Compaction

1. Unless otherwise specified or indicated on the Drawings, use satisfactory material removed during excavation for backfilling trenches. The Engineer may require stockpiling, drying, blending and reuse of materials from sources on the Project.

2. Spread and compact the material promptly after it has been deposited. When, in the Engineer's judgment, equipment is inadequate to spread and compact the material properly, reduce the rate of placing of the fill or employ additional equipment.

3. When excavated material is specified for backfill and there is an insufficient amount of this material at a particular location on the Project due to rejection of a portion thereof, consideration will be given to the use of excess material from one portion of the Project to make up the deficiency existing on other portions of the Project. Moving this excess material from one portion of the Project and placing it in another portion of the Project will be at no additional cost to the Owner.

a. Use borrow material if there is no excess of excavated material available at other portions of the Project.

4. Backfilling and compaction methods shall attain 95% of maximum dry density at optimum moisture content as determined in accordance with ASTM D1557.

5. Do not place stone or rock fragment larger than six inches in greatest dimension in the backfill.

6. Maximum loose lift height for backfilling existing or borrow material shall be 12 inches.

7. Do not drop large masses of backfill material into the trench endangering the pipe or adjacent utilities.

8. Install pipe in rock excavated trenches on a dense graded stone bedding with a minimum depth of 6 inches. Shape the stone bedding at the pipe bells to provide uniform support. Encase the pipe in the dense graded crushed stone bedding to a grade 6 inches over the top of the pipe and 12 inches on each side of the pipe.

9. Backfill from the bottom of the trench to the centerline of the pipe with the specified material. This initial backfill is to be placed in layers of no more than 6 inches and thoroughly tamped under and around the pipe. This initial backfilling shall be deposited in the trench for its full width on both sides of the pipe, fittings and appurtenances simultaneously.

10. Electrical conduit not encased in concrete, shall be backfilled with sand borrow conforming to the requirements of Section 02320. The backfill shall be placed in the trench for its full width and shall extend to 12 inches over the pipe.

11. Where excavation is made through permanent pavements, curbs, paved driveways or paved sidewalks, or where such structures are undercut by the excavation, place the entire backfill to sub-grade with granular materials and compact in 6 inch layers. Use approved mechanical tampers for the full depth of the trench. If required, sprinkle the backfill material with water before tamping so as to improve compaction.

12. Place and compact backfill around manholes, vaults, pumping stations, gate boxes or other structures in six inch layers, from a point 1 foot over the pipe. Exercise care to protect and prevent damage to the structures.

13. Install impervious trench dams where stone borrow is used for pipe bedding to prevent groundwater from following along the stone bedding. Install dams every 100 feet.

D. Test Pit Excavation

1. General requirements of test pits are specified in Section 02 30 00.

E. Dewatering

1. Provide, operate and maintain adequate pumping, diversion and drainage facilities in accordance with the approved dewatering plan to maintain the excavated area sufficiently dry from groundwater and/or surface runoff so as not to adversely affect construction procedures nor cause excessive disturbance of underlying natural ground. Locate dewatering system components so that they do not interfere with construction under this or other contracts.

2. Take actions necessary to ensure that dewatering discharges comply with permits applicable to the Project. Dispose of water from the trenches and excavations in such a manner as to avoid public nuisance, injury to public health or the environment, damage to public or private property, or damage to the work completed or in progress.

3. Repair any damage resulting from the failure of the dewatering operations and any damage resulting from the failure to maintain all the areas of work in a suitable dry condition, at no additional cost to the Owner.

4. Exercise care to ensure that water does not collect in the bell or collar holes to sufficient depth to wet the bell or collar of pipes waiting to be jointed.

5. Take precautions to protect new work from flooding during storms or from other causes. Control the grading in the areas surrounding all excavations so that the surface of the ground will be properly sloped to prevent water from running into the excavated area. Where required, provide temporary ditches for drainage. Upon completion of the work, all areas shall be restored to original condition.

6. Brace or otherwise protect pipelines and structures not stable against uplift during construction.

7. Do not excavate until the dewatering system is operational and the excavation may proceed without disturbance to the final subgrade.

8. Unless otherwise specified, continue dewatering uninterrupted until the structures, pipes, and appurtenances to be installed have been completed such that they will not float or be otherwise damaged by an increase in groundwater elevation.

9. If open pumping from sumps and ditches results in “boils”, loss of fines, or softening of the ground, submit a modified dewatering plan to the Engineer within 48 hours. Implement the approved modified plan and repair any damage incurred at no additional cost to the Owner.

10. Where subgrade materials are unable to meet the subgrade density requirements due to improper dewatering techniques, remove and replace the materials in accordance with Section 31 23 23 at no additional cost to the Owner.

11. Notify the Engineer immediately if any settlement or movement is detected of survey points adjacent to excavations being dewatered. If settlement is deemed by the Engineer to be related to the dewatering, submit a modified dewatering plan to the Engineer within 24 hours. Implement the approved modified plan and repair any damage incurred to the adjacent structure at no additional cost to the Owner.

12. Dewatering discharge:

    a. Install sand and gravel, or crushed stone, filters in conjunction with sumps, well points, and/or deep wells to prevent the migration of fines from the existing soil during the dewatering operation.

    b. Transport pumped or drained water without interference to other work, damage to pavement, other surfaces, or property. Pump water through a silt filter bag prior to discharge to grade of drainage system.

c. Do not discharge water into any sanitary sewer system.

d. Provide separately controllable pumping lines.

e. The Engineer reserves the right to sample discharge water at any time.

13. Install erosion/sedimentation controls for velocity dissipation at point discharges onto non-paved surfaces.

14. Removal

a. Do not remove dewatering system without written approval from the Engineer.

b. Backfill and compact sumps or ditches with screened gravel or crushed rock in accordance with Section 31 23 23.

c. Remove well points and deep wells. Backfill abandoned well holes with cement grout having a water cement ratio of 1 to 1 by volume.

END OF SECTION 02 2300

SECTION 31 2323 - BORROW MATERIALS

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Soil Materials
2. Ordinary Borrow
3. Gravel Subbase
4. Processed Aggregate Base for Bituminous Concrete Pavement
5. Sand Borrow
6. Stone Borrow

1.2 REFERENCES

A. ASTM C136 - Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates.

B. ASTM C117 - Standard Test Method for Materials Finer than 75 µm (No. 200) Sieve in Mineral Aggregates by Washing.

C. ASTM D1557 – Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lb./ft^3).

D. ASTM D2434 - Standard Test Method for Permeability of Granular Soils (Constant Head).

E. ASTM D2487 - Standard Classification of Soils for Engineering Purposes (Unified Soil Classification System).

F. ASTM D2922 - Standard Test Methods for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth).

G. ASTM D3017 – Standard Test Method for Water Content of Soil and Rock in Place by Nuclear Methods (Shallow Depth).

H. AASHTO – Standard Specification for Transportation Materials and Methods of Sampling and Testing, 1986 Edition as amended.

I. State of Connecticut Department of Transportation “Standard Specifications for Roads, Bridges, and Incidental Construction Form 818”.

1.3 SUBMITTALS

A. Representative samples of borrow materials taken from the source. Tag, label, and package the samples as requested by Owner’s Project Representative. Provide access to the borrow site for field evaluation and inspection.

B. Sieve analysis (ASTM C136) and permeability analysis (ASTM D2434) from certified soils testing laboratory for all borrow materials. A sample shall be taken and tested (at cost to Contractor) for each 1,500 c.y. of borrow material placed.

C. Modified proctor analysis (ASTM D1557) from certified soils testing laboratory for all borrow materials.

D. The Owner's Project Representative reserves the right to require more frequent testing than that which is specified above should the borrow characteristics change.

E. Prior to the start of work, submit to the Owner's Project Representative performance data for all compaction equipment to be utilized.

F. A Certificate of Clean Fill must be provided to Engineer and Owner for approval prior to delivery of any and all fill material including but not limited to, mineral soil, borrow material, structural fill, processed fill material, loam, or top soil to be placed on site during the course of the Work. The Certificate must include laboratory analytical reports for all material to be used at the site on a basis of one sample per every 500 cubic yards or lesser portions thereof. Analytical reports must demonstrate that the proposed material does not contain detectable concentrations of contaminants including but not limited to; petroleum hydrocarbons, semi volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), volatile organic compounds (VOCs), pesticides, and/or herbicides and that metals listed in the Connecticut Remediation Standard Regulations do not exceed minimal concentrations deemed allowable by Engineer and Owner. No fill material shall be placed on site until Contractor has received approval from Engineer and/or Owner. Engineer and Owner reserves the right to collect and analyze samples from any proposed fill material prior to or after delivery to the site and to allow use of off-specification material at their sole discretion.

The Certificate must clearly state the following and be signed by an authorized signatory employed by the Contractor:

1. Volume of material to be used
2. Process by which the material was obtained
3. Location of origin and summary of current and past site uses of the location of origin
4. Statement from Contractor that the analytical reports included with the Certificate represent the specific material to be used at the site
5. Statement that the Contractor does not know or have reason to believe that the proposed fill material contains foreign materials or contaminants.

1.4 QUALITY ASSURANCE

A. No borrow shall be placed prior to the approval of Engineer.

B. Use adequate numbers of skilled workmen who are trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and methods required for proper performance of the work in this Section.

C. Use equipment of adequate size, capacity, and quantity to accomplish the work of this Section in a timely manner.

D. Comply with the directions of Owner's Project Representative and the requirements of governmental agencies having jurisdiction.

1.5 PROJECT/SITE CONDITIONS

A. Existing Conditions

1. The Contractor shall be aware of any environmental requirements and restrictions, and shall comply with strict adherence to them.

2. During hauling operations, all public and private roadway surfaces shall be kept clean, and any borrow or other debris that may be brought upon the surface shall be removed promptly and thoroughly before it becomes compacted by traffic. If necessary, the wheels of all vehicles used for hauling shall be cleaned frequently and kept clean to avoid bringing any dirt upon the paved surfaces.

3. All excavation, hauling and placement of borrow material on site shall be conducted in such a manner so as to insure that no infringement of these specifications shall be violated.

PART 2 - PRODUCTS

2.1 SOIL MATERIALS

A. Fill material is subject to the approval of the Owner's Project Representative and may be either material removed from excavations or borrow from off site. Fill material, whether from the excavations or from borrow, shall be of such nature that after it has been placed and properly compacted, it will make a dense, stable fill.

B. Satisfactory materials shall include materials classified by ASTM D 2487 as GW, GP, GM, GP-GM, GW-GM, GC, GP-GC, SW, and SP.

C. Satisfactory materials shall not contain trash, refuse, vegetation, masses of roots, individual roots more than 18 inches long or more than 1/2 inch in diameter, or stones over 6 inches in diameter. Organic matter shall not exceed minor quantities and shall be well distributed.

D. Satisfactory materials shall not contain frozen materials nor shall backfill be placed on frozen material.

E. Excavated surface and/or pavement materials such as gravel or trap rock that are salvaged may be used as a sub-grade material. In no case will salvaged materials be substituted for the required gravel base.

2.2 ORDINARY BORROW

A. Ordinary borrow shall consist of a material satisfactory to Owner's Project Representative and not specified as gravel borrow, sand borrow, special borrow material or other particular kind of borrow. This material shall have the physical characteristics of soils designated as type GW, GP, GM, SW, SP or SM, under USCS. It shall have properties such that it may be readily spread and compacted for the formation of embankments. The borrow shall not include rocks with a major dimension greater than 8 inches.

2.3 GRAVEL SUBBASE

A. Gravel subbase shall consist of inert material that is hard, durable stone and coarse sand, free from loam and clay, surface coatings, and deleterious materials. The coarse aggregate shall have a percentage of wear, by the Los Angeles Abrasion Test, of not more than 50.

B. Gradation requirements shall conform to the M.02.02 of the State of Connecticut Department of Transportation "Standard Specifications for Roads, Bridges, and Incidental Construction Form 818".

2.4 PROCESSED AGGREGATE BASE FOR BITUMINOUS CONCRETE PAVEMENT

A. The compacted processed aggregate borrow to be used for pavement subbase shall consist of inert material that is hard, durable stone and coarse sand, free from loam and clay, surface coatings and deleterious materials. The coarse aggregate shall have a percentage of wear, by the Los Angeles Abrasion Test, of not more than 50.

B. Gradation requirements shall conform to the M.05.01 of the State of Connecticut Department of Transportation "Standard Specifications for Roads, Bridges, and Incidental Construction Form 818".

C. Stockpile the processed materials shall be stockpiled in such a manner to minimize segregation of particle sizes. All processed gravel shall come from approved stockpiles.

2.5 SAND BORROW

A. Sand borrow material used for this item shall be supplied from an off-site borrow area, subject to Owner's Project Representative's approval. Testing of the off-site sand borrow shall be at the Contractor's expense.

B. Sand borrow shall consist of clean, inert, hard, durable grains of quartz or other hard, durable, rock, free from loam or clay, surface coatings and deleterious materials. The allowable amount of material passing a No. 200 sieve as determined by ASTM-C117 shall not exceed 10% by weight.

C. Material shall consist of a clean, non-plastic, granular material conforming to the requirements of a SW, SP or SM under the Unified Soil Classification System (USCS) (ASTM D2487).

D. The material shall have the characteristics that when placed and compacted, the soil particles will bind together so as to form a solid, stable surface capable of supporting rubber-tired vehicular traffic during wet weather periods as well as extended dry weather periods. The borrow material shall not contain fines to the extent that the surface layer becomes "greasy" when wet.

E. The material shall not contain stones larger than 3/8 inch in diameter.

F. Material consisting of frozen clogs, ice and snow shall be rejected.

G. All sand borrow material to be used shall be subject to approval by Owner's Project Representative, and Owner's Project Representative reserves the right to reject any borrow material from the job that does not meet the above requirements.

2.6 STONE BORROW

A. Crushed Stone Borrow

1. Crushed stone borrow shall consist of one of the following materials:

a. Durable crushed rock consisting of the angular fragments obtained by breaking and crushing solid or shattered natural rock, and free from a detrimental quality of thin, flat, elongated or other objectionable pieces. A detrimental quality will be considered as any amount in excess of 15% of the total weight. Thin stones shall be considered to be such stones whose average width exceeds 4 times their average thickness. Elongated stones shall be considered to be stones whose average length exceeds 4 times their average width.

b. Durable crushed gravel stone obtained by artificial crushing of gravel boulders or fieldstone with a minimum diameter before crushing of 8 inches.

2. The crushed stone shall be reasonably free from clay, loam or deleterious material and not more than 1.0% of satisfactory material passing a No. 200 sieve will be allowed to adhere to the crushed stone.

3. The crushed stone shall have a maximum percentage of wear as determined by the Los Angeles Abrasion Test (AASHTO-T-96) as follows:

a. For Class 1 Bit. Conc. 30%**

b. For Cement Concrete Aggregate 45%***

c. Crushed Stone for Subbase 45%

** Crushed stone for this use shall consist of crushed or shattered natural rock only. Crushed gravel stone will not be permitted.

*** Except for 5000 psi or greater cement concrete and prestressed concrete which shall be 30%.

4. The crushed stone shall conform to the grading requirements shown in the following grading Table.

Sieve Size	Percent by Weight Passing Through	
	Minimum	Maximum
1½″	100	--

1¼″	85	100
¾″	10	40
½″	0	8

5. Stone gradations shall vary depending on field use and shall be determined by Owner's Project Representative.

B. ½-Inch Crushed Stone Borrow

1. The crushed stone used for pipe bedding and backfill shall be a dense graded mixture and conform to the following gradation requirements.

Sieve Size (Square Openings)	Percent by Weight Passing Through	
	Minimum	Maximum
5/8″	100	100
½″	85	100
3/8″	15	45
#4	0	15
#8	0	5

C. Washed Rounded Stone (Peastone)

1. All stone shall be clean material substantially free from any foreign and deleterious material such that not more than 1% passes the #200 sieve. The maximum particle size shall be 0.75 inches. (2cm).

2. Washed rounded stone shall conform to the following gradation requirements:

Sieve Size	Percent Passing Through by Weight	
	Minimum	Maximum
1″	100	-
¾″	90	100
½”	10	50
3/8”	0	20
No.4	0	5

2.7 EQUIPMENT

A. Use equipment capable of adequately placing, spreading and compacting materials to the depth specified.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Prior to the placement of borrow material, site preparation shall be completed as required by the Contract Documents, and approved by the Owner's Project Representative.

B. Ensure that all materials are properly stockpiled on site to prevent contamination by other materials.

C. Borrow material shall be placed over the entire area in uniform lifts and compacted to 95% of maximum dry density.

D. Stockpiled borrow shall be utilized prior to using off-site borrow.

E. Gravel borrow shall be used in all locations where a surface treatment has not been specified but requires a firm finish surface.

F. Processed gravel for pavement subbase is intended to provide a stable foundation for driveways, sidewalk and roadway repair where a gravel base has been specified.

G. Borrow shall be used as a replacement for unsuitable materials where poor soil conditions below the normal depth of the trench are encountered during the progress of the work. Extra excavation and the type of borrow, as determined by Owner's Project Representative, shall be used only in those locations where its use is ordered by Owner's Project Representative. The intent of the borrow is to provide a stable foundation for the pipe as a replacement of unsatisfactory material, not as an aid to dewatering trenches. Its use shall be limited to those areas in which Owner's Project Representative orders its use in writing.

H. Borrow used for pipe foundation material shall be shaped so that it supports the pipe properly and will not damage the pipe, bells, collars, or the pipe fittings.

I. All borrow shall be placed so as to keep it free of other materials and to prevent segregation.

END OF SECTION 31 2323

SECTION 31 2333 - TRENCHING AND BACKFILLING

PART 1 - GENERAL

1.1 SUMMARY

A. Perform trench excavation and backfill in accordance with the Contract Documents. The Work includes but is not limited to trench excavation and backfill for the following:

1. Storm drainage, sanitary sewers, water distribution and utility services demolition, abandonment, and construction

2. Provide temporary paving or surfacing such as stabilized crushed stone so that traffic may be restored as soon as possible after completion of utility Work.

B. Related Sections include the following:

1. Section 31 2500 – Sedimentation and Erosion Control

1.2 COORDINATION

A. Coordinate and schedule the work of this Section with all trades involved to prevent interference, and in order to allow adequate time at the proper stage of construction to properly perform all work of this Section.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Materials shall comply with CTDOT Form 818, “Standard Specifications for Road, Bridges, and Incidental Construction” latest revision.

B. Materials installed within Town of East Hartford Roadway Right-of-Way shall conform to the Town of East Hartford standards and requirements.

C. Materials for backfill as well as compaction requirements for utility services shall conform to the respective utility standards and specifications.

PART 3 - EXECUTION

3.1 EXCAVATION, TRENCHING AND BACKFILLING

A. Perform excavation to the depths shown or specified.

B. During excavation, pile material suitable for backfilling in an orderly manner a sufficient distance from the banks of the trench to avoid overloading and to prevent slides or cave-ins.

C. Remove all excavated materials not required or suitable for backfill from the site.

D. Grade as necessary to prevent surface water from flowing into trenches or other excavations. Remove any water accumulating therein by pumping or by other approved method.

E. Install sheeting and shoring as necessary for the protection of the Work and for the safety of personnel.

F. Unless otherwise indicated, excavation to be open cut.

G. Excavation is classified as earth excavation and includes excavation to subgrade elevations indicated, regardless of character of materials and obstructions encountered, pavements, and other obstructions visible on ground surface, underground structures, utilities and other items indicated to be demolished and removed, together with earth and other materials, excluding rock.

H. Rock, for the purposes of classification shall consist of rock material in beds, ledges, unstratified masses, conglomerate deposits and boulders of rock material that exceed 1 cubic yard that cannot be removed by rock excavating equipment without systematic drilling, ram hammering, ripping or blasting. Rock excavating equipment is defined as a late-model, track-mounted, hydraulic excavator equipped with a 42-inch wide, maximum, short-tip radius rock bucket, rated at not less than 138-hp flywheel power with bucket-curling force of not less than 28,090 lbf and stick-crowd force of not less than 18,650 lbf; measured according to SAE J-1179.

I. Backfill and surface excavations for utilities occurring in or across streets or sidewalks with temporary paving or crushed stone as soon as possible after Work is completed.

J. Maintain temporary paving or surfacing in a condition acceptable to the Owner until permanent pavement can be installed.

3.2 SIZES OF TRENCHES

A. Ensure trenches are the necessary width for the proper laying of the pipe, and ensure the banks areas nearly vertical as practicable.

B. Accurately grade the bottom of the trenches to provide uniform bearing and support for each section of the pipe on undisturbed soil at every point along its entire length.

C. Except where rock is encountered, take care not to excavate below the depths indicated or specified.

D. Where rock excavations are required, excavate the rock to a minimum overdepth of 6 inches below the trench depths indicated on the drawings or specified.

E. Backfill overdepths in the rock excavation and unauthorized overdepths with thoroughly compacted sand or gravel as specified.

F. Whenever wet or otherwise unstable soil that is incapable of properly supporting the pipe, as determined by the Owner's Geotechnical Consultant, is encountered in the bottom of the trench, remove such soil to the depth required and backfill the trench to the proper grade with coarse sand, fine gravel or other suitable material.

G. Ensure trenches for utilities are of a depth that will provide the following minimum depths of cover from existing grade or from indicated finished grade, whichever is lower, unless otherwise specifically shown:

1. 4.5’ minimum cover for water lines, sanitary sewers; gas mains and the like carrying fluids.

2. 2.5’ feet minimum cover for electrical and telephone conduit and storm sewers.

H. For bedding of piping, ensure the width of the trench at and below the top of the pipe is such that the clear space between the barrel of the pipe and the trench wall is 12 inches minimum on either side of the pipe.

I. Ensure the width of the trench above the pipe crown is as wide as necessary for sheeting and bracing and the proper performance of the Work.

J. Round the bottom of the trench so that at least the bottom quadrant of the pipe rests firmly on bedding material for as nearly as the full length of the barrel as proper joining operations will permit.

K. Ensure the part of the excavation described in subsection J above is performed manually only a few feet in advance of the pipe laying by men skilled in this type of Work.

3.3 EXISTING UTILITY LINES

A. Contact "Call Before You Dig" at 1-800-922-4455 at least 48 hours in advance of any construction to verify the location of utilities.

B. Protect existing utility lines to be retained that are shown on the drawings or the locations of which are made known to the General Contractor prior to excavation

operations from damage during excavation and backfilling. If such lines are damaged, the Contractor will repair at his expense.

3.4 BACKFILL RESTRICTIONS AND REQUIREMENTS

A. Do not backfill trenches until all required pressure and other tests have been performed and until the utilities systems as installed conform to the requirements of the drawings and specification.

B. Carefully backfill the trenches with the excavated materials approved for backfilling consisting of earth, loam, sand, sand and gravel, soft shale or other approved materials, free from large clods of earth, stones over 2-1/2 inches maximum dimension, or other undesirable material as specified in Section 31 23 23 –Borrow Material. Deposit backfill in 6 inch layers then thoroughly and carefully tamp until the pipe has a cover of not less than one (1) foot.

C. Carefully place the remainder of the backfill material in the trench in one foot layers and tamp. Settling the backfill with water is not permitted.

D. Grade the surface to a reasonable uniformity and leave the mounding over trenches in a uniform and neat condition.

E. The Engineer may reject any on-site or borrow materials which he considers unsuitable for intended backfill or fill usage.

F. Under all paved areas, compact the fill and/or backfill to 95% of the maximum density at optimum moisture when tested in accordance with ASTM Designation D1557.

G. Perform field density tests by the approved Soil Testing Laboratory at locations and elevations as directed. In general, take test samples for every 250 cubic yards of fill or backfill placed or at 100 linear foot intervals of trench backfilled.

H. Backfill trenches excavated under footings and within 18 inches of bottom of footings with compacted select backfill; fill with concrete to elevation of bottom of footings.

END OF SECTION 31 2333

SECTION 31 2500 - SOIL EROSION AND SEDIMENT CONTROL MEASURES

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Dust control
2. Drainage and erosion control
3. Haybales and siltation fence
4. Sediment trapping devices

B. Provide and maintain required erosion and sedimentation controls in accordance with the Contract Documents and as directed.

C. Conduct operations at all times in conformity with all federal, state and local permit requirements concerning water, air, or noise pollution.

D. The Contractor to be responsible for, and hold the Owner and Engineer harmless from, any penalties or fines which may be assessed by any authority due to his failure to comply with the terms of all applicable permits and approval requirements.

1.2 SUBMITTALS

A. Informational Submittals

1. Construction Sequencing Plan

B. Action Submittals

1. Product Data, Cutsheets, Material Certifications for all products proposed for use in the execution of the Work.

1.3 REQUIREMENTS AND RESTRICTIONS

A. Control and abate siltation, sedimentation, erosion and pollution of all waters, and underground water systems, throughout the life of the contract.

B. Do not refuel equipment or machinery within twenty-five (25) feet of any watercourse or storm drainage system.

C. Do not place materials resulting from construction activities in, or contribute to, the degradation of an adjacent wetland or watercourse. Dispose of any material in accordance with these Specifications and the Connecticut General Statutes, including but not limited to, Sections 22a-207 through 22a-209.

D. Submit, in writing, a construction sequencing plan to be reviewed and approved by the Engineer and Owner prior to the commencement of any construction.

E. When dewatering surface runoff is necessary, do not discharge pumps directly into any drainage system. Prior to dewatering, submit to the Owner and the Engineer, for their review, a written proposal for specific methods and devices to be used. Detail the methods and devices to be used, including but not limited to, pumping the water into a temporary sedimentation bowl, installation of sump pits, providing surge protection at the inlet and outlet of pumps, or floating the intake of the pump, or other methods to minimize and retain the suspended solids.

F. Do not dump oil, chemicals or other deleterious materials on the ground. Provide a means of catching, retaining, and properly disposing of drained oil, removed oil filters, or other deleterious material. All spills of such materials shall be reported immediately to the CTDEEP.

G. Do not apply herbicides or pesticides within twenty-five (25) feet of any watercourse or drainage inlet.

H. Inspect temporary and permanent erosion and sedimentation controls immediately after each rainfall and daily during prolonged rainfall. Maintain all erosion and sedimentation control devices in a functional condition in accordance with the Contract Documents, manufacturer's guidelines and the latest edition of the "Connecticut Guidelines for Soil Erosion and Sediment Control", as amended. In the event that such devices are not maintained in accordance with these documents, and the failures are not corrected within 48 hours after receipt of written notice, the Owner may proceed to remedy the failures specified in the notice. The cost thereof will be deducted from monies due the Contractor under the contract or under any other contract.

PART 2 - PRODUCTS

2.1 HAYBALES

A. Haybales required for siltation control shall be wire tied bales of the type normally used for siltation or erosion control or construction projects.

2.2 FILTER FABRIC

A. Filter fabric siltation fencing shall be a woven filter fabric having a weight of at least 2.5 ounces per square yard, a thickness of at least 17 mils, a coefficient of permeability of not less than 0.0009 centimeters per second and allows a water flow rate of a minimum 40 gallons per minute per square yard. The material shall have a high sediment filtration capacity, high slurry flow and minimum clogging characteristics. The material shall be equal to FW-300 as

manufactured by Mirafi, Inc., Charlotte, North Carolina; Amoco 2130 by Nilex, Inc., Centennial, CO; MISF 180 by Mutual Industries, PA; or equal.

2.3 SEDIMENT TRAPPING DEVICES

A. Sediment trapping devices shall be Siltsack®, Dandy Bag II®, or equal.

2.4 MULCH

A. Hay mulch shall consist of mowed cured grass, clover, alfalfa, timothy, oats, or wheat. No salt hay shall be used.

PART 3 - EXECUTION

3.1 DUST CONTROL

A. Control dust during the Work. Use a mechanical street sweeper as needed or at the request of the Engineer.

B. Prevent dust from becoming a nuisance or hazard. During construction, excavated material and open or stripped areas are to be policed and controlled to prevent spreading of the material.

C. Control dust during the work on-site using calcium chloride and/or water.

D. During the Work on-site, all paved road and driveway surfaces shall be scraped and broomed free of excavated materials on a daily basis. The surfaces shall be hosed down or otherwise treated to eliminate active or potential dust conditions and the natural road or wearing surface shall be exposed.

E. Ensure that the existing equipment, facilities, and occupied space adjacent to or nearby areas of the work do not come in contact with dust or debris as a result of concrete demolition, excavation or surface preparation for coatings.

F. Control dust by the construction of temporary wooden frame/polyethylene sheeting walls and covering enclosures separating adjacent or nearby areas and equipment from the Work site.

3.2 DRAINAGE AND EROSION CONTROL

A. Control erosion and siltation during the construction through mulching, haybales, siltation fencing, diversion and control of storm water run-off, ponding areas and similar methods.

B. Provide and maintain sediment trapping systems.

C. Discharge surface runoff from any disturbances to the site into silt containment basins. Utilize siltation prevention measures including haybale and geotextile fences before discharge to drainage systems.

D. Control surface waters within the construction area through the use of temporary culverts.

E. Install sediment trapping devices in catch basins located in existing paved areas with sediment trapping devices to minimize the transport of sediment through the subsurface stormwater collection system.

3.3 SILTSACK®

A. Install SILTSACK® in all drainage inlet structure and drywells on site and along the roadway and as otherwise directed.

B. Install the SILTSACK® by removing the grate and placing the sack in the opening. Hold approximately 6 inches of the sack outside the frame. This is where the lifting straps are located. Replace the grate to hold the sack in place.

C. Remove the SILTSACK® by taking two pieces of 1” diameter rebar and placing them through the lifting loops on each side of the sack to facilitate the lifting of the SILTSACK®.

D. Empty the SILTSACK® when the restraint cord is no longer visible. Place it where the contents will be collected. Place the rebar through the lift straps (connected to the bottom of the sack) and lift, turning the SILTSACK® inside out and emptying the contents. Clean out and rinse. Return the SILTSACK® to its original shape and replace in the basin.

3.4 HAYBALES AND SILTATION FENCE

A. Place and maintain both haybales and a staked filter fabric siltation fence along the entire length of the proposed construction between the area of construction and where shown on the Drawings or required by permit.

B. Install haybales by anchoring bales butted together to existing ground with at least 2 stakes per bale. The stake shall be a minimum of 2 inch square cross section and shall be long enough to penetrate 12 inches into the ground. Replace deteriorated haybales. Remove and dispose of the haybales following the successful growth of vegetation in the areas disturbed by the construction. Haybales shall not be removed until their removal is approved by the Engineer.

C. Install a filter fabric siltation fence in addition to the staked haybales, prior to construction and remove after full surface restoration has been achieved. Install the siltation fence parallel and immediately adjacent to the haybales as shown on the Drawings. Install as follows:

1. Hand shovel excavate a small trench on the upstream side of the desired fence line location.

2. Unroll the siltation fence system, position the post in the back of the trench (downhill side), and hammer the post at least 1½ feet into the ground.

3. Lay the bottom 6 inches of the fabric into the trench to prevent undermining by storm water run-off.

4. Backfill the trench and compact.

3.5 RESTORATION

A. Provide erosion control, seed and mulch and netting for surface restoration of areas disturbed during construction activities.

B. Provide temporary stabilization of disturbed areas that remain inactive greater than 14 consecutive days to minimize erosion. Methods to minimize erosion may include but are not limited to:

1. Spreading straw and/or providing temporary planting stabilization.

2. Installing jute netting.

3. Preparing surfaces to increase the runoff flow path, reduce the runoff flow velocity, or create small storage pockets to retain surface flows. Methods of accomplishing this include using mechanical devices such as track equipment or sheep’s foot rollers.

C. Place mulch on seeded areas. Use jute netting on areas having a slope greater than 3 horizontal to 1 vertical, to anchor the mulch until a satisfactory growth is obtained. If seeding is not possible because of the time of the year, apply mulch and netting to stabilize the area until such time as seed can be sown.

D. Provide grading, refertilizing, reseeding, remulching and/or netting to maintain the restored areas until the Work is accepted by the Owner.

E. See Section 32 92 00 – Turf and Grasses for seed.

3.6 CLEANING

A. Remove any sediment that builds up around the haybales or catchbasins.

B. Clean sediment trapping devices periodically during the Work. Devices shall be cleaned on a weekly basis, or more frequently if the devices become clogged.

C. Clean catchbasins that collect sediment as a result of the Work.

END OF SECTION 31 2500

SECTION 32 1216 - BITUMINOUS CONCRETE PAVEMENT

PART 1 - GENERAL

1.1 SUMMARY

A. The work under this Section shall consist of bituminous concrete placed upon a completed processed aggregate base course or upon the surface of an existing pavement. The work shall be installed in accordance with the line, compacted thickness and details shown on the Contract drawings.

B. Section Includes:

1. New Pavement
2. Pavement overlay
3. Permanent pavement repair
4. Bituminous Concrete Curbing

1.2 QUALITY ASSURANCE

A. Codes and standards: Comply with provisions of following, except otherwise indicated:

1. Reference to “Form 818” means the State of Connecticut Department of Transportation “Standard Specification for Roads, Bridges and Incidental Construction, 2020”, including any interim and supplemental specification.
2. For work within Town of East Hartford right of way shall conform with Town of East Hartford Department of Public Works standard details and specifications.

1.3 SUBMITTALS

A. Submit Material Certificates of Bituminous Mixture (Class) and Tack Coat signed by material producer and Contractor, certifying that each material item complies with or exceeds specified requirements in accordance with Conditions of Contract and Division 1 Specifications Sections.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Bituminous Concrete Pavement:

1. Material for Bituminous Concrete Pavement and Bituminous Bases shall comply with Section M.04 of “Form 818”.

2. The class of bituminous and compacted thickness shall be as indicated on the Contract Drawings.

PART 3 – EXECUTION

3.1 CONSTRUCTIONS METHODS

1. Bituminous Concrete for Pavement shall comply with Article 4.06.03 of “Form 818”.

END OF SECTION 32 1216

SECTION 32 9003 - LAWNS AND GRASSES

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Restoration of all vegetated areas disturbed during construction including:

a. Lawn areas

b. Grass surfaces

2. New loam and seed areas

3. Loam, starter fertilizer, lime, lawn seed

4. Mulch

B. Related Sections:

1. Section 02 4000 – Site Preparation

1.2 REFERENCES

A. ASTM D5539 – Standard Specification for Seed Starter Mix

1.3 QUALITY ASSURANCE

A. Place seed only between the periods from April 15th to June 1st, and from August 15th to October 1st, unless otherwise approved by the Engineer.

1.4 SUBMITTALS

A. Submit the following for approval:

1. Lawn seed mixture including percent by weight of each seed type, and manufacturer/supplier name.

2. Suitable laboratory analysis of the soil to determine the quantity of fertilizer and lime to be applied.

3. Lime and starter fertilizer application rates based on laboratory soil tests.

B. A Certificate of Clean Fill must be provided to Engineer and Owner for approval prior to delivery of any and all fill material including but not limited to, mineral soil, borrow material, structural fill, processed fill material, loam, or top soil to be placed on site during the course of the Work. The Certificate must include laboratory analytical reports for all material to be used at the site on a basis of one sample per every 500 cubic yards or lesser portions thereof. Analytical reports must demonstrate that the proposed material does not contain detectable concentrations of contaminants including but not limited to; petroleum hydrocarbons, semi volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), volatile organic compounds (VOCs), pesticides, and/or herbicides and that metals listed in the Connecticut Remediation Standard Regulations do not exceed minimal concentrations deemed allowable by Engineer and Owner. No fill material shall be placed on site until Contractor has received approval from Engineer and/or Owner. Engineer and Owner reserves the right to collect and analyze samples from any proposed fill material prior to or after delivery to the site and to allow use of off-specification material at their sole discretion.

The Certificate must clearly state the following and be signed by an authorized signatory employed by the Contractor:

1. Volume of material to be used
2. Process by which the material was obtained
3. Location of origin and summary of current and past site uses of the location of origin
4. Statement from Contractor that the analytical reports included with the Certificate represent the specific material to be used at the site
5. Statement that the Contractor does not know or have reason to believe that the proposed fill material contains foreign materials or contaminants.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Loam

1. Loam shall consist of fertile, friable, natural topsoil typical of the locality without admixture of subsoil, refuse or other foreign materials and shall be obtained from a well-drained arable site. It shall be such a mixture of sand, silt and clay particles as to exhibit sandy and clayey properties in and about equal proportions. It shall be reasonably free of stumps, roots, heavy or stiff clay, stones larger than 1-inch in diameter, lumps, coarse sand, noxious weeds, sticks, brush or other litter. Topsoil as delivered to the site or stockpiled shall have pH between 6.0 and 7.0 and shall contain not less than 5 percent or more than 8 percent organic matter as determined by loss of ignition of moisture-free samples dried at 100 degrees Celsius. The topsoil shall meet the following mechanical analysis:

	PERCENTAGE FINER
1-in screen opening	100
No. 10 mesh	95 to 100
No. 270 mesh	35 to 75
0.002 mm*	5 to 25

* Clay size fraction determined by pipette or hydrometer analysis.

2. Place a minimum of 4 inches of loam.

B. Starter Fertilizer

1. Starter fertilizer shall bear the manufacturer's name and guaranteed statement of analysis, and shall be applied in accordance with the manufacturer's directions.

2. Starter fertilizer shall be Scott's Starter Fertilizer, or equal, with timed nitrogen release to prevent burning.

C. Lime

1. Lime shall be an agricultural type ground limestone.

2. Lime shall be pelletized type for prolonged time release to soil.

D. Lawn Seed

1. Seed shall be of the previous year's crop.
2. Required ranges:
   a. Purity > 90%
   b. Germination > 80%
   c. Crop < 0.5%
   d. Weed < 0.3%
   e. Noxious Weed – 0%
   f. Inert < 8%
3. The standard seed mixture shall be applied at a minimum rate of 175 lbs./acre, 4 lbs./1,000 sf.

OPEN FIELD MIX	% WEIGHT
Red Fescue (Creeping)	60%
Red Top	10%
Crown Vetch	30%

4. All seed shall comply with State and Federal seed laws.

5. A sworn certificate indicating each variety of seed, weed content, germination of seed, net weight, date of shipment and manufacturer's name shall accompany each seed shipment. Responsibility for satisfactory results rests entirely on the Contractor.

E. Mulch

1. Shall be a specially processed 100 percent Virgin wood fiber mulch containing no growth or germination-inhibiting factors. Wood fiber mulch shall be Second Nature Regenerated wood fiber as by Central Fiber Corporation, Wellsville, KS or equal. It shall be manufactured in such a manner that after addition and agitation in slurry tanks with water, the fibers in the material become uniformly suspended to form a homogenous slurry. When sprayed on the ground, the material shall allow absorption and percolation of moisture. Each package of the wood fiber shall be marked by the manufacturer to show the air dry weight content and not contain in excess of 10 percent moisture.

PART 3 - EXECUTION

3.1 PREPARATION

A. In accordance with Section 024000, salvage all existing loam and stockpile at an acceptable on-site location. Under no circumstances shall existing topsoil be removed from the Project site.

B. The ground surface shall be fine graded and raked to prepare the surface of the loam for lime, fertilizer and seed.

C. Perform a laboratory soil test on the proposed loam before placing any lime, fertilizer, or seed. This work shall be in accordance with ASTM D5539.

D. Loam surface that has been raked smooth and prepared for sod installation shall be watered as directed by grower for plant species supplied.

3.2 LAWN AREAS

A. Apply fertilizer and lime to the surface of the ground in accordance with the manufacturers' instructions, and based on the results of the certified soils test.

B. Place the seed using a drop or rotary spreader at the rate recommended by the seed manufacturer for the intended use of the lawn or grass area being restored.

C. After spreading the seed, lightly rake the surface to work the seed in. The surface shall then be rolled.

D. All seed on banks and slopes of three to one (3:1) and greater shall be netted and staked.

E. As sodding is completed in any one section, roll the entire section by making four passes with a hand roller weighing not more than 100 lbs/ft of width.

3.3 MAINTENANCE

A. Maintain loamed and seeded areas by mulching, covering, netting, watering and fencing until an acceptable stand of vegetation is approved by the Engineer.

B. The dressed and seeded areas shall be sprinkled with water as necessary from time to time. Signs and barricades should be placed to protect the seeded areas. After the grass has started to grow, all areas and parts of areas that fail to show a uniform stand of grass shall be seeded repeatedly until all areas are covered with a satisfactory growth of grass.

3.4 SPECIAL CONSIDERATIONS

A. Following the final top course of paving, all pavement edges, waterways, sidewalks and berms shall be brought to grade with loam, fine graded, raked, seeded, and rolled to the satisfaction of the Engineer. The final surface of the loam backup shall slope away from the surface edge to allow proper sheeting of runoff. The Contractor shall protect, maintain, and repair seeded areas until a satisfactory start of healthy grass is established.

3.5 RESTORATION

A. In locations where the Work passes through existing grass, weed brush or tree-surfaced areas that are not covered by a specific lawn repair item, surface restoration shall be as follows:

1. After completion of backfilling, the existing loam and organic ground cover materials that were salvaged during excavation shall be returned to the top of the trench.

2. After natural settlement and compaction has taken place, the trench surface shall be harrowed, dragged and raked as necessary to produce a smooth and level surface.

3. The area is then to be sowed with “orchard grass” or “rye grass” or other such materials to hold the soil and produce a growth similar to that existing prior to construction.

3.6 GUARANTEE PERIOD AND FINAL ACCEPTANCE

A. At the end of the guaranteed period, inspection will be made by the Engineer upon written request submitted at least 10 days before the anticipated date. Seeded areas not demonstrating satisfactory stands as outlined above, as determined by the Engineer, shall be renovated, reseeded and maintained meeting all requirements as specified herein.

B. After all necessary corrective work has been completed, the Engineer shall certify in writing the final acceptance of the seeded areas.

END OF SECTION 32 9003

SECTION 32 9210 - VEGETATIVE SUPPORT MATERIAL

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes

1. Topsoil

1.2 SUBMITTALS

A. Provide representative samples of borrow materials taken from the source. Tag, label, and package the samples as requested by the Engineer. Provide access to the borrow site for field evaluation and inspection.

B. Provide analytical test results at the rate specified. Results shall indicate whether sample was taken from the upper or lower 6 inches of the vegetative support materials. All samples shall be representative and analyzed for the following:

pH
Nitrogen
Phosphorus
Potash
Grain size
Organic content

PART 2 - PRODUCTS

2.1 MATERIALS

A. Vegetative Support Material

1. Vegetative support material shall consist of fertile, friable, natural topsoil typical of the locality without admixture of subsoil, refuse or other foreign materials and shall be obtained from a well-drained arable site. It shall be such a mixture of sand, silt and clay particles as to exhibit sandy and clayey properties in and about equal proportions. It shall be reasonably free of stumps, roots, heavy or stiff clay, stones larger than 1-inch in diameter, lumps, coarse sand, noxious weeds, sticks, brush or other litter. Topsoil as delivered to the site or stockpiled shall have pH between 6.0 and 7.0 and shall contain not less than 5 percent or more than 8 percent organic matter as determined by loss of ignition of moisture-free samples dried at 100 degrees Celsius. The topsoil shall meet the following mechanical analysis:

	PERCENTAGE FINER
1-in screen opening	100
No. 10 mesh	95 to 100
No. 270 mesh	35 to 75
0.002 mm*	5 to 25

* Clay size fraction determined by pipette or hydrometer analysis.

2. Prior to stripping, the topsoil shall have demonstrated; by the occurrence upon it of healthy crops, grass or other vegetative growth; that it is reasonably well drained and that it does not contain toxic amounts of either acid or alkaline elements.

B. A Certificate of Clean Fill must be provided to Engineer and Owner for approval prior to delivery of any and all fill material including but not limited to, mineral soil, borrow material, structural fill, processed fill material, loam, or top soil to be placed on site during the course of the Work. The Certificate must include laboratory analytical reports for all material to be used at the site on a basis of one sample per every 500 cubic yards or lesser portions thereof. Analytical reports must demonstrate that the proposed material does not contain detectable concentrations of contaminants including but not limited to; petroleum hydrocarbons, semi volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), volatile organic compounds (VOCs), pesticides, and/or herbicides and that metals listed in the Connecticut Remediation Standard Regulations do not exceed minimal concentrations deemed allowable by Engineer and Owner. No fill material shall be placed on site until Contractor has received approval from Engineer and/or Owner. Engineer and Owner reserves the right to collect and analyze samples from any proposed fill material prior to or after delivery to the site and to allow use of off-specification material at their sole discretion.

The Certificate must clearly state the following and be signed by an authorized signatory employed by the Contractor:

1. Volume of material to be used
2. Process by which the material was obtained
3. Location of origin and summary of current and past site uses of the location of origin
4. Statement from Contractor that the analytical reports included with the Certificate represent the specific material to be used at the site
5. Statement that the Contractor does not know or have reason to believe that the proposed fill material contains foreign materials or contaminants

A. EQUIPMENT

i. Earth Moving Equipment

ii. Adequate types and number of equipment shall be used to ensure that the vegetative support material is spread evenly and at the proper depth to all areas intended to be covered without damaging underlying soil layers or structures.

6. EXECUTION

A. INSTALLATION

i. Vegetative support material shall be placed over approved areas to a depth sufficiently greater than required so that after natural settlement and light rolling, the complete work will conform to the lines, grades and elevations indicated. No loam shall be spread in water or while frozen or muddy.

ii. The vegetative support material shall be hauled, deposited, spread, compacted, tracked and raked to the lines and grades shown on the Plans or as directed by the Engineer. After the vegetative support material has been spread, it shall be carefully prepared for seeding by spading or harrowing, and raking. All large, stiff clods, lumps, stones, brush, roots, stumps, litter, and other foreign material shall be removed.

iii. The compaction shall be equivalent to that produced by a hand roller weighing from 75 to 100 pounds per foot of width. The compaction may be obtained by rolling, dragging or any method that produces satisfactory results. All depressions caused by settlement or rolling shall be filled with additional materials and the surfaces shall be regraded and rolled until it presents a reasonably smooth and even finish and is up to the required grade.

iv. During hauling operations, all public and private roadway surfaces shall be kept clean and any topsoil or other dirt which may be brought upon the surface shall be removed promptly and thoroughly before it becomes compacted by traffic. If necessary, the wheels of all vehicles used for hauling shall be cleaned frequently and kept clean to avoid bringing any dirt upon the surface.

B. QUALITY CONTROL

i. The responsibility for satisfactory results on work carried out under this item rests entirely on the Contractor regardless of the prior approval of the materials and methods on the part of the Engineer.

ii. The Contractor shall provide laboratory test results for the vegetative support material intended for use as specified herein, at a frequency of 1 round per 1,000 cy of material.

iii. The Engineer shall randomly sample the borrow material and have a certified analytical laboratory perform testing as described herein. The

testing shall be a verification of the results submitted by the Contractor and shall be entirely at the Contractor's expense.

END OF SECTION 32 9210

SURVEY REPORT

PRE-DEMOLITION INVESTIGATIVE SURVEY FOR HAZARDOUS BUILDING MATERIALS

FORMER McCARTIN SCHOOL
70 CANTERBURY STREET
EAST HARTFORD, CONNECTICUT

Prepared for

Capital Region Development Authority
100 Columbus Boulevard
Suite 500
Hartford, Connecticut

Prepared by

TRC
Windsor, Connecticut

Issued
April 2023

PRE-DEMOLITION INVESTIGATIVE SURVEY FOR HAZARDOUS BUILDING MATERIALS

FORMER McCARTIN SCHOOL
70 CANTERBURY STREET
EAST HARTFORD, CONNECTICUT

Prepared for
Capital Region Development Authority
100 Columbus Boulevard
Suite 500
Hartford, Connecticut

Prepared by
TRC
Windsor, Connecticut

Michael Kostruba CSP, CHMM
Senior Project Manager

Gregory Kaczynski
Senior Project Manager

TRC Project No. 522705.0000.0000
Issued-April 2023

TRC
21 Griffin Road North
Windsor, Connecticut 06095
Telephone (860) 298-9692

TABLE OF CONTENTS

EXECUTIVE SUMMARY

TRC of Windsor, Connecticut was retained by the Capital Region Development Authority to conduct a pre-demolition survey for hazardous building materials at the former McCartin School, located at 70 Canterbury Street, East Hartford, Connecticut. The survey included the inspection/assessment for asbestos containing materials (ACM), lead based/containing paint (LBP), polychlorinated biphenyl (PCB) containing caulks and glazing and an inventory of other hazardous/regulated items associated with the building.

Asbestos Containing Materials (ACM)

Connecticut licensed/EPA-trained asbestos inspectors from TRC conducted visual inspections and physical assessments of suspect asbestos containing materials (ACM) in accordance with USEPA AHERA/NESHAP protocols. Bulk samples of suspect materials were collected, properly transferred using chain-of-custody forms, and were brought to TRC's CTDPH approved in-house laboratory for analysis via polarized light microscopy (PLM) with visual area estimate (vae) techniques (EPA 600/R-93/116). Select non-friable organically bound (NOB) material samples (i.e., floor tiles, mastics, glazes/caulks, etc.) were analyzed with PLM gravimetric methods as appropriate in accordance with EPA and CTDPH analytical protocols. ACM was identified as blackboard glue daubs, various building/window/door caulks, door window glazing, resilient floor tiles/associated mastics, ceiling tile glue daubs, light fixture paper insulations, mudded pipe fittings, pipe insulations, and roof penetration/perimeter flashing/tar materials. Other items which are assumed to be asbestos containing materials include interior boiler components, interior "Destructor" components, interior electrical on/off switch components, residual black floor mastics, bulletin board glue and buried pipe insulation/mudded fittings. ACM to be impacted by demolition/ renovation activities must be removed prior to disturbance in accordance with OSHA, USEPA, CTDPH, and CTDEEP standards for asbestos abatement/disposal. See Tables 1, 2 & 3, and Appendices A & D.

Lead Based Paint (LBP)

Connecticut licensed/EPA trained lead inspectors from TRC conducted a screening for lead based/containing paint (LBP) throughout the interior subject area using an on-site x-ray fluorescence (XRF) lead detector. Low levels of LBP (<1.0 mg/cm^2) were identified on wood/metal cabinets,

metal stair stringer, metal railings, metal doors/components, metal window/components, metal radiators, metal trusses, metal bathroom stalls, metal I-beams, metal vent hood, CMU block, wood shelving and concrete slab. Higher levels of LBP (>1.0 mg/cm$^{2)}$ were identified on metal stairs, metal railings, metal trusses, metal radiators, metal windowsills, metal door jambs/casings, wood cabinet and wood soffit. Exposure levels for lead in the construction industry are regulated by OSHA 29 CFR 1926.62. Construction activities disturbing surfaces containing lead paint which are likely to be employed, such as grinding, cutting, and demolishing have been known to expose workers to airborne levels of lead in excess of the permissible exposure limit (PEL). Any Contractor impacting these surfaces should conduct demolition work in conformance with the OSHA regulations, utilizing engineering controls and personal protective equipment.

In addition, disposal of construction waste containing lead paint is subject to regulation under both the CTDEEP Hazardous and Special Waste Management (22a-209-1 through 16; 22a-449(c)-11; 22a-449(c)-13; 22a-449(c)-100 through 110; and 22a-454) and USEPA RCRA Hazardous Waste Management (40 CFR Parts 260 through 274) regulations. Scrap metal, however, is exempt from regulation under the CTDEEP/USEPA Hazardous Waste Regulations provided it is properly recycled at an approved metal recycling facility.

Building debris waste disposal determination with regards to potentially hazardous lead painted components is regulated by USEPA Resource Conservation Recovery Act (RCRA) Hazardous Waste Regulations (40 CFR Parts 260 through 274), and the CTDEEP Hazardous Waste Regulations (22a-209-1 and 22a-449(c)). The State of Connecticut's Department of Environmental Protection Memo issued on January 26, 2004, regarding the characterization of non-metal lead-based paint debris, states that obtaining XRF readings of less than 1.0 mg/cm^2 is sufficient to demonstrate that a given debris coated with paint is not a hazardous lead waste. Therefore, the non-metal building components/materials where XRF readings were low (<1.0 mg/cm^2) may be considered non-hazardous waste for lead content and may be disposed of at an appropriately licensed state facility.

Due to higher levels of lead (>1.0 mg/cm^2) in the wood soffit, a Lead Toxic Characterization Leachate Procedure (TCLP) test was performed on the soffit component alone to determine if the wood soffit, as its own waste stream, could be disposed of as regular C&D waste or if it must be

deposited in a hazardous landfill based on the amounts of leachable lead. Results of the lead TCLP for the wood soffit alone indicated that the soffit would need to be deposited in a hazardous waste landfill. However, additional lead TCLP analysis was performed on a weighted representative sample of the mass of all non-metal, non-masonry building components including wood, sheetrock, ceiling tiles, wood cabinet (also >1.0 mg/cm^2) and the soffit wood. The results of the second TCLP indicated very low levels of lead leachate present in the sample. Therefore, based on the results of the analysis, the wood soffit and wood cabinet may be disposed of as regular non-hazardous C&D waste, provided they are disposed of with the waste stream of all other non-metal/non-masonry/non-hazardous C&D waste. Please note that where the wood soffit is in contact with PCB caulking (C4), the soffit shall be removed and disposed of as CTDEEP regulated PCB waste. **Additional TCLP sampling will be required to characterize this waste stream, and potentially others, which may be generated during abatement/demolition activities**. Detailed results of the lead survey/TCLP testing can be found in Tables 4 and 5 as well as Appendices E and F.

Other Hazardous/Regulated Items

TRC inspectors also conducted a visual inventory inspection to identify and quantify other potentially hazardous or regulated materials, wastes or items within the building. Items inventoried included materials such as mercury fluorescent lamps, PCB ballasts, halogen lights, mercury thermostat ampoules, CFC containing devices, used electronic devices, etc. Hazardous/regulated materials/wastes/items visually identified were then categorized according to their potential hazard. These materials will require proper collection, packing, handling, transport and disposal/recycling prior to building demolition in accordance with EPA RCRA and CTDEEP waste disposal standards. It should be noted that only items associated with/attached to building systems were inventoried at the time of the survey. Many other loose, regulated items (used electronics, household chemicals, paints, etc.) were present in the building at the time of the survey. However, it was explained to TRC that these items are to be removed and salvaged by the Town prior to the building being demolished and therefore, quantities of these items were not included in the inventory. See Table 6 for a list of other hazardous or regulated items inventoried/quantified by TRC.

Polychlorinated Biphenyls (PCBs)

TRC's on-site inspectors further conducted a visual inspection and bulk sampling of suspect PCB

containing caulking and glazing on interior/exterior components of McCartin School. Bulk samples from the building were collected following a sample strategy similar to the EPA's simplified sampling scheme for ACM. The samples were then sent to a CTDPH accredited laboratory for PCB analysis via EPA method 8082, with EPA Method 3540c, soxhlet extraction. Several interior and exterior building/door/window caulks containing PCBs (C2, C4, DC1, WSC2, WC3, WC5) were identified and characterized as Connecticut Regulated Waste (CRW) (>1<50 ppm). These caulks are regulated by the CTDEEP and will require proper removal/disposal prior to demolition.

Based on the bulk sampling results for the suspect PCB containing caulks and glazing (which indicated only CTDEEP regulated PCB materials were present), TRC implemented a sampling program to identify any potential PCB migration/impact into both the adjacent porous substrate building materials (brick, CMU, wood etc.) in contact with the caulks and the ground cover (soils, asphalt, concrete etc.) beneath any exterior caulkings/glazings.

Samples of porous building material substrates were collected adjacent to the subject caulk for each PCB caulk/substrate combination at the 0", 3" & 6" distances to assess potential impact into each porous substrate material. Sampling was conducted following protocols modified from EPA 40 CFR 761 Subpart N for site characterization of PCB Remediation Waste. Samples were collected at depths of ½ inch at each representative location following the EPA Region 1 Standard Operating Procedures for Sampling Concrete. Building substrate sampling was not performed on either adjacent non-porous substrates (metals, glass etc.) or substrates (wood soffit) which would be completely removed and disposed of during the PCB caulk remediation activities.

Representative samples of exterior ground cover materials (soils, asphalt, concrete etc.) were also collected directly beneath horizontal and vertical applications of PCB containing caulks. Ground cover samples were collected a distance of 1 foot from the base of the building, or bulk PCB containing material, at 20-foot intervals (for horizontal applications) and beneath vertical applications modifying protocols from EPA 40 CFR 761 Subpart N. All soil ground cover samples were collected as grab samples of a soil interval not to exceed 3" in depth. Where the ground cover was asphalt or concrete, the samples were collected at depths of ½ inch at each representative location following the EPA Region 1 Standard Operating Procedures for Sampling Concrete.

All substrate/ground cover samples were sent to a CTDPH accredited laboratory for PCB analysis via EPA Method 8082, with EPA Method 3540c, soxhlet extraction. Laboratory analytical results indicated no PCB impact to the porous substrates adjacent to the CTDEEP regulated caulks. Laboratory analytical results did identify CTDEEP regulated PCB impacted ground cover (soil) in four (4) areas on the D and C sides of the 1962 wing. Soil remediation/removal will be required in these areas. See Tables 7, 8, 9, 10 and Appendices A & G for additional information.

PROJECT OUTLINE

Site Address:	Former McCartin School-70 Canterbury Street, East Hartford, CT
CRDA Project Manager:	Kimberly Hart / Michael Yost
TRC Project No.:	522705-0000-0000
Asbestos Inspectors:	Hilton Hernandez (LIC #000424) Andrew Smith (LIC #001137) Michael Kostruba (LIC #000694) Carmen Jacko (LIC #000812)
Lead Inspectors:	Hilton Hernandez (LIC #002231), Andrew Smith
PCB Inspectors:	Hilton Hernandez, Andrew Smith, Michael Kostruba, Carmen Jacko, Tyler Noll, Boris Ngadjui
Date(s) of Inspection:	12/13/22 - 12/16/22, 12/19/22, 1/14/23, 1/18/23, 4/4/23, 4/5/23, 4/27/23
Asbestos Identified:	Yes
Lead Paint Identified:	Yes
PCBs Identified:	Yes (CTDEEP Regulated)
Add'l Haz./Reg. Mat./Waste/Items:	Yes (See Table 6)
Asbestos/PCB Abatement Estimate:	~$499,913.00.
Other Regulated Items Estimate:	~$30,500.00.

Additional Notes:

The property consists of a one-story brick building with two wings. The building was originally an elementary school and formerly used as a senior center. The construction of the original wing occurred in 1959. The northern wing was added to the building in 1962. There are no basement levels or utility tunnels under the building. The building is heated by two gas fired boilers housed in the 1959 mechanical room and is cooled by window AC units. Electricity and City water/sewer services the building. Two heating oil USTs were previously removed from the property, one in 1989 (original) and another in 2019 (installed in 1989).

TABLES

TABLE 1
BULK SAMPLE SUMMARY OF SUSPECT ASBESTOS CONTAINING MATERIALS
FORMER McCARTIN SCHOOL
EAST HARTFORD, CONNECTICUT

Sample No.	Sample Location	Type of Homogeneous Material	% and Type Asbestos
Samples Collected 12/13/22-12/19/22			
01	Room AA	BB1 - Brown blackboard glue daubs	10% Chrysotile
02	Room H	BB1 - Brown blackboard glue daubs	NA/PS
03	Boiler 2	BI1 - White preformed boiler insulation	ND
04	Boiler 1	BI1 - White preformed boiler insulation	ND
05	Boiler 2	BI1 - White preformed boiler insulation	ND
06	Boiler 1	BI2 - Grey seam sealer	ND
07	Boiler 2	BI2 - Grey seam sealer	ND
08	Boiler 1	BI2 - Grey seam sealer	ND*
09	Chimney	C1 - Grey chimney caulk	ND
10	Chimney	C1 - Grey chimney caulk	ND*
11	Room B	C2 - Tan brittle tectum/CMU caulking	3% Chrysotile♦
12	Room H	C2 - Tan brittle tectum/CMU caulking	NA/PS♦
13	A side E-1962 window	C3 - Grey rubbery caulk	ND
14	B side E-1962 window	C3 - Grey rubbery caulk	ND*
15	Exterior 1959 east	C4 - White sticky soffit caulk	ND♦
16	Exterior 1962 east	C4 - White sticky soffit caulk	ND*♦
17	Front entrance 1959	C5 - White sidewalk caulk	ND
18	Front entrance 1959	C5 - White sidewalk caulk	ND*
19	Room U	CB1 - Black cove base	ND
		Assoc. black glue	ND
20	Room E	CB1 - Black cove base	ND*
		Assoc. black glue	ND*
21	Room U	CB2 - Orange vinyl cove base glue	ND
22	Room CC	CB2 - Orange vinyl cove base glue	ND*
23	Room C	CB3 - Brown cove base	ND
		Assoc. brown glue	ND

NA/PVA Not analyzed/positive via inseparable association with a confirmed positive ACM
NA/PS Not analyzed/positive stop, homogeneous to sample proven to contain asbestos
ND Non-detected, less than 1%
NAD No asbestos detected
\+ Although found to be negative by analysis, material is homogeneous to a determined ACM and therefore must be considered positive
* Analyzed by EPA/600/R-93/116 with gravimetric reduction
♦ CTDEEP Regulated PCB Containing Material (>1, <50 ppm)

TABLE 1
BULK SAMPLE SUMMARY OF SUSPECT ASBESTOS CONTAINING MATERIALS
FORMER McCARTIN SCHOOL
EAST HARTFORD, CONNECTICUT

Sample No.	Sample Location	Type of Homogeneous Material	% and Type Asbestos
24	Room JC	CB3 - Brown cove base and brown glue	ND*
		Assoc. brown glue	ND*
25	Room J hall	CB4 - Orange cove base glue	ND
26	Room H hall	CB4 - Orange cove base glue	ND*
27	Room J hall	CB5 - Dark brown cove base glue	ND
28	Room H hall	CB5 - Dark brown cove base glue	ND*
29	Room AA	CBG1 - Brown cork board adhesive	ND
30	Room H	CBG1 - Brown cork board adhesive	ND*
31	BB room	CG1 - Brown hard glue	ND
32	Room GG	CG1 - Brown hard glue	ND*
33	Room U	CT1 - 2'x4' Long white fissure (width) with small pinholes	ND
34	Hall outside 59/62 junction	CT1 - 2'x4' Long white fissure (width) with small pinholes	ND
35	Room U	CT2 - 2'x4' Long white fissure (length) with small pinholes	ND
36	Hall outside room F	CT2 - 2'x4' Long white fissure (length) with small pinholes	ND
37	Room U	CT3 - 2'x4' Short white fissure with small pinholes	ND
38	Room M	CT3 - 2'x4' Short white fissure with small pinholes	ND
39	1962 door room L exterior door	DC1 - Tan brittle caulk	5% Chrysotile♦
40	1962 door room L exterior door	DC1 - Tan brittle caulk	NA/PS♦
41	Outside D hallway door	DC2 - Grey sticky caulking	ND
42	Outside D hallway door	DC2 - Grey sticky caulking	ND*
43	Daycare entry exterior door	DC3 - Red brittle door caulk	ND
44	Daycare entry exterior door	DC3 - Red brittle door caulk	ND*
45	A/B daycare exit door	DC4 - Light grey rubbery caulk	ND
46	A/B daycare exit door	DC4 - Light grey rubbery caulk	ND*

NA/PVA Not analyzed/positive via inseparable association with a confirmed positive ACM
NA/PS Not analyzed/positive stop, homogeneous to sample proven to contain asbestos
ND Non-detected, less than 1%
NAD No asbestos detected
\+ Although found to be negative by analysis, material is homogeneous to a determined ACM and therefore must be considered positive
* Analyzed by EPA/600/R-93/116 with gravimetric reduction
♦ CTDEEP Regulated PCB Containing Material (>1, <50 ppm)

TABLE 1
BULK SAMPLE SUMMARY OF SUSPECT ASBESTOS CONTAINING MATERIALS
FORMER McCARTIN SCHOOL
EAST HARTFORD, CONNECTICUT

Sample No.	Sample Location	Type of Homogeneous Material	% and Type Asbestos
47	Kitchen room X door	DWG1 - Grey door window glaze	ND
48	Kitchen room X door	DWG1 - Grey door window glaze	1.8% Chrysotile*
49	Southeast entrance door	DWG2 - Grey sticky door/window system glazing	10% Chrysotile
50	Exit at Room D hall	DWG2 - Grey sticky door/window system glazing	NA/PS
51	Room GG door	DWG3 - Off white door window glaze	ND
52	Room O	DWG3 - Off white door window glaze	ND*
53	P entry	DWG4 - Black sticky door window glaze	Trace Chrysotile
54	Hall outside D	DWG4 - Black sticky door window glaze	5.7% Chrysotile*
55	Room E	FB1 - Grey fire brick	ND
56	Room E	FB1 - Grey fire brick	ND
57	Room U	FT1 - 9"x9" Dark tan floor tile with brown/white streaks	10% Chrysotile
		Assoc. black mastic	10% Chrysotile
58	Room C	FT1 - 9"x9" Dark tan floor tile with brown/white streaks	NA/PS
		Assoc. black mastic	NA/PS
59	Room X	FT2 - 9"x9" Dark green floor tile with white streaks	10% Chrysotile
		Assoc. black mastic	ND
60	Room DD3 outside hall	FT2 - 9"x9" Dark green floor tile with white streaks	NA/PS
		Assoc. black mastic	ND*
61	Hall outside Room AA	FT3 - 12"x12" Tan/white mottled floor tile	ND
		Assoc. brown adhesive	ND
62	Hall outside Room AA	FT3 - 12"x12" Tan/white mottled floor tile	ND*
		Assoc. brown adhesive	ND*

NA/PVA Not analyzed/positive via inseparable association with a confirmed positive ACM
NA/PS Not analyzed/positive stop, homogeneous to sample proven to contain asbestos
ND Non-detected, less than 1%
NAD No asbestos detected
\+ Although found to be negative by analysis, material is homogeneous to a determined ACM and therefore must be considered positive
* Analyzed by EPA/600/R-93/116 with gravimetric reduction
♦ CTDEEP Regulated PCB Containing Material (>1, <50 ppm)

TABLE 1
BULK SAMPLE SUMMARY OF SUSPECT ASBESTOS CONTAINING MATERIALS
FORMER McCARTIN SCHOOL
EAST HARTFORD, CONNECTICUT

Sample No.	Sample Location	Type of Homogeneous Material	% and Type Asbestos
63	Room T	FT4 - 9"x9" Tan floor tile with black streaks	10% Chrysotile
		Assoc. black mastic	ND
64	Room T	FT4 - 9"x9" Tan floor tile with black streaks	NA/PS
		Assoc. black mastic	ND*
65	Room T	FT5 - 9"x9" Brown floor tile with white/red streaks	10% Chrysotile
		Assoc. black mastic	ND
66	Room O1	FT5 - 9"x9" Brown floor tile with white/red streaks	NA/PS
		Assoc. black mastic	ND*
67	Room AA	FT6 - 12"x12" White floor tile with pink/blue specks	ND
		Assoc. tan mastic	ND
68	Room AA	FT6 - 12"x12" White floor tile with pink/blue specks	ND*
		Assoc. tan mastic	ND*
69	Room AA	FT7 - 12"x12" Green floor tile with white/green specks	ND
		Assoc. tan adhesive	ND
70	Room AA	FT7 - 12"x12" Green floor tile with white/green specks	ND*
		Assoc. tan adhesive	ND*
71	Room BB	FT8 - 12"x12" White floor tile with grey/black specks	ND
		Assoc. tan mastic	ND
72	Room O1	FT8 - 12"x12" White floor tile with grey/black specks	ND*
		Assoc. tan mastic	ND*
73	Room BB	FT9 - 12"x12" White floor tile and black mastic	3% Chrysotile
		Assoc. black mastic	10% Chrysotile

NA/PVA Not analyzed/positive via inseparable association with a confirmed positive ACM
NA/PS Not analyzed/positive stop, homogeneous to sample proven to contain asbestos
ND Non-detected, less than 1%
NAD No asbestos detected
\+ Although found to be negative by analysis, material is homogeneous to a determined ACM and therefore must be considered positive
* Analyzed by EPA/600/R-93/116 with gravimetric reduction
♦ CTDEEP Regulated PCB Containing Material (>1, <50 ppm)

TABLE 1
BULK SAMPLE SUMMARY OF SUSPECT ASBESTOS CONTAINING MATERIALS
FORMER McCARTIN SCHOOL
EAST HARTFORD, CONNECTICUT

Sample No.	Sample Location	Type of Homogeneous Material	% and Type Asbestos
74	Room BB	FT9 - 12"x12" White floor tile and black mastic	NA/PS
		Assoc. black mastic	NA/PS
75	Room B	FT10 - 12"x12" Light tan tile floor tile with brown/white specks	ND
		Assoc. black mastic	10% Chrysotile
76	Room M2	FT10 - 12"x12" Light tan tile floor tile with brown/white specks and black mastic	ND*
		Assoc. black mastic	NA/PS
77	Room JC	FT11 - 9"x9" Grey floor tile with white streaks	10% Chrysotile
		Assoc. black mastic	10 % Chrysotile
78	Room I3	FT11 - 9"x9" Grey floor tile with white streaks	NA/PS
		Assoc. black mastic	NA/PS
79	Room H	FT12 - 9"x9" Tan floor tile with black/white streaks	10% Chrysotile
		Assoc. black mastic	10% Chrysotile
80	Room H	FT12 - 9"x9" Tan floor tile with black/white streaks	NA/PS
		Assoc. black mastic	NA/PS
81	Room M	FT13 - 12"x12" Tan floor tile with white black specks	ND
		Assoc. black mastic	ND
82	Room M2	FT13 - 12"x12" Tan floor tile with white black specks	ND*
		Assoc. black mastic	ND*
83	Room X	GD1 - Light brown ceiling glue daubs	10% Anthophyllite
84	Room X	GD1 - Light brown ceiling glue daubs	NA/PS
85	Room D Hall	GD2 - Dark brown ceiling glue daub	ND
86	Room D Hall	GD2 - Dark brown ceiling glue daub	ND*

NA/PVA Not analyzed/positive via inseparable association with a confirmed positive ACM
NA/PS Not analyzed/positive stop, homogeneous to sample proven to contain asbestos
ND Non-detected, less than 1%
NAD No asbestos detected
\+ Although found to be negative by analysis, material is homogeneous to a determined ACM and therefore must be considered positive
* Analyzed by EPA/600/R-93/116 with gravimetric reduction
♦ CTDEEP Regulated PCB Containing Material (>1, <50 ppm)

TABLE 1
BULK SAMPLE SUMMARY OF SUSPECT ASBESTOS CONTAINING MATERIALS
FORMER McCARTIN SCHOOL
EAST HARTFORD, CONNECTICUT

Sample No.	Sample Location	Type of Homogeneous Material	% and Type Asbestos
87	DD2	GR1 - Light Grey wall seam grout	ND
88	DD3	GR1 - Light Grey wall seam grout	ND
89	Women's '59	GR2 - Grey ceramic floor tile	ND
90	Men's '59	GR2 - Grey ceramic floor tile	ND
91	Room F	GR3 - Grey wall seam grout	ND
92	Room G	GR3 - Grey wall seam grout	ND
93	Room F	GR4 - Grey ceramic floor tile grout	ND
94	Room G	GR4 - Grey ceramic floor tile grout	ND
95	Room E	GR5 - Red fire brick grout	ND
96	Room E	GR5 - Red fire brick grout	ND
97	Room HH3A	LEV1 – Reddish brown cementitious floor leveler	ND
98	Room HH3A	LEV1 – Reddish brown cementitious floor leveler	ND
99	Room W2	LP1 - Silver/grey light fixture insulating paper	30% Chrysotile
100	Room R1	LP1 - Silver/grey light fixture insulating paper	NA/PS
101	Room U	MF1 - Grey mudded fitting	80% Chrysotile
102	Room T1	MF1 - Grey mudded fitting	NA/PS
103	Hall 1959	MF1 - Grey mudded fitting	NA/PS
104	Room E	MF2 - Grey mudded fitting	ND
105	Room E	MF2 - Grey mudded fitting	ND
106	Room JC	MF2 - Grey mudded fitting	ND
107	Roof 62 east	MG1 - Amber membrane glue	ND
108	Roof 59 south	MG1 - Amber membrane glue	ND*
109	59 roof middle	PBT1 - Black pitch box tar	ND
110	59 roof middle	PBT1 - Black pitch box tar	ND*
111	Room U	PI1 - White pipe insulation	5% Amosite

NA/PVA Not analyzed/positive via inseparable association with a confirmed positive ACM
NA/PS Not analyzed/positive stop, homogeneous to sample proven to contain asbestos
ND Non-detected, less than 1%
NAD No asbestos detected
\+ Although found to be negative by analysis, material is homogeneous to a determined ACM and therefore must be considered positive
* Analyzed by EPA/600/R-93/116 with gravimetric reduction
♦ CTDEEP Regulated PCB Containing Material (>1, <50 ppm)

TABLE 1
BULK SAMPLE SUMMARY OF SUSPECT ASBESTOS CONTAINING MATERIALS
FORMER McCARTIN SCHOOL
EAST HARTFORD, CONNECTICUT

Sample No.	Sample Location	Type of Homogeneous Material	% and Type Asbestos
112	Room X	PI1 - White pipe insulation	NA/PS
113	Room T1	PI1 - White pipe insulation	NA/PS
114	Room X	PI2 - Grey pipe insulation paper	5% Chrysotile
115	Room U	PI2 - Grey pipe insulation paper	NA/PS
116	Room T1	PI2 - Grey pipe insulation paper	NA/PS
117	62 east roof	PNF1 - Black/brown penetration tar and paper	10% Chrysotile
118	59 roof north	PNF1 - Black/brown penetration tar and paper	NA/PS
119	62 roof west	PRF1 - Black flashing tar	20% Chrysotile
120	59 roof north	PRF1 - Black flashing tar	NA/PS
121	59 roof south lower roof south	PRF2 - Black flashing tar	20% Chrysotile
122	59 roof south lower roof west	PRF2 - Black flashing tar	NA/PS
123	Upper roof chimney	PRF3 - Black perimeter a chimney	ND
124	Upper roof chimney	PRF3 - Black perimeter a chimney	ND*
125	62 roof east	RF1 - Black paper membrane roof and tar	ND
126	62 roof west	RF1 - Black paper membrane roof and tar	ND*
127	59 roof north	RF2 - Black built up roofing	ND
128	59 roof south	RF2 - Black built up roofing	ND*
129	Lower roof north	RF3 - Black roofing layer	ND
130	Lower roof south	RF3 - Black roofing layer	ND*
131	62 roof east	RFL1 - Black tar flashing on hoods	20% Chrysotile
132	62 west roof	RFL1 - Black tar flashing on hoods	NA/PS
133	59 roof north	RFL2 - Black tar paper	ND
134	59 roof north	RFL2 - Black tar paper	ND*
135	Room CC	SHR1 - White sheetrock	ND
		Assoc. white joint compound	ND

NA/PVA Not analyzed/positive via inseparable association with a confirmed positive ACM
NA/PS Not analyzed/positive stop, homogeneous to sample proven to contain asbestos
ND Non-detected, less than 1%
NAD No asbestos detected
\+ Although found to be negative by analysis, material is homogeneous to a determined ACM and therefore must be considered positive
* Analyzed by EPA/600/R-93/116 with gravimetric reduction
♦ CTDEEP Regulated PCB Containing Material (>1, <50 ppm)

TABLE 1
BULK SAMPLE SUMMARY OF SUSPECT ASBESTOS CONTAINING MATERIALS
FORMER McCARTIN SCHOOL
EAST HARTFORD, CONNECTICUT

Sample No.	Sample Location	Type of Homogeneous Material	% and Type Asbestos
136	Room Q	SHR1 - White sheetrock	ND
		Assoc. white joint compound	ND
137	Room HH3	SHR2 - Grey sheetrock	ND
		Assoc. white joint compound	ND
138	Room HH1	SHR2 - Grey sheetrock	ND
		Assoc. white joint compound	ND
139	Daycare main hall	SHR3 - Grey sheetrock	ND
140	Daycare main hall	SHR3 - Grey sheetrock	ND
141	1962 roof east	SS1 - Black rubbery membrane seam sealant	ND
142	1959 roof north	SS1 - Black rubbery membrane seam sealant	ND*
143	Room HH3	SU1 - Light grey sink undercoating	ND
144	Room N	SU1 - Light grey sink undercoating	ND*
145	Room I	SU2 - Dark grey sink undercoating	ND
146	Room J	SU2 - Dark grey sink undercoating	ND*
147	Room X	SUR1 - Grey cementitious wall surfacing	ND
148	Room BB hall	SUR1 - Grey cementitious wall surfacing	ND
149	Outside AA hall	SUR1 - Grey cementitious wall surfacing	ND
150	Hall outside of room FF	SUR2 - Green wall texture	ND
151	Hall outside room AA	SUR2 - Green wall texture	ND
152	Hall outside room O	SUR2 - Green wall texture	ND
153	Hall outside room E	SUR2 - Green wall texture	ND
154	Hall outside room HH3	SUR2 - Green wall texture	ND
155	1962 East	TM1 - White tectum deck	ND
156	1962 west	TM1 - White tectum deck	ND
157	1962 Southeast roof	VB1 - Black vapor barrier	ND

NA/PVA Not analyzed/positive via inseparable association with a confirmed positive ACM
NA/PS Not analyzed/positive stop, homogeneous to sample proven to contain asbestos
ND Non-detected, less than 1%
NAD No asbestos detected
\+ Although found to be negative by analysis, material is homogeneous to a determined ACM and therefore must be considered positive
* Analyzed by EPA/600/R-93/116 with gravimetric reduction
♦ CTDEEP Regulated PCB Containing Material (>1, <50 ppm)

TABLE 1
BULK SAMPLE SUMMARY OF SUSPECT ASBESTOS CONTAINING MATERIALS
FORMER McCARTIN SCHOOL
EAST HARTFORD, CONNECTICUT

Sample No.	Sample Location	Type of Homogeneous Material	% and Type Asbestos
158	1962 Northwest roof	VB1 - Black vapor barrier	ND*
159	Room X	WC1 - Black interior/exterior window caulk	ND
160	Room D	WC1 - Black interior/exterior window caulk	ND*
161	South Boiler room window	WC2 - Tan brittle window caulk	10% Anthophyllite
162	West boiler room window	WC2 - Tan brittle window caulk	NA/PS
163	South boiler room window	WG1 - Grey brittle window glaze	ND
164	West boiler room window	WG1 - Grey brittle window glaze	ND*
165	East side exterior window	WSC1 - Light grey brittle caulk 1959	10% Anthophyllite
166	West side exterior window	WSC1 - Light grey brittle caulk 1959	NA/PS
167	East exterior window	WSC2 - Dark grey brittle caulk 1962	10% Chrysotile♦
168	West exterior window	WSC2 - Dark grey brittle caulk 1962	NA/PS♦
Samples Collected 1/14/23			
1	1959 wing	WVB1 - Black tar paper wall vapor barrier behind brick veneer	ND
2	1959 wing	WVB1 - Black tar paper wall vapor barrier behind brick veneer	ND*
3	1962 wing	WVB2 - Black tar paper vapor barrier behind brick veneer	ND
4	1962 wing	WVB2 - Black tar paper vapor barrier behind brick veneer	ND*
5	1959 Corridor o/s room GG	SVB1 - Tar vapor varies adhered to underside of slab	ND
6	1959 Corridor o/s room GG	SVB1 - Tar vapor varies adhered to underside of slab	ND*
7	Exterior 59 construction o/s Q1	WC3- Light Grey window frame caulk on and around window system	ND♦
8	Exterior 59 construction o/s BB	WC3 - Light Grey window frame caulk on and around window system	ND*♦

NA/PVA Not analyzed/positive via inseparable association with a confirmed positive ACM
NA/PS Not analyzed/positive stop, homogeneous to sample proven to contain asbestos
ND Non-detected, less than 1%
NAD No asbestos detected
\+ Although found to be negative by analysis, material is homogeneous to a determined ACM and therefore must be considered positive
* Analyzed by EPA/600/R-93/116 with gravimetric reduction
♦ CTDEEP Regulated PCB Containing Material (>1, <50 ppm)

TABLE 1
BULK SAMPLE SUMMARY OF SUSPECT ASBESTOS CONTAINING MATERIALS
FORMER McCARTIN SCHOOL
EAST HARTFORD, CONNECTICUT

Sample No.	Sample Location	Type of Homogeneous Material	% and Type Asbestos
9	Exterior 62 construction o/s main entrance area-left side	WC4 - Light Grey window frame caulk on and around smaller windows	ND
10	Exterior 62 construction o/s main entrance area right side of entry	WC4 - Light Grey window frame caulk on and around smaller windows	ND*
11	Exterior 1962 wing o/s D	WC5 - Dark Grey window frame caulk on and around window system	ND♦
12	Exterior 1962 wing o/s B	WC5 - Dark Grey window frame caulk on and around window system	ND*♦
13	Room V	FD1 - Fire door insulation white	ND
14	Room V	FD1 - Fire door insulation white	ND
15	Room E	FD2 - Fire door insulation white	ND
16	Room E	FD2 - Fire door insulation white	ND
17	Room M	FD3 - Fire door insulation white	ND
18	Room M	FD3 - Fire door insulation white	ND
19	Room H	FD4 – Fire door insulation white	ND
20	Room H	FD4 – Fire door insulation white	ND
21	Room JC	FD5 - Fire door insulation white	ND
22	Room JC	FD5 - Fire door insulation white	ND
23	Corridor of 1962 wing	FD6 - Fire door insulation white	ND
24	Corridor of 1962 wing	FD6 - Fire door insulation white	ND
Samples Collected 1/18/23			
1	A side o/s Room U West end door	DC5-offwhite door frame caulk	ND
2	A side o/s Room U East end door	DC5-offwhite door frame caulk	ND*
Samples Collected 4/5/23			
25	Room JC-1962-domsetic water line	Grey mudded fittings on fiberglass insulated domestic water line	ND
26	Room F-1962-domestic water line	Grey mudded fittings on fiberglass insulated domestic water line	ND
27	Room L-1962-Valve-heating line	Light grey mudded fittings on fiberglass insulated heating lines	ND

NA/PVA Not analyzed/positive via inseparable association with a confirmed positive ACM
NA/PS Not analyzed/positive stop, homogeneous to sample proven to contain asbestos
ND Non-detected, less than 1%
NAD No asbestos detected
\+ Although found to be negative by analysis, material is homogeneous to a determined ACM and therefore must be considered positive
* Analyzed by EPA/600/R-93/116 with gravimetric reduction
♦ CTDEEP Regulated PCB Containing Material (>1, <50 ppm)

TABLE 1
BULK SAMPLE SUMMARY OF SUSPECT ASBESTOS CONTAINING MATERIALS
FORMER McCARTIN SCHOOL
EAST HARTFORD, CONNECTICUT

Sample No.	Sample Location	Type of Homogeneous Material	% and Type Asbestos
28	Room L-1962-Piping-heating line	Light grey mudded fittings on fiberglass insulated heating lines	ND
Samples Collected 4/28/23			
1	1959 Exterior-D side	WG2-Black gummy window glaze	ND
2	1959 Exterior-B side	WG2-Black gummy window glaze	ND
3	1962 Exterior-D side	WG3-Black gummy window glaze	ND
4	1962 Exterior-C side	WG3-Black gummy window glaze	ND

NA/PVA Not analyzed/positive via inseparable association with a confirmed positive ACM
NA/PS Not analyzed/positive stop, homogeneous to sample proven to contain asbestos
ND Non-detected, less than 1%
NAD No asbestos detected
\+ Although found to be negative by analysis, material is homogeneous to a determined ACM and therefore must be considered positive
* Analyzed by EPA/600/R-93/116 with gravimetric reduction
♦ CTDEEP Regulated PCB Containing Material (>1, <50 ppm)

TABLE 2
IDENTIFIED ASBESTOS CONTAINING MATERIALS (>1%)
FORMER McCARTIN SCHOOL
EAST HARTFORD, CONNECTICUT

Material	Sampled/ Assumed (mo/yr)	General Location	NESHAP Category	AHERA Category	Estimated Quantity
BB1 – Brown blackboard glue daubs	Sampled 12/22	Rooms AA, H, J	Category II Non-friable	Miscellaneous	265 SF
C2 – Tan brittle tectum/CMU caulking♦	Sampled 12/22	Rooms A, B, C, D, H, I, J, K & 1962 Corridor	Category II Non-friable	Miscellaneous	1100 LF
DC1 – Tan brittle caulk♦	Sampled 12/22	Exterior - doors to Room L & E and Room E louvre	Category II Non-friable	Miscellaneous	40 LF
DWG1 – Grey door window glaze	Sampled 12/22	Room U & X doors	Category II Non-friable	Miscellaneous	3 EA
DWG2 – Grey sticky door window /door light system glazing	Sampled 12/22	Southeast Entrance Hall	Category II Non-friable	Miscellaneous	2 Door Windows 5 Door light windows
DWG4 – Black sticky door window glaze	Sampled 12/22	Room E, P Entry (all 4 doors) & M	Category II Non-friable	Miscellaneous	7 EA
FT1 – 9”x9” Dark tan floor tile with brown/white streaks and black mastic	Sampled 12/22	Room C, U & R	Category I Non-friable	Miscellaneous	3888 SF
**FT2 – 9”x9” Dark green floor tile with white streaks and black mastic	Sampled 12/22	Room FF, GG, N, S, W, W2, X & 1959 Hall	Category I Non-friable	Miscellaneous	3100 SF

AHERA Categories = thermal system insulation (TSI), surfacing material or miscellaneous
NESHAP Categories = friable, category I non-friable or category II non-friable
Friable = crumbled, pulverized or reduced to powder by hand pressure when dry
Category I Non-friable = packings, gaskets, resilient floor covering and asphalt roofing
Category II Non-friable = all non-friable that is not Category I
♦CTDEEP Regulated PCB Containing Material (>1, <50 ppm)
**Associated mastic samples were ND. However, the mastic shall be handled/abated as an ACM

TABLE 2
IDENTIFIED ASBESTOS CONTAINING MATERIALS (>1%)
FORMER McCARTIN SCHOOL
EAST HARTFORD, CONNECTICUT

Material	Sampled/ Assumed (mo/yr)	General Location	NESHAP Category	AHERA Category	Estimated Quantity
**FT4 – 9”x9” Tan floor tile with black streaks and black mastic	Sampled 12/22	Room T & T1	Category I Non-friable	Miscellaneous	288 SF
**FT5 – 9”x9” Brown floor tile with white/red streaks and black mastic	Sampled 12/22	Room O, T & T1	Category I Non-friable	Miscellaneous	650 SF
FT9 – 12”x12” White floor tile and black mastic	Sampled 12/22	Room BB & CC	Category I Non-friable	Miscellaneous	720 SF
FT10 – black mastic associated with 12"x12" Light tan tile floor tile with brown/white specks	Sampled 12/22	Room A, D, E, B	Category I Non-friable	Miscellaneous	2304 SF
FT11 – 9”x9” Grey floor tile with white streaks and black mastic	Sampled 12/22	Room J, JC, I, I3 & 1962 Hall	Category I Non-friable	Miscellaneous	1440 SF
FT12 – 9”x9” Tan floor tile with black/white streaks and black mastic	Sampled 12/22	Room H & K	Category I Non-friable	Miscellaneous	1152 SF
GD1 – Light brown ceiling glue daubs	Sampled 12/22	Room X	Category II Non-friable	Miscellaneous	432 SF
LP1 – Silver/grey light fixture paper	Sampled 12/22	Room R1 & W2	Friable	Miscellaneous	2 EA
MF1 – Grey mudded fitting (associated with PI1 & PI2)	Sampled 12/22	1959 Wing -Rooms BB, DD1, DD3, HH3, T, U, U1, V, X & Main Hall, Bathroom wet walls, other wet walls, above ceilings	Friable	TSI	Included in LF of PI1 & PI2

AHERA Categories = thermal system insulation (TSI), surfacing material or miscellaneous
NESHAP Categories = friable, category I non-friable or category II non-friable
Friable = crumbled, pulverized or reduced to powder by hand pressure when dry
Category I Non-friable = packings, gaskets, resilient floor covering and asphalt roofing
Category II Non-friable = all non-friable that is not Category I
♦CTDEEP Regulated PCB Containing Material (>1, <50 ppm)
**Associated mastic samples were ND. However, the mastic shall be handled/abated as an ACM

TABLE 2
IDENTIFIED ASBESTOS CONTAINING MATERIALS (>1%)
FORMER McCARTIN SCHOOL
EAST HARTFORD, CONNECTICUT

Material	Sampled/ Assumed (mo/yr)	General Location	NESHAP Category	AHERA Category	Estimated Quantity
PI1 – White pipe insulation	Sampled 12/22	1959 Wing -Rooms BB, DD1, DD3, HH3, T, U, U1, V, X & Main Hall, Bathroom wet walls, other wet walls, above fixed ceilings	Friable	TSI	1300 LF
PI2 – Grey pipe insulation paper	Sampled 12/22	1959 Wing -Rooms BB, DD1, DD3, HH3, T, U, U1, V, X & Main Hall, Bathroom wet walls, other wet walls, above fixed ceilings	Friable	TSI	1300 LF
PNF1 – Black/brown penetration tar and paper	Sampled 12/22	1959 & 1962 Wings - Roofs	Category I Non-friable	Miscellaneous	1520 SF
PRF1 – Black perimeter flashing system/tar	Sampled 12/22	1959 & 1962 Wings - Roofs	Category I Non-friable	Miscellaneous	1375 SF (PRF1 & 2 Combined)
PRF2 – Black perimeter flashing system / tar	Sampled 12/22	1959 Wing - Lower Roof	Category I Non-friable	Miscellaneous	
RFL1 – Black tar flashing on hoods	Sampled 12/22	1959 & 1962 Wings - Roofs	Category I Non-friable	Miscellaneous	12 SF

AHERA Categories = thermal system insulation (TSI), surfacing material or miscellaneous
NESHAP Categories = friable, category I non-friable or category II non-friable
Friable = crumbled, pulverized or reduced to powder by hand pressure when dry
Category I Non-friable = packings, gaskets, resilient floor covering and asphalt roofing
Category II Non-friable = all non-friable that is not Category I
♦CTDEEP Regulated PCB Containing Material (>1, <50 ppm)
**Associated mastic samples were ND. However, the mastic shall be handled/abated as an ACM

TABLE 2
IDENTIFIED ASBESTOS CONTAINING MATERIALS (>1%)
FORMER McCARTIN SCHOOL
EAST HARTFORD, CONNECTICUT

Material	Sampled/ Assumed (mo/yr)	General Location	NESHAP Category	AHERA Category	Estimated Quantity
WC2 – Tan brittle window caulk	Sampled 12/22	Exterior - Around small & large window systems & louvres off Rooms U & V	Category II Non-friable	Miscellaneous	195 LF
WSC1 – Light grey brittle caulk under metal windowsill- 1959	Sampled 12/22	Exterior - under metal window sills*(1959 construction)*	Category II Non-friable	Miscellaneous	400 LF
WSC2 – Dark grey brittle caulk under windowsill- 1962♦	Sampled 12/22	Exterior - under metal windowsills *(1962 addition)*	Category II Non-friable	Miscellaneous	220 LF
Interior Boiler Insulation Components	Assumed 12/22	Room A	Friable	TSI	2 Boilers
"Destructor" Interior Components	Assumed 12/22	Room E	Friable	TSI	1 Unit
Electrical on/off Switch Interior Components	Assumed 12/22	Room V, E	Category II Non-friable	Miscellaneous	10 EA
Pipe insulation & fittings	Assumed 12/22	Exterior-buried underground running from Boiler Room A to Mech Room E	Friable	TSI	600 LF
BBG1-Brown bulletin board glue between boards and on wall behind boards	Assumed 4/23	1962 wing-Hallway, Rooms J & H	Category II Non-friable	Miscellaneous	390 SF
RM1-Residual mastic associated with removed 9x9 floor tiles	Assumed 4/23	1959-Maint., P, P1, P2, P3, Hall adjacent to P3	Category II Non-friable	Miscellaneous	840 SF

AHERA Categories = thermal system insulation (TSI), surfacing material or miscellaneous
NESHAP Categories = friable, category I non-friable or category II non-friable
Friable = crumbled, pulverized or reduced to powder by hand pressure when dry
Category I Non-friable = packings, gaskets, resilient floor covering and asphalt roofing
Category II Non-friable = all non-friable that is not Category I
♦CTDEEP Regulated PCB Containing Material (>1, <50 ppm)
**Associated mastic samples were ND. However, the mastic shall be handled/abated as an ACM

TABLE 3
CONFIRMED NON-ASBESTOS CONTAINING MATERIALS (<1%)
FORMER McCARTIN SCHOOL
EAST HARTFORD, CONNECTICUT

Material	General Location
Samples Collected 12/13/22-12/19/22	
BI1 - White preformed boiler insulation	Room V
BI2 - Grey seam sealer	Room V
C1 - Grey chimney caulk	Exterior-Chimney
C3 - Grey rubbery caulk	Exterior-Around boarded up windows/doors o/s E
C4♦ - White sticky soffit caulk	Above window large systems-59 & 62 construction
C5 - White sidewalk caulk	o/s building entry adjacent to T1
CB1 - Black cove base and black glue	Throughout ’59
CB2 - Orange vinyl cove base glue	Throughout ’59
CB3 - Brown cove base and brown glue	Throughout ’62
CB4 - Orange cove base glue	Room I & I3
CB5 - Dark brown cove base glue	’62 Main hall
CBG1 - Brown cork board adhesive	Room A, H, K & Hall outside J & K
CG1 - Brown hard glue	Room BB, FF, GG, HH, HH1, HH2 & HH3
CT1 - 2'x4' Long white fissure (width) with small pinholes	Main Hall ’59 & ’62 & Room U
CT2 - 2'x4' Long white fissure (length) with small pinholes	Main Hall ’59 & ’62 & Room U
CT3 - 2'x4' Short white fissure with small pinholes	Main Hall ’59 & ’62 & Room U
DC2 - Grey sticky caulking	o/s entry to building adjacent to Room A-62 construction
DC3 - Red brittle door caulk	o/s main entry to 62 construction
DC4 - Light grey rubbery caulk	o/s entry to building adjacent to Room E-62 construction
DWG3 - Off white door window glaze	’59 & ’62 Classroom doors
**FT2-black mastic only	Room FF, GG, N, S, W, W2 & Hall
FT3 - 12"x12" Tan/white mottled floor tile and brown adhesive	Hall outside T & T1
**FT4-black mastic only	Room T & T1
**FT5-black mastic only	Room O, T & T1
FT6 - 12"x12" White floor tile with pink/blue specks and tan mastic	Room AA
FT7 - 12"x12" Green floor tile with white/green specks and tan adhesive.	Room AA
FT8 - 12"x12" White floor tile with grey/black specks and tan mastic	Room BB, O1, P, P1, P2, P3 & P Entry
**FT10-Tan/brown floor tile only	Room A, D, E, B & M2
FT13 - 12"x12" Tan floor tile with white/black specks and black mastic	Room M, M1, M2, M3, M4, 1962 Entrance Vestibule
GD2 - Dark brown ceiling glue daub	Main corridor 62 construction

♦CTDEEP Regulated PCB Containing Material (>1, <50 ppm)
** However, associated layers are positive

TABLE 3
CONFIRMED NON-ASBESTOS CONTAINING MATERIALS (<1%)
FORMER McCARTIN SCHOOL
EAST HARTFORD, CONNECTICUT

Material	General Location
GR1 - Light Grey wall seam grout	Men's & Women's Bathrooms '59
GR2 - Grey ceramic floor tile	Men's & Women's Bathrooms '59
GR3 - Grey wall seam grout	Men's & Women's Bathrooms '62
GR4 - Grey ceramic floor tile grout	Men's & Women's Bathrooms '62
GR5 - Red fire brick grout	Room E
LEV1 – Reddish brown cementitious floor leveler	Throughout '59 & '62
MF2 - Grey mudded fitting on fiberglass piping	Throughout '62
MG1 - Amber membrane glue	Throughout '59 & '62 roofs
PBT1 - Black pitch box tar	A/C '59 roof
PRF3 - Black perimeter a chimney	Roof '59 chimney
RF1 - Black paper membrane roof and tar	'62 Roof
RF2 - Black built up roofing	'59 Roof
RF3 - Black roofing layer	'59 lower roof
RFL2 - Black tar paper	Candy cane vent '59 roof north
SHR1 - White sheetrock and white joint compound	Room AA, CC, F, I3, GG, JC, O1, O2, Q, Q1 & Q2
SHR2 - Grey sheet rock and white joint compound	Room HH, HH1, HH2, HH3 & HH4
SHR3 - Grey sheetrock	Day Care Main Hall
SS1 - Black rubbery membrane seam sealant	Throughout '59 & '62 roofs
SU1 - Light grey sink undercoating	Room HH3 & N
SU2 - Dark grey sink undercoating	Room J, K, & M
SUR1 - Grey cementitious wall surfacing	'59 Hallway Walls
SUR2 - Green wall texture	'59 & '62 Hallway Walls
TM1 - White tectum deck	62 construction roof-throughout
VB1 - Black vapor barrier	Perimeter Walls '62
WC1 - Black interior/exterior window caulk	'59 & '62 Perimeter Windows
WG1 - Grey brittle window glaze	o/s Room V, U
Samples Collected 1/14/23	
WVB1 - Black tar paper wall vapor barrier behind brick veneer	Behind brick veneer on 1959 wing
WVB2 - Black tar paper vapor barrier behind brick veneer	Behind brick veneer on 1962 wing
SVB1 - Tar vapor varies adhered to underside of slab	Under slab in 1959 wing
WC3♦ - Light Grey window frame caulk	On and around large and small window systems of 1959 B & D sides
WC4 - Light Grey window frame caulk around smaller windows	Around small windows of 1962 wing-A side east end
WC5♦- Dark Grey window frame caulk	On and around large and small window systems of 1962 wing B & C sides
FD1 - Fire door insulation white	Room V
FD2 - Fire door insulation white	Room E

♦CTDEEP Regulated PCB Containing Material (>1, <50 ppm)
** However, associated layers are positive

TABLE 3
CONFIRMED NON-ASBESTOS CONTAINING MATERIALS (<1%)
FORMER McCARTIN SCHOOL
EAST HARTFORD, CONNECTICUT

Material	General Location
FD3 - Fire door insulation white	Room M
FD4 – Fire door insulation white	Room H
FD5 - Fire door insulation white	Room JC
FD6 - Fire door insulation white	Corridor 1962
Samples Collected 1/18/23	
DC5- off white door frame caulk	Exterior o/s Rooms U, X
Samples Collected 4/5/23	
Grey mudded fittings on domestic fiberglass insulated water lines-(additional MF2 samples)	Throughout 1962
Light grey mudded fittings on fiberglass insulated heating lines (additional MF2 samples)	Throughout 1962
Samples Collected 4/27/23	
WG2-Black gummy window glaze	All newer style windows on 1959 wing
WG3-Black gummy window glaze	Throughout 1962 wing windows

♦CTDEEP Regulated PCB Containing Material (>1, <50 ppm)
** However, associated layers are positive

TABLE 4
SUMMARY OF LEAD PAINT XRF MEASUREMENTS
FORMER McCARTIN SCHOOL
EAST HARTFORD, CONNECTICUT

Structure	No. of Measurements	Calibrations	Void	Lead Detected	No Lead Detected
Former McCartin School	274	29	0	80	165

See Lead Paint XRF Measurement Table in Appendix E.

TABLE 5
SUMMARY OF COMPOSITE BUILDING MATERIAL WASTE CHARACTERIZATION
FORMER McCARTIN SCHOOL
EAST HARTFORD, CONNECTICUT

Waste Stream	Metal	mg/L Leachate	Hazardous/Non-Hazardous
Exterior wood soffit	Lead	**7.34**	**Hazardous**
Bldg. Material Composite including wood soffit, cabinet wood, sheetrock, ceiling tiles, other wood)	Lead	<0.10	Non-Hazardous

Note: Any metal components should be recycled to promote waste minimization efforts, rather than disposed of, and the recycling operation is exempt from the USEPA RCRA and CTDEEP Hazardous Waste regulations.

Additional lead TCLP samples may be required to characterize other waste streams (unknown at the time of the survey) which may be generated during abatement/demolition activities.

See Appendix F for Laboratory Data.

BDL - Below Detection Limit
ND - Not Detected

TABLE 6
INVENTORY OF ADDITIONAL HAZARDOUS/REGULATED MATERIALS, WASTES AND ITEMS IDENTIFIED
FORMER McCARTIN SCHOOL
EAST HARTFORD, CONNECTICUT

Quantity	Size	Material / Item	General Location	Potential Hazard
1		Smoke Detectors	A	LLRW/Circuit Boards
1		Motion Sensors/Heat Sensors	A	UW - Circuit boards
2		Fluorescent bulbs - 4'	A	UW - Hg Lamps
1		Light Ballasts	A	UW - Circuit Boards CRW-PCBs
2		TV/Computer Monitor	AA	UW - Circuit boards/CRT
3		Air Conditioner	AA	CFCs/Freon
5		Motion Sensors/Heat Sensors	AA	UW - Circuit boards
2		Smoke Detectors	AA	LLRW/Circuit Boards
32		Fluorescent bulbs - 4'	AA	UW - Hg Lamps
16		Electronic Light Ballasts	AA	UW - Circuit Boards CRW-PCBs
6		Fluorescent bulbs - 4'	B	UW - Hg Lamps
3		Light Ballasts	B	UW - Circuit Boards CRW-PCBs
4		Compact Fluorescent	B	UW - Hg Lamps
1		Air Conditioner	B	CFCs/Freon
1		Smoke Detectors	B	LLRW/Circuit Boards
1		Camera	B	Circuit Boards
1		PCB Transformer	B	CRW - PCBs
1		Motion Sensors/Heat Sensors	B	UW - Circuit boards
1		Motion Sensors/Heat Sensors	BB	UW - Circuit boards

CRW- Connecticut Regulated Waste – PCBs (CR01), Oils (CR02/CR03), waste chemical liquids - antifreeze, latex & solvent paints, sludges, etc. (CR04), waste chemical solids (CR05)
UW- Universal Waste (batteries, thermostat ampoules, fluorescent lamps, used electronics)
IH- Inhalation hazard (silicas, etc.)
I- Ignitable - may contain ingredients which are ignitable (materials which have a flashpoint <140ºF) (D001)
C- Corrosive - may contain ingredients which are alkaline or acidic (materials with a PH<2 or >12.5) (D002)
T- Toxic - may contain ingredients which are harmful if swallowed or which release vapors that can cause irritation
R- Reactive – may contain ingredients which are unstable, react violently with water or are explosive (D003)

TABLE 6
INVENTORY OF ADDITIONAL HAZARDOUS/REGULATED MATERIALS, WASTES AND ITEMS IDENTIFIED
FORMER McCARTIN SCHOOL
EAST HARTFORD, CONNECTICUT

Quantity	Size	Material / Item	General Location	Potential Hazard
2		Air Conditioner	BB	CFCs/Freon
1		Smoke Detectors	BB	LLRW/Circuit Boards
12		Fluorescent bulbs - 4'	BB	UW - Hg Lamps
6		Light Ballasts	BB	UW - Circuit Boards CRW-PCBs
2		Motion Sensors/Heat Sensors	C	UW - Circuit boards
1		Electronic Thermostats	C	UW - Circuit boards
1		Air Conditioner	C	CFCs/Freon
22		Fluorescent bulbs - 4'	C	UW - Hg Lamps
11		Light Ballasts	C	UW - Circuit Boards CRW-PCBs
1		Smoke Detectors	C	LLRW/Circuit Boards
1		Camera	C	Circuit Boards
1		Motion Sensors/Heat Sensors	CC	UW - Circuit boards
1		Electronic Thermostats	CC	UW - Circuit boards
1		Smoke Detectors	CC	LLRW/Circuit Boards
4		Fluorescent bulbs - 4'	CC	UW - Hg Lamps
2		Light Ballasts	CC	UW - Circuit Boards CRW-PCBs
1		Smoke Detectors	D	LLRW/Circuit Boards
2		Motion Sensors/Heat Sensors	D	UW - Circuit boards
1		Air Conditioner	D	CFCs/Freon

CRW- Connecticut Regulated Waste – PCBs (CR01), Oils (CR02/CR03), waste chemical liquids - antifreeze, latex & solvent paints, sludges, etc. (CR04), waste chemical solids (CR05)
UW- Universal Waste (batteries, thermostat ampoules, fluorescent lamps, used electronics)
IH- Inhalation hazard (silicas, etc.)
I- Ignitable - may contain ingredients which are ignitable (materials which have a flashpoint <140ºF) (D001)
C- Corrosive - may contain ingredients which are alkaline or acidic (materials with a PH<2 or >12.5) (D002)
T- Toxic - may contain ingredients which are harmful if swallowed or which release vapors that can cause irritation
R- Reactive – may contain ingredients which are unstable, react violently with water or are explosive (D003)

TABLE 6
INVENTORY OF ADDITIONAL HAZARDOUS/REGULATED MATERIALS, WASTES AND ITEMS IDENTIFIED
FORMER McCARTIN SCHOOL
EAST HARTFORD, CONNECTICUT

Quantity	Size	Material / Item	General Location	Potential Hazard
20		Fluorescent bulbs - 4'	D	UW - Hg Lamps
10		Light Ballasts	D	UW - Circuit Boards CRW-PCBs
1		Compact Fluorescent	DD1	UW - Hg Lamps
2		Fluorescent bulbs - 4'	DD1	UW - Hg Lamps
1		Light Ballasts	DD1	UW - Circuit Boards CRW-PCBs
1		Smoke Detectors	DD1	LLRW/Circuit Boards
1		Motion Sensors/Heat Sensors	DD1	UW - Circuit boards
2		Fluorescent bulbs - 4'	DD2	UW - Hg Lamps
1		Light Ballasts	DD2	UW - Circuit Boards CRW-PCBs
3		Compact Fluorescent	DD3	UW - Hg Lamps
1		Smoke Detectors	DD3	LLRW/Circuit Boards
4		Fluorescent bulbs - 4'	DD3	UW - Hg Lamps
2		Light Ballasts	DD3	UW - Circuit Boards CRW-PCBs
1		Call box	DD3	Circuit Boards
1		Motion Sensors/Heat Sensors	DD3	UW - Circuit boards
3		Exit Sign Batteries	Daycare hallway	UW - Circuit boards/Hg Lamps/Batteries
2		Fire pulldown	Daycare hallway	Circuit Boards/Hg Ampoule
3		Motion Sensors/Heat Sensors	Daycare hallway	UW - Circuit boards

CRW- Connecticut Regulated Waste – PCBs (CR01), Oils (CR02/CR03), waste chemical liquids - antifreeze, latex & solvent paints, sludges, etc. (CR04), waste chemical solids (CR05)
UW- Universal Waste (batteries, thermostat ampoules, fluorescent lamps, used electronics)
IH- Inhalation hazard (silicas, etc.)
I- Ignitable - may contain ingredients which are ignitable (materials which have a flashpoint <140ºF) (D001)
C- Corrosive - may contain ingredients which are alkaline or acidic (materials with a PH<2 or >12.5) (D002)
T- Toxic - may contain ingredients which are harmful if swallowed or which release vapors that can cause irritation
R- Reactive – may contain ingredients which are unstable, react violently with water or are explosive (D003)

TABLE 6
INVENTORY OF ADDITIONAL HAZARDOUS/REGULATED MATERIALS, WASTES AND ITEMS IDENTIFIED
FORMER McCARTIN SCHOOL
EAST HARTFORD, CONNECTICUT

Quantity	Size	Material / Item	General Location	Potential Hazard
4		Emergency Lighting	Daycare hallway	UW - Batteries/Hg Lamps
6		Smoke Detectors	Daycare hallway	LLRW/Circuit Boards
3		Fire strobe	Daycare hallway	Circuit Boards
2		Fire Extinguisher	Daycare hallway	CRW - Waste Chemical Solid
1		Electronic Thermostats	Daycare hallway	UW - Circuit boards
18		Fluorescent bulbs - 4'	Daycare hallway	UW - Hg Lamps
9		Electronic Light Ballasts	Daycare hallway	UW - Circuit Boards
2		Burglary alarm	Daycare hallway	UW - Circuit Boards
2		Compact Fluorescent	E	UW - Hg Lamps
5		Control Panels	E	UW - Circuit Boards
		Cleaning Supplies	E	T
1		Smoke Detectors	E	LLRW/Circuit Boards
4		Compact Fluorescent	E 1962	UW - Hg Lamps
6		Control Panels	E 1962	UW - Circuit Boards
1		Fire Extinguisher	E 1962	CRW - Waste Chemical Solid
4		Fluorescent bulbs - 4'	F	UW - Hg Lamps
2		Light Ballasts	F	UW - Circuit Boards CRW-PCBs
1		Smoke Detectors	F	LLRW/Circuit Boards
1		Emergency Lighting	F	UW - Batteries/Hg Lamps
16		Fluorescent bulbs - 4'	FF	UW - Hg Lamps

CRW- Connecticut Regulated Waste – PCBs (CR01), Oils (CR02/CR03), waste chemical liquids - antifreeze, latex & solvent paints, sludges, etc. (CR04), waste chemical solids (CR05)
UW- Universal Waste (batteries, thermostat ampoules, fluorescent lamps, used electronics)
IH- Inhalation hazard (silicas, etc.)
I- Ignitable - may contain ingredients which are ignitable (materials which have a flashpoint <140ºF) (D001)
C- Corrosive - may contain ingredients which are alkaline or acidic (materials with a PH<2 or >12.5) (D002)
T- Toxic - may contain ingredients which are harmful if swallowed or which release vapors that can cause irritation
R- Reactive – may contain ingredients which are unstable, react violently with water or are explosive (D003)

TABLE 6
INVENTORY OF ADDITIONAL HAZARDOUS/REGULATED MATERIALS, WASTES AND ITEMS IDENTIFIED
FORMER McCARTIN SCHOOL
EAST HARTFORD, CONNECTICUT

Quantity	Size	Material / Item	General Location	Potential Hazard
8		Light Ballasts	FF	UW - Circuit Boards CRW-PCBs
1		Motion Sensors/Heat Sensors	FF	UW - Circuit boards
1		Electronic Thermostats	FF	UW - Circuit boards
2		Air Conditioner	FF	CFCs/Freon
		Cleaning Supplies	FF	T
1		Security System/Control Panels	Front 1962 entry	UW - Circuit boards/Hg Lamps/Batteries
2		Fluorescent bulbs - 4'	Front 1962 entry	UW - Hg Lamps
1		Light Ballasts	Front 1962 entry	UW - Circuit Boards CRW-PCBs
4		Fluorescent bulbs - 4'	G	UW - Hg Lamps
2		Light Ballasts	G	UW - Circuit Boards CRW-PCBs
1		Emergency Lighting	G	UW - Batteries/Hg Lamps
1		Smoke Detectors	G	LLRW/Circuit Boards
2		Air Conditioner	GG	CFCs/Freon
1		Smoke Detectors	GG	LLRW/Circuit Boards
1		Fire Extinguisher	GG	CRW - Waste Chemical Solid
16		Fluorescent bulbs - 4'	GG	UW - Hg Lamps
8		Light Ballasts	GG	UW - Circuit Boards CRW-PCBs
1		Motion Sensors/Heat Sensors	GG	UW - Circuit boards

CRW- Connecticut Regulated Waste – PCBs (CR01), Oils (CR02/CR03), waste chemical liquids - antifreeze, latex & solvent paints, sludges, etc. (CR04), waste chemical solids (CR05)
UW- Universal Waste (batteries, thermostat ampoules, fluorescent lamps, used electronics)
IH- Inhalation hazard (silicas, etc.)
I- Ignitable - may contain ingredients which are ignitable (materials which have a flashpoint <140ºF) (D001)
C- Corrosive - may contain ingredients which are alkaline or acidic (materials with a PH<2 or >12.5) (D002)
T- Toxic - may contain ingredients which are harmful if swallowed or which release vapors that can cause irritation
R- Reactive – may contain ingredients which are unstable, react violently with water or are explosive (D003)

TABLE 6
INVENTORY OF ADDITIONAL HAZARDOUS/REGULATED MATERIALS, WASTES AND ITEMS IDENTIFIED
FORMER McCARTIN SCHOOL
EAST HARTFORD, CONNECTICUT

Quantity	Size	Material / Item	General Location	Potential Hazard
1		Exit Sign Batteries	Hall outside D	UW - Circuit boards/Hg Lamps/Batteries
1		Emergency Lighting	Hall outside D	UW - Circuit Boards CRW-PCBs
1		Smoke Detectors	Hall outside D	LLRW/Circuit Boards
1		Motion Sensors/Heat Sensors	Hall outside D	UW - Circuit boards
6		Fluorescent bulbs - 4'	Hall outside D	UW - Hg Lamps
3		Light Ballasts	Hall outside D	UW - Circuit Boards CRW-PCBs
1		Electronic Thermostats	Hall outside D	UW - Circuit boards
1		Fire Extinguisher	Hall outside D	CRW - Waste Chemical Solid
1		Fire pulldown	Hall outside D	UW - Circuit boards/Hg ampoule
1		Camera	Hall outside D	UW - Circuit boards
1		Fire strobe	Hall outside D	UW - Circuit boards
6		Fluorescent bulbs	H	UW - Hg Lamps
6		Light Ballasts	H	UW - Circuit Boards CRW-PCBs
1		Motion Sensors/Heat Sensors	H	UW - Circuit boards
1		Smoke Detectors	H	LLRW/Circuit Boards
1		Air Conditioner	H	CFCs/Freon
1		Burglary alarm	H	UW - Circuit boards
1		Motion Sensors/Heat Sensors	HH	UW - Circuit boards
2		Fluorescent bulbs - 4'	HH	UW - Hg Lamps

CRW- Connecticut Regulated Waste – PCBs (CR01), Oils (CR02/CR03), waste chemical liquids - antifreeze, latex & solvent paints, sludges, etc. (CR04), waste chemical solids (CR05)
UW- Universal Waste (batteries, thermostat ampoules, fluorescent lamps, used electronics)
IH- Inhalation hazard (silicas, etc.)
I- Ignitable - may contain ingredients which are ignitable (materials which have a flashpoint <140ºF) (D001)
C- Corrosive - may contain ingredients which are alkaline or acidic (materials with a PH<2 or >12.5) (D002)
T- Toxic - may contain ingredients which are harmful if swallowed or which release vapors that can cause irritation
R- Reactive – may contain ingredients which are unstable, react violently with water or are explosive (D003)

TABLE 6
INVENTORY OF ADDITIONAL HAZARDOUS/REGULATED MATERIALS, WASTES AND ITEMS IDENTIFIED
FORMER McCARTIN SCHOOL
EAST HARTFORD, CONNECTICUT

Quantity	Size	Material / Item	General Location	Potential Hazard
2		Light Ballasts	HH	UW - Circuit Boards CRW-PCBs
1		Air Conditioner	HH	CFCs/Freon
1		Smoke Detectors	HH	LLRW/Circuit Boards
1		Smoke Detectors	HH1	LLRW/Circuit Boards
4		Fluorescent bulbs - 4'	HH1	UW - Hg Lamps
2		Light Ballasts	HH1	UW - Circuit Boards CRW-PCBs
1		Air Conditioner	HH1	CFCs/Freon
1		Motion Sensors/Heat Sensors	HH1	UW - Circuit boards
2		Fluorescent bulbs - 4'	HH3	UW - Hg Lamps
1		Light Ballasts	HH3	UW - Circuit Boards CRW-PCBs
		Smoke Detectors	HH3	LLRW/Circuit Boards
1		Motion Sensors/Heat Sensors	HH3	UW - Circuit boards
1		Motion Sensors/Heat Sensors	HH3-A	UW - Circuit boards
1		Smoke Detectors	HH3-A	LLRW/Circuit Boards
2		Fluorescent bulbs - 4'	HH3-A	UW - Hg Lamps
1		Light Ballasts	HH3-A	UW - Circuit Boards CRW-PCBs
1		Motion Sensors/Heat Sensors	HH4	UW - Circuit boards
1		Smoke Detectors	HH4	LLRW/Circuit Boards
2		Fluorescent bulbs - 4'	HH4	UW - Hg Lamps

CRW- Connecticut Regulated Waste – PCBs (CR01), Oils (CR02/CR03), waste chemical liquids - antifreeze, latex & solvent paints, sludges, etc. (CR04), waste chemical solids (CR05)
UW- Universal Waste (batteries, thermostat ampoules, fluorescent lamps, used electronics)
IH- Inhalation hazard (silicas, etc.)
I- Ignitable - may contain ingredients which are ignitable (materials which have a flashpoint <140ºF) (D001)
C- Corrosive - may contain ingredients which are alkaline or acidic (materials with a PH<2 or >12.5) (D002)
T- Toxic - may contain ingredients which are harmful if swallowed or which release vapors that can cause irritation
R- Reactive – may contain ingredients which are unstable, react violently with water or are explosive (D003)

TABLE 6
INVENTORY OF ADDITIONAL HAZARDOUS/REGULATED MATERIALS, WASTES AND ITEMS IDENTIFIED
FORMER McCARTIN SCHOOL
EAST HARTFORD, CONNECTICUT

Quantity	Size	Material / Item	General Location	Potential Hazard
1		Light Ballasts	HH4	UW - Circuit Boards CRW-PCBs
15		Light Ballasts	I	UW - Circuit Boards CRW-PCBs
30		Fluorescent bulbs - 4'	I	UW - Hg Lamps
2		Air Conditioner	I	CFCs/Freon
2		Smoke Detectors	I	LLRW/Circuit Boards
1		Fire Extinguisher	I	CRW - Waste Chemical Solid
1		TV/Computer Monitor	I	UW - Circuit boards/CRT
1		Refrigerator	I	CFCs/Freon
1		Light Ballasts	I	UW - Circuit boards
		Phone	I	UW - Circuit boards
1		Burglary alarm	I	UW - Circuit boards
1		Motion Sensors/Heat Sensors	I1	UW - Circuit boards
1		Compact Fluorescent	I1	UW - Hg Lamps
1		Motion Sensors/Heat Sensors	I2	UW - Circuit boards
2		Compact Fluorescent	I2	UW - Hg Lamps
1		Smoke Detectors	I2	LLRW/Circuit Boards
1		Motion Sensors/Heat Sensors	I3	UW - Circuit boards
2		Fluorescent bulbs - 4'	I3	UW - Hg Lamps
2		Light Ballasts	I3	UW - Circuit Boards CRW-PCBs

CRW- Connecticut Regulated Waste – PCBs (CR01), Oils (CR02/CR03), waste chemical liquids - antifreeze, latex & solvent paints, sludges, etc. (CR04), waste chemical solids (CR05)
UW- Universal Waste (batteries, thermostat ampoules, fluorescent lamps, used electronics)
IH- Inhalation hazard (silicas, etc.)
I- Ignitable - may contain ingredients which are ignitable (materials which have a flashpoint <140ºF) (D001)
C- Corrosive - may contain ingredients which are alkaline or acidic (materials with a PH<2 or >12.5) (D002)
T- Toxic - may contain ingredients which are harmful if swallowed or which release vapors that can cause irritation
R- Reactive – may contain ingredients which are unstable, react violently with water or are explosive (D003)

TABLE 6
INVENTORY OF ADDITIONAL HAZARDOUS/REGULATED MATERIALS, WASTES AND ITEMS IDENTIFIED
FORMER McCARTIN SCHOOL
EAST HARTFORD, CONNECTICUT

Quantity	Size	Material / Item	General Location	Potential Hazard
1		Smoke Detectors	I3	LLRW/Circuit Boards
12		Light Ballasts	J	UW - Circuit Boards CRW-PCBs
24		Fluorescent bulbs - 4'	J	UW - Hg Lamps
2		Air Conditioner	J	CFCs/Freon
2		Smoke Detectors	J	LLRW/Circuit Boards
1		Fire Extinguisher	J	CRW - Waste Chemical Solid
1		TV/Computer Monitor	J	UW - Circuit boards/CRT
1		Refrigerator	J	CFCs/Freon
1		Electronic Thermostats	J	UW - Circuit boards
		Phone	J	UW - Circuit boards
1		Burglary alarm	J	UW - Circuit boards
1		Compact Fluorescent	Janitor closet	UW - Hg Lamps
		Cleaning Supplies	Janitor closet	T
		Cleaning Supplies	JC	T
1		Compact Fluorescent	JC	UW - Hg Lamps
12		Light Ballasts	K	UW - Circuit Boards CRW-PCBs
24		Fluorescent bulbs - 4'	K	UW - Hg Lamps
2		Air Conditioner	K	CFCs/Freon
2		Smoke Detectors	K	LLRW/Circuit Boards
1		Fire Extinguisher	K	CRW - Waste Chemical Solid

CRW- Connecticut Regulated Waste – PCBs (CR01), Oils (CR02/CR03), waste chemical liquids - antifreeze, latex & solvent paints, sludges, etc. (CR04), waste chemical solids (CR05)
UW- Universal Waste (batteries, thermostat ampoules, fluorescent lamps, used electronics)
IH- Inhalation hazard (silicas, etc.)
I- Ignitable - may contain ingredients which are ignitable (materials which have a flashpoint <140ºF) (D001)
C- Corrosive - may contain ingredients which are alkaline or acidic (materials with a PH<2 or >12.5) (D002)
T- Toxic - may contain ingredients which are harmful if swallowed or which release vapors that can cause irritation
R- Reactive – may contain ingredients which are unstable, react violently with water or are explosive (D003)

TABLE 6
INVENTORY OF ADDITIONAL HAZARDOUS/REGULATED MATERIALS, WASTES AND ITEMS IDENTIFIED
FORMER McCARTIN SCHOOL
EAST HARTFORD, CONNECTICUT

Quantity	Size	Material / Item	General Location	Potential Hazard
1		TV/Computer Monitor	K	UW - Circuit boards/CRT
1		Refrigerator	K	CFCs/Freon
1		Light Ballasts	K	UW - Circuit Boards CRW-PCBs
		Phone	K	UW - Circuit boards
1		Burglary alarm	K	UW - Circuit boards
20		Fluorescent bulbs - 4'	M	UW - Hg Lamps
10		Light Ballasts	M	UW - Circuit Boards CRW-PCBs
2		Air Conditioner	M	CFCs/Freon
1		Phone	M	UW - Circuit boards
1		Fire Extinguisher	M	CRW - Waste Chemical Solid
1		Refrigerator	M	CFCs/Freon
3		Smoke Detectors	M	LLRW/Circuit Boards
1		Burglary alarm	M	UW - Circuit boards
1		Motion Sensors/Heat Sensors	M1	UW - Circuit boards
1		Burglary alarm	M1	UW - Circuit boards
1		Air Conditioner	M1	CFCs/Freon
2		Fluorescent bulbs - 4'	M1	UW - Hg Lamps
1		Light Ballasts	M1	UW - Circuit Boards CRW-PCBs
1		Burglary alarm	M2	UW - Circuit boards

CRW- Connecticut Regulated Waste – PCBs (CR01), Oils (CR02/CR03), waste chemical liquids - antifreeze, latex & solvent paints, sludges, etc. (CR04), waste chemical solids (CR05)
UW- Universal Waste (batteries, thermostat ampoules, fluorescent lamps, used electronics)
IH- Inhalation hazard (silicas, etc.)
I- Ignitable - may contain ingredients which are ignitable (materials which have a flashpoint <140ºF) (D001)
C- Corrosive - may contain ingredients which are alkaline or acidic (materials with a PH<2 or >12.5) (D002)
T- Toxic - may contain ingredients which are harmful if swallowed or which release vapors that can cause irritation
R- Reactive – may contain ingredients which are unstable, react violently with water or are explosive (D003)

TABLE 6
INVENTORY OF ADDITIONAL HAZARDOUS/REGULATED MATERIALS, WASTES AND ITEMS IDENTIFIED
FORMER McCARTIN SCHOOL
EAST HARTFORD, CONNECTICUT

Quantity	Size	Material / Item	General Location	Potential Hazard
1		Motion Sensors/Heat Sensors	M2	UW - Circuit boards
1		Air Conditioner	M2	CFCs/Freon
1		Fire strobe	M2	UW - Circuit boards
4		Fluorescent bulbs - 4'	M2	UW - Hg Lamps
2		Light Ballasts	M2	UW - Circuit Boards CRW-PCBs
1		Motion Sensors/Heat Sensors	M3	UW - Circuit boards
2		Fluorescent bulbs - 4'	M4	UW - Hg Lamps
1		Light Ballasts	M4	UW - Circuit Boards
1		Smoke Detectors	M4	LLRW/Circuit Boards
1		Fire Extinguisher	Main Hall 1 1959	CRW - Waste Chemical Solid
1		Emergency Lighting	Main Hall 1 1959	UW - Batteries/Hg Lamps
2		Exit Sign Batteries	Main Hall 1 1959	UW - Circuit boards/Hg Lamps/Batteries
1		Electronic Thermostats	Main Hall 1 1959	UW - Circuit boards
1		Security System/Control Panels	Main Hall 1 1959	UW - Circuit boards/Hg Lamps/Batteries
3		Motion Sensors/Heat Sensors	Main Hall 1 1959	UW - Circuit boards
2		Fire strobe	Main Hall 1 1959	UW - Circuit boards
1		Fire pulldown	Main Hall 1 1959	UW - Circuit boards/Hg ampoule
1		Smoke Detectors	Main Hall 1 1959	LLRW/Circuit Boards
1		Water Fountains	Main Hall 1 1959	CFCs/Freon
4		Fluorescent bulbs - 4'	Main Hall 1 1959	UW - Hg Lamps

CRW- Connecticut Regulated Waste – PCBs (CR01), Oils (CR02/CR03), waste chemical liquids - antifreeze, latex & solvent paints, sludges, etc. (CR04), waste chemical solids (CR05)
UW- Universal Waste (batteries, thermostat ampoules, fluorescent lamps, used electronics)
IH- Inhalation hazard (silicas, etc.)
I- Ignitable - may contain ingredients which are ignitable (materials which have a flashpoint <140ºF) (D001)
C- Corrosive - may contain ingredients which are alkaline or acidic (materials with a PH<2 or >12.5) (D002)
T- Toxic - may contain ingredients which are harmful if swallowed or which release vapors that can cause irritation
R- Reactive – may contain ingredients which are unstable, react violently with water or are explosive (D003)

TABLE 6
INVENTORY OF ADDITIONAL HAZARDOUS/REGULATED MATERIALS, WASTES AND ITEMS IDENTIFIED
FORMER McCARTIN SCHOOL
EAST HARTFORD, CONNECTICUT

Quantity	Size	Material / Item	General Location	Potential Hazard
24	2'	Fluorescent bulbs	Main Hall 1 1959	UW - Hg Lamps
14		Light Ballasts	Main Hall 1 1959	UW - Circuit Boards CRW-PCBs
3		Fire Extinguisher	Main hall 2	CRW - Waste Chemical Solid
2		Fire pulldown	Main hall 2	UW - Circuit boards/Hg ampoule
3		Exit Sign Batteries	Main hall 2	UW - Circuit boards/Hg Lamps/Batteries
4		Motion Sensors/Heat Sensors	Main hall 2	UW - Circuit boards
5		Smoke Detectors	Main hall 2	LLRW/Circuit Boards
2		Fire strobe	Main hall 2	UW - Circuit boards
1		Electronic Thermostats	Main hall 2	UW - Circuit boards
1		Security System/Control Panels	Main hall 2	UW - Circuit boards/Hg Lamps/Batteries
2		Emergency Lighting	Main hall 2	UW - Batteries/Hg Lamps
36		Fluorescent bulbs - 4'	Main hall 2	UW - Hg Lamps
18		Light Ballasts	Main hall 2	UW - Circuit Boards CRW-PCBs
1		Water Fountains	Main hall 2	CFCs/Freon
2		Fluorescent bulbs - 4'	Maint	UW - Hg Lamps
1		Light Ballasts	Maint	UW - Circuit Boards CRW-PCBs
		Smoke Detectors	Maint	LLRW/Circuit Boards
1		Fire Extinguisher	N	CRW - Waste Chemical Solid

CRW- Connecticut Regulated Waste – PCBs (CR01), Oils (CR02/CR03), waste chemical liquids - antifreeze, latex & solvent paints, sludges, etc. (CR04), waste chemical solids (CR05)
UW- Universal Waste (batteries, thermostat ampoules, fluorescent lamps, used electronics)
IH- Inhalation hazard (silicas, etc.)
I- Ignitable - may contain ingredients which are ignitable (materials which have a flashpoint <140ºF) (D001)
C- Corrosive - may contain ingredients which are alkaline or acidic (materials with a PH<2 or >12.5) (D002)
T- Toxic - may contain ingredients which are harmful if swallowed or which release vapors that can cause irritation
R- Reactive – may contain ingredients which are unstable, react violently with water or are explosive (D003)

TABLE 6
INVENTORY OF ADDITIONAL HAZARDOUS/REGULATED MATERIALS, WASTES AND ITEMS IDENTIFIED
FORMER McCARTIN SCHOOL
EAST HARTFORD, CONNECTICUT

Quantity	Size	Material / Item	General Location	Potential Hazard
1		Fire strobe	N	UW - Circuit boards
		Cleaning Supplies	N	T
1		Computer Monitor	N	UW - Circuit boards
1		Phone	N	UW - Circuit boards
2		Air Conditioner	N	CFCs/Freon
64		Fluorescent bulbs - 4'	N	UW - Hg Lamps
32		Light Ballasts	N	UW - Circuit Boards CRW-PCBs
2		Smoke Detectors	N	LLRW/Circuit Boards
1		Motion Sensors/Heat Sensors	N	UW - Circuit boards
1		Fire Extinguisher	O	CRW - Waste Chemical Solid
1		Motion Sensors/Heat Sensors	O	UW - Circuit boards
1		Smoke Detectors	O	LLRW/Circuit Boards
32		Fluorescent bulbs - 4'	O	UW - Hg Lamps
16		Light Ballasts	O	UW - Circuit Boards CRW-PCBs
1		Air Conditioner	O	CFCs/Freon
1		Air Conditioner	O1	CFCs/Freon
1		Motion Sensors/Heat Sensors	O1	UW - Circuit boards
4		Fluorescent bulbs - 4'	O1	UW - Hg Lamps
2		Light Ballasts	O1	UW - Circuit Boards CRW-PCBs

CRW- Connecticut Regulated Waste – PCBs (CR01), Oils (CR02/CR03), waste chemical liquids - antifreeze, latex & solvent paints, sludges, etc. (CR04), waste chemical solids (CR05)
UW- Universal Waste (batteries, thermostat ampoules, fluorescent lamps, used electronics)
IH- Inhalation hazard (silicas, etc.)
I- Ignitable - may contain ingredients which are ignitable (materials which have a flashpoint <140ºF) (D001)
C- Corrosive - may contain ingredients which are alkaline or acidic (materials with a PH<2 or >12.5) (D002)
T- Toxic - may contain ingredients which are harmful if swallowed or which release vapors that can cause irritation
R- Reactive – may contain ingredients which are unstable, react violently with water or are explosive (D003)

TABLE 6
INVENTORY OF ADDITIONAL HAZARDOUS/REGULATED MATERIALS, WASTES AND ITEMS IDENTIFIED
FORMER McCARTIN SCHOOL
EAST HARTFORD, CONNECTICUT

Quantity	Size	Material / Item	General Location	Potential Hazard
1		Electronic Thermostats	O1	UW - Circuit boards
1		Control Panels	O1	UW - Circuit Boards
2	8'	Fluorescent bulbs	O2	UW - Hg Lamps
1		Light Ballasts	O2	UW - Circuit Boards CRW-PCBs
1		Smoke Detectors	O5	LLRW/Circuit Boards
1		Motion Sensors/Heat Sensors	O5	UW - Circuit boards
1		Air Conditioner	O5	CFCs/Freon
4		Fluorescent bulbs - 4'	O5	UW - Hg Lamps
2		Light Ballasts	O5	UW - Circuit Boards CRW-PCBs
		Cleaning Supplies	O3	T
1		Security System/Control Panels	O4	UW - Circuit boards/Hg Lamps/Batteries
1		Motion Sensors/Heat Sensors	O4	UW - Circuit boards
2		Fluorescent bulbs - 4'	O4	UW - Hg Lamps
1		Light Ballasts	O4	UW - Circuit Boards CRW-PCBs
3		Exit Sign Batteries	P	UW - Circuit boards/Hg Lamps/Batteries
2		Emergency Lighting	P	UW - Batteries/Hg Lamps
1		Fire pulldown	P	UW - Circuit boards/Hg lamps
1		Air Conditioner	P	CFCs/Freon

CRW- Connecticut Regulated Waste – PCBs (CR01), Oils (CR02/CR03), waste chemical liquids - antifreeze, latex & solvent paints, sludges, etc. (CR04), waste chemical solids (CR05)
UW- Universal Waste (batteries, thermostat ampoules, fluorescent lamps, used electronics)
IH- Inhalation hazard (silicas, etc.)
I- Ignitable - may contain ingredients which are ignitable (materials which have a flashpoint <140ºF) (D001)
C- Corrosive - may contain ingredients which are alkaline or acidic (materials with a PH<2 or >12.5) (D002)
T- Toxic - may contain ingredients which are harmful if swallowed or which release vapors that can cause irritation
R- Reactive – may contain ingredients which are unstable, react violently with water or are explosive (D003)

TABLE 6
INVENTORY OF ADDITIONAL HAZARDOUS/REGULATED MATERIALS, WASTES AND ITEMS IDENTIFIED
FORMER McCARTIN SCHOOL
EAST HARTFORD, CONNECTICUT

Quantity	Size	Material / Item	General Location	Potential Hazard
6		Fluorescent bulbs - 4'	P	UW - Hg Lamps
3		Light Ballasts	P	UW - Circuit Boards CRW-PCBs
1		Smoke Detectors	P	LLRW/Circuit Boards
1		Air Conditioner	P1	CFCs/Freon
1		Motion Sensors/Heat Sensors	P1	UW - Circuit boards
1		Smoke Detectors	P1	LLRW/Circuit Boards
2		Fluorescent bulbs - 4'	P1	UW - Hg Lamps
1		Light Ballasts	P1	UW - Circuit Boards CRW-PCBs
1		Phone	P2	UW - Circuit boards
1		Refrigerator	P2	CFCs/Freon
4		Fluorescent bulbs - 4'	P2	UW - Hg Lamps
2		Light Ballasts	P2	UW - Circuit Boards CRW-PCBs
1		Smoke Detectors	P2	LLRW/Circuit Boards
1		Electronic Thermostats	P2	UW - Circuit boards
1		Motion Sensors/Heat Sensors	Q	UW - Circuit boards
8		Fluorescent bulbs - 4'	Q	UW - Hg Lamps
4		Light Ballasts	Q	UW - Circuit Boards CRW-PCBs
1		Smoke Detectors	Q	LLRW/Circuit Boards
1		Motion Sensors/Heat Sensors	Q1	UW - Circuit boards

CRW- Connecticut Regulated Waste – PCBs (CR01), Oils (CR02/CR03), waste chemical liquids - antifreeze, latex & solvent paints, sludges, etc. (CR04), waste chemical solids (CR05)
UW- Universal Waste (batteries, thermostat ampoules, fluorescent lamps, used electronics)
IH- Inhalation hazard (silicas, etc.)
I- Ignitable - may contain ingredients which are ignitable (materials which have a flashpoint <140ºF) (D001)
C- Corrosive - may contain ingredients which are alkaline or acidic (materials with a PH<2 or >12.5) (D002)
T- Toxic - may contain ingredients which are harmful if swallowed or which release vapors that can cause irritation
R- Reactive – may contain ingredients which are unstable, react violently with water or are explosive (D003)

TABLE 6
INVENTORY OF ADDITIONAL HAZARDOUS/REGULATED MATERIALS, WASTES AND ITEMS IDENTIFIED
FORMER McCARTIN SCHOOL
EAST HARTFORD, CONNECTICUT

Quantity	Size	Material / Item	General Location	Potential Hazard
1		Smoke Detectors	Q1	LLRW/Circuit Boards
4		Fluorescent bulbs - 4'	Q1	UW - Hg Lamps
2		Light Ballasts	Q1	UW - Circuit Boards CRW-PCBs
1		Air Conditioner	Q1	CFCs/Freon
1		Motion Sensors/Heat Sensors	Q2	UW - Circuit boards
4		Fluorescent bulbs - 4'	Q2	UW - Hg Lamps
2		Light Ballasts	Q2	UW - Circuit Boards CRW-PCBs
1		Smoke Detectors	Q2	LLRW/Circuit Boards
1		Air Conditioner	Q2	CFCs/Freon
1		Smoke Detectors	R	LLRW/Circuit Boards
6		Fluorescent bulbs - 4'	R	UW - Hg Lamps
3		Light Ballasts	R	UW - Circuit Boards CRW-PCBs
1		Air Conditioner	R	CFCs/Freon
1		Motion Sensors/Heat Sensors	R	UW - Circuit boards
		Cleaning Supplies	R	T
		Cleaning Supplies	R1	T
1		Compact Fluorescent	R1	UW - Hg Lamps
4		Fluorescent bulbs - 4'	Rear 1962 hallway	UW - Hg Lamps
2		Light Ballasts	Rear 1962 hallway	UW - Circuit Boards CRW-PCBs

CRW- Connecticut Regulated Waste – PCBs (CR01), Oils (CR02/CR03), waste chemical liquids - antifreeze, latex & solvent paints, sludges, etc. (CR04), waste chemical solids (CR05)
UW- Universal Waste (batteries, thermostat ampoules, fluorescent lamps, used electronics)
IH- Inhalation hazard (silicas, etc.)
I- Ignitable - may contain ingredients which are ignitable (materials which have a flashpoint <140ºF) (D001)
C- Corrosive - may contain ingredients which are alkaline or acidic (materials with a PH<2 or >12.5) (D002)
T- Toxic - may contain ingredients which are harmful if swallowed or which release vapors that can cause irritation
R- Reactive – may contain ingredients which are unstable, react violently with water or are explosive (D003)

TABLE 6
INVENTORY OF ADDITIONAL HAZARDOUS/REGULATED MATERIALS, WASTES AND ITEMS IDENTIFIED
FORMER McCARTIN SCHOOL
EAST HARTFORD, CONNECTICUT

Quantity	Size	Material / Item	General Location	Potential Hazard
1		Motion Sensors/Heat Sensors	Rear 1962 hallway	UW - Circuit boards
1		Smoke Detectors	Rear 1962 hallway	LLRW/Circuit Boards
1		Emergency Lighting	Rear 1962 hallway	UW - Batteries/Hg Lamps
1		Fire strobe	Rear 1962 hallway	UW - Circuit boards
1		Motion Sensors/Heat Sensors	Rear 1962 entry	UW - Circuit boards
2		Fluorescent bulbs - 4'	Rear 1962 entry	UW - Hg Lamps
1		Light Ballasts	Rear 1962 entry	UW - Circuit Boards CRW-PCBs
1		Camera	Rear 1962 entry	UW - Circuit boards
1		Fire pulldown	Rear 1962 entry	UW - Circuit boards/Hg ampoule
1		TV/Computer Monitor	S	UW - Circuit boards/CRT
6		Fluorescent bulbs - 4'	S	UW - Hg Lamps
3		Light Ballasts	S	UW - Circuit Boards CRW-PCBs
1		Smoke Detectors	S	LLRW/Circuit Boards
1		Air Conditioner	S	CFCs/Freon
1		Compact Fluorescent	S1	UW - Hg Lamps
		Cleaning Supplies	S1	T
1		Compact Fluorescent	S2	UW - Hg Lamps
1		Compact Fluorescent	T3	UW - Hg Lamps
1		Motion Sensors/Heat Sensors	T3	UW - Circuit boards
2		Compact Fluorescent	T4	UW - Hg Lamps

CRW- Connecticut Regulated Waste – PCBs (CR01), Oils (CR02/CR03), waste chemical liquids - antifreeze, latex & solvent paints, sludges, etc. (CR04), waste chemical solids (CR05)
UW- Universal Waste (batteries, thermostat ampoules, fluorescent lamps, used electronics)
IH- Inhalation hazard (silicas, etc.)
I- Ignitable - may contain ingredients which are ignitable (materials which have a flashpoint <140ºF) (D001)
C- Corrosive - may contain ingredients which are alkaline or acidic (materials with a PH<2 or >12.5) (D002)
T- Toxic - may contain ingredients which are harmful if swallowed or which release vapors that can cause irritation
R- Reactive – may contain ingredients which are unstable, react violently with water or are explosive (D003)

TABLE 6
INVENTORY OF ADDITIONAL HAZARDOUS/REGULATED MATERIALS, WASTES AND ITEMS IDENTIFIED
FORMER McCARTIN SCHOOL
EAST HARTFORD, CONNECTICUT

Quantity	Size	Material / Item	General Location	Potential Hazard
1		Motion Sensors/Heat Sensors	T4	UW - Circuit boards
		Cleaning Supplies	T4	T
1		Motion Sensors/Heat Sensors	T	UW - Circuit boards
4		Fluorescent bulbs - 4'	T	UW - Circuit Boards CRW-PCBs
2		Light Ballasts	T	UW - Circuit Boards
1		Smoke Detectors	T	LLRW/Circuit Boards
1		Fire Extinguisher	U	CRW - Waste Chemical Solid
16		Light Ballasts	U	UW - Circuit Boards CRW-PCBs
32		Fluorescent bulbs - 4'	U	UW - Hg Lamps
3		Fire pulldown	U	UW - Circuit boards/Hg ampoule
1		Fire strobe	U	UW - Circuit boards
1		Motion Sensors/Heat Sensors	U	UW - Circuit boards
2		Electronic Thermostats	U	UW - Circuit boards
3		Exit Sign Batteries	U	UW - Circuit boards/Hg Lamps/Batteries
4		Emergency Lighting	U	UW - Batteries/Hg Lamps
3		Air Conditioner	U	CFCs/Freon
1		Electronic Thermostats	U1	UW - Circuit boards
1		Control Panels	U1	UW - Circuit Boards
1		Smoke Detectors	U1	LLRW/Circuit Boards

CRW- Connecticut Regulated Waste – PCBs (CR01), Oils (CR02/CR03), waste chemical liquids - antifreeze, latex & solvent paints, sludges, etc. (CR04), waste chemical solids (CR05)
UW- Universal Waste (batteries, thermostat ampoules, fluorescent lamps, used electronics)
IH- Inhalation hazard (silicas, etc.)
I- Ignitable - may contain ingredients which are ignitable (materials which have a flashpoint <140ºF) (D001)
C- Corrosive - may contain ingredients which are alkaline or acidic (materials with a PH<2 or >12.5) (D002)
T- Toxic - may contain ingredients which are harmful if swallowed or which release vapors that can cause irritation
R- Reactive – may contain ingredients which are unstable, react violently with water or are explosive (D003)

TABLE 6
INVENTORY OF ADDITIONAL HAZARDOUS/REGULATED MATERIALS, WASTES AND ITEMS IDENTIFIED
FORMER McCARTIN SCHOOL
EAST HARTFORD, CONNECTICUT

Quantity	Size	Material / Item	General Location	Potential Hazard
6		Fluorescent bulbs - 4'	U1	UW - Hg Lamps
3		Light Ballasts	U1	UW - Circuit Boards CRW-PCBs
1		Fire Extinguisher	V	CRW - Waste Chemical Solid
4		Compact Fluorescent	V	UW - Hg Lamps
1		Smoke Detectors	V	LLRW/Circuit Boards
2		Power flame burner	V	UW - Circuit boards
8		Control Panels	V	UW - Circuit Boards
		Petrometer	V	UW - Circuit boards
2		Compact Fluorescent	W	UW - Hg Lamps
1		Smoke Detectors	W	LLRW/Circuit Boards
1		Electronic Thermostats	W	UW - Circuit boards
1		Cleaning Supplies	W	T
1		Fire pulldown	W	UW - Circuit boards/Hg ampoule
1		Exit Sign Batteries	W	UW - Circuit boards/Hg Lamps/Batteries
2		Compact Fluorescent	W1	UW - Hg Lamps
2		Compact Fluorescent	W2	UW - Hg Lamps
1		Smoke Detectors	W2	LLRW/Circuit Boards
2		Compact Fluorescent	W3	UW - Hg Lamps
2		Motion Sensors/Heat Sensors	X	UW - Circuit boards
1		Electronic Thermostats	X	UW - Circuit boards

CRW- Connecticut Regulated Waste – PCBs (CR01), Oils (CR02/CR03), waste chemical liquids - antifreeze, latex & solvent paints, sludges, etc. (CR04), waste chemical solids (CR05)
UW- Universal Waste (batteries, thermostat ampoules, fluorescent lamps, used electronics)
IH- Inhalation hazard (silicas, etc.)
I- Ignitable - may contain ingredients which are ignitable (materials which have a flashpoint <140ºF) (D001)
C- Corrosive - may contain ingredients which are alkaline or acidic (materials with a PH<2 or >12.5) (D002)
T- Toxic - may contain ingredients which are harmful if swallowed or which release vapors that can cause irritation
R- Reactive – may contain ingredients which are unstable, react violently with water or are explosive (D003)

TABLE 6
INVENTORY OF ADDITIONAL HAZARDOUS/REGULATED MATERIALS, WASTES AND ITEMS IDENTIFIED
FORMER McCARTIN SCHOOL
EAST HARTFORD, CONNECTICUT

Quantity	Size	Material / Item	General Location	Potential Hazard
1		Air Conditioner	X	CFCs/Freon
2		Refrigerator	X	CFCs/Freon
1		Smoke Detectors	X	LLRW/Circuit Boards
6		Light Ballasts	X	UW - Circuit Boards CRW-PCBs
12		Fluorescent bulbs - 4'	X	UW - Hg Lamps
1		Grease trap	X	CRW-Oils
1		Smoke Detectors	Y	LLRW/Circuit Boards
1		Security System/Control Panels	Z	UW - Circuit boards/Hg Lamps/Batteries
2		Compact Fluorescent	Z	UW - Hg Lamps
1		Smoke Detectors	Z	LLRW/Circuit Boards
8		Compact Fluorescent	Exterior	UW - Hg Lamps
1		Natural gas gauge	Exterior	UW - Circuit Boards
2		Call box	Exterior	UW - Circuit Boards
2		Flood lights	Exterior	UW - Hg Lamps
1		Security camera	Exterior	UW - Circuit Boards
1		HVAC Units on Rooftop	Exterior	CFCs/Freon
10		Boxes of various size fluorescent bulbs	L	UW - Hg Lamps
25		Light Ballasts	L	UW - Circuit Boards CRW-PCBs
5		Halogen bulbs	L	UW - Hg Lamps

CRW- Connecticut Regulated Waste – PCBs (CR01), Oils (CR02/CR03), waste chemical liquids - antifreeze, latex & solvent paints, sludges, etc. (CR04), waste chemical solids (CR05)
UW- Universal Waste (batteries, thermostat ampoules, fluorescent lamps, used electronics)
IH- Inhalation hazard (silicas, etc.)
I- Ignitable - may contain ingredients which are ignitable (materials which have a flashpoint <140ºF) (D001)
C- Corrosive - may contain ingredients which are alkaline or acidic (materials with a PH<2 or >12.5) (D002)
T- Toxic - may contain ingredients which are harmful if swallowed or which release vapors that can cause irritation
R- Reactive – may contain ingredients which are unstable, react violently with water or are explosive (D003)

TABLE 6
INVENTORY OF ADDITIONAL HAZARDOUS/REGULATED MATERIALS, WASTES AND ITEMS IDENTIFIED
FORMER McCARTIN SCHOOL
EAST HARTFORD, CONNECTICUT

Quantity	Size	Material / Item	General Location	Potential Hazard
3		Motion detector	L	UW - Circuit Boards
2		Black Beauty abrasive	L	CRW - Waste Chemical Solid
1		Water fountain	L	CFCs/Freon
1		Bag of Quickcrete	L	CRW - Waste Chemical Solid
1		Gallon Driveway cleaner	L	CRW - Waste Chemical Liquid

CRW- Connecticut Regulated Waste – PCBs (CR01), Oils (CR02/CR03), waste chemical liquids - antifreeze, latex & solvent paints, sludges, etc. (CR04), waste chemical solids (CR05)
UW- Universal Waste (batteries, thermostat ampoules, fluorescent lamps, used electronics)
IH- Inhalation hazard (silicas, etc.)
I- Ignitable - may contain ingredients which are ignitable (materials which have a flashpoint <140ºF) (D001)
C- Corrosive - may contain ingredients which are alkaline or acidic (materials with a PH<2 or >12.5) (D002)
T- Toxic - may contain ingredients which are harmful if swallowed or which release vapors that can cause irritation
R- Reactive – may contain ingredients which are unstable, react violently with water or are explosive (D003)

TABLE 7
BULK SAMPLE SUMMARY OF SUSPECT PCB CONTAINING BUILDING MATERIALS
FORMER McCARTIN SCHOOL
EAST HARTFORD, CONNECTICUT

Sample No.	Homogenous Material Type	Sample Location	Total PCB (ppm)	EPA/CTDEEP Regulated
Sampled 12/17/22 & 12/19/22				
1	C1 - Grey chimney caulk	Chimney	ND<0.81	No
2	C2 - Tan Brittle tectum/CMU and expansion joint caulk♦	Room J	**3.8**	**Yes-CTDEEP Regulated**
3		Room H	**8.0**	
4		Room K	**1.7**	
5	C3 - Grey rubbery caulk	A side E-162 window	ND<0.59	No
6	C4 - White sticky soffit caulking	B side 1959	**1.3**	**Yes-CTDEEP Regulated**
7		C side 1962	ND<0.95	
8		D side 1959	ND<0.69	
9	C5 - White caulk	Front entrance 1959	ND<0.74	No
10	DC1 - Tan brittle caulk♦	Door outside room L	1.0	**Yes-CTDEEP Regulated**
11	DC2 - Grey rubbery caulk	Entry outside room D	ND<0.65	No
12	DC3 - Red brittle caulk	Daycare front entry	ND<0.65	No
13		B/C joint	ND<0.99	
14	DC4 - Grey rubbery caulk	A/B daycare exit door	ND<0.4	No
15	DWG1 - Grey door window glaze♦	Kitchen door between X and U	ND<0.78	No
16	DWG2 - Grey sticky door/window system glazing ♦	Southeast entrance	ND<0.88	No
17	DWG3 - Off White door window glaze	Q door	ND<0.7	No
18		AA door main hall 2	ND<0.93	
19		BB door	ND<0.91	
20	DWG4 - Sticky black window glaze♦	M2 entry	ND<0.41	No
21	WC1 - Black interior/exterior window caulk	Room AA	ND<0.79	No
22		Room N	ND<0.82	
23		Room GG	ND<0.56	
24	WC2 - Tan brittle window caulk♦	Room U south	0.43	No
25		Room U south	ND<0.77	
26		Room U south	ND<0.59	
27	WG1 - Grey brittle window glaze	U exterior window	ND<0.57	No
28		Ext boiler room V	ND<0.58	
29	WSC1 - Light grey brittle caulk 1959♦	Exterior 1959 west	ND<0.48	No
30		Exterior 1959 northeast	ND<0.41	
31		Exterior 1959 southeast	ND<0.83	
32	WSC2 - Dark grey brittle caulk 1962♦	1962 Northwest	**1.9**	**Yes-CTDEEP Regulated**
33		1962 Northeast	**4.7**	
34		1962 east	ND<0.56	
Sampled 1/14/23				
1	WC3-Light grey window frame caulk on and around large/small window systems of 1959 wing	59 B Side South	**1.1**	**Yes-CTDEEP Regulated**
2		59 D Side South	ND<0.76	
3		59 D Side North	ND<0.72	
4	WC4-Light grey window frame	Exterior of 62 o/s main	ND<0.75	No

ND< = Below Detection Limit
PCB ≥ 50 ppm = EPA PCB Bulk Product Waste
PCB >1 ppm but <50 ppm = CTDEEP regulated

♦Asbestos containing material (>1%)

TABLE 7
BULK SAMPLE SUMMARY OF SUSPECT PCB CONTAINING BUILDING MATERIALS
FORMER McCARTIN SCHOOL
EAST HARTFORD, CONNECTICUT

Sample No.	Homogenous Material Type	Sample Location	Total PCB (ppm)	EPA/CTDEEP Regulated
	caulk on small windows of 1962 wing-A side east end	entry left side		
5		Exterior of 62 o/s main entry right side	ND<0.93	
6	WC5-Dark grey window frame caulk on and around large window systems 1962 wing	Exterior of 62 o/s B	**3.2**	**Yes-CTDEEP Regulated**
7		Exterior of 62 o/s C	ND<0.76	
8		Exterior of 62 o/s I	ND<0.48	
Sampled 1/18/23				
1-DC1♦	DC1-tan brittle caulking	Louvre vent o/s Room E-1962	**1.5**	**Yes-CTDEEP Regulated**
1-DC5	DC5-offwhite door caulking	A side o/s U-1959	0.82	No
2-DC5		B side o/s X-1959	ND<0.44	

ND< = Below Detection Limit
PCB ≥ 50 ppm = EPA PCB Bulk Product Waste
PCB >1 ppm but <50 ppm = CTDEEP regulated

♦Asbestos containing material (>1%)

TABLE 8
IDENTIFIED PCB CONTAINING BUILDING MATERIALS
FORMER McCARTIN SCHOOL
EAST HARTFORD, CONNECTICUT

Material	Sample Date (mo/yr)	General Location	Estimated Quantity
CTDEEP REGULATED PCB CONTAINING MATERIALS (> 1 ppm, < 50 ppm)			
C2 - Tan Brittle tectum ceiling/CMU caulk♦	Sampled 12/22	Rooms A, B, C, D, H, I, J, K & 1962 Corridor	1100 LF
C4 - White sticky soffit caulking	Sampled 12/22	Exterior of 1959 & 1962 Wings - Above all large window systems where windows meet soffit	620 LF
DC1 - Tan brittle caulk♦	Sampled 12/22	Exterior - doors to Room L & E and Room E louvre	40 LF
WSC2 - Dark grey brittle caulk 1962♦	Sampled 12/22	Exterior - under metal window sills of 1962 Wing	220 LF
WC3-Light grey window frame caulk on and around large/small window systems of 1959 wing	Sampled 01/23	Exterior – On and around large and small windows of 1959 Wing B & D sides	2000 LF
WC5-Dark grey window frame caulk on and around window systems 1962 wing	Sampled 01/23	Exterior – On and around large and small window systems of 1962 Wing B & C sides and A side West end only	1000 LF

♦Asbestos containing material (>1%)

TABLE 9
POROUS SUBSTRATE PCB SAMPLE RESULTS SUMMARY
FORMER McCARTIN SCHOOL
EAST HARTFORD, CONNECTICUT

Sample ID	Substrate Description & Location	Adjacent PCB Building Material	Date Collected	Total PCBs (PPM)	Material Classification
Porous Substrate Samples Adjacent to CTDEEP CAULKS					
01	0”- Brick-Exterior D-Side 1959	Adjacent to WC3	4/4/23	ND<0.76	Unregulated
02*	3”- Brick-Exterior D-Side 1959		4/4/23	---	
03*	6”- Brick-Exterior D-Side 1959		4/4/23	---	
04	0”- Brick-Exterior B-Side North 1959	Adjacent to WC3	4/4/23	ND<0.62	Unregulated
05*	3”- Brick-Exterior B-Side North 1959		4/4/23	---	
06*	6”- Brick-Exterior B-Side North 1959		4/4/23	---	
07	0”- Brick-Exterior B-Side South 1959	Adjacent to WC3	4/4/23	ND<0.71	Unregulated
08*	3”- Brick-Exterior B-Side South 1959		4/4/23	---	
09*	6”- Brick-Exterior B-Side South 1959		4/4/23	---	
10	0”- Brick-Exterior C-Side West 1962	Adjacent to DC1	4/4/23	ND<0.39	Unregulated
11*	3”- Brick-Exterior C-Side West 1962		4/4/23	---	
12*	6”- Brick-Exterior C-Side West 1962		4/4/23	---	
13	0”- Brick-Exterior C-Side West 1962	Adjacent to WC5	4/4/23	ND<0.52	Unregulated
14*	3”- Brick-Exterior C-Side West 1962		4/4/23	---	
15*	6”- Brick-Exterior C-Side West 1962		4/4/23	---	
16	0”- Brick-Exterior C-Side East 1962	Adjacent to WC5	4/4/23	ND<0.72	Unregulated
17*	3”- Brick-Exterior C-Side East 1962		4/4/23	---	
18*	6”- Brick-Exterior C-Side East 1962		4/4/23	---	
19	0”- Brick-Exterior D-Side 1962	Adjacent to WC5	4/4/23	ND<0.68	Unregulated
20*	3”- Brick-Exterior D-Side 1962		4/4/23	---	

ND = Not Detected
* = Sample was not analyzed

TABLE 9
POROUS SUBSTRATE PCB SAMPLE RESULTS SUMMARY
FORMER McCARTIN SCHOOL
EAST HARTFORD, CONNECTICUT

Sample ID	Substrate Description & Location	Adjacent PCB Building Material	Date Collected	Total PCBs (PPM)	Material Classification
21*	6”- Brick-Exterior D-Side 1962		4/4/23	---	
22	0”- Brick-Exterior D-Side 1962	Adjacent to WSC2	4/4/23	ND<0.62	Unregulated
23*	3”- Brick-Exterior D-Side 1962		4/4/23	---	
24*	6”- Brick-Exterior D-Side 1962		4/4/23	---	
25	0”- Brick-Exterior C-Side East 1962	Adjacent to WSC2	4/4/23	ND<0.79	Unregulated
26*	3”- Brick-Exterior C-Side East 1962		4/4/23	---	
27*	6”- Brick-Exterior C-Side East 1962		4/4/23	---	
28	0”- Brick-Exterior A-Side East 1962	Adjacent to WSC2	4/4/23	ND<0.65	Unregulated
29*	3”- Brick-Exterior A-Side East 1962		4/4/23	---	
30*	6”- Brick-Exterior A-Side East 1962		4/4/23	---	
31	0”- Tectum-Interior Room H	Adjacent to C2	4/5/23	0.52	Unregulated
32*	3”- Tectum-Interior Room H		4/5/23	---	
33*	6”- Tectum-Interior Room H		4/5/23	---	
34	0”- Tectum-Interior Room D	Adjacent to C2	4/5/23	ND<0.44	Unregulated
35*	3”- Tectum-Interior Room D		4/5/23	---	
36*	6”- Tectum-Interior Room D		4/5/23	---	
37	0”- Tectum-Interior Room J	Adjacent to C2	4/5/23	ND<0.96	Unregulated
38*	3”- Tectum-Interior Room J		4/5/23	---	
39*	6”- Tectum-Interior Room J		4/5/23	---	
40	0”- CMU-Interior Hall West 1962	Adjacent to C2	4/5/23	ND<0.68	Unregulated
41*	3”- CMU-Interior Hall West 1962		4/5/23	---	

ND = Not Detected
* = Sample was not analyzed

TABLE 9
POROUS SUBSTRATE PCB SAMPLE RESULTS SUMMARY
FORMER McCARTIN SCHOOL
EAST HARTFORD, CONNECTICUT

Sample ID	Substrate Description & Location	Adjacent PCB Building Material	Date Collected	Total PCBs (PPM)	Material Classification
42*	6”- CMU-Interior Hall West 1962		4/5/23	---	
43	0”- CMU-Interior Hall Center 1962	Adjacent to C2	4/5/23	ND<0.8	Unregulated
44*	3”- CMU-Interior Hall Center 1962		4/5/23	---	
45*	6”- CMU-Interior Hall Center 1962		4/5/23	---	
46	0”- CMU-Interior Room H	Adjacent to C2	4/5/23	ND<0.84	Unregulated
47*	3”- CMU-Interior Room H		4/5/23	---	
48*	6”- CMU-Interior Room H		4/5/23	---	

ND = Not Detected
* = Sample was not analyzed

TABLE 10
GROUND COVER PCB SAMPLE RESULTS SUMMARY
FORMER McCARTIN SCHOOL
EAST HARTFORD, CONNECTICUT

Sample ID	Surface Cover Type	Sample Location	Date Collected	Total PCBs (PPM)	Material Classification
1	Soil	D-Side 1959	4/4/23	ND<0.38	Unregulated
2	Soil	D-Side 1959	4/4/23	ND<0.4	Unregulated
3	Soil	D-Side 1959	4/4/23	ND<0.4	Unregulated
4	Soil	D-Side 1959	4/4/23	ND<0.38	Unregulated
5	Soil	D-Side 1959	4/4/23	ND<0.42	Unregulated
6	Soil	D-Side 1959	4/4/23	ND<0.42	Unregulated
7	Soil	D-Side 1959	4/4/23	ND<0.42	Unregulated
8	Soil	D-Side 1959	4/4/23	ND<0.41	Unregulated
9	Soil	D-Side 1959	4/4/23	ND<0.4	Unregulated
10	Soil	A-Side East 1962	4/4/23	ND<0.4	Unregulated
11	Soil	A-Side East 1962	4/4/23	ND<0.39	Unregulated
12	Soil	A-Side East 1962	4/4/23	0.42	Unregulated
13	Soil	D-Side 1962	4/4/23	**1.2**	**CTDEEP Regulated**
14	Soil	D-Side 1962	4/4/23	**1.3**	**CTDEEP Regulated**
15	Soil	C-Side 1962	4/4/23	**1.6**	**CTDEEP Regulated**
16	Soil	C-Side 1962	4/4/23	0.78	Unregulated
17	Soil	C-Side 1962	4/4/23	0.81	Unregulated
18	Soil	C-Side 1962	4/4/23	**1.1**	**CTDEEP Regulated**
19	Soil	C-Side 1962	4/4/23	0.62	Unregulated
20	Soil	C-Side 1962	4/4/23	0.81	Unregulated
21	Asphalt	C-Side 1962	4/4/23	0.76	Unregulated
22	Asphalt	C-Side 1962	4/4/23	ND<0.66	Unregulated
23	Asphalt	C-Side 1962	4/4/23	ND<0.43	Unregulated
24	Asphalt	C-Side 1962	4/4/23	ND<0.47	Unregulated
25	Concrete	C-Side 1962	4/4/23	ND<0.48	Unregulated
26	Asphalt	B-Side 1962	4/4/23	ND<0.65	Unregulated
27	Asphalt	A-Side West 1962	4/4/23	ND<0.79	Unregulated
28	Concrete	A-Side West 1962	4/4/23	ND<0.54	Unregulated
29	Soil	B-Side 1959	4/4/23	ND<0.41	Unregulated
30	Soil	B-Side 1959	4/4/23	ND<0.4	Unregulated
31	Soil	B-Side 1959	4/4/23	ND<0.42	Unregulated
32	Soil	B-Side 1959	4/4/23	ND<0.39	Unregulated
33	Soil	B-Side 1959	4/4/23	ND<0.4	Unregulated
34	Soil	B-Side 1959	4/4/23	ND<0.38	Unregulated

ND = Not Detected

TABLE 10
GROUND COVER PCB SAMPLE RESULTS SUMMARY
FORMER McCARTIN SCHOOL
EAST HARTFORD, CONNECTICUT

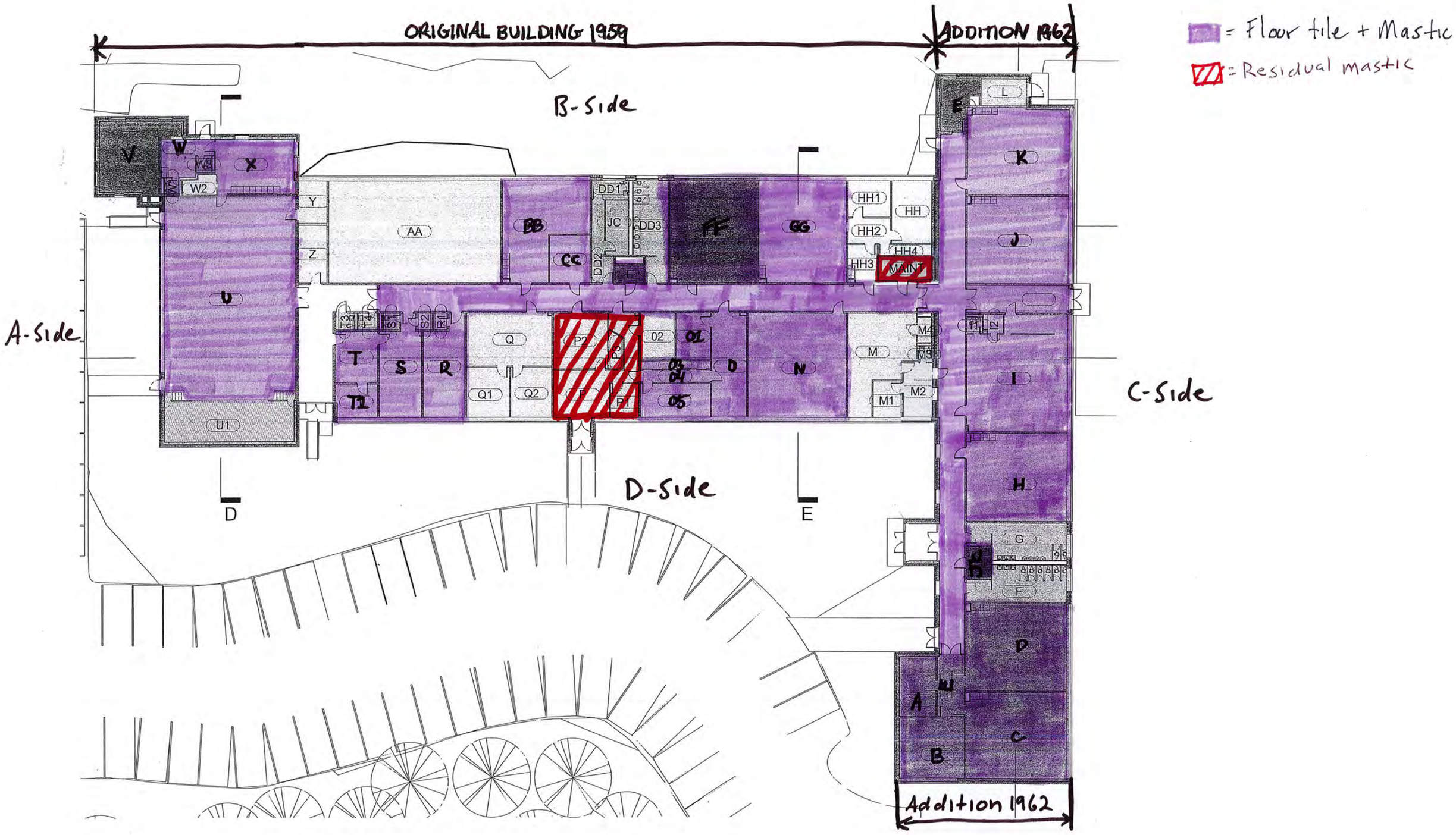
Sample ID	Surface Cover Type	Sample Location	Date Collected	Total PCBs (PPM)	Material Classification
35	Soil	B-Side 1959	4/4/23	ND<0.4	Unregulated
36	Soil	B-Side 1959	4/4/23	ND<0.4	Unregulated
37	Soil	B-Side 1959	4/4/23	ND<0.41	Unregulated
38	Soil	B-Side 1959	4/4/23	ND<0.38	Unregulated
39	Soil	B-Side 1959	4/4/23	ND<0.38	Unregulated

ND = Not Detected

APPENDIX A

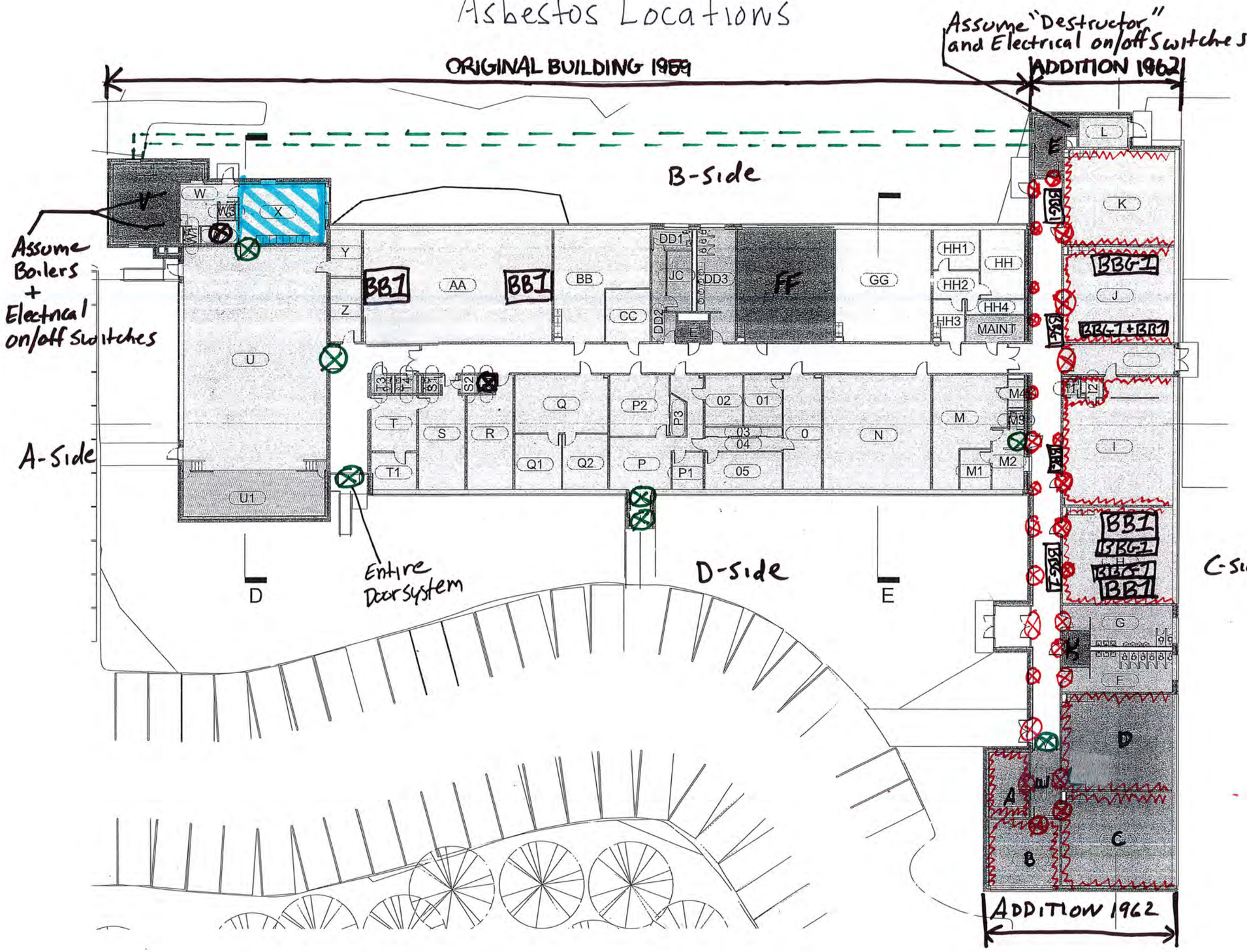
ASBESTOS / PCB LOCATION DRAWINGS & INSPECTOR SITE NOTES

Asbestos Locations



Acm 1

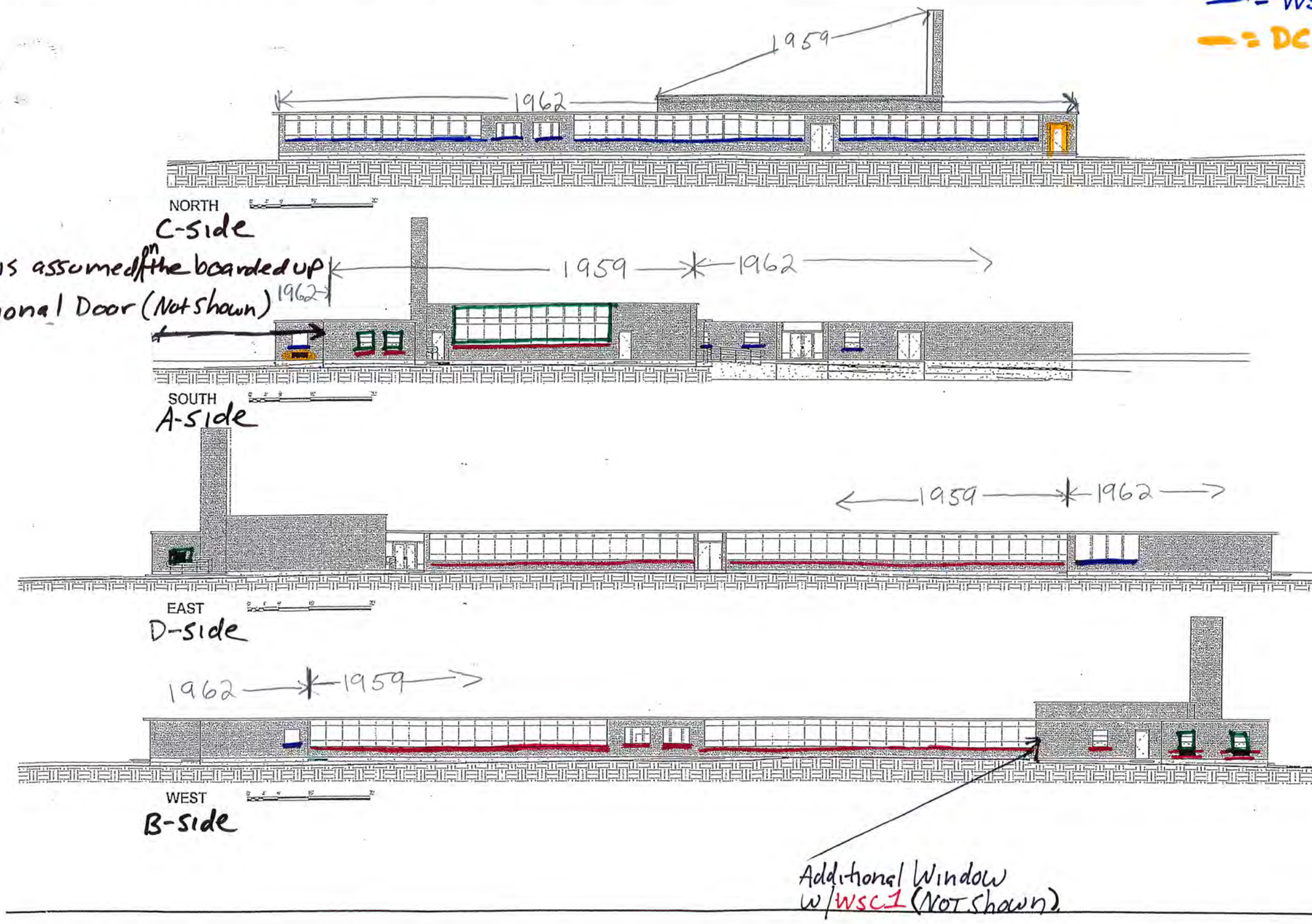
Asbestos Locations



~~~ = C2* at top of Wall

⊗ = C2* in Expansion Joints

⊗ = DWG 1, 2, 4

⊗ = LP1

GD1 = GD1

- - - = Assumed buried Pipe insulation

BB1 = BB1 blackboard glue Daubs

BBG1 = Brown Bulletin Board glue

Note:

Asbestos Pipe Insulations (PI1, PI2) and associated molded fittings (MFI) are not shown on the Drawing. They are present above Ceilings, in wet walls and chases throughout the 1959 Wing.

*= C2 is also CT DEEP PCB

ACM2
~~~

Asbestos Locations

— = WC2
— = WSC1
— = WSC2 (also CT DEEP PCB)
— = DC1 (also CT DEEP PCB)



Acm3

Asbestos Locations

= PRF1 + PRF2

= PNF1

= RFL1

C-Side

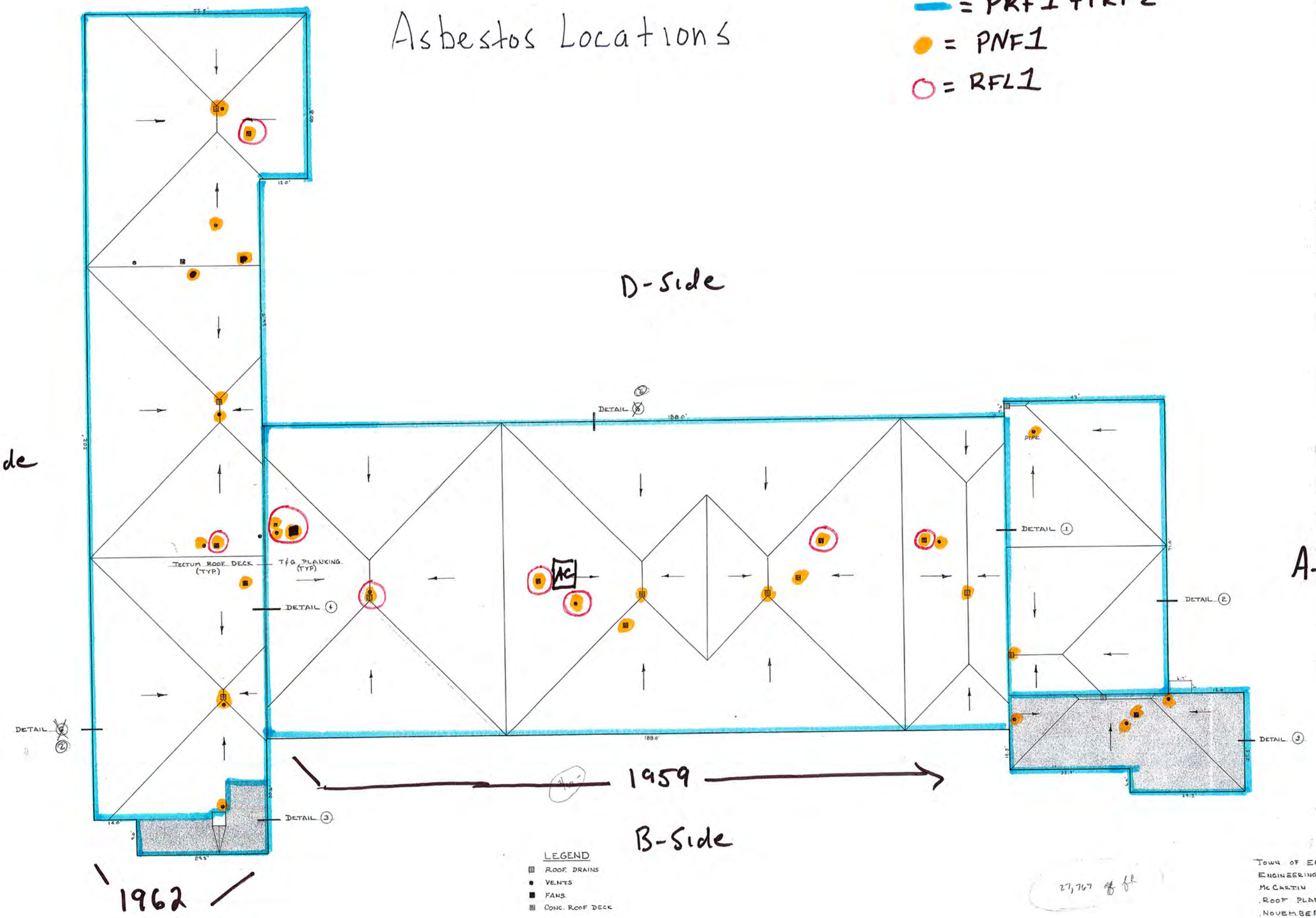
D-Side

A-Side

B-Side

1962

1959



LEGEND

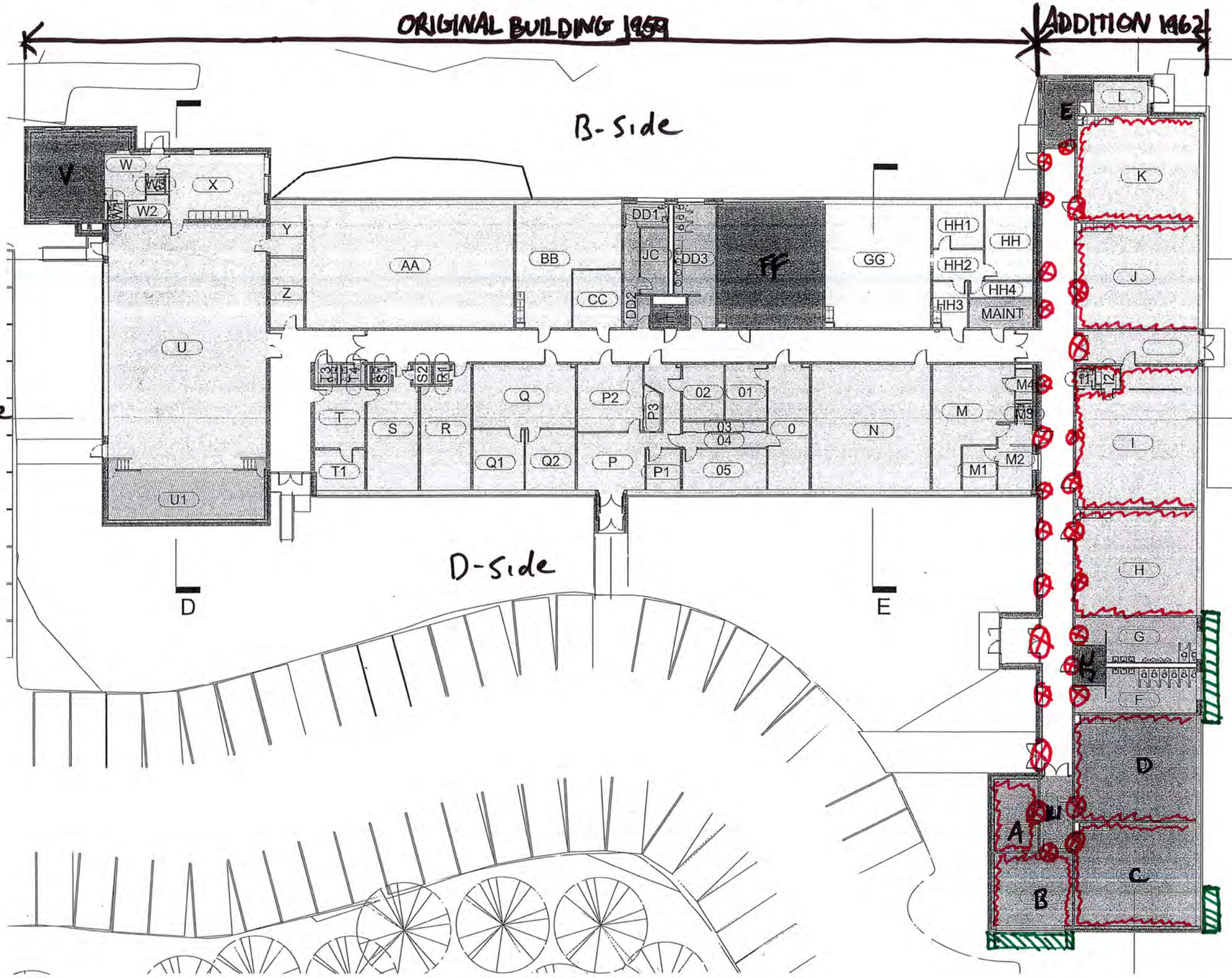
- ROOF DRAINS
- VENTS
- FANS
- CONC. ROOF DECK

27,767 sq ft

TOWN OF EAST HARTFORD
ENGINEERING DIVISION
MCCARTIN SCHOOL
ROOF PLAN
NOVEMBER 1983

ACM4

CT DEEP Regulated PCB Containing Materials



~~~~ = C2 at top of wall (Also Acm)

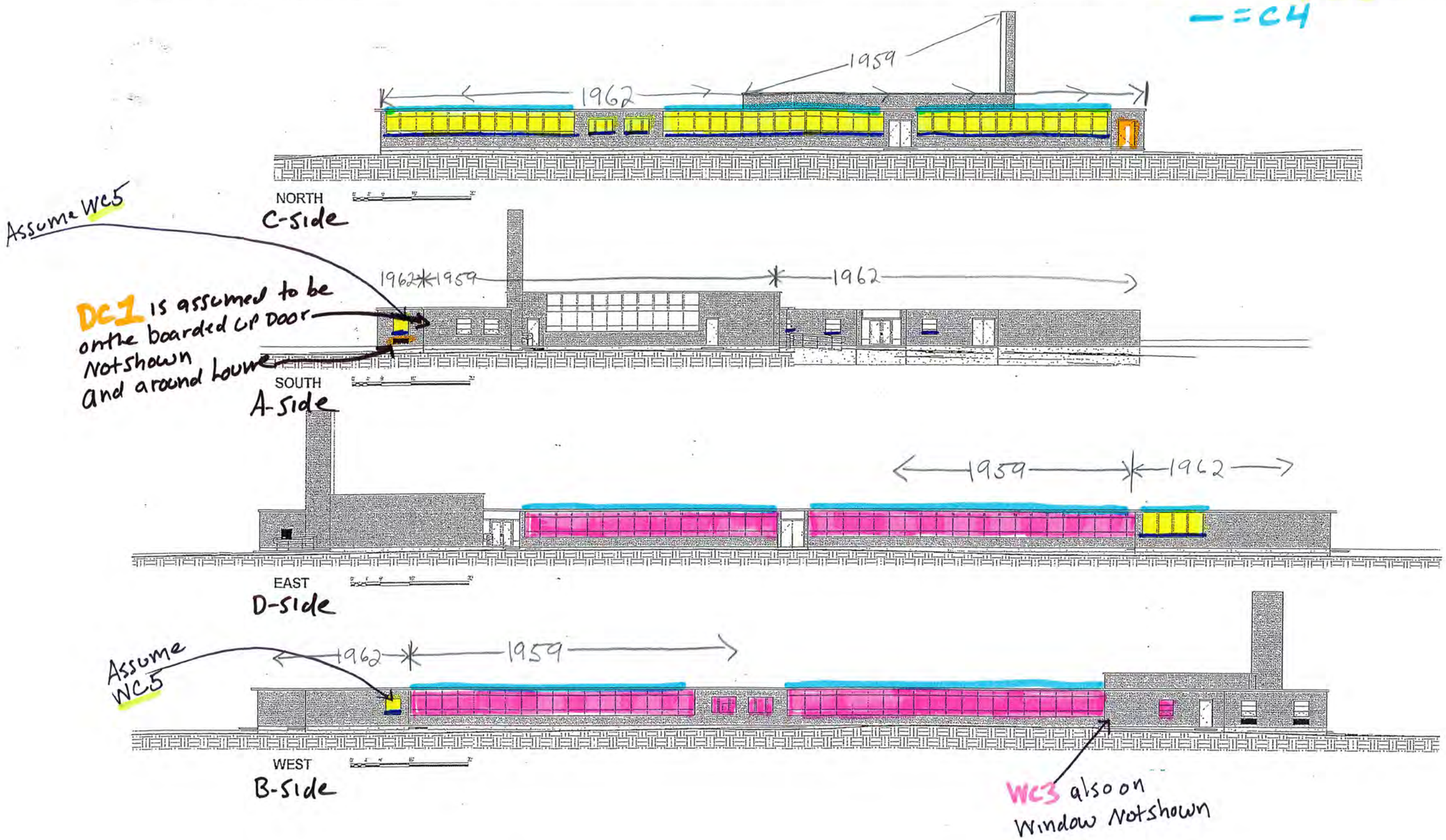
⊗ = C2 in Expansion Joints (Also Acm)

▨ = PCB impacted Soil

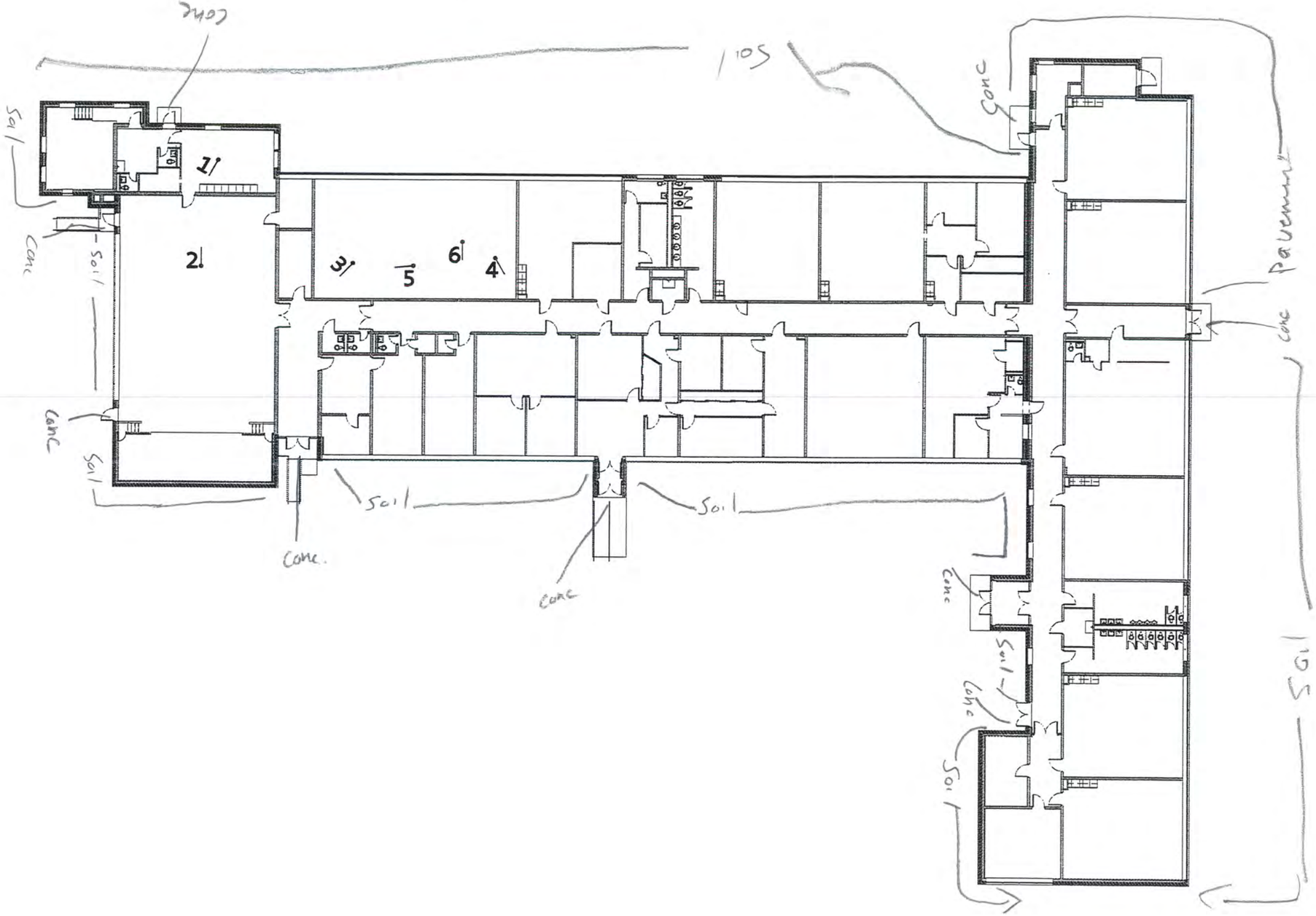
PCB 1
~~~~

CT DEEP Regulated PCB Containing Materials

— : DC1 (Also ACM)
— = WSC2 (Also ACM)
— = WC3
— = WC5
— = C4

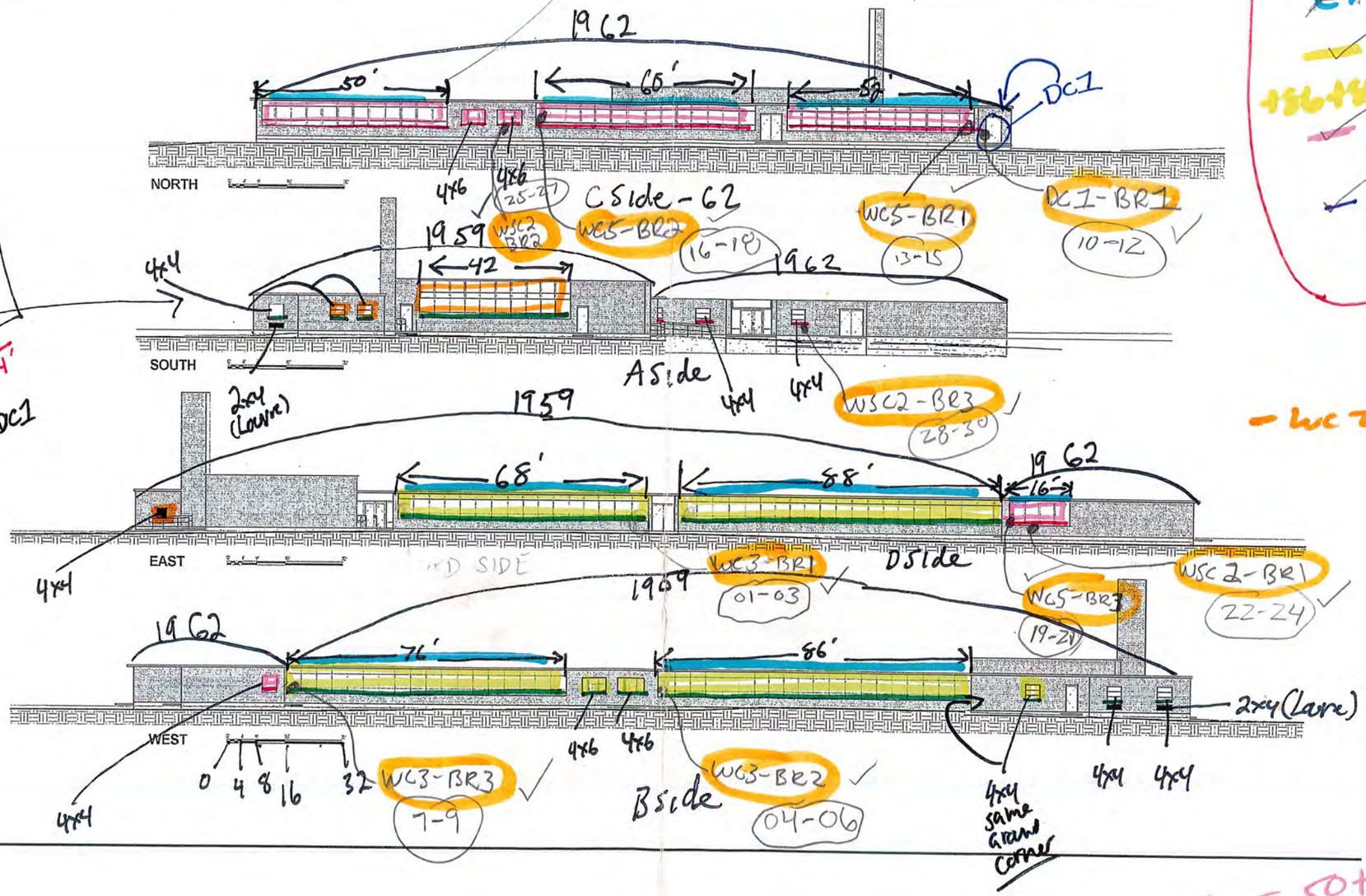


PCB2


Conc
105
Soil
Conc
1
2
3
5
6
4
Conc
Soil
Conc
Soil
Conc
Soil
Conc
Soil
Conc
Soil
Conc
Soil
Conc
Soil
105

Exterior PCB Substrate Sample Locations

WSC1
42+4+4+4+68+88
+76+6+6+86+4+4+4 = 396 LF
~400 LF



Missing Section
Room of 1962
2 windows w/WSC2 +WC5 4' 4'
Louvre w/DC2
+Beaded Door w/DC1

(PCB)
WSC2 -
50+6+6+60+52+4+4+4+16
+4+4+4 = 214 LF ~210LF

(PCB)
C4 = WSC1+WSC2 approx.

(PCB)
WC5: 76+76+6+6
+86+86+6+6 +4+4+4+6
WC5(PCB) +4+4+4+6
+4+4+4+4
+4+4+4+4
+4+4+4+4
+68+68
+6+6
+88+88
+6+6
=788

(PCB)
DC1
=40LF

- WC2

WC5= 50+50+6+6+4+4+6+6
+4+4+6+6+60+60+6+6
+52+52+6+6+16+16
+6+6 = 444

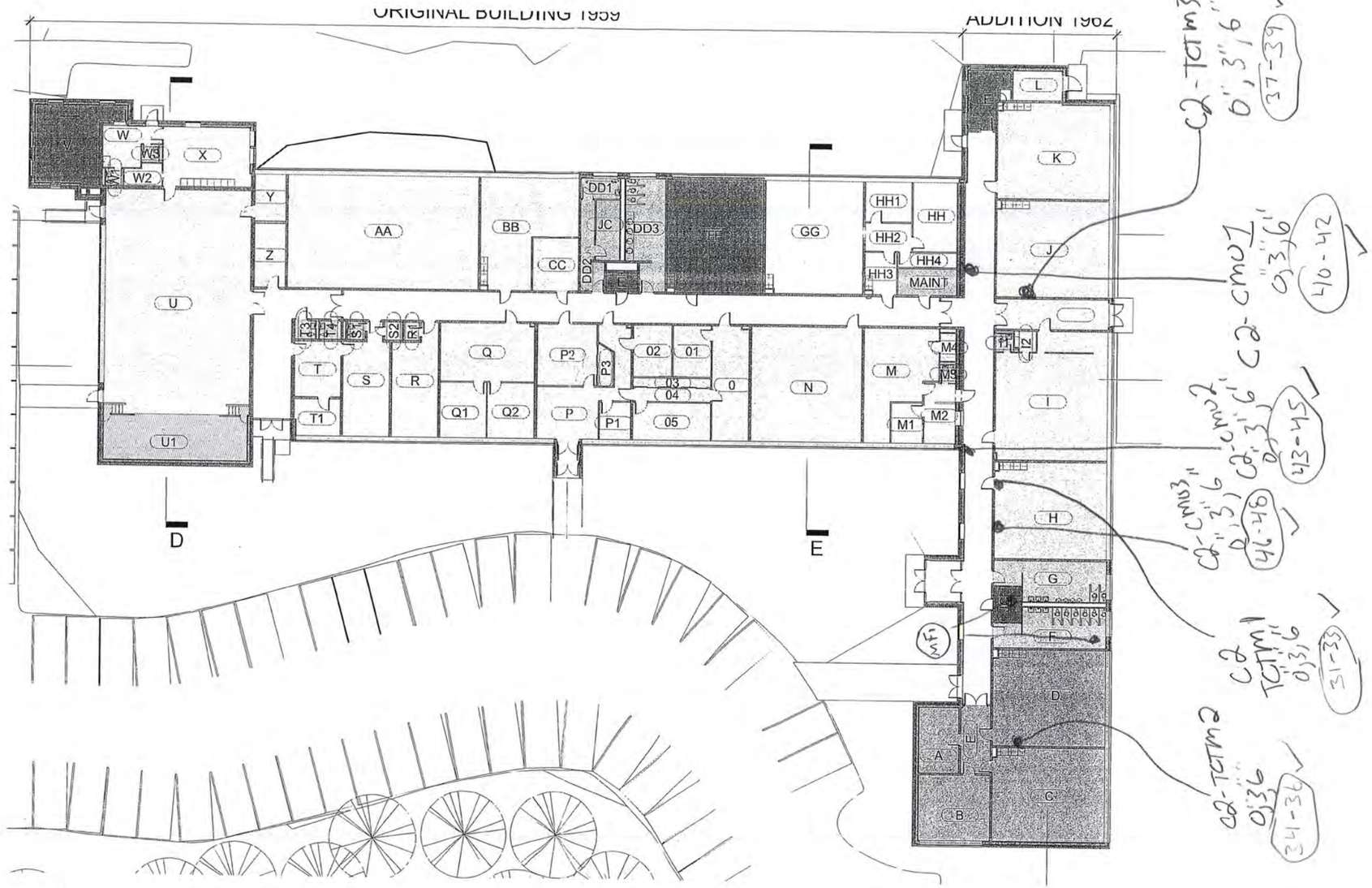
Interior - Substrate Sample Locations - PCB

B

A

C

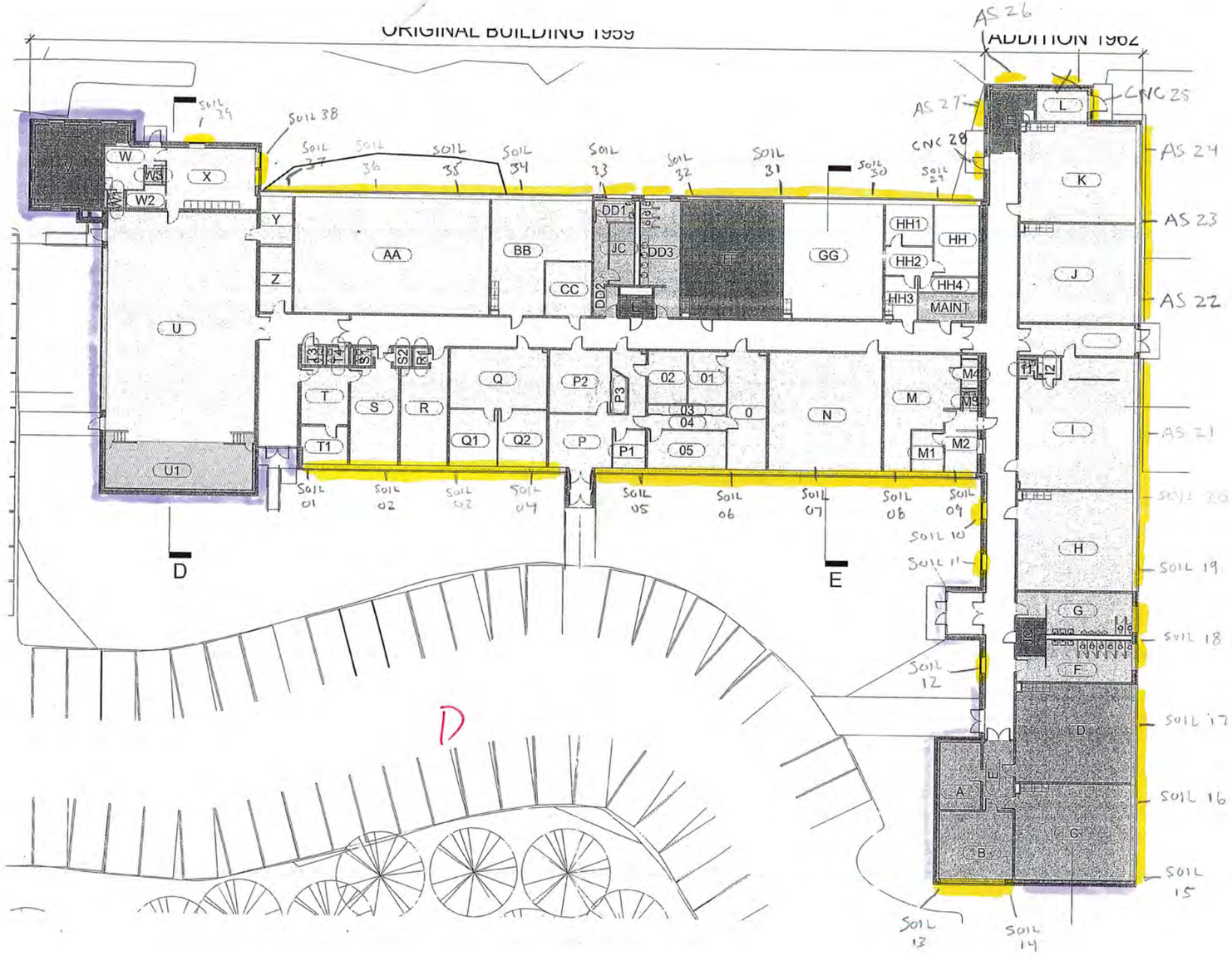
D



= Ground cover associated w/ PCB caulkings.

= No Ground ~~cover~~ sampling needed

- PCB Grand Cover Samplins Locations



APPENDIX B

TRC INSPECTORS LICENSES/CERTIFICATIONS

State of Connecticut

Lookup Detail View

Name

Name
ANDREW J SMITH

License Information

lookup

License Type	License Number	Expiration Date	Granted Date	License Name	License Status		Licensure Actions or Pending Charges
Asbestos Consultant-Inspector	1137	08/31/2023	11/22/2022	ANDREW J SMITH	ACTIVE	CURRENT	None

Generated on: 12/14/2022 5:10:19 PM

P.O. Box 340308
M.S.#12MQA
Hartford, CT 06134-0308

dplc.dph@ct.gov
www.ct.gov/dph/license

Sincerely,

MANISHA JUTHANI, MD, COMMISSIONER
DEPARTMENT OF PUBLIC HEALTH

EMPLOYER'S COPY

STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH

NAME
HILTON HERNANDEZ

VALIDATION NO.	CERTIFICATE NO.	CURRENT THROUGH
03-947266	000424	01/31/23

PROFESSION
ASBESTOS CONSULTANT-INSPECTOR

SIGNATURE

COMMISSIONER

STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH

PURSUANT TO THE PROVISIONS OF THE GENERAL STATUTES OF CONNECTICUT

THE INDIVIDUAL NAMED BELOW IS CERTIFIED
BY THIS DEPARTMENT AS A
ASBESTOS CONSULTANT-INSPECTOR

HILTON HERNANDEZ

CERTIFICATE NO.
000424

CURRENT THROUGH
01/31/23

VALIDATION NO.
03-947266

SIGNATURE

COMMISSIONER

INSTRUCTIONS:

1. Detach and sign each of the cards on this form
2. Display the large card in a prominent place in your office or place of business.
3. The wallet card is for you to carry on your person. If you do not wish to carry the wallet card, place it in a secure place.
4. The employer's copy is for persons who must demonstrate current licensure/certification in order to retain employment or privileges. The employer's card is to be presented to the employer and kept by them as a part of your personnel file. Only one copy of this card can be supplied to you.

WALLET CARD

STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH

NAME
HILTON HERNANDEZ

VALIDATION NO.	CERTIFICATE NO.	CURRENT THROUGH
03-947266	000424	01/31/23

PROFESSION
ASBESTOS CONSULTANT-INSPECTOR

SIGNATURE

COMMISSIONER

State of Connecticut

Lookup Detail View

Name

Name
CARMEN J JACKO

License Information

lookup

License Type	License Number	Expiration Date	Granted Date	License Name	License Status		Licensure Actions or Pending Charges
Asbestos Consultant-Inspector	812	09/30/2023	05/31/2012	CARMEN J JACKO	ACTIVE	CURRENT	None

Generated on: 1/17/2023 1:27:27 PM

State of Connecticut

Lookup Detail View

Name

Name
MICHAEL C KOSTRUBA

License Information

lookup

License Type	License Number	Expiration Date	Granted Date	License Name	License Status		Licensure Actions or Pending Charges
Asbestos Consultant-Project Monitor	613	11/30/2023	02/26/2008	Michael C. Kostruba	ACTIVE	CURRENT	None

Generated on: 11/8/2022 1:53:39 PM

State of Connecticut

Lookup Detail View

Name

Name
HILTON HERNANDEZ

License Information

lookup

License Type	License Number	Expiration Date	Granted Date	License Name	License Status		Licensure Actions or Pending Charges
Lead Inspector Risk Assessor	2231	01/31/2023	07/21/2010	HILTON HERNANDEZ	ACTIVE	CURRENT	None

Generated on: 12/16/2022 12:54:18 PM

1001221 SP 1564 -C01-P01224-I

MICHAEL C. KOSTRUBA
6 LARK RD
SIMSBURY CT 06070-1115

Dear MICHAEL C. KOSTRUBA,

Attached you will find your validated certificate for the coming year. Should you have any questions about your certificate renewal, please do not hesitate to write or call:

Department of Public Health
P.O. Box 340308
M.S.#12MQA
Hartford, CT 06134-0308

(860) 509-7603
oplc.dph@ct.gov
www.ct.gov/dph/license

Sincerely,

MANISHA JUTHANI, MD, COMMISSIONER
DEPARTMENT OF PUBLIC HEALTH

1001221-0001227-0000001 of 0000001-C01-a1d00101-1564-01224

STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH

PURSUANT TO THE PROVISIONS OF THE GENERAL STATUTES OF CONNECTICUT

THE INDIVIDUAL NAMED BELOW IS CERTIFIED
BY THIS DEPARTMENT AS A
LEAD INSPECTOR RISK ASSESSOR

MICHAEL C. KOSTRUBA

CERTIFICATE NO.
002207

CURRENT THROUGH
11/30/23

VALIDATION NO.
03-991489

SIGNATURE

COMMISSIONER

EMPLOYER'S COPY

STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH

NAME
MICHAEL C. KOSTRUBA

VALIDATION NO.	CERTIFICATE NO.	CURRENT THROUGH
03-991489	002207	11/30/23

PROFESSION
LEAD INSPECTOR RISK ASSESSOR

SIGNATURE

COMMISSIONER

INSTRUCTIONS:

1. Detach and sign each of the cards on this form
2. Display the large card in a prominent place in your office or place of business.
3. The wallet card is for you to carry on your person. If you do not wish to carry the wallet card, place it in a secure place.
4. The employer's copy is for persons who must demonstrate current licensure/certification in order to retain employment or privileges. The employer's card is to be presented to the employer and kept by them as a part of your personnel file. Only one copy of this card can be supplied to you.

WALLET CARD

STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH

NAME
MICHAEL C. KOSTRUBA

VALIDATION NO.	CERTIFICATE NO.	CURRENT THROUGH
03-991489	002207	11/30/23

PROFESSION
LEAD INSPECTOR RISK ASSESSOR

SIGNATURE

COMMISSIONER

CERTIFICATE OF ACHIEVEMENT

This certifies that

Michael Kostruba

has successfully completed the

4 Hour Asbestos Management Planner Refresher Training
Asbestos Accreditation Under TSCA Title II
40 CFR Part 763

conducted by:
ATC Group Services LLC dba ATLAS Technical
73 William Franks Drive
West Springfield, MA 01089
(413) 781-0070

Gregory J. Morsch

Principal Instructor: Gregory Morsch

March 24, 2022
Date of Course

March 24, 2023
Expiration Date

Gregory J. Morsch

Regional Training Director: Gregory Morsch

MPAR-3447
Certificate Number

March 24, 2022
Examination Date

CERTIFICATE OF ACHIEVEMENT

This certifies that

Michael Kostruba

has successfully completed the

4 Hour Asbestos Site Inspector Refresher Training
Asbestos Accreditation Under TSCA Title II
40 CFR Part 763

Training held via a Live Webinar

Score: 96%

conducted by:
ATC Group Services LLC dba ATLAS Technical
73 William Franks Drive
West Springfield, MA 01089
(413) 781-0070

Gregory J. Morsch

Principal Instructor: Gregory Morsch

March 24, 2022
Date of Course

March 24,2023
Expiration Date

Gregory J. Morsch

Regional Training Director: Gregory Morsch

SIAR - 7096
Certificate Number

March 24, 2022
Examination Date

CERTIFICATE OF ACHIEVEMENT

This certifies that

Hilton Hernandez

has successfully completed the

4 Hour Asbestos Site Inspector Refresher Training
Asbestos Accreditation Under TSCA Title II
40 CFR Part 763

Training held via a Live Webinar

Score: 80%

conducted by:
ATC Group Services LLC dba ATLAS Technical
73 William Franks Drive
West Springfield, MA 01089
(413) 781-0070

Gregory J. Morsch

Principal Instructor: Gregory Morsch

February 24, 2022
Date of Course

February 24,2023
Expiration Date

Gregory J. Morsch

Regional Training Director: Gregory Morsch

SIAR - 7089
Certificate Number

February 24, 2022
Examination Date

ATLAS

CERTIFICATE OF ACHIEVEMENT

This certifies that

Carmen Jacko

has successfully completed the

4 Hour Asbestos Site Inspector Refresher Training
Asbestos Accreditation Under TSCA Title II
40 CFR Part 763

Training held via a Live Webinar

Score: 72%

conducted by:
ATC Group Services LLC dba ATLAS Technical
73 William Franks Drive
West Springfield, MA 01089
(413) 781-0070

Principal Instructor: Thomas Dion

Regional Training Director: Gregory Morsch

May 26, 2022
Date of Course

SIAR - 7172
Certificate Number

May 26, 2023
Expiration Date

May 26, 2022
Examination Date

ATLAS

CERTIFICATE OF ACHIEVEMENT

This certifies that

Andrew Smith

has successfully completed the

24 Hour Asbestos Site Inspector Initial Training
Asbestos Accreditation Under TSCA Title II
40 CFR Part 763

conducted by:
ATC Group Services LLC dba ATLAS Technical
73 William Franks Drive
West Springfield, MA 01089
(413) 781-0070

Principal Instructor: Thomas Dion

October 17-19, 2022
Date of Course

October 19, 2023
Expiration Date

Regional Training Director: Gregory Morsch

SI-2081
Certificate Number

October 19, 2022
Examination Date

CERT#: L-600-Virtual.1205

CHEMSCOPE TRAINING DIVISION

LEAD INSPECTOR/RISK ASSESSOR REFRESHER

8-HOUR TRAINING CERTIFICATE

Hilton Hernandez

21 Alderson Avenue, Plainville CT

Has attended an 8-hour course on the subject discipline on

02/28/2022 and has passed a written examination.

The above individual has successfully completed the above training course approved in accordance with the Department of Public Health Standards established pursuant to Section 20-477 of the Connecticut General Statutes.

Course topics include all required topics of State of Connecticut DPH and EPA.

Under civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (U.S.C. 1001 and 15 U.S. C. 2615), I certify that this training complies with all applicable requirements of Title IV of TSCA, 40 CFR part 745 and any other applicable Federal, State or local requirements.

Examination Score: 86%
Exam Date: 02/28/2022
Expiration Date: 02/28/2023

Daniel Sullivan
Training Manager

Chem Scope, Inc.
15 Moulthrop Street
North Haven CT 06473
Phone: 203.865.5605
www.chem-scope.com

CERT#: L-600-Virtual.1269

CHEMSCOPE TRAINING DIVISION

LEAD INSPECTOR/RISK ASSESSOR REFRESHER
8-HOUR TRAINING CERTIFICATE

Michael Kostruba

6 Lark Road, Simsbury CT

Has attended an 8-hour course on the subject discipline on

12/09/2022 and has passed a written examination.

The above individual has successfully completed the above training course approved in accordance with the Department of Public Health Standards established pursuant to Section 20-477 of the Connecticut General Statutes.

Course topics include all required topics of State of Connecticut DPH and EPA.

Under civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (U.S.C. 1001 and 15 U.S. C. 2615), I certify that this training complies with all applicable requirements of Title IV of TSCA, 40 CFR part 745 and any other applicable Federal, State or local requirements.

Examination Score: 100%
Exam Date: 12/09/2022
Expiration Date: 12/09/2023

Daniel Sullivan
Training Manager

Chem Scope, Inc.
15 Moulthrop Street
North Haven CT 06473
Phone: 203.865.5605
www.chem-scope.com

Litho in U.S.A.

APPENDIX C

LABORATORY ACCREDITATIONS

State of Connecticut, Department of Public Health

Approved Environmental Laboratory

THIS IS TO CERTIFY THAT THE LABORATORY DESCRIBED BELOW HAS BEEN APPROVED BY THE STATE DEPARTMENT OF PUBLIC HEALTH PURSUANT TO APPLICABLE PROVISIONS OF THE PUBLIC HEALTH CODE AND GENERAL STATUTES OF CONNECTICUT, FOR MAKING THE EXAMINATIONS, DETERMINATIONS OR TESTS SPECIFIED BELOW WHICH HAVE BEEN AUTHORIZED IN WRITING BY THAT DEPARTMENT.

PHOENIX ENVIRONMENTAL LABORATORIES, INC.

LOCATED AT 587 East Middle Turnpike IN Manchester, Connecticut 06040

AND REGISTERED IN THE NAME OF Allan E. Caffyn

THIS CERTIFICATE IS ISSUED IN THE NAME OF Phyllis Shiller (Chemistry) Kathleen Cressia (Microbiology) WHO HAS BEEN DESIGNATED

BY THE REGISTERED OWNER\AUTHORIZED AGENT TO BE IN CHARGE OF THE LABORATORY WORK COVERED BY THIS CERTIFICATE OF APPROVAL AS FOLLOWS:

DRINKING WATER, NON-POTABLE/WASTEWATER, SOLID WASTE/SOIL

Examination For:
BACTERIA
INORGANIC CHEMICALS
ORGANIC CHEMICALS
RADIOCHEMICALS

ENVIRONMENTAL HEALTH & HOUSING

Examination For:
LEAD In PAINT
LEAD In DUST WIPES
LEAD (PAINT) In SOIL

SEE COMPUTER PRINT-OUT FOR SPECIFIC TESTS APPROVED

EFFECTIVE RENEWAL DATE July 1, 2022

THIS CERTIFICATE EXPIRES June 30, 2024 AND IS REVOCABLE FOR CAUSE BY THE STATE DEPARTMENT OF PUBLIC HEALTH

DATED AT HARTFORD, CONNECTICUT, THIS 12th DAY OF July, 2022

Registration No. PH – 0618

Lori J. Mathieu '22

Lori J. Mathieu
Public Health Branch Chief

STATE OF CONNECTICUT

DEPARTMENT OF PUBLIC HEALTH
Environmental Health and Drinking Water Branch

ENVIRONMENTAL LABORATORY CERTIFICATION PROGRAM
CERTIFIED ANALYTES REPORT FOR ALL MATRICES

Phoenix Environmental Laboratories, Inc.

587 EAST MIDDLE TURNPIKE
MANCHESTER, CT 06040

CT REGISTRATION NUMBER :	PH-0618
REGISTERED OWNER / AUTHORIZED AGENT :	Allan Caffyn
DIRECTOR :	Phyllis Shiller
CO DIRECTOR(S) :	Kathleen Cressia
PHONE :	(860) 645-1102
LABORATORY REGISTRATION EFFECTIVE DATE :	07/01/2022
LABORATORY REGISTRATION EXPIRATION DATE :	06/30/2024
LABORATORY STATUS :	APPROVED

APPROVED BY Lori J. Mathieu '22
Lori J Mathieu
Public Health Branch Chief
Environmental Health & Drinking Water Branch

REVIEWED BY Dawn E. Shaban 7/12/2022 1:07:59 PM
Dawn Shaban
Laboratory Consultant/Certification Officer

ANY QUESTIONS CONCERNING THIS DOCUMENT SHOULD BE ADDRESSED TO THE ENVIRONMENTAL LABORATORY CERTIFICATION PROGRAM AT (860) 509-7389

DRINKING WATER (SDWA)

STATUS REPORTED ON 7/12/2022

ANALYTE NAME

MICROBIOLOGY/BACTERIA

E. COLI - COLILERT (SM9223 Enumeration)	
E. COLI - COLILERT 18 (SM9223 P/A)	E. COLI - MF NUTRIENT AGAR + MUG (SM9222G)
ENTEROCOCCUS - ENTEROLERT	FECAL COLIFORM - MF m-FC (SM9222D)
HPC - POUR PLATE (SM9215B)	TOT COLIFORM - COLILERT (SM9223 Enumeration)
TOT COLIFORM - COLILERT 18 (SM9223 P/A)	TOT. COLIFORM - MF mENDO (SM9222B)

PHYSICALS

COLOR	CONDUCTIVITY
ODOR	pH
TEMPERATURE	TURBIDITY

MINERALS

ACIDITY	ALKALINITY
CHLORIDE	CHLORINE, TOTAL & FREE RESIDUAL
FLUORIDE	HARDNESS, CALCIUM
HARDNESS, TOTAL	SULFATE

NUTRIENTS

AMMONIA	NITRATE
NITRITE	O-PHOSPHATE

METALS

ALUMINUM	
ANTIMONY	ARSENIC
BARIUM	BERYLLIUM
BORON	CADMIUM
CALCIUM	CHROMIUM
COBALT	COPPER
IRON	LEAD
MAGNESIUM	MANGANESE
MERCURY	MOLYBDENUM
NICKEL	POTASSIUM
SELENIUM	SILVER
SODIUM	THALLIUM
TIN	VANADIUM
ZINC	

RESIDUE

TOTAL DISSOLVED SOLIDS	
TOTAL RESIDUE (SOLIDS)	

DEMANDS

TOTAL ORGANIC CARBON	

MISCELLANEOUS

CYANIDE (TOTAL)	FOAMING AGENTS (MBAS)

ORGANIC DISINFECTION BY-PRODUCTS

BROMOACETIC ACID	BROMOCHLOROACETIC ACID
CHLOROACETIC ACID	DIBROMOACETIC ACID
DICHLOROACETIC ACID	TRICHLOROACETIC ACID

VOLATILE ORGANICS

1,2-DIBROMO-3-CHLOROPROPANE 504.1 (DBCP) (SOC)	
1,4-DIOXANE (522 SIM)	1,4-DIOXANE (Mod 8270)
ETHYLENE DIBROMIDE 504.1 (EDB) (SOC)	TOTAL TRIHALOMETHANES 524.2 (SOC)
VINYL CHLORIDE - 524.2	VOLATILE ORGANICS - 524.2 (SOCs)

PESTICIDES/ PCB'S

ALDRIN	
CHLORDANE (TECHNICAL) (SOC)	DIELDRIN
ENDRIN (SOC)	HEPTACHLOR (SOC)
HEPTACHLOR EPOXIDE (SOC)	HEXACHLOROBENZENE (SOC)
HEXACHLOROCYCLOPENTADIENE (SOC)	LINDANE (BHC-GAMMA) (SOC)
METHOXYCHLOR (SOC)	METRIBUZIN
PCB's (Aroclors, Qualitative Only)	TOXAPHENE (SOC)

HERBICIDES

2,4,5-TP (SILVEX) (SOC)	
2,4-D (SOC)	DALAPON (SOC)
DICAMBA	DINOSEB (SOC)
DIQUAT (SOC)	GLYPHOSATE (SOC)
PARAQUAT	PENTACHLOROPHENOL (SOC)
PICLORAM (SOC)	

PHTHALATE ESTERS & ADIPATES

BIS (2 - ETHYLHEXYL) ADIPATE - 525.3 (SOC)	BIS (2 - ETHYLHEXYL) PHTHALATE - 525.3 (SOC)

PAHS

BENZO(a)PYRENE - 525.3 (SOC)	

TRIAZINE PESTICIDES

ALACHLOR (SOC)	
ATRAZINE (SOC)	BUTACHLOR
METOLACHLOR	PROPACHLOR

SIMAZINE (SOC)

CARBAMATE PESTICIDES

3 - HYDROXYCARBOFURAN	ALDICARB (SOC)
ALDICARB SULFONE (SOC)	ALDICARB SULFOXIDE (SOC)
CARBARYL	CARBOFURAN (SOC)
METHOMYL	OXAMYL (SOC)

RADIOCHEMICALS

URANIUM - EPA 200.8

NON-POTABLE WATER/ WASTEWATER (CWA)

STATUS REPORTED ON 7/12/2022

ANALYTE NAME

MICROBIOLOGY/BACTERIA

E. COLI - COLILERT (SM9223 Enumeration & P/A)	E. COLI - COLILERT (SM9223 Enumeration)
E. COLI - MF NUTRIENT AGAR + MUG (SM9222G)	ENTEROCOCCUS - ENTEROLERT
FECAL COLIFORM - COLILERT-18 (Enumeration)	FECAL COLIFORM - MF m-FC (SM9222D)
HPC - POUR PLATE (SM9215B)	TOT COLIFORM - COLILERT (SM9223 Enumeration & P/A)
TOT. COLIFORM - MF mENDO (SM9222B)	

PHYSICALS

COLOR	
CONDUCTIVITY	ODOR
pH	TEMPERATURE
TURBIDITY	

MINERALS

ACIDITY	
ALKALINITY	CHLORIDE
CHLORINE, TOTAL & FREE RESIDUAL	HARDNESS, CALCIUM
HARDNESS, TOTAL	SULFATE
SULFIDE	SULFITE

NUTRIENTS

AMMONIA	
KJELDAHL NITROGEN	NITRATE
NITRITE	O-PHOSPHATE
TOTAL PHOSPHOROUS	

METALS

ALUMINUM	
ANTIMONY	ARSENIC
BARIUM	BERYLLIUM
BORON	CADMIUM
CALCIUM	CHROMIUM
CHROMIUM - Hexavalent	COBALT
COPPER	IRON
LEAD	MAGNESIUM
MANGANESE	MERCURY
MOLYBDENUM	NICKEL
POTASSIUM	SELENIUM

SILVER	SODIUM
STRONTIUM	THALLIUM
TIN	TITANIUM
VANADIUM	ZINC

RESIDUE

TOTAL DISSOLVED SOLIDS	
TOTAL RESIDUE (SOLIDS)	TOTAL SUSPENDED SOLIDS
TOTAL VOLATILE RESIDUE	

DEMANDS

BOD	CARBONACEOUS BOD
COD	TOTAL ORGANIC CARBON

MISCELLANEOUS

CYANIDE (AMENABLE)	CYANIDE (TOTAL)
FOAMING AGENTS (MBAS)	FORMALDEHYDE
PHENOLICS	

INORGANIC DISINFECTION BY-PRODUCTS

BROMIDE	

VOLATILE ORGANICS

VOLATILE ORGANICS - 624.1	

PESTICIDES/ PCB'S

ORGANOCHLORINE PESTICIDES - 608.3	
PCB IN OIL	PCBs - 608.3
TOXAPHENE	

SOLVENTS

CT Extractable Petroleum Hydrocarbons (ETPH)	MA Extractable Petroleum Hydrocarbons (EPH)
MA Volatile Petroleum Hydrocarbons (VPH)	OIL & GREASE
TPH (HEM/SGT)	

HERBICIDES

2,4,5-T	2,4,5-TP (SILVEX)
2,4-D	2,4-DB
DALAPON	DICAMBA

TRIAZINE PESTICIDES

ALACHLOR	
ATRAZINE	SIMAZINE

SEMIVOLATILES

SEMIVOLATILES - 625.1	

RECREATIONAL WATER

STATUS REPORTED ON 7/12/2022

ANALYTE NAME

MICROBIOLOGY/BACTERIA

ENTEROCOCCUS - MF mEI Agar (EPA1600)

SOLID WASTE/SOIL (RCRA)

STATUS REPORTED ON 7/12/2022

ANALYTE NAME

PHYSICALS	
pH	
MINERALS	
SULFIDE	
NUTRIENTS	
AMMONIA	
KJELDAHL NITROGEN	TOTAL PHOSPHOROUS
METALS	
ALUMINUM	ANTIMONY
ARSENIC	BARIUM
BERYLLIUM	BORON
CADMIUM	CALCIUM
CHROMIUM	CHROMIUM - Hexavalent
COBALT	COPPER
IRON	LEAD
MAGNESIUM	MANGANESE
MERCURY	MOLYBDENUM
NICKEL	POTASSIUM
SELENIUM	SILVER
SODIUM	STRONTIUM
THALLIUM	TIN
TITANIUM	VANADIUM
ZINC	
RESIDUE	
TOTAL RESIDUE (SOLIDS)	TOTAL VOLATILE RESIDUE
DEMANDS	
TOTAL ORGANIC CARBON	
MISCELLANEOUS	
CORROSIVITY	CYANIDE (TOTAL)
IGNITABILITY	PHENOLICS
REACTIVITY	SPLP LEACH (1312)
TCLP LEACH (1311)	
PESTICIDES/ PCB'S	
CHLORDANE (TECHNICAL)	ORGANOCHLORINE PESTICIDES (Single Response)

PCB IN OIL	POLYCHLORINATED BIPHENYLS
TOXAPHENE	

SOLVENTS

CT Extractable Petroleum Hydrocarbons (ETPH)	MA Extractable Petroleum Hydrocarbons (EPH)
MA Volatile Petroleum Hydrocarbons (VPH)	OIL & GREASE
TOTAL ORGANIC HALIDES	TPH (HEM/SGT)

HERBICIDES

2,4,5-T	2,4,5-TP (SILVEX)
2,4-D	DICAMBA

TRIAZINE PESTICIDES

ALACHLOR	ATRAZINE
SIMAZINE	

RCRA (SW-846) ORGANICS

ACID EXTRACTABLES (PHENOLS) (SW 8270)	
BENZIDINES (SW 8270)	CHLORINATED HYDROCARBONS (SW 8270)
HALOETHERS (SW 8270)	NITROAROMATICS & CYCLIC KETONES (SW 8270)
NITROSOAMINES (SW 8270)	PAH's (SW 8270)
PHTHALATES (SW 8270)	VOLATILE ORGANICS (SW 8260)

RADIOCHEMICALS

URANIUM

ENVIRONMENTAL HEALTH & HOUSING

LEAD (PAINT) IN SOIL	
LEAD IN DUST WIPES	LEAD IN PAINT

Report Profile:	Lab Name : Phoenix Environmental Laboratories, Inc.
	Test Name : *
	Matrix Name : *
	Matrix Selection = ALL OR SOME MATRICES SELECTED
	Certifications approved or provisional on 7/12/2022

THIS IS THE LAST PAGE OF THE REPORT

State of Connecticut, Department of Public Health

Approved Environmental Laboratory

THIS IS TO CERTIFY THAT THE LABORATORY DESCRIBED BELOW HAS BEEN APPROVED BY THE STATE DEPARTMENT OF PUBLIC HEALTH PURSUANT TO APPLICABLE PROVISIONS OF THE PUBLIC HEALTH CODE AND GENERAL STATUTES OF CONNECTICUT, FOR MAKING THE EXAMINATIONS, DETERMINATIONS OR TESTS SPECIFIED BELOW WHICH HAVE BEEN AUTHORIZED IN WRITING BY THAT DEPARTMENT.

TRC ENVIRONMENTAL CORPORATION

LOCATED AT 21 Griffin Road North **IN** Windsor, CT 06095

AND REGISTERED IN THE NAME OF Erik Plimpton

THIS CERTIFICATE IS ISSUED IN THE NAME OF Kathleen Williamson **WHO HAS BEEN DESIGNATED BY THE REGISTERED OWNER/AUTHORIZED AGENT TO BE IN CHARGE OF THE LABORATORY WORK COVERED BY THIS CERTIFICATE OF APPROVAL AS FOLLOWS:**

BUILDING MATERIALS
ASBESTOS FIBERS – PCM
BULK IDENTIFICATION – PLM

SEE COMPUTER PRINT-OUT FOR SPECIFIC TESTS APPROVED

EFFECTIVE RENEWAL DATE April 1, 2022

THIS CERTIFICATE EXPIRES March 31, 2024 **AND IS REVOCABLE FOR CAUSE BY THE STATE DEPARTMENT OF PUBLIC HEALTH**

DATED AT HARTFORD, CONNECTICUT, THIS 27th **DAY OF** April, 2022

Registration No.

PH–0426

Lori J. Mathieu '22

Lori J. Mathieu
Public Health Branch Chief

STATE OF CONNECTICUT

DEPARTMENT OF PUBLIC HEALTH
Environmental Health and Drinking Water Branch

ENVIRONMENTAL LABORATORY CERTIFICATION PROGRAM

CERTIFIED ANALYTES REPORT FOR ALL MATRICES

TRC-Environmental Corporation

21 GRIFFIN ROAD NORTH
WINDSOR, CT 060951590

CT REGISTRATION NUMBER :	PH-0426
REGISTERED OWNER / AUTHORIZED AGENT :	Erik Plimpton
DIRECTOR :	Kathleen Williamson
CO DIRECTOR(S) :	
PHONE :	(860) 298-9692
LABORATORY REGISTRATION EFFECTIVE DATE :	04/01/2022
LABORATORY REGISTRATION EXPIRATION DATE :	03/31/2024
LABORATORY STATUS :	APPROVED

APPROVED BY Lori J. Mathieu '22

Lori J. Mathieu
Public Health Branch Chief
Environmental Health & Drinking Water Branch

REVIEWED BY Dawn E. Shaban 4/27/2022 10:16:55 AM

Dawn Shaban
Laboratory Consultant/Certification Officer

ANY QUESTIONS CONCERNING THIS DOCUMENT SHOULD BE ADDRESSED TO THE ENVIRONMENTAL LABORATORY CERTIFICATION PROGRAM AT (860) 509-7389

CONSTRUCTION, RENOVATION & DEMO BLDG MATERIALS

STATUS REPORTED ON 4/27/2022

ANALYTE NAME

ASBESTOS

ASBESTOS FIBERS (PCM)	ASBESTOS IN BULK MATERIALS (PLM)

Report Profile:	Lab Name : TRC-Environmental Corporation
	Test Name : *
	Matrix Name : *
	Matrix Selection = ALL OR SOME MATRICES SELECTED
	Certifications approved or provisional on 4/27/2022

THIS IS THE LAST PAGE OF THE REPORT

United States Department of Commerce
National Institute of Standards and Technology

Certificate of Accreditation to ISO/IEC 17025:2017

NVLAP LAB CODE: 101424-0

TRC Environmental Corporation

Windsor, CT

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).

2022-07-01 through 2023-06-30

Effective Dates

For the National Voluntary Laboratory Accreditation Program

National Voluntary Laboratory Accreditation Program

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

TRC Environmental Corporation
21 Griffin Road North
Windsor, CT 06095
Ms. Kathleen Williamson
Phone: 860-298-6392 Fax: 860-298-6214
Email: kwilliamson@trccompanies.com
www.trccompanies.com/

ASBESTOS FIBER ANALYSIS **NVLAP LAB CODE 101424-0**

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

For the National Voluntary Laboratory Accreditation Program

APPENDIX D

ASBESTOS PLM
LABORATORY ANALYSIS
DATA

Industrial Hygiene Laboratory
21 Griffin Road North
Windsor, CT 06095
(860) 298-6308

BULK ASBESTOS ANALYSIS REPORT

CLIENT: East Hartford Board of Education

Lab Log #: 0060919
Project #: 522705.0000.0000
Date Received: 12/27/2022
Date Analyzed: 12/30/2022

Site: McCartin School, East Hartford, CT

POLARIZED LIGHT MICROSCOPY by EPA 600/R-93/116

Sample No.	Sample Location	Homogeneous Material Description	Other Matrix Materials		Asbestos %	Asbestos Type
01	Room AA	Dark Brown BB1 - blackboard glue daub		- - -	10%	Chrysotile
02	Room H	- -		- -	NA/PS	- -
03	Boiler 2	White BI1 - preformed boiler insulation	30%	cellulose	ND	None
04	Boiler 1	White BI1 - preformed boiler insulation	30%	cellulose	ND	None
05	Boiler 2	White BI1 - preformed boiler insulation	30%	cellulose	ND	None
06	Boiler 1	Light Grey BI2 - seam sealer	20% 60%	cellulose mineral wool	ND	None
07	Boiler 2	Light Grey BI2 - seam sealer	20% 60%	cellulose mineral wool	ND	None
08♣	Boiler 1	Light Grey BI2 - seam sealer	40%	mineral wool	ND	None
09	Chimney	Grey C1 - chimney caulk		- - -	ND	None
10♣	Chimney	Grey C1 - chimney caulk		- - -	ND	None
11	Room B	Tan C2 - brittle tectum/CMU caulking		- - -	3%	Chrysotile
12	Room H	- -		- -	NA/PS	- -
13	A side E-1962 window	Grey C3 - rubbery caulk		- - -	ND	None
14♣	B side E-1962 window	Grey C3 - rubbery caulk		- - -	ND	None
15	Exterior 1959 east	White C4 - sticky soffit caulk		- - -	ND	None
16♣	Exterior 1962 east	White C4 - sticky soffit caulk		- - -	ND	None

Industrial Hygiene Laboratory
21 Griffin Road North
Windsor, CT 06095
(860) 298-6308

POLARIZED LIGHT MICROSCOPY by EPA 600/R-93/116

Sample No.	Sample Location	Homogeneous Material Description	Other Matrix Materials		Asbestos %	Asbestos Type
17	Front entrance 1959	White C5 - sidewalk caulk	- - -		ND	None
18♣	Front entrance 1959	White C5 - sidewalk caulk	- - -		ND	None
19	Room U	LAYER 1 Black CB1 - glue	- - -		ND	None
19		LAYER 2 Black CB1 - cove base	- - -		ND	None
20♣	Room E	LAYER 1 Black CB1 - glue	- - -		ND	None
20♣		LAYER 2 Black CB1 - cove base	- - -		ND	None
21	Room U	Orange CB2 - vinyl cove base glue	- - -		ND	None
22♣	Room CC	Orange CB2 - vinyl cove base glue	- - -		ND	None
23	Room C	LAYER 1 Brown CB3 - glue	- - -		ND	None
23		LAYER 2 Brown CB3 - cove base	- - -		ND	None
24♣	Room JC	LAYER 1 Brown CB3 - glue	- - -		ND	None
24♣		LAYER 2 Brown CB3 - cove base	- - -		ND	None
25	Room J hall	Orange CB4 - cove base glue	- - -		ND	None
26♣	Room H hall	Orange CB4 - cove base glue	- - -		ND	None
27	Room J hall	Dark Brown CB5 - cove base glue	- - -		ND	None
28♣	Room H hall	Dark Brown CB5 - cove base glue	- - -		ND	None
29	Room AA	Brown CBG1 - cork board adhesive	- - -		ND	None
30♣	Room H	Brown CBG1 - cork board adhesive	- - -		ND	None
31	BB room	Brown CG1 - hard glue	- - -		ND	None
32♣	Room GG	Brown CG1 - hard glue	- - -		ND	None
33	Room U	White/Grey CT1 - 2'x4' long fissure (width) with small pinholes	30% 60%	cellulose mineral wool	ND	None
34	Hall outside 59/62 junction	White/Grey CT1 - 2'x4' long fissure (width) with small pinholes	30% 60%	cellulose mineral wool	ND	None

Industrial Hygiene Laboratory
21 Griffin Road North
Windsor, CT 06095
(860) 298-6308

POLARIZED LIGHT MICROSCOPY by EPA 600/R-93/116

Sample No.	Sample Location	Homogeneous Material Description	Other Matrix Materials		Asbestos %	Asbestos Type
35	Room U	White/Grey CT2 - 2'x4' long fissure (length) with small pinholes	30% 60%	cellulose mineral wool	ND	None
36	Hall outside room F	White/Grey CT2 - 2'x4' long fissure (length) with small pinholes	30% 60%	cellulose mineral wool	ND	None
37	Room U	White/Grey CT3 - 2'x4' short fissure with small pinholes	30% 60%	cellulose mineral wool	ND	None
38	Room M	White/Grey CT3 - 2'x4' short fissure with small pinholes	30% 60%	cellulose mineral wool	ND	None
39	1962 door room L exterior door	Tan DC1 - brittle caulk		- - -	5%	Chrysotile
40	1962 door room L exterior door	- -		- -	NA/PS	- -
41	Outside D hallway door	Grey DC2 - sticky caulking		- - -	ND	None
42♣	Outside D hallway door	Grey DC2 - sticky caulking		- - -	ND	None
43	Daycare entry exterior door	Red DC3 - brittle door caulk		- - -	ND	None
44♣	Daycare entry exterior door	Red DC3 - brittle door caulk		- - -	ND	None
45	A/B daycare exit door	Light Grey DC4 - rubbery caulk		- - -	ND	None
46♣	A/B daycare exit door	Light Grey DC4 - rubbery caulk		- - -	ND	None
47	Kitchen room X door	Grey DWG1 - door window glaze		- - -	ND	None
48♣	Kitchen room X door	Grey DWG1 - door window glaze		- - -	1.8%	Chrysotile
49	Southeast entrance door	Grey DWG2 - sticky door/window system glazing		- - -	10%	Chrysotile
50	Exit at Room D hall	- -		- -	NA/PS	- -
51	Room GG door	Off-White DWG3 - door window glaze		- - -	ND	None
52♣	Room O	Off-White DWG3 - door window glaze		- - -	ND	None
53	P entry	Black DWG4 - sticky door window glaze		- - -	Trace	Chrysotile
54♣	Hall outside D	Black DWG4 - sticky door window glaze		- - -	5.7%	Chrysotile
55	Room E	Grey FB1 - fire brick		- - -	ND	None

Industrial Hygiene Laboratory
21 Griffin Road North
Windsor, CT 06095
(860) 298-6308

POLARIZED LIGHT MICROSCOPY by EPA 600/R-93/116

Sample No.	Sample Location	Homogeneous Material Description	Other Matrix Materials	Asbestos %	Asbestos Type
56	Room E	Grey FB1 - fire brick	- - -	ND	None
57	Room U	LAYER 1 Black FT1 - mastic	- - -	10%	Chrysotile
57		LAYER 2 Dark Tan/Brown/White FT1 - 9"x9" floor tile	- - -	10%	Chrysotile
58	Room C	- -	- -	NA/PS	- -
58		- -	- -	NA/PS	- -
59	Room X	LAYER 1 Black FT2 - mastic	- - -	ND	None
59		LAYER 2 Dark Green/White FT2 - 9"x9" floor tile	- - -	10%	Chrysotile
60♣	Room DD3 outside hall	LAYER 1 Black FT2 - mastic	- - -	ND	None
60		- -	- -	NA/PS	- -
61	Hall outside room AA	LAYER 1 Brown FT3 - adhesive	- - -	ND	None
61		LAYER 2 Tan/White FT3 - 12"x12" mottled floor tile	- - -	ND	None
62♣	Unknown	LAYER 1 Brown FT3 - adhesive	- - -	ND	None
62♣		LAYER 2 Tan/White FT3 - 12"x12" mottled floor tile	- - -	ND	None
63	Room T	LAYER 1 Black FT4 - mastic	- - -	ND	None
63		LAYER 2 Tan/Black FT4 - 9"x9" floor tile	- - -	10%	Chrysotile
64♣	Unknown	LAYER 1 Black FT4 - mastic	- - -	ND	None
64		- -	- -	NA/PS	- -
65	Room T	LAYER 1 Black FT5 - mastic	- - -	ND	None
65		LAYER 2 Brown/White/Red FT5 - 9"x9" floor tile	- - -	10%	Chrysotile
66♣	Room O1	LAYER 1 Black FT5 - mastic	- - -	ND	None
66		- -	- -	NA/PS	- -

Industrial Hygiene Laboratory
21 Griffin Road North
Windsor, CT 06095
(860) 298-6308

POLARIZED LIGHT MICROSCOPY by EPA 600/R-93/116

Sample No.	Sample Location	Homogeneous Material Description	Other Matrix Materials	Asbestos %	Asbestos Type
67	Room AA	LAYER 1 Tan FT6 - mastic	- - -	ND	None
67		LAYER 2 White/Pink/Blue FT6 - 12"x12" floor tile	- - -	ND	None
68♣	Room AA	LAYER 1 Tan FT6 - mastic	- - -	ND	None
68♣		LAYER 2 White/Pink/Blue FT6 - 12"x12" floor tile	- - -	ND	None
69	Room AA	LAYER 1 Tan FT7 - adhesive	- - -	ND	None
69		LAYER 2 Green/White FT7 - 12"x12" floor tile	- - -	ND	None
70♣	Room AA	LAYER 1 Tan FT7 - adhesive	- - -	ND	None
70♣		LAYER 2 Green/White FT7 - 12"x12" floor tile	- - -	ND	None
71	Room BB	LAYER 1 Tan FT8 - mastic	- - -	ND	None
71		LAYER 2 White/Grey/Black FT8 - 12"x12" floor tile	- - -	ND	None
72♣	Room O1	LAYER 1 Tan FT8 - mastic	- - -	ND	None
72♣		LAYER 2 White/Grey/Black FT8 - 12"x12" floor tile	- - -	ND	None
73	Room BB	LAYER 1 Black FT9 - mastic	- - -	10%	Chrysotile
73		LAYER 2 White FT9 - 12"x12" floor tile	- - -	3%	Chrysotile
74	Room BB	- -	- -	NA/PS	- -
74		- -	- -	NA/PS	- -
75	Room B	LAYER 1 Black FT10 - mastic	- - -	10%	Chrysotile
75		LAYER 2 Tan/Brown FT10 - 12"x12" tile floor tile	- - -	ND	None
76	Room M2	- -	- -	NA/PS	- -
76♣		LAYER 2 Tan/Brown FT10 - 12"x12" tile floor tile	- - -	ND	None
77	Room JC	LAYER 1 Black FT11 - mastic	- - -	10%	Chrysotile
77		LAYER 2 Grey/White FT11 - 9"x9" floor tile	- - -	10%	Chrysotile

Industrial Hygiene Laboratory
21 Griffin Road North
Windsor, CT 06095
(860) 298-6308

POLARIZED LIGHT MICROSCOPY by EPA 600/R-93/116

Sample No.	Sample Location	Homogeneous Material Description	Other Matrix Materials		Asbestos %	Asbestos Type
78	Unknown	- -		- -	NA/PS	- -
78		- -		- -	NA/PS	- -
79	Room H	LAYER 1 Black FT12 - mastic		- - -	10%	Chrysotile
79		LAYER 2 Tan/Black/White FT12 - 9"x9" floor tile		- - -	10%	Chrysotile
80	Room H	- -		- -	NA/PS	- -
80		- -		- -	NA/PS	- -
81	Room M	LAYER 1 Black FT13 - mastic	10%	cellulose	ND	None
81		LAYER 2 Tan/White/Black FT13 - 12"x12" floor tile		- - -	ND	None
82♣	Room M2	LAYER 1 Black FT13 - mastic		- - -	ND	None
82♣		LAYER 2 Tan/White/Black FT13 - 12"x12" floor tile		- - -	ND	None
83	Room X	Light Brown GD1 - ceiling glue daub		- - -	10%	Anthophyllite
84	Unknown	- -		- -	NA/PS	- -
85	Unknown	Dark Brown GD2 - ceiling glue daub		- - -	ND	None
86♣	Room D hall	Dark Brown GD2 - ceiling glue daub		- - -	ND	None
87	DD2	Light Grey GR1 - wall seam grout		- - -	ND	None
88	DD3	Light Grey GR1 - wall seam grout		- - -	ND	None
89	Women's '59	Grey GR2 - ceramic floor tile		- - -	ND	None
90	Unknown	Grey GR2 - ceramic floor tile		- - -	ND	None
91	Room F	Grey GR3 - wall seam grout		- - -	ND	None
92	Room G	Grey GR3 - wall seam grout		- - -	ND	None
93	Room F	Grey GR4 - ceramic floor tile grout		- - -	ND	None
94	Room G	Grey GR4 - ceramic floor tile grout		- - -	ND	None

Industrial Hygiene Laboratory
21 Griffin Road North
Windsor, CT 06095
(860) 298-6308

POLARIZED LIGHT MICROSCOPY by EPA 600/R-93/116

Sample No.	Sample Location	Homogeneous Material Description	Other Matrix Materials		Asbestos %	Asbestos Type
95	Room E	Red GR5 - fire brick grout		- - -	ND	None
96	Room E	Red GR5 - fire brick grout		- - -	ND	None
97	Room HH3A	Red LEV1 - cementitious floor leveler		- - -	ND	None
98	Room HH3A	Red LEV1 - cementitious floor leveler		- - -	ND	None
99	Room W2	Silver/Grey LP1 - light paper	40%	cellulose	30%	Chrysotile
100	Room R1	- -		- -	NA/PS	- -
101	Room U	Grey MF1 - mudded fitting		- - -	80%	Chrysotile
102	Room T1	- -		- -	NA/PS	- -
103	Hall 1959	- -		- -	NA/PS	- -
104	Room E	Grey MF2 - mudded fitting	40%	mineral wool	ND	None
105	Room E	Grey MF2 - mudded fitting	40%	mineral wool	ND	None
106	Room JC	Grey MF2 - mudded fitting	40%	mineral wool	ND	None
107	Roof 62 east	Amber MG1 - membrane glue	60%	cellulose	ND	None
108♣	Roof 59 south	Amber MG1 - membrane glue		- - -	ND	None
109	59 roof middle	Black PBT1 - pitch box tar	20%	cellulose	ND	None
110♣	59 roof middle	Black PBT1 - pitch box tar		- - -	ND	None
111	Room U	White PI1 - pipe insulation		- - -	5%	Amosite
112	Room X	- -		- -	NA/PS	- -
113	Room T1	- -		- -	NA/PS	- -
114	Room X	Grey PI2 - pipe insulation paper	60%	cellulose	5%	Chrysotile
115	Room U	- -		- -	NA/PS	- -
116	Room T1	- -		- -	NA/PS	- -

Industrial Hygiene Laboratory
21 Griffin Road North
Windsor, CT 06095
(860) 298-6308

POLARIZED LIGHT MICROSCOPY by EPA 600/R-93/116

Sample No.	Sample Location	Homogeneous Material Description	Other Matrix Materials		Asbestos %	Asbestos Type
117	62 east roof	Black/Brown PNF1 - penetration tar and paper		- - -	10%	Chrysotile
118	59 roof north	- -		- -	NA/PS	- -
119	62 roof west	Black PRF1 - flashing tar		- - -	20%	Chrysotile
120	59 roof north	- -		- -	NA/PS	- -
121	59 roof south lower roof south	Black PRF2 - flashing tar		- - -	20%	Chrysotile
122	59 roof south lower roof west	- -		- -	NA/PS	- -
123	Upper roof chimney	Black PRF3 - perimeter a chimney		- - -	ND	None
124♣	Upper roof chimney	Black PRF3 - perimeter a chimney		- - -	ND	None
125	62 roof east	Black RF1 - paper membrane roof and tar	30%	cellulose	ND	None
126♣	62 roof west	Black RF1 - paper membrane roof and tar		- - -	ND	None
127	59 roof north	Black RF2 - built-up roofing	20% 10%	cellulose fibrous glass	ND	None
128♣	59 roof south	Black RF2 - built-up roofing	20%	fibrous glass	ND	None
129	Lower roof north	Black RF3 - roofing layer		- - -	ND	None
130♣	Lower roof south	Black RF3 - roofing layer		- - -	ND	None
131	62 roof east	Black RFL1 - tar flashing on hood		- - -	20%	Chrysotile
132	62 west roof	- -		- -	NA/PS	- -
133	59 roof north	Black RFL2 - tar paper	5%	cellulose	ND	None
134♣	59 roof north	Black RFL2 - tar paper		- - -	ND	None
135	Room CC	LAYER 1 White SHR1 - joint compound		- - -	ND	None
135		LAYER 2 White SHR1 - sheetrock	2%	cellulose	ND	None
136	Room Q	LAYER 1 White SHR1 - joint compound		- - -	ND	None
136		LAYER 2 White SHR1 - sheetrock	2%	cellulose	ND	None

Industrial Hygiene Laboratory
21 Griffin Road North
Windsor, CT 06095
(860) 298-6308

POLARIZED LIGHT MICROSCOPY by EPA 600/R-93/116

Sample No.	Sample Location	Homogeneous Material Description	Other Matrix Materials		Asbestos %	Asbestos Type
137	Room HH3	LAYER 1 White SHR2 - joint compound		- - -	ND	None
137		LAYER 2 Grey SHR2 - sheetrock	2%	cellulose	ND	None
138	Room HH1	LAYER 1 White SHR2 - joint compound		- - -	ND	None
138		LAYER 2 Grey SHR2 - sheetrock	2%	cellulose	ND	None
139	Daycare main hall	Grey SHR3 - sheetrock	10%	cellulose	ND	None
140	Daycare main hall	Grey SHR3 - sheetrock	10%	cellulose	ND	None
141	1962 roof east	Black SS1 - rubbery membrane seam sealant		- - -	ND	None
142♣	1959 roof north	Black SS1 - rubbery membrane seam sealant		- - -	ND	None
143	Room HH3	Light Grey SU1 - sink undercoating		- - -	ND	None
144♣	Room N	Light Grey SU1 - sink undercoating		- - -	ND	None
145	Room I	Dark Grey SU2 - sink undercoating	30%	cellulose	ND	None
146♣	Room J	Dark Grey SU2 - sink undercoating		- - -	ND	None
147	Room X	Grey SUR1 - cementitious wall surfacing		- - -	ND	None
148	Room BB hall	Grey SUR1 - cementitious wall surfacing		- - -	ND	None
149	Outside AA hall	Grey SUR1 - cementitious wall surfacing		- - -	ND	None
150	Hall outside of room FF	Green SUR2 - wall texture		- - -	ND	None
151	Hall outside room AA	Green SUR2 - wall texture		- - -	ND	None
152	Hall outside room O	Green SUR2 - wall texture		- - -	ND	None
153	Hall outside room E	Green SUR2 - wall texture		- - -	ND	None
154	Hall outside room HH3	Green SUR2 - wall texture		- - -	ND	None
155	1962 East	White TM1 - tectum deck	80%	cellulose	ND	None
156	1962 west	White TM1 - tectum deck	80%	cellulose	ND	None

Industrial Hygiene Laboratory
21 Griffin Road North
Windsor, CT 06095
(860) 298-6308

POLARIZED LIGHT MICROSCOPY by EPA 600/R-93/116

Sample No.	Sample Location	Homogeneous Material Description	Other Matrix Materials		Asbestos %	Asbestos Type
157	1962 Southeast roof	Black VB1 - vapor barrier	80%	cellulose	ND	None
158♣	1962 Northwest roof	Black VB1 - vapor barrier		- - -	ND	None
159	Room X	Black WC1 - interior/exterior window caulk		- - -	ND	None
160♣	Room D	Black WC1 - interior/exterior window caulk		- - -	ND	None
161	South Boiler room window	Tan WC2 - brittle window caulk		- - -	10%	Anthophyllite
162	West boiler room window	- -		- -	NA/PS	- -
163	South boiler room window	Grey WG1 - brittle window glaze		- - -	ND	None
164♣	West boiler room window	Grey WG1 - brittle window glaze		- - -	ND	None
165	East side exterior window	Light Grey WSC1 - brittle caulk 1959		- - -	10%	Anthophyllite
166	West side exterior window	- -		- -	NA/PS	- -
167	East exterior window	Dark Grey WSC2 - brittle caulk 1962		- - -	10%	Chrysotile
168	West exterior window	- -		- -	NA/PS	- -

♣ Samples analyzed by EPA/600/R-93/116 with gravimetric reduction

ND - asbestos was not detected
Trace - asbestos was observed at level of 1% or less - This is the reporting limit
NA/PS - Not Analyzed / Positive Stop
SNA - Sample Not Analyzed- See Chain of Custody for details
Notes: Asbestos-Containing Material (ACM) is any material containing more than 1% asbestos

Note: Polarized-light microscopy is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. In those cases, EPA recommends, and certain states (e.g. NY) require, that negative results be confirmed by quantitative transmission electron microscopy.

The Laboratory at TRC follows the EPA's Interim Method for the Determination of Asbestos in Bulk Insulation 1982 (EPA 600/M4-82-020) Bulk Analysis Code 18/A01 and the EPA recommended Method for the Determination of Asbestos in Bulk Building Materials July 1993, R.L. Perkins and B.W. Harvey, (EPA/600/R-93/116) Bulk Analysis Code 18/A03, which utilize polarized light microscopy (PLM). Our analysts have completed an accredited course in asbestos identification. TRC's Laboratory is accredited under the National Voluntary Laboratory Accreditation Program (NVLAP), for Bulk Asbestos Fiber Analysis, NVLAP Code 18/A01, effective through June 30, 2023. TRC is accredited by the AIHA Laboratory Accreditation Programs (AIHA-LAP), LLC in the Industrial Hygiene Program (IHLAP) for PLM effective through October 1, 2024. Asbestos content is determined by visual estimate unless otherwise indicated. Quality Control is performed in-house on at least 10% of samples and QC data related to the samples is available upon written request from client.

Analyzed by: Kathleen Williamson, Laboratory Manager

Reviewed by: Joel Corso, Approved Signatory

Date Issued 01/04/2023

TRC
21 GRIFFIN ROAD NORTH
WINDSOR, CONNECTICUT 06095
TELEPHONE (860) 298-9692
FAX (860) 298-6380

Edition: October 2009
Supersede Previous Edition

ASBESTOS BULK SAMPLING CHAIN OF CUSTODY

LAB ID #. 60919

PROJECT NUMBER	PROJECT NAME	TURNAROUND TIME
S22705	East Hartford BOE McCartin, 70, East Hartford, CT	PLM: 8hr 24hr X 48hr 3day TEM: 24hr 48hr 3day 5day
SIGNATURE	INSPECTOR	
	Hilton Hernandez	

FIELD SAMPLE NUMBER	DATE	TIME	TYPE: COMP	TYPE: GRAB	SAMPLE LOCATION	PLM EPA 600/R93/116 (POSITIVE STOP)	PLM EPA 600/R93/116 (w/ gravimetric reduction) (POSITIVE STOP)	ANALYZE BY LAYER	POINT COUNT (IF >1% & <10%)	TEM NY NOB 198.4 (IF PLM SERIES NEG)	MATERIAL
01	12/14/2022	09:54		X	Room AA	X					BB1 - Brown blackboard glue daubs
02	12/17/2022	10:47		X	Room H	X	X				BB1 - Brown blackboard glue daubs
03	12/14/2022	14:53		X	Boiler 2	X					BI1 - White preformed boiler insulation
04	12/14/2022	14:53		X	Boiler 1	X					BI1 - White preformed boiler insulation
05	12/14/2022	14:54		X	Boiler 2	X					BI1 - White preformed boiler insulation
06	12/14/2022	14:56		X	Boiler 1	X					BI2 - Grey seam sealer
07	12/14/2022	14:56		X	Boiler 2	X					BI2 - Grey seam sealer
08	12/14/2022	14:57		X	Boiler 1	X					BI2 - Grey seam sealer
09	12/13/2022	11:22		X	Chimney	X					C1 - Grey chimney caulk
10	12/13/2022	11:22		X	Chimney	X	X				C1 - Grey chimney caulk
11	12/15/2022	10:43		X	Room B	X					C2 - Tan brittle tectum/CMU caulking
12	12/17/2022	09:42		X	Room H	X	X				C2 - Tan brittle tectum/CMU caulking

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
	12/27/22	12/27/22			
(Printed) Hilton Hernandez	Time: 0700	(Printed) 0900	(Printed)	Time:	(Printed)

Remarks: Please send results to Mike K. and Hilton H.

Condition of Samples: _____
Acceptable: Yes ✓ No _____
Comments:

TRC

21 GRIFFIN ROAD NORTH
WINDSOR, CONNECTICUT 06095
TELEPHONE (860) 298-9692
FAX (860) 298-6380

Edition: October 2009
Supersede Previous Edition

ASBESTOS BULK SAMPLING CHAIN OF CUSTODY

LAB ID #. 60919

PROJECT NUMBER	PROJECT NAME	PARAMETERS	TURNAROUND TIME
522705	East Hartford BOE McCartin, 70, East Hartford, CT		PLM: [ ] 8hr [ ] 24hr [X] 48hr [ ] 3day TEM: [ ] 24hr [ ] 48hr [ ] 3day [ ] 5day

SIGNATURE	INSPECTOR
	Hilton Hernandez

FIELD SAMPLE NUMBER	DATE	TIME	TYPE: COMP	TYPE: GRAB	SAMPLE LOCATION	PLM EPA 600/R93/116 (POSITIVE STOP)	PLM EPA 600/R93/116 (w/ gravimetric reduction) (POSITIVE STOP)	ANALYZE BY LAYER	POINT COUNT (IF >1% & <10%)	TEM NY NOB 198.4 (IF PLM SERIES NEG)	MATERIAL
13	12/19/2022	13:23		X	A side E-1962 window	X					C3 - Grey rubbery caulk
14	12/19/2022	13:23		X	B side E-1962 window	X	X				C3 - Grey rubbery caulk
15	12/19/2022	14:53		X	Exterior 1959 east	X					C4 - White sticky soffit caulk
16	12/19/2022	14:53		X	Exterior 1962 east	X	X				C4 - White sticky soffit caulk
17	12/19/2022	15:22		X	Front entrance 1959	X					C5 - White sidewalk caulk
18	12/19/2022	15:22		X	Front entrance 1959	X	X				C5 - White sidewalk caulk
19	12/13/2022	13:20		X	Room U	X		X			CB1 - Black cove base and black glue
20	12/14/2022	12:11		X	Room E	X	X	X			CB1 - Black cove base and black glue
21	12/13/2022	13:22		X	Room U	X					CB2 - Orange vinyl cove base glue
22	12/14/2022	10:24		X	Room CC	X	X				CB2 - Orange vinyl cove base glue
23	12/15/2022	10:56		X	Room C	X		X			CB3 - Brown cove base and brown glue
24	12/17/2022	09:45		X	Room JC	X	X	X			CB3 - Brown cove base and brown glue

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
	12/27/22	12/27/22			
(Printed)	Time:	(Printed)	(Printed)	Time:	(Printed)
Hilton Hernandez	0700	Dino Marino 0900			

Remarks: Please send results to Mike K. and Hilton H.

Condition of Samples:
Acceptable: Yes ✓ No
Comments:

TRC
21 GRIFFIN ROAD NORTH
WINDSOR, CONNECTICUT 06095
TELEPHONE (860) 298-9692
FAX (860) 298-6380

Edition: October 2009
Supersede Previous Edition

ASBESTOS BULK SAMPLING CHAIN OF CUSTODY

LAB ID #. C0919

PROJECT NUMBER	PROJECT NAME	PARAMETERS	TURNAROUND TIME
E22705	East Hartford BOE McCartin, 70, East Hartford, CT		PLM: [ ] 8hr [ ] 24hr [X] 48hr [ ] 3day TEM: [ ] 24hr [ ] 48hr [ ] 3day [ ] 5day
SIGNATURE	INSPECTOR		
	Hilton Hernandez		

FIELD SAMPLE NUMBER	DATE	TIME	TYPE: COMP	TYPE: GRAB	SAMPLE LOCATION	PLM EPA 600/R93/116 (POSITIVE STOP)	PLM EPA 600/R93/116 (w/ gravimetric reduction) (POSITIVE STOP)	ANALYZE BY LAYER	POINT COUNT (IF >1% & <10%)	TEM NY NOB 198.4 (IF PLM SERIES NEG)	MATERIAL
25	12/17/2022	10:04		X	Room J hall	X					CB4 - Orange cove base glue
26	12/17/2022	10:07		X	Room H hall	X	X				CB4 - Orange cove base glue
27	12/17/2022	10:07		X	Room J hall	X					CB5 - Dark brown cove base glue
28	12/17/2022	10:09		X	Room H hall	X	X				CB5 - Dark brown cove base glue
29	12/14/2022	10:01		X	Room AA	X					CBG1 - Brown cork board adhesive
30	12/17/2022	10:48		X	Room H	X	X				CBG1 - Brown cork board adhesive
31	12/14/2022	10:12		X	BB room	X					CG1 - Brown hard glue
32	12/14/2022	12:32		X	Room GG	X	X				CG1 - Brown hard glue
33	12/13/2022	13:35		X	Room U	X					CT1 - 2'x4' Long white fissure (width) with small pinholes
34	12/17/2022	09:28		X	Hall outside 59/62 junction	X					CT1 - 2'x4' Long white fissure (width) with small pinholes
35	12/13/2022	13:41		X	Room U	X					CT2 - 2'x4' Long white fissure (length) with small pinholes

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
	12/27/22	12/27/22			
(Printed) Hilton Hernandez	Time: 0700	(Printed) Dan Murino 0900	(Printed)	Time:	(Printed)

Remarks: Please send results to Mike K. and Hilton H.

Condition of Samples: _____
Acceptable: Yes ✓ No _____
Comments:

TRC
21 GRIFFIN ROAD NORTH
WINDSOR, CONNECTICUT 06095
TELEPHONE (860) 298-9692
FAX (860) 298-6380

ASBESTOS BULK SAMPLING CHAIN OF CUSTODY

Edition: October 2009
Supersede Previous Edition

LAB ID #. 60919

PROJECT NUMBER	PROJECT NAME	PARAMETERS	TURNAROUND TIME
522705	East Hartford BOE McCartin, 70, East Hartford, CT		PLM: [ ] 8hr [ ] 24hr [X] 48hr [ ] 3day TEM: [ ] 24hr [ ] 48hr [ ] 3day [ ] 5day
SIGNATURE	INSPECTOR		
	Hilton Hernandez		

FIELD SAMPLE NUMBER	DATE	TIME	TYPE COMP	TYPE GRAB	SAMPLE LOCATION	PLM EPA 600/R93/116 (POSITIVE STOP)	PLM EPA 600/R93/116 (w/ gravimetric reduction) (POSITIVE STOP)	ANALYZE BY LAYER	POINT COUNT (IF >1% & <10%)	TEM NY NOB 198.4 (IF PLM SERIES NEG)	MATERIAL
36	12/17/2022	09:30		X	Hall outside room F	X					CT2 - 2'x4' Long white fissure (length) with small pinholes
37	12/13/2022	13:47		X	Room U	X					CT3 - 2'x4' Short white fissure with small pinholes
38	12/17/2022	09:33		X	Room M	X					CT3 - 2'x4' Short white fissure with small pinholes
39	12/15/2022	13:49		X	1962 door room L exterior door	X					DC1 - Tan brittle caulk
40	12/15/2022	13:49		X	1962 door room L exterior door	X	X				DC1 - Tan brittle caulk
41	12/15/2022	13:54		X	Outside D hallway door	X					DC2 - Grey sticky caulking
42	12/15/2022	13:54		X	Outside D hallway door	X	X				DC2 - Grey sticky caulking
43	12/15/2022	14:02		X	Daycare entry exterior door	X					DC3 - Red brittle door caulk
44	12/15/2022	14:02		X	Daycare entry exterior door	X	X				DC3 - Red brittle door caulk
45	12/19/2022	13:38		X	A/B daycare exit door	X					DC4 - Light grey rubbery caulk
46	12/19/2022	13:38		X	A/B daycare exit door	X	X				DC4 - Light grey rubbery caulk
47	12/13/2022	14:14		X	Kitchen room X door	X					DWG1 - Grey door window glaze

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
	12/27/22	12/27/22			
(Printed)	Time:	(Printed)	(Printed)	Time:	(Printed)
Hilton Hernandez	0700	0700			

Remarks: Please send results to Mike K. and Hilton H.

Condition of Samples:
Acceptable: Yes ✓ No
Comments:

TRC
21 GRIFFIN ROAD NORTH
WINDSOR, CONNECTICUT 06095
TELEPHONE (860) 298-9692
FAX (860) 298-6380

ASBESTOS BULK SAMPLING CHAIN OF CUSTODY

Edition: October 2009
Supersede Previous Edition

LAB ID #. 60919

PROJECT NUMBER	PROJECT NAME	PARAMETERS	TURNAROUND TIME
522705	East Hartford BOE McCartin, 70, East Hartford, CT		PLM: 8hr 24hr X 48hr 3day TEM: 24hr 48hr 3day 5day

SIGNATURE	INSPECTOR
	Hilton Hernandez

FIELD SAMPLE NUMBER	DATE	TIME	TYPE COMP	TYPE GRAB	SAMPLE LOCATION	PLM EPA 600/R93/116 (POSITIVE STOP)	PLM EPA 600/R93/116 (w/ gravimetric reduction) (POSITIVE STOP)	ANALYZE BY LAYER	POINT COUNT (IF >1% & <10%)	TEM NY NOB 198.4 (IF PLM SERIES NEG)	MATERIAL
48	12/13/2022	14:14		X	Kitchen room X door	X	X				DWG1 - Grey door window glaze
49	12/13/2022	15:25		X	Southeast entrance door	X					DWG2 - Grey sticky door/window system glazing
50	12/15/2022	13:56		X	Exit at Room D hall	X	X				DWG2 - Grey sticky door/window system glazing
51	12/14/2022	13:15		X	Room GG door	X					DWG3 - Off white door window glaze
52	12/14/2022	13:24		X	Room O	X	X				DWG3 - Off white door window glaze
53	12/14/2022	13:53		X	P entry	X					DWG4 - Black sticky door window glaze
54	12/14/2022	13:54		X	Hall outside D	X	X				DWG4 - Black sticky door window glaze
55	12/17/2022	13:04		X	Room E	X					FB1 - Grey fire brick
56	12/17/2022	13:05		X	Room E	X					FB1 - Grey fire brick
57	12/13/2022	13:04		X	Room U	X		X			FT1 - 9"x9" Dark tan floor tile with brown/white streaks and black mastic
58	12/15/2022	10:51		X	Room C	X	X	X			FT1 - 9"x9" Dark tan floor tile with brown/white streaks and black mastic

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
	12/27/22	12/27/22			
(Printed) Hilton Hernandez	Time: 0700	(Printed) 0900	(Printed)	Time:	(Printed)

Remarks: Please send results to Mike K. and Hilton H.

Condition of Samples:
Acceptable: Yes ✓ No
Comments:

TRC
21 GRIFFIN ROAD NORTH
WINDSOR, CONNECTICUT 06095
TELEPHONE (860) 298-9692
FAX (860) 298-6380

Edition: October 2009
Supersede Previous Edition

ASBESTOS BULK SAMPLING CHAIN OF CUSTODY

LAB ID #. 60919

PROJECT NUMBER	PROJECT NAME	PARAMETERS	TURNAROUND TIME
522705	East Hartford BOE McCartin, 70, East Hartford, CT		PLM: [ ] 8hr [ ] 24hr [X] 48hr [ ] 3day TEM: [ ] 24hr [ ] 48hr [ ] 3day [ ] 5day
SIGNATURE	INSPECTOR		
	Hilton Hernandez		

FIELD SAMPLE NUMBER	DATE	TIME	TYPE: COMP	TYPE: GRAB	SAMPLE LOCATION	PLM EPA 600/R93/116 (POSITIVE STOP)	PLM EPA 600/R93/116 (w/ gravimetric reduction) (POSITIVE STOP)	ANALYZE BY LAYER	POINT COUNT (IF >1% & <10%)	TEM NY NOB 198.4 (IF PLM SERIES NEG)	MATERIAL
59	12/13/2022	14:34		X	Room X	X		X			FT2 - 9"x9" Dark green floor tile with white streaks and black mastic
60	12/14/2022	12:15		X	Room DD3 outside hall	X	X	X			FT2 - 9"x9" Dark green floor tile with white streaks and black mastic
61	12/14/2022	09:01		X	Hall outside room AA	X		X			FT3 - 12"x12" Tan/white mottled floor tile and brown adhesive
62	12/14/2022	09:01		X		X	X	X			FT3 - 12"x12" Tan/white mottled floor tile and brown adhesive
63	12/14/2022	09:15		X	Room T	X					FT4 - 9"x9" Tan floor tile with black streaks and black mastic
64	12/14/2022	09:15		X		X	X				FT4 - 9"x9" Tan floor tile with black streaks and black mastic
65	12/14/2022	09:17		X	Room T	X		X			FT5 - 9"x9" Brown floor tile with white/red streaks
66	12/14/2022	13:39		X	Room O1	X	X	X			FT5 - 9"x9" Brown floor tile with white/red streaks
67	12/14/2022	09:40		X	Room AA	X		X			FT6 - 12"x12" White floor tile with pink/blue specks and tan mastic

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
	12/27/22	12/27/22			
(Printed)	Time:	(Printed) 0900	(Printed)	Time:	(Printed)
Hilton Hernandez	0700				

Remarks: Please send results to Mike K. and Hilton H.

Condition of Samples:
Acceptable: Yes ✓ No
Comments:

TRC
21 GRIFFIN ROAD NORTH
WINDSOR, CONNECTICUT 06095
TELEPHONE (860) 298-9692
FAX (860) 298-6380

ASBESTOS BULK SAMPLING CHAIN OF CUSTODY

Edition: October 2009
Supersede Previous Edition

LAB ID #. 60919

PROJECT NUMBER	PROJECT NAME	PARAMETERS	TURNAROUND TIME
522705	East Hartford BOE McCartin, 70, East Hartford, CT		PLM: 8hr 24hr X 48hr 3day TEM: 24hr 48hr 3day 5day
SIGNATURE	INSPECTOR		
	Hilton Hernandez		

FIELD SAMPLE NUMBER	DATE	TIME	TYPE COMP	TYPE GRAB	SAMPLE LOCATION	PLM EPA 600/R93/116 (POSITIVE STOP)	PLM EPA 600/R93/116 (w/ gravimetric reduction) (POSITIVE STOP)	ANALYZE BY LAYER	POINT COUNT (IF >1% & <10%)	TEM NY NOB 198.4 (IF PLM SERIES NEG)	MATERIAL
68	12/14/2022	09:41		X	Room AA	X	X	X			FT6 - 12"x12" White floor tile with pink/blue specks and tan mastic
69	12/14/2022	09:46		X	Room AA	X		X			FT7 - 12"x12" Green floor tile with white/green specks and tan adhesive.
70	12/14/2022	09:46		X	Room AA	X	X	X			FT7 - 12"x12" Green floor tile with white/green specks and tan adhesive.
71	12/14/2022	10:12		X	Room BB	X		X			FT8 - 12"x12" White floor tile with grey/black specks and tan mastic
72	12/14/2022	13:43		X	Room O1	X	X	X			FT8 - 12"x12" White floor tile with grey/black specks and tan mastic
73	12/14/2022	10:19		X	Room BB	X		X			FT9 - 12"x12" White floor tile and black mastic
74	12/14/2022	10:19		X	Room BB	X	X	X			FT9 - 12"x12" White floor tile and black mastic
75	12/15/2022	10:32		X	Room B	X		X			FT10 - 12"x12" Light tan tile floor tile with brown/white specks and black mastic
76	12/17/2022	11:46		X	Room M2	X	X	X			FT10 - 12"x12" Light tan tile floor tile with brown/white specks and black mastic

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
	12/27/22	12/27/22			
(Printed)	Time:	(Printed) 0900	(Printed)	Time:	(Printed)
Hilton Hernandez	0700				

Remarks: Please send results to Mike K. and Hilton H.

Condition of Samples:
Acceptable: Yes ✓ No
Comments:

TRC
21 GRIFFIN ROAD NORTH
WINDSOR, CONNECTICUT 06095
TELEPHONE (860) 298-9692
FAX (860) 298-6380

ASBESTOS BULK SAMPLING CHAIN OF CUSTODY

Edition: October 2009
Supersede Previous Edition

LAB ID #. 60919

PROJECT NUMBER	PROJECT NAME	PARAMETERS	TURNAROUND TIME
522705	East Hartford BOE McCartin, 70, East Hartford, CT		PLM: [ ] 8hr [ ] 24hr [X] 48hr [ ] 3day TEM: [ ] 24hr [ ] 48hr [ ] 3day [ ] 5day
SIGNATURE	INSPECTOR		
	Hilton Hernandez		

FIELD SAMPLE NUMBER	DATE	TIME	TYPE: COMP	TYPE: GRAB	SAMPLE LOCATION	PLM EPA 600/R93/116 (POSITIVE STOP)	PLM EPA 600/R93/116 (w/ gravimetric reduction) (POSITIVE STOP)	ANALYZE BY LAYER	POINT COUNT (IF >1% & <10%)	TEM NY NOB 198.4 (IF PLM SERIES NEG)	MATERIAL
77	12/17/2022	09:47		X	Room JC	X		X			FT11 - 9"x9" Grey floor tile with white streaks and black mastic
78	12/17/2022	09:48		X		X	X	X			FT11 - 9"x9" Grey floor tile with white streaks and black mastic
79	12/17/2022	10:18		X	Room H	X		X			FT12 - 9"x9" Tan floor tile with black/white streaks and black mastic
80	12/17/2022	10:18		X	Room H	X	X	X			FT12 - 9"x9" Tan floor tile with black/white streaks and black mastic
81	12/17/2022	11:50		X	Room M	X		X			FT13 - 12"x12" Tan floor tile with white black specks and black mastic
82	12/17/2022	11:53		X	Room M2	X	X	X			FT13 - 12"x12" Tan floor tile with white black specks and black mastic
83	12/13/2022	14:28		X	Room X	X					GD1 - Light brown ceiling glue daubs
84	12/13/2022	14:28		X		X	X				GD1 - Light brown ceiling glue daubs
85	12/17/2022	10:25		X		X					GD2 - Dark brown ceiling glue daub
86	12/17/2022	10:30		X	Room D hall	X	X				GD2 - Dark brown ceiling glue daub

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
	12/27/22	12/27/22			
(Printed)	Time:	(Printed)	(Printed)	Time:	(Printed)
Hilton Hernandez	0700	Dave Marino 0900			

Remarks: Please send results to Mike K. and Hilton H.

Condition of Samples: _____
Acceptable: Yes √ No _____
Comments:

TRC

21 GRIFFIN ROAD NORTH
WINDSOR, CONNECTICUT 06095
TELEPHONE (860) 298-9692
FAX (860) 298-6380

Edition: October 2009
Supersede Previous Edition

ASBESTOS BULK SAMPLING CHAIN OF CUSTODY

LAB ID #. 60919

PROJECT NUMBER	PROJECT NAME	PARAMETERS	TURNAROUND TIME
	East Hartford BOE McCartin, 70, East Hartford, CT		PLM: [ ] 8hr [ ] 24hr [X] 48hr [ ] 3day TEM: [ ] 24hr [ ] 48hr [ ] 3day [ ] 5day
SIGNATURE	INSPECTOR Hilton Hernandez		

FIELD SAMPLE NUMBER	DATE	TIME	TYPE COMP	TYPE GRAB	SAMPLE LOCATION	PLM EPA 600/R93/116 (POSITIVE STOP)	PLM EPA 600/R93/116 (w/ gravimetric reduction) (POSITIVE STOP)	ANALYZE BY LAYER	POINT COUNT (IF >1% & <10%)	TEM NY NOB 198.4 (IF PLM SERIES NEG)	MATERIAL
87	12/14/2022	10:37		X	DD2	X					GR1 - Light Grey wall seam grout
88	12/14/2022	12:22		X	DD3	X					GR1 - Light Grey wall seam grout
89	12/14/2022	11:52		X	Women's '59	X					GR2 - Grey ceramic floor tile
90	12/14/2022	11:22		X		X					GR2 - Grey ceramic floor tile
91	12/17/2022	08:56		X	Room F	X					GR3 - Grey wall seam grout
92	12/17/2022	09:04		X	Room G	X					GR3 - Grey wall seam grout
93	12/17/2022	09:09		X	Room F	X					GR4 - Grey ceramic floor tile grout
94	12/17/2022	09:10		X	Room G	X					GR4 - Grey ceramic floor tile grout
95	12/17/2022	13:07		X	Room E	X					GR5 - Red fire brick grout
96	12/17/2022	13:07		X	Room E	X					GR5 - Red fire brick grout
97	12/14/2022	12:44		X	Room HH3A	X					LEV1 - Red cementitious floor leveler
98	12/14/2022	12:45		X	Room HH3A	X					LEV1 - Red cementitious floor leveler

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
	12/27/22	12/27/22			
(Printed)	Time:	(Printed)	(Printed)	Time:	(Printed)
Hilton Hernandez	0700	0900			

Remarks: Please send results to Mike K. and Hilton H.

Condition of Samples: _____
Acceptable: Yes ✓ No _____
Comments:

TRC
21 GRIFFIN ROAD NORTH
WINDSOR, CONNECTICUT 06095
TELEPHONE (860) 298-9692
FAX (860) 298-6380

ASBESTOS BULK SAMPLING CHAIN OF CUSTODY

Edition: October 2009
Supersede Previous Edition

LAB ID #. 60914

PROJECT NUMBER	PROJECT NAME	PARAMETERS	TURNAROUND TIME
522703	East Hartford BOE McCartin, 70, East Hartford, CT		PLM: 8hr 24hr X 48hr 3day TEM: 24hr 48hr 3day 5day
SIGNATURE	INSPECTOR		
	Hilton Hernandez		

FIELD SAMPLE NUMBER	DATE	TIME	TYPE COMP	TYPE GRAB	SAMPLE LOCATION	PLM EPA 600/R93/116 (POSITIVE STOP)	PLM EPA 600/R93/116 (w/ gravimetric reduction) (POSITIVE STOP)	ANALYZE BY LAYER	POINT COUNT (IF >1% & <10%)	TEM NY NOB 198.4 (IF PLM SERIES NEG)	MATERIAL
99	12/14/2022	08:41		X	Room W2	X					LP1 - Silver/grey light paper
100	12/14/2022	14:15		X	Room R1	X					LP1 - Silver/grey light paper
101	12/13/2022	14:07		X	Room U	X					MF1 - Grey mudded fitting
102	12/13/2022	14:33		X	Room T1	X					MF1 - Grey mudded fitting
103	12/13/2022	14:48		X	Hall 1959	X					MF1 - Grey mudded fitting
104	12/17/2022	12:23		X	Room E	X					MF2 - Grey mudded fitting
105	12/17/2022	12:25		X	Room E	X					MF2 - Grey mudded fitting
106	12/17/2022	09:20		X	Room JC	X					MF2 - Grey mudded fitting
107	12/13/2022	08:59		X	Roof 62 east	X					MG1 - Amber membrane glue
108	12/13/2022	10:58		X	Roof 59 south	X	X				MG1 - Amber membrane glue
109	12/13/2022	10:52		X	59 roof middle	X					PBT1 - Black pitch box tar
110	12/13/2022	10:52		X	59 roof middle	X	X				PBT1 - Black pitch box tar

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
	12/27/22	12/27/22			
(Printed)	Time:	(Printed)	(Printed)	Time:	(Printed)
Hilton Hernandez	0700	Dave Marino			

Remarks: Please send results to Mike K. and Hilton H.

Condition of Samples:
Acceptable: Yes ✓ No
Comments:

TRC
21 GRIFFIN ROAD NORTH
WINDSOR, CONNECTICUT 06095
TELEPHONE (860) 298-9692
FAX (860) 298-6380

ASBESTOS BULK SAMPLING
CHAIN OF CUSTODY

Edition: October 2009
Supersede Previous Edition

LAB ID #. 60918

PROJECT NUMBER	PROJECT NAME	PARAMETERS	TURNAROUND TIME
522705	East Hartford BOE McCartin, 70, East Hartford, CT		PLM: 8hr 24hr X 48hr 3day TEM: 24hr 48hr 3day 5day
SIGNATURE	INSPECTOR		
	Hilton Hernandez		

FIELD SAMPLE NUMBER	DATE	TIME	TYPE COMP	TYPE GRAB	SAMPLE LOCATION	PLM EPA 600/R93/116 (POSITIVE STOP)	PLM EPA 600/R93/116 (w/ gravimetric reduction) (POSITIVE STOP)	ANALYZE BY LAYER	POINT COUNT (IF >1% & <10%)	TEM NY NOB 198.4 (IF PLM SERIES NEG)	MATERIAL
111	12/13/2022	14:08		X	Room U	X					PI1 - White pipe insulation
112	12/13/2022	14:49		X	Room X	X					PI1 - White pipe insulation
113	12/13/2022	14:25		X	Room T1	X					PI1 - White pipe insulation
114	12/13/2022	14:48		X	Room X	X					PI2 - Grey pipe insulation paper
115	12/13/2022	14:10		X	Room U	X					PI2 - Grey pipe insulation paper
116	12/13/2022	14:25		X	Room T1	X					PI2 - Grey pipe insulation paper
117	12/13/2022	09:52		X	62 east roof	X					PNF1 - Black/brown penetration tar and paper
118	12/13/2022	10:45		X	59 roof north	X	X				PNF1 - Black/brown penetration tar and paper
119	12/13/2022	10:38		X	62 roof west	X					PRF1 - Black flashing tar
120	12/13/2022	10:47		X	59 roof north	X	X				PRF1 - Black flashing tar
121	12/13/2022	11:10		X	59 roof south lower roof south	X					PRF2 - Black flashing tar
122	12/13/2022	11:11		X	59 roof south lower roof west	X	X				PRF2 - Black flashing tar

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
	12/27/22	12/27/22			
(Printed)	Time:	(Printed)	(Printed)	Time:	(Printed)
Hilton Hernandez	0700	0900			

Remarks: Please send results to Mike K. and Hilton H.

Condition of Samples:
Acceptable: Yes ✓ No
Comments:

TRC
21 GRIFFIN ROAD NORTH
WINDSOR, CONNECTICUT 06095
TELEPHONE (860) 298-9692
FAX (860) 298-6380

ASBESTOS BULK SAMPLING CHAIN OF CUSTODY

Edition: October 2009
Supersede Previous Edition

LAB ID #. 60919

PROJECT NUMBER	PROJECT NAME	PARAMETERS	TURNAROUND TIME
522705	East Hartford BOE McCartin, 70, East Hartford, CT		PLM: ☐ 8hr ☐ 24hr X 48hr ☐ 3day TEM: ☐ 24hr ☐ 48hr ☐ 3day ☐ 5day
SIGNATURE	INSPECTOR		
	Hilton Hernandez		

FIELD SAMPLE NUMBER	DATE	TIME	TYPE COMP	TYPE GRAB	SAMPLE LOCATION	PLM EPA 600/R93/116 (POSITIVE STOP)	PLM EPA 600/R93/116 (w/ gravimetric reduction) (POSITIVE STOP)	ANALYZE BY LAYER	POINT COUNT (IF >1% & <10%)	TEM NY NOB 198.4 (IF PLM SERIES NEG)	MATERIAL
123	12/13/2022	11:34		X	Upper roof chimney	X					PRF3 - Black perimeter a chimney
124	12/13/2022	11:34		X	Upper roof chimney	X	X				PRF3 - Black perimeter a chimney
125	12/13/2022	09:49		X	62 roof east	X					RF1 - Black paper membrane roof and tar
126	12/13/2022	10:04		X	62 roof west	X	X				RF1 - Black paper membrane roof and tar
127	12/13/2022	10:26		X	59 roof north	X					RF2 - Black built up roofing
128	12/13/2022	10:56		X	59 roof south	X	X				RF2 - Black built up roofing
129	12/13/2022	11:19		X	Lower roof north	X					RF3 - Black roofing layer
130	12/13/2022	11:19		X	Lower roof south	X	X				RF3 - Black roofing layer
131	12/13/2022	10:08		X	62 roof east	X					RFL1 - Black tar flashing on hoods
132	12/13/2022	10:14		X	62 west roof	X	X				RFL1 - Black tar flashing on hoods
133	12/13/2022	10:16		X	59 roof north	X					RFL2 - Black tar paper
134	12/13/2022	10:17		X	59 roof north	X	X				RFL2 - Black tar paper

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
	12/27/22	12/27/22			
(Printed)	Time:	(Printed)	(Printed)	Time:	(Printed)
Hilton Hernandez	0700	0900 Dave Mallard			

Remarks: Please send results to Mike K. and Hilton H.

Condition of Samples:
Acceptable: Yes ✓ No ____
Comments:

TRC
21 GRIFFIN ROAD NORTH
WINDSOR, CONNECTICUT 06095
TELEPHONE (860) 298-9692
FAX (860) 298-6380

ASBESTOS BULK SAMPLING CHAIN OF CUSTODY

Edition: October 2009
Supersede Previous Edition

LAB ID #. 60919

PROJECT NUMBER	PROJECT NAME	PARAMETERS	TURNAROUND TIME
S22705	East Hartford BOE McCartin, 70, East Hartford, CT		PLM: [ ] 8hr [ ] 24hr [X] 48hr [ ] 3day TEM: [ ] 24hr [ ] 48hr [ ] 3day [ ] 5day

SIGNATURE	INSPECTOR
	Hilton Hernandez

FIELD SAMPLE NUMBER	DATE	TIME	TYPE COMP	TYPE GRAB	SAMPLE LOCATION	PLM EPA 600/R93/116 (POSITIVE STOP)	PLM EPA 600/R93/116 (w/ gravimetric reduction) (POSITIVE STOP)	ANALYZE BY LAYER	POINT COUNT (IF >1% & <10%)	TEM NY NOB 198.4 (IF PLM SERIES NEG)	MATERIAL
135	12/14/2022	10:28		X	Room CC	X		X			SHR1 - Whit sheetrock and white joint compound
136	12/14/2022	14:02		X	Room Q	X		X			SHR1 - Whit sheetrock and white joint compound
137	12/14/2022	12:58		X	Room HH3	X		X			SHR2 - Grey sheet rock and white joint compound
138	12/14/2022	13:11		X	Room HH1	X		X			SHR2 - Grey sheet rock and white joint compound
139	12/17/2022	13:13		X	Daycare main hall	X					SHR3 - Grey sheetrock
140	12/22/2022	19:49		X	Daycare main hall	X					SHR3 - Grey sheetrock
141	12/13/2022	09:54		X	1962 roof east	X					SS1 - Black rubbery membrane seam sealant
142	12/13/2022	10:31		X	1959 roof north	X	X				SS1 - Black rubbery membrane seam sealant
143	12/14/2022	12:55		X	Room HH3	X					SU1 - Light grey sink undercoating
144	12/14/2022	13:29		X	Room N	X	X				SU1 - Light grey sink undercoating
145	12/17/2022	11:06		X	Room I	X					SU2 - Dark grey sink undercoating
146	12/17/2022	12:25		X	Room J	X	X				SU2 - Dark grey sink undercoating

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
	12/27/22	12/27/22			
(Printed)	Time:	(Printed)	(Printed)	Time:	(Printed)
Hilton Hernandez	0700	0900			

Remarks: Please send results to Mike K. and Hilton H.

Condition of Samples:
Acceptable: Yes ✓ No
Comments:

TRC
21 GRIFFIN ROAD NORTH
WINDSOR, CONNECTICUT 06095
TELEPHONE (860) 298-9692
FAX (860) 298-6380

ASBESTOS BULK SAMPLING CHAIN OF CUSTODY

Edition: October 2009
Supersede Previous Edition

LAB ID #. 60914

PROJECT NUMBER	PROJECT NAME	PARAMETERS	TURNAROUND TIME
622705	East Hartford BOE McCartin, 70, East Hartford, CT		PLM: 8hr 24hr X 48hr 3day TEM: 24hr 48hr 3day 5day
SIGNATURE	INSPECTOR		
	Hilton Hernandez		

FIELD SAMPLE NUMBER	DATE	TIME	TYPE COMP	TYPE GRAB	SAMPLE LOCATION	PLM EPA 600/R93/116 (POSITIVE STOP)	PLM EPA 600/R93/116 (w/ gravimetric reduction) (POSITIVE STOP)	ANALYZE BY LAYER	POINT COUNT (IF >1% & <10%)	TEM NY NOB 198.4 (IF PLM SERIES NEG)	MATERIAL
147	12/13/2022	14:56		X	Room X	X					SUR1 - Grey cementitious wall surfacing
148	12/14/2022	11:41		X	Room BB hall	X					SUR1 - Grey cementitious wall surfacing
149	12/15/2022	12:38		X	Outside AA hall	X					SUR1 - Grey cementitious wall surfacing
150	12/15/2022	12:39		X	Hall outside of room FF	X					SUR2 - Green wall texture
151	12/15/2022	12:39		X	Hall outside room AA	X					SUR2 - Green wall texture
152	12/15/2022	12:40		X	Hall outside room O	X					SUR2 - Green wall texture
153	12/15/2022	12:41		X	Hall outside room E	X					SUR2 - Green wall texture
154	12/15/2022	12:41		X	Hall outside room HH3	X					SUR2 - Green wall texture
155	12/13/2022	09:47		X	1962 East	X					TM1 - White tectum deck
156	12/13/2022	10:05		X	1962 west	X					TM1 - White tectum deck
157	12/19/2022	11:11		X	1962 Southeast roof	X					VB1 - Black vapor barrier
158	12/19/2022	11:25		X	1962 Northwest roof	X	X				VB1 - Black vapor barrier

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
	12/27/22	12/27/22			
(Printed)	Time:	(Printed)	(Printed)	Time:	(Printed)
Hilton Hernandez	0700	Dan Marino 0700			

Remarks: Please send results to Mike K. and Hilton H.

Condition of Samples: _____
Acceptable: Yes ✓ No _____
Comments:

TRC
21 GRIFFIN ROAD NORTH
WINDSOR, CONNECTICUT 06095
TELEPHONE (860) 298-9692
FAX (860) 298-6380

ASBESTOS BULK SAMPLING
CHAIN OF CUSTODY

Edition: October 2009
Supersede Previous Edition

LAB ID #. G0919

PROJECT NUMBER	PROJECT NAME	PARAMETERS	TURNAROUND TIME
522705	East Hartford BOE McCartin, 70, East Hartford, CT		PLM: [ ] 8hr [ ] 24hr [X] 48hr [ ] 3day TEM: [ ] 24hr [ ] 48hr [ ] 3day [ ] 5day
SIGNATURE	INSPECTOR		
	Hilton Hernandez		

FIELD SAMPLE NUMBER	DATE	TIME	TYPE COMP	TYPE GRAB	SAMPLE LOCATION	PLM EPA 600/R93/116 (POSITIVE STOP)	PLM EPA 600/R93/116 (w/ gravimetric reduction) (POSITIVE STOP)	ANALYZE BY LAYER	POINT COUNT (IF >1% & <10%)	TEM NY NOB 198.4 (IF PLM SERIES NEG)	MATERIAL
159	12/13/2022	14:55		X	Room X	X					WC1 - Black interior/exterior window caulk
160	12/15/2022	11:09		X	Room D	X	X				WC1 - Black interior/exterior window caulk
161	12/14/2022	15:26		X	South Boiler room window	X					WC2 - Tan brittle window caulk
162	12/14/2022	15:27		X	West boiler room window	X	X				WC2 - Tan brittle window caulk
163	12/14/2022	15:28		X	South boiler room window	X					WG1 - Grey brittle window glaze
164	12/14/2022	15:28		X	West boiler room window	X	X				WG1 - Grey brittle window glaze
165	12/14/2022	15:15		X	East side exterior window	X					WSC1 - Light grey brittle caulk 1959
166	12/14/2022	15:22		X	West side exterior window	X	X				WSC1 - Light grey brittle caulk 1959
167	12/14/2022	15:21		X	East exterior window	X					WSC2 - Dark grey brittle caulk 1962
168	12/17/2022	14:08		X	West exterior window	X	X				WSC2 - Dark grey brittle caulk 1962

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
	12/27/22	12/27/22			
(Printed)	Time:	(Printed)	(Printed)	Time:	(Printed)
Hilton Hernandez	0700	0700			

Remarks: Please send results to Mike K. and Hilton H.

Condition of Samples:
Acceptable: Yes ✓ No
Comments:

PLM Gravimetric Analysis

						g crucible		decimal	% Asb	% Asb
Date	**Analyst**	**Lab Log #**	**Sample ID**	**Crucible ID**	**g crucible**	**plus sample**	**g after 450°**	**Residue**	**in residue**	**total Sample**
12/30/2022	KW	60919	**08**	Z	29.113	29.2531	29.2434	0.931	0.00	0.00
			10	BB	26.9696	27.1053	27.0093	0.293	0.00	0.00
			14	EE	31.9427	32.2802	32.1859	0.721	0.00	0.00
			16	HH	32.4249	32.537	32.4547	0.266	0.00	0.00
			18	OO	31.9229	32.5911	32.4005	0.715	0.00	0.00
			20G	1	18.6197	18.6725	18.6262	0.123	0.00	0.00
			20CB	5	19.3966	19.5777	19.4849	0.488	0.00	0.00
			22	6	20.8164	20.8565	20.8296	0.329	0.00	0.00
			24G	8	16.881	17.0084	16.9642	0.653	0.00	0.00
			24CB	10	20.6418	20.7842	20.7463	0.734	0.00	0.00
			26	11	19.9907	20.0831	20.0309	0.435	0.00	0.00
			28	12	19.2198	19.3842	19.2924	0.442	0.00	0.00
			30	13	20.7016	21.0015	20.8416	0.467	0.00	0.00
			32	14	20.4295	20.5777	20.5095	0.540	0.00	0.00
			42	20	17.9645	18.0208	18.0032	0.687	0.00	0.00
			44	21	19.46	19.602	19.5564	0.679	0.00	0.00
			46	23	17.5765	17.7006	17.6439	0.543	0.00	0.00
			48	29	21.633	21.679	21.6736	0.883	2.00	1.77
			52	31	20.3491	20.4804	20.4618	0.858	0.00	0.00
			54	34	23.9765	24.0216	24.0022	0.570	10.00	5.70
			60M	38	27.2592	27.2751	27.2673	0.509	0.00	0.00
			62A	42	20.5565	20.604	20.5905	0.716	0.00	0.00
			62T	45	25.5548	25.7691	25.7375	0.853	0.00	0.00
			64M	48	20.6216	20.6334	20.6241	0.212	0.00	0.00

PLM Gravimetric Analysis

						g crucible		decimal	% Asb	% Asb
Date	**Analyst**	**Lab Log #**	**Sample ID**	**Crucible ID**	**g crucible**	**plus sample**	**g after 450°**	**Residue**	**in residue**	**total Sample**
12/30/2022	KW	60919	**66M**	49	20.3771	20.3805	20.3776	0.147	0.00	0.00
			68M	50	22.1282	22.1554	22.1461	0.658	0.00	0.00
			68T	51	21.0544	21.4375	21.3878	0.870	0.00	0.00
			70A	60	23.6806	23.7237	23.7032	0.524	0.00	0.00
			70T	61	19.4829	19.7664	19.7297	0.871	0.00	0.00
			72M	62	23.5136	23.5342	23.5283	0.714	0.00	0.00
			72T	63	19.6022	19.9186	19.8632	0.825	0.00	0.00
			76T	65	26.4643	26.5663	26.5503	0.843	0.00	0.00
			82M	66	18.2288	18.2544	18.2364	0.297	0.00	0.00
			82T	67	17.4785	17.5149	17.5055	0.742	0.00	0.00
			86	70	24.4802	24.7751	24.6251	0.491	0.00	0.00
			108	72	26.7413	26.793	26.7417	0.008	0.00	0.00
			110	73	17.7111	17.8748	17.8101	0.605	0.00	0.00
			124	74	20.9848	21.1566	21.0724	0.510	0.00	0.00
			126	75	19.8515	19.959	19.857	0.051	0.00	0.00
			128	76	17.3563	17.7632	17.417	0.149	0.00	0.00
			130	79	26.5528	26.7507	26.5553	0.013	0.00	0.00
			134	80	18.0737	18.1921	18.1498	0.643	0.00	0.00
			142	81	20.999	21.1352	21.0612	0.457	0.00	0.00
			144	83	20.5609	20.569	20.5667	0.716	0.00	0.00
			146	85	21.2027	21.2661	21.2489	0.729	0.00	0.00
			158	88	26.4499	26.5807	26.4524	0.019	0.00	0.00
			160	93	25.597	25.648	25.6226	0.502	0.00	0.00
			164	95	20.1843	20.3988	20.3714	0.872	0.00	0.00

Industrial Hygiene Laboratory
21 Griffin Road North
Windsor, CT 06095
(860) 298-6308

BULK ASBESTOS ANALYSIS REPORT

CLIENT: Capital Region Development Authority

Lab Log #: 0061046
Project #: 522705.0000.0000
Date Received: 01/17/2023
Date Analyzed: 01/20/2023

Site: McCartin School, 70 Canterbury Street, East Hartford, CT

POLARIZED LIGHT MICROSCOPY by EPA 600/R-93/116

Sample No.	Sample Location	Homogeneous Material Description	Other Matrix Materials		Asbestos %	Asbestos Type
1	59 construction	Black WVB1 - tar paper wall vapor barrier behind brick veneer	80%	cellulose	ND	None
2♣	59 construction	Black WVB1 - tar paper wall vapor barrier behind brick veneer		- - -	ND	None
3	62 construction	Black WVB2 - tar paper vapor barrier behind brick veneer	80%	cellulose	ND	None
4♣	62 construction	Black WVB2 - tar paper vapor barrier behind brick veneer		- - -	ND	None
5	59 Corridor o/s room GG	Black SVB1 - tar vapor varies adhered to underside of slab		- - -	ND	None
6♣	59 Corridor o/s room GG	Black SVB1 - tar vapor varies adhered to underside of slab		- - -	ND	None
7	Exterior 59 construction o/s Q1	Light Grey WC3 - window frame caulk		- - -	ND	None
8♣	Exterior 59 construction o/s BB	Light Grey WC3 - window frame caulk		- - -	ND	None
9	Exterior 62 construction o/s main entrance area	Light Grey WC4 - window frame caulk around smaller windows		- - -	ND	None
10♣	Exterior 62 construction o/s main entrance area right side of entry	Light Grey WC4 - window frame caulk around smaller windows		- - -	ND	None
11	Exterior 62 construction o/s D	Dark Grey WC5 - window frame caulk		- - -	ND	None
12♣	Exterior 62 construction o/s B	Dark Grey WC5 - window frame caulk		- - -	ND	None
13	Room V	White FD1 - fire door insulation	20%	cellulose	ND	None
14	Room V	White FD1 - fire door insulation	20%	cellulose	ND	None
15	Room E	White FD2 - fire door insulation	10%	cellulose	ND	None
16	Room E	White FD2 - fire door insulation	10%	cellulose	ND	None
17	Room M	White FD3 - fire door insulation	10%	cellulose	ND	None

Industrial Hygiene Laboratory
21 Griffin Road North
Windsor, CT 06095
(860) 298-6308

POLARIZED LIGHT MICROSCOPY by EPA 600/R-93/116

Sample No.	Sample Location	Homogeneous Material Description	Other Matrix Materials		Asbestos %	Asbestos Type
18	Room M	White FD3 - fire door insulation	10%	cellulose	ND	None
19	Room H	White FD4 - fire door insulation		- - -	ND	None
20	Room H	White FD4 - fire door insulation		- - -	ND	None
21	Room JC	White FD5 - fire door insulation		- - -	ND	None
22	Room JC	White FD5 - fire door insulation		- - -	ND	None
23	Corridor of 62 construction	White FD6 - fire door insulation		- - -	ND	None
24	Corridor of 62 construction	White FD6 - fire door insulation		- - -	ND	None

♣ Samples analyzed by EPA/600/R-93/116 with gravimetric reduction

ND - asbestos was not detected
Trace - asbestos was observed at level of 1% or less - This is the reporting limit
NA/PS - Not Analyzed / Positive Stop
SNA - Sample Not Analyzed- See Chain of Custody for details
Notes: Asbestos-Containing Material (ACM) is any material containing more than 1% asbestos

Note: Polarized-light microscopy is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. In those cases, EPA recommends, and certain states (e.g. NY) require, that negative results be confirmed by quantitative transmission electron microscopy.

The Laboratory at TRC follows the EPA's Interim Method for the Determination of Asbestos in Bulk Insulation 1982 (EPA 600/M4-82-020) Bulk Analysis Code 18/A01 and the EPA recommended Method for the Determination of Asbestos in Bulk Building Materials July 1993, R.L. Perkins and B.W. Harvey, (EPA/600/R-93/116) Bulk Analysis Code 18/A03, which utilize polarized light microscopy (PLM). Our analysts have completed an accredited course in asbestos identification. TRC's Laboratory is accredited under the National Voluntary Laboratory Accreditation Program (NVLAP), for Bulk Asbestos Fiber Analysis, NVLAP Code 18/A01, effective through June 30, 2023. TRC is accredited by the AIHA Laboratory Accreditation Programs (AIHA-LAP), LLC in the Industrial Hygiene Program (IHLAP) for PLM effective through October 1, 2024. Asbestos content is determined by visual estimate unless otherwise indicated. Quality Control is performed in-house on at least 10% of samples and QC data related to the samples is available upon written request from client.

Analyzed by: Joel Corso, Laboratory Analyst

Reviewed by: Kathleen Williamson, Laboratory Manager

Date Issued 01/23/2023

TRC
21 GRIFFIN ROAD NORTH
WINDSOR, CONNECTICUT 06095
TELEPHONE (860) 298-9692
FAX (860) 298-6380

ASBESTOS B[illegible]MPLING CHAIN O[illegible]ODY

Edition: October 2009
Supersede Previous Edition

LAB ID #. 61046

PROJECT NUMBER	PROJECT NAME	PARAMETERS	TURNAROUND TIME
522705.0000.0000	CRDA – McCartin School-Additional Sampling, 70 Canterbury Street , East Hartford, CT		PLM: [ ] 8hr [ ] 24hr [ ] 48hr [X] 3day TEM: [ ] 24hr [ ] 48hr [ ] 3day [ ] 5day
SIGNATURE	INSPECTOR		
	Michael Kostruba		

FIELD SAMPLE NUMBER	DATE	TIME	TYPE COMP	TYPE GRAB	SAMPLE LOCATION	ANALYZE BY LAYER	POINT COUNT (IF >1% & <10%)	TEM NY NOB 198.4 (IF PLM SERIES NEG)	MATERIAL
1	1/14/2023			X	59 construction				WVB1 - Black tar paper wall vapor barrier behind brick veneer
2	1/14/2023			X	59 construction	X			WVB1 - Black tar paper wall vapor barrier behind brick veneer
3	1/14/2023			X	62 construction				WVB2 - Black tar paper vapor barrier behind brick veneer
4	1/14/2023			X	62 construction	X			WVB2 - Black tar paper vapor barrier behind brick veneer
5	1/14/2023			X	59 Corridor o/s room GG	X			SVB1 - Tar vapor varies adhered to underside of slab
6	1/14/2023			X	59 Corridor o/s room GG	X			SVB1 - Tar vapor varies adhered to underside of slab
7	1/14/2023			X	Exterior 59 construction o/s Q1	X			WC3 - Light Grey window frame caulk
8	1/14/2023			X	Exterior 59 construction o/s BB	X			WC3 - Light Grey window frame caulk
9	1/14/2023			X	Exterior 62 construction o/s main entrance area	X			WC4 - Light Grey window frame caulk around smaller windows

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
	1/17/23	1/17/23			
(Printed) Michael Kostruba	Time 1220	(Printed) Joel Corso / Kathleen Williamson 1230	(Printed)	Time:	(Printed)

Remarks: Send r[illegible] to M Kostruba

Condition of Samples Acceptable Yes ✓ No

TRC

21 GRIFFIN ROAD NORTH
WINDSOR, CONNECTICUT 06095
TELEPHONE (860) 298-9692
FAX (860) 298-6380

ASBESTOS B[illegible]PLING CHAIN O[illegible]DY

Edition: October 2009
Supersede Previous Edition

LAB ID #. 61046

PROJECT NUMBER	PROJECT NAME	PARAMETERS	TURNAROUND TIME
522705.0000.0000	CRDA – McCartin School-Additional Sampling, 70 Canterbur[illegible] Street , East Hartford, CT		PLM: 8hr 24hr 48hr X 3day TEM: 24hr 48hr 3day 5day
SIGNATURE	INSPECTOR		
	Mi[illegible]gael Kostruba		

FIELD SAMPLE NUMBER	DATE	TIME	TYPE COMP	TYPE GRAB	SAMPLE LOCATION	PLM EPA 600/R93/116 (POSITIVE STOP)	PLM EPA 600/R93/116 (w/ gravimetric reduc[illegible] (POSITIVE STOP)	ANALYZE BY LAYER	POINT C[illegible]T (IF >1% & [illegible]%)	TEM NY NOB 198.4 (IF PLM SERIES NEG)	MATERIAL
10	1/14/2023	11:22		X	Exterior 62 construction o/s main entrance area right side of entry	X	X				WC4 - Light Grey window frame caulk around smaller windows
11	1/14/2023	11:24		X	Exterior 62 construction o/s D						WC5 - Dark Grey window frame caulk
12	1/14/2023	11:27		X	Exterior 62 construction o/s [illegible]	X	X				WC5 - Dark Grey window frame caulk
13	1/14/2023	11:28		X	Room V	X					FD1 - Fire door insulation white
14	1/14/2023	11:29		X	Room V	X					FD1 - Fire door insulation white
15	1/14/2023	11:30		X	Room E	X					FD2 - Fire door insulation white
16	1/14/2023	11:30		X	Room E	X					FD2 - Fire door insulation white
17	1/14/2023	11:32		X	Room M	X					FD3 - Fire door insulation white
18	1/14/2023	11:32		X	Room M	X					FD3 - Fire door insulation white
19	1/14/2023	11:34		X	Room H	X					FD4 - Firedoor insulation white
20	1/14/2023	11:34		X	Room H	X					FD4 - Firedoor insulation white

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
	1/17/23	1/17/23			
(Printed)	Time:	(Printed) Joel Corso	(Printed)	Time:	(Printed)
Michael Kostruba	1220	~~Kathleen Williamson~~ 1230			

Remarks: Send results to M Kostruba

[illegible] ✓ No

TRC
21 GRIFFIN ROAD NORTH
WINDSOR, CONNECTICUT 06095
TELEPHONE (860) 298-9692
FAX (860) 298-6380

ASBESTOS B PLING CHAIN O DY

Edition: October 2009
Supersede Previous Edition

LAB ID #. 61046

PROJECT NUMBER	PROJECT NAME	PARAMETERS	TURNAROUND TIME
522705.0000.0000	CRDA — McCartin School-Additional Sampling, 70 Canterbury Street , East Hartford, CT		PLM: 8hr 24hr 48hr X 3day TEM: 24hr 48hr 3day 5day
SIGNATURE	INSPECTOR		
	Michael Kostruba		

FIELD SAMPLE NUMBER	DATE	TIME	TYPE COMP	TYPE GRAB	SAMPLE LOCATION	PLM EPA 600/R93 (POSITIVE STOP)	PLM EPA 600/R93 (w/gravimetric reduction) (POSITIVE STOP)	ANALYZE BY LAYER	POINT COUNT (IF >1% & <10%)	TEM NY NOB 198.4 (IF PLM SERIES NEG)	MATERIAL
21	1/14/2023	11:36		X	Room JC	X					FD5 - Fire door insulation white
22	1/14/2023	11:37		X	Room JC	X					FD5 - Fire door insulation white
23	1/14/2023	11:38		X	Corridor of 62 construction	X					FD6 - Fire door insulation white
24	1/14/2023	11:40		X	Corridor of 62 construction	X					FD6 - Fire door insulation white

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
	1/17/23	1/17/23			
(Printed) Michael Kostruba	Time: 1220	(Printed) Joel Colon ~~Kathleen Williamson~~ 1230	(Printed)	Time:	(Printed)

Remarks: Send results to M Kostruba

Custody Seals: Yes ✓ No

						g crucible		decimal	% Asb	% Asb
Date	**Analyst**	**Lab Log #**	**Sample ID**	**Crucible ID**	**g crucible**	**plus sample**	**g after 450^{o}**	**Residue**	**in residue**	**total Sample**
1/20/2023	JC	61046	**2**	10	20.6410	20.8514	20.6512	0.048	0.00	0.00
			4	14	20.4289	20.5681	20.4376	0.063	0.00	0.00
			6	25	28.5987	28.7109	28.683	0.751	0.00	0.00
			8	26	24.7089	24.8906	24.8235	0.631	0.00	0.00
			10	38	27.2584	27.4084	27.3404	0.547	0.00	0.00
			12	76	17.3557	17.5014	17.4297	0.508	0.00	0.00

Industrial Hygiene Laboratory
21 Griffin Road North
Windsor, CT 06095
(860) 298-6308

BULK ASBESTOS ANALYSIS REPORT

CLIENT: Capital Region Development Authority

Lab Log #: 0061069
Project #: 522705.0000.0000
Date Received: 01/19/2023
Date Analyzed: 01/24/2023

Site: McCartin School, 70 Canterbury Street, East Hartford, CT

POLARIZED LIGHT MICROSCOPY by EPA 600/R-93/116

Sample No.	Sample Location	Homogeneous Material Description	Other Matrix Materials	Asbestos %	Asbestos Type
1	Left Door	Off-White DC5 - door frame caulk	- - -	ND	None
2♣	Right Door	Off-White DC5 - door frame caulk	- - -	ND	None

♣ Samples analyzed by EPA/600/R-93/116 with gravimetric reduction

ND - asbestos was not detected
Trace - asbestos was observed at level of 1% or less - This is the reporting limit
NA/PS - Not Analyzed / Positive Stop
SNA - Sample Not Analyzed- See Chain of Custody for details
Notes: Asbestos-Containing Material (ACM) is any material containing more than 1% asbestos

Note: Polarized-light microscopy is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. In those cases, EPA recommends, and certain states (e.g. NY) require, that negative results be confirmed by quantitative transmission electron microscopy.

The Laboratory at TRC follows the EPA's Interim Method for the Determination of Asbestos in Bulk Insulation 1982 (EPA 600/M4-82-020) Bulk Analysis Code 18/A01 and the EPA recommended Method for the Determination of Asbestos in Bulk Building Materials July 1993, R.L. Perkins and B.W. Harvey, (EPA/600/R-93/116) Bulk Analysis Code 18/A03, which utilize polarized light microscopy (PLM). Our analysts have completed an accredited course in asbestos identification. TRC's Laboratory is accredited under the National Voluntary Laboratory Accreditation Program (NVLAP), for Bulk Asbestos Fiber Analysis, NVLAP Code 18/A01, effective through June 30, 2023. TRC is accredited by the AIHA Laboratory Accreditation Programs (AIHA-LAP), LLC in the Industrial Hygiene Program (IHLAP) for PLM effective through October 1, 2024. Asbestos content is determined by visual estimate unless otherwise indicated. Quality Control is performed in-house on at least 10% of samples and QC data related to the samples is available upon written request from client.

Analyzed by: Joel Corso, Laboratory Analyst

Reviewed by: Kathleen Williamson, Laboratory Manager

Date Issued 01/24/2023

TRC

21 GRIFFIN ROAD NORTH
WINDSOR, CONNECTICUT 06095
TELEPHONE (860) 298-9692
FAX (860) 298-6380

ASBESTOS BULK SAMPLING CHAIN OF CUSTODY

Edition: October 2009
Supersede Previous Edition

LAB ID #. 61069

PROJECT NUMBER	PROJECT NAME
522705	McCartin School

SIGNATURE	INSPECTOR
[signature]	Mike Kastrube

TURNAROUND TIME

PLM:		8hr		24hr		48hr	X	3day
TEM:		24hr		48hr		3day		5day

FIELD SAMPLE NUMBER	DATE	TIME	TYPE: COMP	TYPE: GRAB	SAMPLE LOCATION	PLM EPA 600/R93/116 (POSITIVE STOP)	PLM EPA 600/R93/116 (w/ gravimetric reduction) (POSITIVE STOP)	ANALYZE BY LAYER	POINT COUNT (IF >1% & <10%)	TEM NY NOB 198.4 (IF PLM SERIES NEG)	MATERIAL
1	1/18/23	1300		X	Left Ascle Door - o/s C	X					DCS - of Fuh to Doorframe Caulk
2	⟂	⟂			Ascle - Right Door o/s C	X	✓				" "

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
[signature]	1/18/23	[signature] 1/19/23			
(Printed) Mike Kastrube	Time: 1530	(Printed) Dave Marino 0800	(Printed)	Time:	(Printed)

Remarks: Results to MK

Condition of Samples:
Acceptable: Yes ✓ No ____
Comments:

Page 1 of 1

						g crucible		decimal	% Asb	% Asb
Date	**Analyst**	**Lab Log #**	**Sample ID**	**Crucible ID**	**g crucible**	**plus sample**	**g after 450°**	**Residue**	**in residue**	**total Sample**
1/24/2023	JC	61069	**2**	111	22.0246	22.153	22.0632	0.301	0.00	0.00

Industrial Hygiene Laboratory
21 Griffin Road North
Windsor, CT 06095
(860) 298-6308

BULK ASBESTOS ANALYSIS REPORT

CLIENT: Capital Region Development Authority

Lab Log #: 0061700
Project #: 522705.0000.0000
Date Received: 04/05/2023
Date Analyzed: 04/07/2023

Site: McCartin School, 70 Canterbury Street, East Hartford, CT

POLARIZED LIGHT MICROSCOPY by EPA 600/R-93/116

Sample No.	Sample Location	Homogeneous Material Description	Other Matrix Materials		Asbestos %	Asbestos Type
25	Room JC- 62'	Grey MF1- mudded fitting on water piping	60%	mineral wool	ND	None
26	Room F- 62'	Grey MF1- mudded fitting on water piping	60%	mineral wool	ND	None
27	Room L off valve- 62'	Grey MF2- mudded fitting on heat piping	60%	mineral wool	ND	None
28	Room L off piping- 62'	Grey MF2- mudded fitting on heat piping	60%	mineral wool	ND	None

ND - asbestos was not detected
Trace - asbestos was observed at level of 1% or less - This is the reporting limit
NA/PS - Not Analyzed / Positive Stop
SNA - Sample Not Analyzed- See Chain of Custody for details
Notes: Asbestos-Containing Material (ACM) is any material containing more than 1% asbestos

Note: Polarized-light microscopy is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. In those cases, EPA recommends, and certain states (e.g. NY) require, that negative results be confirmed by quantitative transmission electron microscopy.

The Laboratory at TRC follows the EPA's Interim Method for the Determination of Asbestos in Bulk Insulation 1982 (EPA 600/M4-82-020) Bulk Analysis Code 18/A01 and the EPA recommended Method for the Determination of Asbestos in Bulk Building Materials July 1993, R.L. Perkins and B.W. Harvey, (EPA/600/R-93/116) Bulk Analysis Code 18/A03, which utilize polarized light microscopy (PLM). Our analysts have completed an accredited course in asbestos identification. TRC's Laboratory is accredited under the National Voluntary Laboratory Accreditation Program (NVLAP), for Bulk Asbestos Fiber Analysis, NVLAP Code 18/A01, effective through June 30, 2023. TRC is accredited by the AIHA Laboratory Accreditation Programs (AIHA-LAP), LLC in the Industrial Hygiene Program (IHLAP) for PLM effective through October 1, 2024. Asbestos content is determined by visual estimate unless otherwise indicated. Quality Control is performed in-house on at least 10% of samples and QC data related to the samples is available upon written request from client.

Analyzed by: Kathleen Williamson, Laboratory Manager

Reviewed by: Joel Corso, Approved Signatory

Date Issued 04/10/2023

TRC
21 GRIFFIN ROAD NORTH
WINDSOR, CONNECTICUT 06095
TELEPHONE (860) 298-9692
FAX (860) 298-6380

ASBESTOS BULK SAMPLING CHAIN OF CUSTODY

Edition: October 2009
Supersede Previous Edition

LAB ID #. 61700

PROJECT NUMBER	PROJECT NAME	PARAMETERS	TURNAROUND TIME
522705.0000.0000	CRDA — McCartin School-Additional Sampling, 70 Canterbury Street, East Hartford, CT		PLM: ☐ 8hr ☐ 24hr ☐ 48hr X 3day TEM: ☐ 24hr ☐ 48hr ☐ 3day ☐ 5day
SIGNATURE	INSPECTOR		
	Tyler Noll		

FIELD SAMPLE NUMBER	DATE	TIME	TYPE COMP	TYPE GRAB	SAMPLE LOCATION	PLM EPA 600/R93/116 (POSITIVE STOP)	PLM EPA 600/R93/116 (w/ gravimetric reduction) (POSITIVE STOP)	ANALYZE BY LAYER	POINT COUNT (IF >1% & <10%)	TEM NY NOB 198.4 (IF PLM SERIES NEG)	MATERIAL
25	4/5/2023	09:07		X	Room JC - 62'	X					MF1 - Grey mudded fittings on water piping
26	4/5/2023	09:09		X	Room F - 62'	X					MF1 - Grey mudded fittings on water piping
27	4/5/2023	09:13		X	Room L off valve - 62'	X					MF2 - Light grey mudded fittings on heat piping
28	4/5/2023	09:19		X	Room L off piping - 62'	X					MF2 - Light grey mudded fittings on heat piping

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
	4/5/23	4/5/23			
(Printed) TYLER NOLL	Time: 12:40	(Printed) Drac Macho 1500	(Printed)	Time:	(Printed)

Remarks: RESULTS TO M. KOSTRUBA PLEASE.

Condition of Samples:
Acceptable: Yes ✓ No
Comments:

Industrial Hygiene Laboratory
21 Griffin Road North
Windsor, CT 06095
(860) 298-6308

BULK ASBESTOS ANALYSIS REPORT

CLIENT: Capital Region Development Authority

Lab Log #: 0061897
Project #: 522705.0001.0000
Date Received: 04/27/2023
Date Analyzed: 04/27/2023

Site: McCartin School, 70 Canterbury Street, East Hartford, CT

POLARIZED LIGHT MICROSCOPY by EPA 600/R-93/116

Sample No.	Sample Location	Homogeneous Material Description	Other Matrix Materials	Asbestos %	Asbestos Type
1	59- D Side	Black WG2- gummy window glaze	- - -	ND	None
2	59- B Side	Black WG2- gummy window glaze	- - -	ND	None
3	62- D side	Black WG3- gummy window glaze	- - -	ND	None
4	62- C Side	Black WG3- gummy window glaze	- - -	ND	None

ND - asbestos was not detected
Trace - asbestos was observed at level of 1% or less - This is the reporting limit
NA/PS - Not Analyzed / Positive Stop
SNA - Sample Not Analyzed- See Chain of Custody for details
Notes: Asbestos-Containing Material (ACM) is any material containing more than 1% asbestos

Note: Polarized-light microscopy is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. In those cases, EPA recommends, and certain states (e.g. NY) require, that negative results be confirmed by quantitative transmission electron microscopy.

The Laboratory at TRC follows the EPA's Interim Method for the Determination of Asbestos in Bulk Insulation 1982 (EPA 600/M4-82-020) Bulk Analysis Code 18/A01 and the EPA recommended Method for the Determination of Asbestos in Bulk Building Materials July 1993, R.L. Perkins and B.W. Harvey, (EPA/600/R-93/116) Bulk Analysis Code 18/A03, which utilize polarized light microscopy (PLM). Our analysts have completed an accredited course in asbestos identification. TRC's Laboratory is accredited under the National Voluntary Laboratory Accreditation Program (NVLAP), for Bulk Asbestos Fiber Analysis, NVLAP Code 18/A01, effective through June 30, 2023. TRC is accredited by the AIHA Laboratory Accreditation Programs (AIHA-LAP), LLC in the Industrial Hygiene Program (IHLAP) for PLM effective through October 1, 2024. Asbestos content is determined by visual estimate unless otherwise indicated. Quality Control is performed in-house on at least 10% of samples and QC data related to the samples is available upon written request from client.

Analyzed by: Kathleen Williamson, Laboratory Manager

Reviewed by: Joel Corso, Approved Signatory

Date Issued 04/27/2023

TRC

Edition: October 2009
Supersede Previous Edition

21 GRIFFIN ROAD NORTH
WINDSOR, CONNECTICUT 06095
TELEPHONE (860) 298-9692
FAX (860) 298-6380

ASBESTOS BULK SAMPLING CHAIN OF CUSTODY

LAB ID #. 61897

PROJECT NUMBER	PROJECT NAME	PARAMETERS	TURNAROUND TIME
52205.0001	CRDA - Former McCormick		PLM: X 8hr 24hr 48hr 3day TEM: 24hr 48hr 3day 5day
SIGNATURE	INSPECTOR		
	Mike Kostrko		

FIELD SAMPLE NUMBER	DATE	TIME	TYPE COMP	TYPE GRAB	SAMPLE LOCATION	PLM EPA 600/R93/116 (POSITIVE STOP)	PLM EPA 600/R93/116 (w/ gravimetric reduction) (POSITIVE STOP)	ANALYZE BY LAYER	POINT COUNT (IF >1% & <10%)	TEM NY NOB 198.4 (IF PLM SERIES NEG)	MATERIAL
1	4/22/23	11:10			S4 - D Side	X					WG2 - Black gummy window glaze
2	"	11:15			S4 - B Side	"					"
3	"	11:20			C2 - D Side	"					WG3 - Black gummy window glaze
4	"	11:25			C2 - C Side	"					"

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
	4/22/23	4/27/23			
(Printed)	Time:	(Printed) 1400	(Printed)	Time:	(Printed)
Mike Kostrko	1400	Kathleen Williamson			

Remarks: ASAP please

Condition of Samples: _____
Acceptable: Yes ___ No ___
Comments:

APPENDIX E

LEAD PAINT XRF MEASUREMENT TABLE

Lead Based Paint Measurement Summary Table

Device(s) : Niton XLP301-A (Serial #24792) X Ray Fluorescence (XRF) Spectrum Analyzer
Client : CRDA/Town of East Hartford
Site : Former McCartin School
Project # : 522705
Date(s) : 12/13/2022, 12/14/2022, 12/15/2022,
Inspector : AS

Number	Interior/ Exterior	Floor	Room	Side	Structure	Feature	Material	Color	Condition	Reading (mg/cm^2)	Precision (mg/cm^2)	Depth Index	Duration (sec)	Date/Time
1		Shutter Calibration								1.7	0.0		196.86	12/13/2022 9:15
2		Calibration 0.0								0.0	0.0	1.0	1.48	12/13/2022 9:19
3		Calibration 1.5								1.7	0.1	1.22	7.93	12/13/2022 9:20
4		Calibration 0.7								0.7	0.2	1.11	1.88	12/13/2022 9:20
5	Interior	1	A	A	Wall		Block	Tan/beige		0.0	0.0	1.0	1.88	12/13/2022 9:38
6	Interior	1	A	A	Wall		Block	Tan/beige		0.0	0.0	1.0	3.49	12/13/2022 9:39
7	Interior	1	A	B	Wall		Block	Tan/beige		0.0	0.0	1.0	4.69	12/13/2022 9:40
8	Interior	1	A	C	Wall		Block	Tan/beige		0.0	0.0	1.0	3.36	12/13/2022 9:40
9	Interior	1	A	D	Wall		Concrete	Tan/beige		0.0	0.0	1.0	0.4	12/13/2022 9:41
10	Interior	1	A	D	Wall		Concrete	Tan/beige		0.0	0.0	1.0	1.21	12/13/2022 9:42
11	Interior	1	A	D	Wall		Concrete	Tan/beige		0.0	0.0	1.0	3.35	12/13/2022 9:42
12	Interior	1	A	A	Wall		Wood	Black		0.0	0.0	1.0	2.15	12/13/2022 9:45
13	Interior	1	A	D	Cabinet		Wood	Red		0.2	0.1	1.46	5.79	12/13/2022 9:46
14	Interior	1	A	D	Wall		Wood	White		0.0	0.0	1.0	2.15	12/13/2022 9:47
15	Interior	1	A	A	Breaker Box		Metal	Blue		0.0	0.0	1.0	2.15	12/13/2022 9:49
16	Interior	1	A	A	Breaker Box		Metal	Red		0.0	0.0	1.33	2.42	12/13/2022 9:49
17	Interior	1	A	B	Stair	Stringer	Metal	Grey		0.8	0.1	2.25	5.78	12/13/2022 9:51
18	Interior	1	A	C	Stair	Riser	Metal	Grey		1.2	1.2	2.73	0.67	12/13/2022 9:51
19	Interior	1	A	C	Stair	Riser	Metal	Grey		1.5	0.2	3.05	7.11	12/13/2022 9:52
20	Interior	1	A	D	Stair	Railing	Metal	Grey		1.3	0.2	3.65	5.91	12/13/2022 9:54
21	Interior	1	A	B	Window	Sill	Metal	Tan		0.6	0.1	1.37	4.15	12/13/2022 9:56
22	Interior	1	A	B	Wall		Block	Tan		0.0	0.0	1.0	3.09	12/13/2022 9:57
23	Interior	1	A		Ceiling		Concrete	Tan		0.0	0.0	1.0	3.63	12/13/2022 9:59
24	Interior	1	A		Floor		Concrete	Grey		0.1	0.0	1.69	5.24	12/13/2022 10:01
25	Interior	1	A	D	Door		Metal	Grey		0.1	0.0	1.13	4.84	12/13/2022 10:01
26	Interior	1	A	D	Wall		Brick	Tan/beige		0.0	0.0	2.2	3.78	12/13/2022 10:03
27	Interior	1	A	D	Door	Frame	Metal	Black		0.2	0.1	1.37	6.17	12/13/2022 10:04
28	Interior	1	W	A	Cabinet		Wood	Grey		1.0	0.1	1.93	20.41	12/13/2022 10:08
29	Interior	1	W	A	Wall		Block	Tan/beige		0.0	0.0	2.85	8.88	12/13/2022 10:10
30	Interior	1	W	D	Door	Frame	Metal	Brown		0.1	0.0	1.59	5.53	12/13/2022 10:11
31	Interior	1	W	D	Shelf		Wood	Tan/beige		0.0	0.0	1.0	1.34	12/13/2022 10:12
32	Interior	1	W1	C	Wall		Block	Tan/beige		0.0	0.0	1.0	1.21	12/13/2022 10:14
33	Interior	1	W1	C	Wall		Block	Tan/beige		0.0	0.0	1.0	2.28	12/13/2022 10:14
34	Interior	1	W3	B	Door	Frame	Metal	Brown		0.1	0.0	1.21	4.44	12/13/2022 10:16
35	Interior	1	X	A	Door	Frame	Metal	Black		0.1	0.0	1.36	4.85	12/13/2022 10:17
36	Interior	1	X	B	Vent Hood		Metal	Brown		0.1	0.3	1.47	0.27	12/13/2022 10:19
37	Interior	1	X	B	Vent Hood		Metal	Brown		0.1	0.2	1.57	0.41	12/13/2022 10:19
38	Interior	1	X	B	Vent Hood		Metal	Brown		0.1	0.1	2.08	3.5	12/13/2022 10:20

Lead paint includes paint found to contain **any detectable** amount of lead
by Atomic Absorption Spectrophotometry (AAS) or X-Ray Fluorescence (XRF).

Side A = Street side; Sides B,C,D follow clockwise

Lead Based Paint Measurement Summary Table

Device(s) : Niton XLP301-A (Serial #24792) X Ray Fluorescence (XRF) Spectrum Analyzer
Client : CRDA/Town of East Hartford
Site : Former McCartin School
Project # : 522705
Date(s) : 12/13/2022, 12/14/2022, 12/15/2022,
Inspector : AS

Number	Interior/ Exterior	Floor	Room	Side	Structure	Feature	Material	Color	Condition	Reading (mg/cm^2)	Precision (mg/cm^2)	Depth Index	Duration (sec)	Date/Time
39	Interior	1	X	C	Window		Wood	White		0.0	0.0	1.0	1.88	12/13/2022 10:21
40	Interior	1	X	C	Window	Sill	Metal	Brown		0.0	0.0	1.0	2.96	12/13/2022 10:22
41	Interior	1	X	D	Cabinet		Metal	Grey		0.2	0.0	1.4	6.73	12/13/2022 10:24
42	Interior	1	W2	A	Wall		Block	Green		0.0	0.0	1.0	0.27	12/13/2022 10:25
43	Interior	1	W2	A	Wall		Block	Green		0.0	0.0	1.0	1.08	12/13/2022 10:25
44	Interior	1	W2	A	Wall		Block	Green		0.0	0.0	1.0	3.36	12/13/2022 10:25
45	Interior	1	W2	C	Door	Casing	Metal	Green		0.1	0.0	1.0	3.49	12/13/2022 10:27
46	Interior	1	W2	D	Pipe		Metal	Black		0.0	0.0	1.0	1.34	12/13/2022 10:28
47	Interior	1	U	D	Door		Metal	Black		0.0	0.0	1.0	2.69	12/13/2022 10:31
48	Interior	1	U	A	Radiator		Metal	Tan/beige		0.0	0.1	1.0	0.14	12/13/2022 10:51
49	Interior	1	U	A	Radiator		Metal	Tan/beige		0.1	0.0	3.77	6.31	12/13/2022 10:52
50	Interior	1	U	B	Wall		Block	White		0.1	0.1	2.67	3.64	12/13/2022 10:53
51	Interior	1	U	B	Wall		Block	Tan/beige		0.1	0.1	2.89	4.85	12/13/2022 10:53
52	Interior	1	U	C	Door	Frame	Metal	Black		0.1	0.1	4.52	6.06	12/13/2022 10:55
53	Interior	1	U	A	Door	Frame	Metal	White		0.0	0.0	1.0	2.03	12/13/2022 10:57
54	Interior	1	U1	A	Stair	Railing	Metal	Brown		0.1	0.1	3.19	6.18	12/13/2022 10:59
55	Interior	1	U1	C	Radiator		Metal	White		0.1	0.1	3.44	4.16	12/13/2022 11:01
56	Interior	1	Y		Floor		Concrete	Grey		0.0	0.0	1.04	3.48	12/13/2022 11:03
57	Interior	1	Z	D	Door	Casing	Metal	Tan/beige		0.0	0.0	1.27	2.82	12/13/2022 11:06
58	Interior	1	T3	A	Wall		Block	Tan/beige		0.0	0.0	1.0	3.22	12/13/2022 11:09
59	Interior	1	T	A	Wall		Block	Brown		0.0	0.0	1.0	1.61	12/13/2022 11:11
60	Interior	1	T	A	Wall		Block	Brown		0.0	0.0	1.0	2.68	12/13/2022 11:11
61	Interior	1	T	A	Wall		Block	Brown		0.0	0.0	1.0	2.69	12/13/2022 11:11
62	Interior	1	T	C	Door	Casing	Metal	Brown		0.0	0.0	1.58	3.76	12/13/2022 11:12
63	Interior	1	T4	C	Wall		Block	Tan/beige		0.0	0.0	1.0	2.69	12/13/2022 11:16
64	Interior	1	Main Hall 2	C	Door		Metal	Tan/beige		0.0	0.0	1.0	1.47	12/13/2022 11:35
65	Interior	1	Main Hall 2	C	Door	Jamb	Metal	Tan/beige		0.0	0.0	1.0	1.48	12/13/2022 11:36
66	Interior	1	AA	D	Door		Metal	Blue		0.0	0.0	1.0	1.35	12/13/2022 11:37
67	Interior	1	AA	D	Door	Casing	Metal	Blue		0.0	0.0	1.33	4.84	12/13/2022 11:37
68	Interior	1	AA	D	Wall		Block	Blue		0.0	0.0	1.0	3.36	12/13/2022 11:38
69	Interior	1	AA		Ceiling	Truss	Metal	Blue		0.0	0.0	1.0	1.87	12/13/2022 11:39
70	Interior	1	AA		Ceiling	I Beam	Metal	White		0.0	0.0	1.0	1.34	12/13/2022 11:40
71	Interior	1	AA	B	Wall	Column	Metal	White		0.0	0.0	1.0	1.62	12/13/2022 11:41
72	Interior	1	AA	B	Radiator		Metal	Blue		0.0	0.0	1.84	3.9	12/13/2022 11:42
73	Interior	1	S	B	Door	Casing	Metal	Tan/beige		0.0	0.0	1.0	2.43	12/13/2022 11:44
74	Interior	1	S		Ceiling	Truss	Metal	White		0.0	0.1	1.0	0.13	12/13/2022 11:45
75	Interior	1	S		Ceiling	Truss	Metal	White		0.0	0.0	1.0	1.61	12/13/2022 11:46
76	Interior	1	S2	C	Shelf		Wood	Tan/beige		0.0	0.0	1.0	2.7	12/13/2022 11:47

Lead paint includes paint found to contain **any detectable** amount of lead
by Atomic Absorption Spectrophotometry (AAS) or X-Ray Fluorescence (XRF).

Side A = Street side; Sides B,C,D follow clockwise

Lead Based Paint Measurement Summary Table

Device(s) : Niton XLP301-A (Serial #24792) X Ray Fluorescence (XRF) Spectrum Analyzer
Client : CRDA/Town of East Hartford
Site : Former McCartin School
Project # : 522705
Date(s) : 12/13/2022, 12/14/2022, 12/15/2022,
Inspector : AS

Number	Interior/ Exterior	Floor	Room	Side	Structure	Feature	Material	Color	Condition	Reading (mg/cm^2)	Precision (mg/cm^2)	Depth Index	Duration (sec)	Date/Time
77	Interior	1	S1		Ceiling	Vent	Metal	Tan/beige		0.0	0.0	1.0	0.4	12/13/2022 11:49
78	Interior	1	S1		Ceiling	Vent	Metal	Tan/beige		0.0	0.1	1.89	1.21	12/13/2022 11:50
79	Interior	1	R	D	Door		Wood	Tan/beige		0.0	0.0	1.0	1.62	12/13/2022 11:52
80	Interior	1	R1	D	Shelf		Wood	Tan/beige		0.0	0.0	1.0	2.55	12/13/2022 11:55
81	Interior	1	R1	C	Window	Sill	Wood	Tan/beige		0.0	0.0	1.87	3.08	12/13/2022 11:58
82	Interior	1	BB	B	Wall		Block	Grey		0.0	0.0	1.0	3.35	12/13/2022 12:00
83	Interior	1	BB	D	Wall		Sheetrock	Tan/beige		0.0	0.0	1.0	2.83	12/13/2022 12:02
84	Interior	1	BB	D	Window	Casing	Metal	Tan/beige		0.0	0.0	1.0	1.62	12/13/2022 12:02
85	Interior	1	BB	A	Door	Jamb	Metal	Tan/beige		0.1	0.0	2.21	4.03	12/13/2022 12:03
86	Interior	1	Q	C	Radiator		Metal	Tan/beige		0.0	0.0	1.0	2.15	12/13/2022 12:06
87	Interior	1	Q	D	Wall		Sheetrock	Tan/beige		0.0	0.0	1.0	2.28	12/13/2022 12:06
88	Interior	1	Q1	A	Wall		Sheetrock	Tan/beige		0.0	0.0	1.0	1.61	12/13/2022 12:08
89	Interior	1	Q1	C	Wall		Block	Tan/beige		0.0	0.0	1.0	3.22	12/13/2022 12:08
90	Interior	1	Q2	D	Radiator		Metal	Tan/beige		0.1	0.1	3.1	5.12	12/13/2022 12:10
91	Interior	1	P2	A	Wall		Block	White		0.0	0.0	1.0	3.62	12/13/2022 12:13
92	Interior	1	P2	C	Wall		Sheetrock	White		0.0	0.0	1.0	3.07	12/13/2022 12:13
93	Interior	1	P	D	Door		Metal	White		0.0	0.0	1.0	2.16	12/13/2022 12:16
94	Interior	1	P Entry	D	Door		Metal	Grey		0.0	0.0	1.0	2.83	12/13/2022 12:16
95	Interior	1	P Entry	D	Door	Casing	Metal	Tan/beige		0.0	0.0	1.0	2.28	12/13/2022 12:17
96	Interior	1	P1	D	Radiator		Metal	Blue		0.1	0.0	2.48	5.51	12/13/2022 12:20
97	Interior	1	P1	A	Wall		Block	Blue		0.0	0.0	1.0	3.48	12/13/2022 12:21
98	Interior	1	O4	B	Door		Wood	Grey		0.0	0.0	1.0	1.35	12/13/2022 12:24
99	Interior	1	O4	B	Door	Casing	Metal	Grey		0.0	0.0	1.0	1.61	12/13/2022 12:25
100	Interior	1	O3	B	Shelf		Wood	Grey		0.0	0.0	1.0	2.56	12/13/2022 12:26
101	Interior	1	O5		Ceiling	Truss	Metal	Blue		0.1	0.2	3.67	1.74	12/13/2022 12:28
102	Interior	1	O5	A	Wall		Block	Blue		0.0	0.0	1.0	3.35	12/13/2022 12:28
103	Interior	1	O5	A	Door	Casing	Metal	Blue		0.0	0.0	1.0	2.16	12/13/2022 12:30
104	Interior	1	O1		Ceiling	Duct	Metal	White		0.0	0.1	2.52	1.34	12/13/2022 12:33
105	Interior	1	CC	B	Window	Casing	Metal	Blue		0.0	0.0	1.0	1.21	12/13/2022 12:35
106	Interior	1	DD2	D	Door	Casing	Metal	Tan/beige		0.0	0.0	1.03	2.82	12/13/2022 13:52
107	Interior	1	DD2	A	Radiator		Metal	Pink		0.0	0.0	1.0	1.35	12/13/2022 13:53
108	Interior	1	DD1	D	Wall		Sheetrock	Tan/beige		0.0	0.0	1.0	3.36	12/13/2022 13:54
109	Interior	1	JC		Ceiling	Truss	Metal	Tan/beige		0.0	0.4	10.0	0.27	12/13/2022 13:57
110	Interior	1	JC		Ceiling	Truss	Metal	Tan/beige		0.0	0.0	1.0	1.34	12/13/2022 13:57
111	Interior	1	E	B	Wall		Block	White		0.2	0.1	4.29	5.24	12/13/2022 14:07
112	Interior	1	E	B	Shelf		Wood	Tan/beige		0.0	0.1	2.76	3.1	12/13/2022 14:08
113	Interior	1	DD3	B	Bathroom Stall		Metal	Pink		0.2	0.1	2.43	6.87	12/13/2022 14:11
114	Interior	1	FF	A	Wall		Block	Tan/beige		0.0	0.0	1.0	2.81	12/13/2022 14:14

Lead paint includes paint found to contain **any detectable** amount of lead
by Atomic Absorption Spectrophotometry (AAS) or X-Ray Fluorescence (XRF).

Side A = Street side; Sides B,C,D follow clockwise

Lead Based Paint Measurement Summary Table

Device(s) : Niton XLP301-A (Serial #24792) X Ray Fluorescence (XRF) Spectrum Analyzer
Client : CRDA/Town of East Hartford
Site : Former McCartin School
Project # : 522705
Date(s) : 12/13/2022, 12/14/2022, 12/15/2022,
Inspector : AS

Number	Interior/ Exterior	Floor	Room	Side	Structure	Feature	Material	Color	Condition	Reading (mg/cm^2)	Precision (mg/cm^2)	Depth Index	Duration (sec)	Date/Time
115	Interior	1	FF	A	Wall		Block	Tan/beige		0.0	0.0	1.0	3.36	12/13/2022 14:14
116	Interior	1	FF	C	Wall		Sheetrock	Tan/beige		0.0	0.0	1.0	2.55	12/13/2022 14:15
117	Interior	1	GG	A	Wall		Block	Pink		0.0	0.0	1.0	3.23	12/13/2022 14:18
118	Interior	1	GG	A	Wall		Sheetrock	Green		0.0	0.0	1.0	3.49	12/13/2022 14:18
119	Interior	1	HH3	A	Door		Wood	Green		0.0	0.0	1.0	1.88	12/13/2022 14:21
120	Interior	1	HH3	C	Wall		Sheetrock	Pink		0.0	0.0	1.0	2.14	12/13/2022 14:22
121	Interior	1	HH3	B	Pipe		Metal	White		0.0	0.1	1.35	2.82	12/13/2022 14:23
122	Interior	1	HH	C	Wall		Block	White		0.0	0.0	1.0	2.54	12/13/2022 14:25
123	Interior	1	HH	C	Wall		Block	White		0.0	0.0	1.0	3.49	12/13/2022 14:25
124	Interior	1	HH	C	Wall		Block	White		0.0	0.0	1.0	3.34	12/13/2022 14:27
125	Interior	1	HH4	B	Window	Casing	Wood	White		0.0	0.0	1.0	1.75	12/13/2022 14:28
126	Interior	1	HH3	A	Door		Wood	Tan/beige		0.0	0.0	1.0	2.3	12/13/2022 14:37
127	Interior	1	Main 1	D	Wall		Block	Tan/beige		0.0	0.0	1.0	3.22	12/13/2022 14:38
128	Interior	1	Main Hall 2	D	Wall		Block	Tan/beige		0.0	0.0	1.0	1.61	12/13/2022 14:39
129	Interior	1	Main Hall 2	D	Wall		Block	Tan/beige		0.0	0.0	1.0	3.49	12/13/2022 14:40
130	Interior	1	N	A	Wall		Block	Blue		0.0	0.0	1.0	3.35	12/13/2022 14:41
131	Interior	1	N	D	Radiator		Metal	Blue		0.1	0.1	4.7	4.02	12/13/2022 14:43
132	Interior	1	N	C	Cabinet		Wood	Green		0.0	0.0	1.0	1.61	12/13/2022 14:44
133	Interior	1	N	B	Door	Casing	Metal	Blue		0.1	0.1	4.49	6.02	12/13/2022 14:45
134		Calibration 0.0								0.0	0.0	1.0	1.62	12/13/2022 16:41
135		Calibration 1.5								1.6	0.2	1.22	4.43	12/13/2022 16:42
136		Calibration 0.7								0.7	0.1	1.14	5.24	12/13/2022 16:42
137		Shutter Calibration								2.3	0.0		200.81	12/14/2022 10:29
138		Calibration 0.0								0.0	0.0	1.0	1.48	12/14/2022 10:35
139		Calibration 1.5								1.5	0.1	1.14	4.96	12/14/2022 10:35
140		Calibration 0.7								0.7	0.3	1.13	1.6	12/14/2022 10:36
141		1	V		Pipe		Metal	Yellow		0.0	0.0	1.98	3.62	12/14/2022 10:40
142		Shutter Calibration								1.8	0.0		198.87	12/15/2022 11:10
143		Calibration 0.0								0.0	0.0	1.0	2.67	12/15/2022 11:14
144		Calibration 1.5								1.4	0.4	1.12	1.74	12/15/2022 11:14
145		Calibration 0.7								0.8	0.1	1.13	3.51	12/15/2022 11:15
146	Interior	1	B		Ceiling	Truss	Metal	White		1.2	1.0	2.35	0.67	12/15/2022 11:26
147	Interior	1	B		Ceiling	Truss	Metal	White		2.0	0.7	3.06	2.42	12/15/2022 11:27
148	Interior	1	B		Ceiling	Truss	Metal	White		1.6	0.7	2.79	1.47	12/15/2022 11:29
149	Interior	1	B		Ceiling	Truss	Metal	White		1.7	0.5	2.95	2.95	12/15/2022 11:29
150	Interior	1	B	D	Radiator		Metal	Tan/beige		1.2	0.2	2.55	5.77	12/15/2022 11:30
151	Interior	1	B	D	Window	Sill	Metal	Tan/beige		1.5	0.2	2.82	5.63	12/15/2022 11:32
152	Interior	1	B	C	Wall		Block	White		0.0	0.0	1.05	4.29	12/15/2022 11:33

Lead paint includes paint found to contain **any detectable** amount of lead
by Atomic Absorption Spectrophotometry (AAS) or X-Ray Fluorescence (XRF).

Side A = Street side; Sides B,C,D follow clockwise

Lead Based Paint Measurement Summary Table

Device(s) : Niton XLP301-A (Serial #24792) X Ray Fluorescence (XRF) Spectrum Analyzer
Client : CRDA/Town of East Hartford
Site : Former McCartin School
Project # : 522705
Date(s) : 12/13/2022, 12/14/2022, 12/15/2022,
Inspector : AS

Number	Interior/ Exterior	Floor	Room	Side	Structure	Feature	Material	Color	Condition	Reading (mg/cm^2)	Precision (mg/cm^2)	Depth Index	Duration (sec)	Date/Time
153	Interior	1	B	C	Door	Jamb	Metal	Brown		1.0	0.1	1.34	20.53	12/15/2022 11:36
154	Interior	1	C	B	Cabinet	Door	Wood	White		0.0	0.0	1.0	1.74	12/15/2022 11:39
155	Interior	1	C		Counter Top		Wood	White		0.0	0.0	1.0	1.87	12/15/2022 11:39
156	Interior	1	C	B	Shelf		Wood	Tan/beige		0.6	0.2	4.25	5.23	12/15/2022 11:41
157	Interior	1	C	D	Wall		Block	White		0.0	0.0	2.18	4.03	12/15/2022 11:42
158	Interior	1	C	B	Wall	Trimwork	Block	Brown		0.0	0.1	1.98	0.54	12/15/2022 11:43
159	Interior	1	C	B	Wall	Trimwork	Block	Brown		0.0	0.0	1.0	0.81	12/15/2022 11:43
160	Interior	1	C	B	Wall	Trimwork	Block	Brown		0.0	0.0	1.0	1.61	12/15/2022 11:43
161	Interior	1	C	C	Radiator		Metal	Tan/beige		0.1	0.1	2.79	6.29	12/15/2022 11:45
162	Interior	1	C	C	Window	Sill	Metal	Tan/beige		0.8	0.2	2.69	4.55	12/15/2022 11:46
163	Interior	1	C		Ceiling	Truss	Metal	Tan/beige		1.6	0.7	2.82	1.6	12/15/2022 11:48
164	Interior	1	C		Ceiling	Truss	Metal	Tan/beige		0.5	0.4	2.21	1.07	12/15/2022 11:48
165	Interior	1	C		Ceiling	Truss	Metal	Tan/beige		1.5	0.3	2.61	3.22	12/15/2022 11:50
166	Interior	1	A		Ceiling	Beam	Metal	Tan/beige		0.4	0.2	2.01	2.68	12/15/2022 11:54
167	Interior	1	A	C	Ceiling	Beam	Metal	Tan/beige		0.5	0.3	2.47	2.28	12/15/2022 11:55
168	Interior	1	A	C	Door	Casing	Metal	Tan/beige		0.8	0.1	1.21	4.42	12/15/2022 11:56
169	Interior	1	D	D	Wall		Block	White		0.0	0.0	1.0	5.38	12/15/2022 12:00
170	Interior	1	D	C	Radiator		Metal	Tan/beige		0.3	0.1	4.52	5.61	12/15/2022 12:02
171	Interior	1	D	C	Window	Sill	Metal	Tan/beige		0.9	0.1	3.12	9.91	12/15/2022 12:04
172	Interior	1	D	C	Window	Sill	Metal	Tan/beige		1.3	0.9	4.16	1.34	12/15/2022 12:04
173	Interior	1	D	C	Window	Sill	Metal	Tan/beige		0.9	0.1	3.27	21.57	12/15/2022 12:06
174	Interior	1	D		Ceiling	Truss	Metal	Tan/beige		3.3	2.0	3.07	0.94	12/15/2022 12:08
175	Interior	1	D		Ceiling	Truss	Metal	Tan/beige		3.7	1.0	3.21	2.68	12/15/2022 12:08
176	Interior	1	D		Ceiling	Cross Beam	Metal	Tan/beige		0.2	0.1	1.95	4.29	12/15/2022 12:10
177	Interior	1	D	A	Wall		Wood	White		0.0	0.0	1.0	1.6	12/15/2022 12:11
178	Interior	1	Hall Outside of D	A	Door	Jamb	Metal	White		0.0	0.0	1.0	1.48	12/15/2022 12:13
179	Interior	1	Hall Outside of D	A	Door		Metal	White		0.0	0.0	1.0	1.34	12/15/2022 12:14
180	Interior	1	Hall Outside of D	A	Wall		Block	White		0.1	0.1	1.91	3.08	12/15/2022 12:14
181	Interior	1	Hall Outside of D	A	Wall		Block	White		0.0	0.0	1.74	3.75	12/15/2022 12:15
182	Interior	1	Hall Outside of D	C	Radiator		Metal	Tan/beige		0.9	0.4	2.35	1.47	12/15/2022 12:17
183	Interior	1	Hall Outside of D	C	Radiator		Metal	Tan/beige		0.8	0.1	2.24	12.73	12/15/2022 12:18
184		Calibration 0.0								0.0	0.0	1.0	1.61	12/15/2022 14:23
185		Calibration 1.5								1.5	0.2	1.12	3.35	12/15/2022 14:23
186		Calibration 0.7								0.7	0.2	1.13	2.14	12/15/2022 14:24
187	Exterior	Exterior	P Entry		Soffit		Wood	White		0.0	0.0	1.0	1.34	12/15/2022 14:28
188	Exterior	Exterior	P Entry	B	Window	Sill	Metal	White		0.0	0.0	1.0	3.36	12/15/2022 14:30
189	Exterior	Exterior	Main Hall 1 Entry		soffit		Wood	White		5.1	3.8	4.94	1.87	12/15/2022 14:34
190	Exterior	Exterior	Main Hall 1 Entry		soffit		Wood	White		3.6	1.2	5.26	5.35	12/15/2022 14:34

Lead paint includes paint found to contain **any detectable** amount of lead
by Atomic Absorption Spectrophotometry (AAS) or X-Ray Fluorescence (XRF).

Side A = Street side; Sides B,C,D follow clockwise

Lead Based Paint Measurement Summary Table

Device(s) : Niton XLP301-A (Serial #24792) X Ray Fluorescence (XRF) Spectrum Analyzer
Client : CRDA/Town of East Hartford
Site : Former McCartin School
Project # : 522705
Date(s) : 12/13/2022, 12/14/2022, 12/15/2022,
Inspector : AS

Number	Interior/ Exterior	Floor	Room	Side	Structure	Feature	Material	Color	Condition	Reading (mg/cm^2)	Precision (mg/cm^2)	Depth Index	Duration (sec)	Date/Time
191	Exterior	Exterior	U Door	C	Door		Metal	White		0.0	0.0	1.0	1.47	12/15/2022 14:38
192	Exterior	Exterior	U Window	C	Window	Casing	Metal	White		0.1	0.1	1.7	3.35	12/15/2022 14:39
193	Exterior	Exterior	U Window	C	Window	Sill	Metal	White		0.0	0.0	1.05	2.42	12/15/2022 14:40
194	Exterior	Exterior	W Ext	D	Door	Casing	Wood	Brown		0.0	0.0	1.0	1.2	12/15/2022 14:42
195	Exterior	Exterior	W Ext	D	Door		Wood	Brown		0.0	0.0	1.0	2.28	12/15/2022 14:43
196	Exterior	Exterior	AA Ext	D	Window	Sill	Metal	White		0.0	0.1	1.43	0.81	12/15/2022 14:44
197	Exterior	Exterior	AA Ext	D	Window	Sill	Metal	White		0.0	0.0	1.1	3.62	12/15/2022 14:45
198		Calibration 0.0								0.0	0.0	1.0	1.34	12/15/2022 15:15
199		Calibration 1.5								1.5	0.3	1.11	3.21	12/15/2022 15:16
200		Calibration 0.7								0.7	0.1	1.12	4.83	12/15/2022 15:16
201		Shutter Calibration								1.6	0.0		200.91	12/17/2022 9:11
202		Calibration 0.0								0.0	0.0	1.0	2.14	12/17/2022 9:23
203		Calibration 1.5								1.6	0.1	1.2	11.09	12/17/2022 9:24
204		Calibration 0.7								0.8	0.1	1.19	5.48	12/17/2022 9:24
205	Interior	1	K	C	Radiator		Metal	White		0.0	0.0	2.14	2.01	12/17/2022 9:33
206	Interior	1	K	C	Window	Sill	Metal	White		0.0	0.0	1.0	1.61	12/17/2022 9:34
207	Interior	1	K	B	Wall		Block	White		0.0	0.0	2.32	8.43	12/17/2022 9:35
208	Interior	1	K		Ceiling	Truss	Metal	Tan/beige		1.8	0.8	3.26	1.47	12/17/2022 9:37
209	Interior	1	K		Ceiling	Truss	Metal	Tan/beige		2.0	0.4	3.6	3.73	12/17/2022 9:37
210	Interior	1	K	A	Door	Casing	Metal	Blue		0.0	0.0	3.15	6.94	12/17/2022 9:40
211	Interior	1	J	A	Wall		Block	White		0.0	0.0	3.42	6.83	12/17/2022 9:42
212	Interior	1	J		Ceiling	Beam	Metal	Tan/beige		0.0	0.0	1.13	3.86	12/17/2022 9:48
213	Interior	1	J		Ceiling	Truss	Metal	Tan/beige		2.0	0.4	4.05	3.87	12/17/2022 9:49
214	Interior	1	J	A	Door	Casing	Metal	Blue		0.0	0.0	1.51	4.81	12/17/2022 9:50
215	Interior	1	I3	B	Door		Wood	Pink		0.0	0.0	1.0	1.47	12/17/2022 9:55
216	Interior	1	I3	B	Door	Jamb	Wood	Pink		0.1	0.0	1.2	6.29	12/17/2022 9:55
217	Interior	1	I3	D	Wall		Sheetrock	White		0.0	0.0	1.0	2.53	12/17/2022 9:57
218	Interior	1	I		Radiator		Metal	Blue		0.0	0.0	1.0	2.0	12/17/2022 10:01
219	Interior	1	I	D	Window	Sill	Metal	Blue		0.0	0.0	1.0	2.01	12/17/2022 10:02
220	Interior	1	I	D	Shelf		Wood	Blue		0.0	0.0	1.0	1.74	12/17/2022 10:02
221	Interior	1	I2	C	Shelf		Wood	White		0.1	0.0	1.92	7.87	12/17/2022 10:05
222	Interior	1	I2	D	Door		Wood	Tan/beige		0.0	0.0	1.0	1.34	12/17/2022 10:06
223	Interior	1	I1	A	Wall		Block	White		0.0	0.0	2.74	7.24	12/17/2022 10:07
224	Interior	1	H	D	Wall		Block	Tan/beige		0.1	0.0	1.67	4.67	12/17/2022 10:11
225	Interior	1	H		Ceiling	Beam	Metal	Tan/beige		0.1	0.0	1.19	4.68	12/17/2022 10:14
226	Interior	1	H	A	Door	Casing	Metal	Pink		0.0	0.0	1.48	5.24	12/17/2022 10:15
227	Interior	1	H	C	Radiator		Metal	White		0.3	0.1	2.19	4.82	12/17/2022 10:16
228	Interior	1	H	C	Window	Sill	Metal	White		1.0	0.1	2.23	20.4	12/17/2022 10:18

Lead paint includes paint found to contain **any detectable** amount of lead
by Atomic Absorption Spectrophotometry (AAS) or X-Ray Fluorescence (XRF).

Side A = Street side; Sides B,C,D follow clockwise

Lead Based Paint Measurement Summary Table

Device(s) : Niton XLP301-A (Serial #24792) X Ray Fluorescence (XRF) Spectrum Analyzer
Client : CRDA/Town of East Hartford
Site : Former McCartin School
Project # : 522705
Date(s) : 12/13/2022, 12/14/2022, 12/15/2022,
Inspector : AS

Number	Interior/ Exterior	Floor	Room	Side	Structure	Feature	Material	Color	Condition	Reading (mg/cm^2)	Precision (mg/cm^2)	Depth Index	Duration (sec)	Date/Time
229	Interior	1	G	C	Bathroom Stall	Door	Metal	Tan/beige		0.0	0.0	1.0	1.74	12/17/2022 10:22
230	Interior	1	G	B	Radiator		Metal	Grey		0.0	0.0	1.0	1.6	12/17/2022 10:23
231	Interior	1	G	C	Wall		Sheetrock	White		0.0	0.0	1.0	0.8	12/17/2022 10:24
232	Interior	1	G	C	Wall		Sheetrock	White		0.0	0.0	1.0	2.94	12/17/2022 10:25
233	Interior	1	G		Ceiling	Truss	Metal	Tan/beige		0.8	0.2	3.87	4.14	12/17/2022 10:26
234	Interior	1	G		Ceiling	Truss	Metal	Tan/beige		1.0	0.8	4.77	1.21	12/17/2022 10:26
235	Interior	1	G		Ceiling	Truss	Metal	Tan/beige		1.3	0.3	5.83	7.23	12/17/2022 10:27
236	Interior	1	G	A	Door	Jamb	Metal	Tan/beige		0.0	0.0	1.0	1.2	12/17/2022 10:28
237	Interior	1	JC		Shelf		Wood	Black		0.0	0.0	1.0	0.66	12/17/2022 10:30
238	Interior	1	JC		Shelf		Wood	Black		0.0	0.0	1.0	1.2	12/17/2022 10:30
239	Interior	1	JC	A	Door	Casing	Metal	Brown		1.1	0.1	1.29	9.64	12/17/2022 10:32
240	Interior	1	F	B	Bathroom Stall		Metal	Tan/beige		0.0	0.0	1.0	2.14	12/17/2022 10:37
241	Interior	1	F	D	Radiator		Metal	Blue		0.0	0.0	1.0	1.6	12/17/2022 10:38
242	Interior	1	M2	D	Radiator		Metal	Blue		0.0	0.0	1.0	1.61	12/17/2022 10:41
243	Interior	1	M2	D	Window	Sill	Metal	Blue		0.0	0.0	3.41	4.54	12/17/2022 10:41
244	Interior	1	M2	B	Wall		Sheetrock	Blue		0.0	0.0	1.0	3.73	12/17/2022 10:42
245	Interior	1	M2	B	Door	Jamb	Metal	White		0.0	0.0	3.07	6.8	12/17/2022 10:44
246	Interior	1	M1	B	Wall		Sheetrock	Green		0.0	0.0	1.0	2.94	12/17/2022 10:45
247	Interior	1	M1	D	Radiator		Metal	Tan/beige		0.0	0.0	1.0	1.34	12/17/2022 10:47
248	Interior	1	M3	C	Wall	Trimwork	Wood	Brown		0.0	0.0	1.0	1.47	12/17/2022 10:49
249	Interior	1	M3	B	Wall		Sheetrock	White		0.0	0.0	1.0	1.34	12/17/2022 10:50
250	Interior	1	M	D	Radiator		Metal	Green		0.0	0.0	1.0	1.74	12/17/2022 10:52
251	Interior	1	M	A	Wall		Sheetrock	Green		0.0	0.0	1.0	2.67	12/17/2022 10:53
252	Interior	1	M4	A	Door	Jamb	Metal	White		0.0	0.0	1.0	2.55	12/17/2022 10:57
253	Interior	1	Daycare Hallway	A	Window		Metal	Blue		0.3	0.5	7.43	24.06	12/17/2022 11:05
254	Interior	1	Daycare Hallway	D	Door	Jamb	Metal	Tan/beige		0.0	0.0	1.09	3.08	12/17/2022 11:05
255	Interior	1	Daycare Hallway	A	Radiator		Metal	Tan/beige		1.1	0.1	1.86	12.66	12/17/2022 11:07
256	Interior	1	Daycare Hallway	A	Fire Ext Case		Metal	Tan/beige		0.2	0.2	2.63	2.94	12/17/2022 11:09
257	Interior	1	Daycare Hallway	D	Radiator		Metal	Blue		0.1	0.0	1.93	6.01	12/17/2022 11:10
258	Interior	1	Daycare Hallway	A	Radiator		Metal	Tan/beige		1.8	0.6	2.28	2.14	12/17/2022 11:11
259	Interior	1	Daycare Hallway	A	Door		Metal	Grey		0.0	0.0	1.0	0.8	12/17/2022 11:11
260	Interior	1	Daycare Hallway	A	Door		Metal	Grey		0.0	0.0	1.0	1.6	12/17/2022 11:11
261	Interior	1	Daycare Hallway	A	Wall		Block	White		0.0	0.0	2.21	3.6	12/17/2022 11:12
262	Interior	1	Daycare Entry	A	Door	Jamb	Metal	Tan/beige		0.0	0.0	1.0	3.21	12/17/2022 11:15
263	Interior	1	Daycare Entry	D	Radiator		Metal	Tan/beige		0.0	0.0	1.0	1.2	12/17/2022 11:15
264	Interior	1	Daycare Entry	C	Wall		Brick	White		0.0	0.0	1.0	3.2	12/17/2022 11:16
265	Interior	1	1962 E	A	Shelf		Wood	Grey		0.0	0.0	4.12	11.74	12/17/2022 12:46
266	Interior	1	1962 E		Ceiling		Concrete	Black		0.0	0.0	1.0	4.26	12/17/2022 12:47

Lead paint includes paint found to contain **any detectable** amount of lead
by Atomic Absorption Spectrophotometry (AAS) or X-Ray Fluorescence (XRF).

Side A = Street side; Sides B,C,D follow clockwise

Lead Based Paint Measurement Summary Table

Device(s) : Niton XLP301-A (Serial #24792) X Ray Fluorescence (XRF) Spectrum Analyzer
Client : CRDA/Town of East Hartford
Site : Former McCartin School
Project # : 522705
Date(s) : 12/13/2022, 12/14/2022, 12/15/2022,
Inspector : AS

Number	Interior/ Exterior	Floor	Room	Side	Structure	Feature	Material	Color	Condition	Reading (mg/cm^2)	Precision (mg/cm^2)	Depth Index	Duration (sec)	Date/Time
267	Interior	1	1962 E		Ceiling		Concrete	Black		0.0	0.0	1.0	1.06	12/17/2022 12:48
268	Interior	1	1962 E		Ceiling		Concrete	Black		0.0	0.0	1.0	3.33	12/17/2022 12:48
269	Interior	1	1962 E	A	Wall		Wood	Black		0.0	0.0	1.0	1.47	12/17/2022 12:48
270	Interior	1	1962 E	A	Cabinet		Wood	Tan/beige		0.0	0.0	1.0	2.67	12/17/2022 12:50
271		Calibration 0.0								0.1	1.6	10.0	0.13	12/17/2022 15:47
272		Calibration 0.0								0.0	0.0	1.0	1.47	12/17/2022 15:47
273		Calibration 1.5								1.5	0.1	1.15	5.61	12/17/2022 15:48
274		Calibration 0.7								0.7	0.2	1.13	2.41	12/17/2022 15:48

Lead paint includes paint found to contain **any detectable** amount of lead
by Atomic Absorption Spectrophotometry (AAS) or X-Ray Fluorescence (XRF).

Side A = Street side; Sides B,C,D follow clockwise

APPENDIX F

COMPOSITE BUILDING MATERIAL WASTE CHARACTERIZATION DATA

PHOENIX
Environmental Laboratories, Inc.

Monday, January 23, 2023

Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Project ID: **MCCARTIN SCHOOL**
SDG ID: **GCN25419**
Sample ID#s: CN25419 - CN25420

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #M-CT007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Sample Id Cross Reference

January 23, 2023

SDG I.D.: GCN25419

Project ID: MCCARTIN SCHOOL

Client Id	Lab Id	Matrix
1	CN25419	BULK
2	CN25420	BULK

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

January 23, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	BULK	Collected by:		01/18/23	
Location Code:	TRC-DAS	Received by:	CP	01/18/23	16:45
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705.0000.0000				

Laboratory Data

SDG ID: GCN25419
Phoenix ID: CN25419

Project ID: MCCARTIN SCHOOL
Client ID: 1

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
TCLP Lead	7.34	0.10	mg/L	1	01/19/23	CPP	SW846 1311/6010
TCLP Metals Digestion	Completed				01/19/23	AB/AB/W	SW3010A
TCLP Extraction for Metals	Completed				01/18/23	AB	SW1311

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

TCLP Non-Volatile Extraction:
Sample weight was < 100 grams (the minimum requirement of the method to insure homogeneity).

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
January 23, 2023
Reviewed and Released by: Ethan Lee, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

January 23, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	BULK	Collected by:		01/18/23	
Location Code:	TRC-DAS	Received by:	CP	01/18/23	16:45
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705.0000.0000				

Laboratory Data

SDG ID: GCN25419
Phoenix ID: CN25420

Project ID: MCCARTIN SCHOOL
Client ID: 2

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
TCLP Lead	< 0.10	0.10	mg/L	1	01/19/23	CPP	SW846 1311/6010
TCLP Metals Digestion	Completed				01/19/23	AB/AB/W	SW3010A
TCLP Extraction for Metals	Completed				01/18/23	AB	SW1311

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

TCLP Non-Volatile Extraction:
Sample weight was < 100 grams (the minimum requirement of the method to insure homogeneity).

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
January 23, 2023
Reviewed and Released by: Ethan Lee, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

January 23, 2023

QA/QC Data

SDG I.D.: GCN25419

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 660578 (mg/L), QC Sample No: CN25667 (CN25419, CN25420)													
ICP Metals - TCLP Extraction													
Lead	BRL	0.010	0.224	0.228	1.80	102	98.2	3.8	103			80 - 120	20

Comment:

Additional Criteria: LCS acceptance range is 80-120% MS acceptance range 75-125%.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference

Phyllis Shiller, Laboratory Director
January 23, 2023

Monday, January 23, 2023

Criteria: None

State: CT

Sample Criteria Exceedances Report

GCN25419 - TRC-DAS

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CN25419	TCLP-PB	TCLP Lead	EPA / 40 CFR 261.24 / Toxicity Characteristics	7.34	0.10	5	5	mg/L

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

REASONABLE CONFIDENCE PROTOCOL
LABORATORY ANALYSIS QA/QC CERTIFICATION FORM

Laboratory Name: Phoenix Environmental Labs, Inc. ***Client:*** TRC Environmental Corp.

Project Location: MCCARTIN SCHOOL ***Project Number:***

Laboratory Sample ID(s): CN25419, CN25420 ***Sampling Date(s):*** 1/18/2023

List RCP Methods Used (e.g., 8260, 8270, et cetera) 1311/1312, 6010

1	**For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP method-specific Reasonable Confidence Protocol documents?**	☑ Yes ☐ No
1A	**Were the method specified preservation and holding time requirements met?**	☑ Yes ☐ No
1B	***VPH and EPH methods only:*** **Was the VPH or EPH method conducted without significant modifications (see section 11.3 of respective RCP methods)**	☐ Yes ☐ No ☑ NA
2	**Were all samples received by the laboratory in a condition consistent with that described on the associated Chain-of-Custody document(s)?**	☑ Yes ☐ No
3	**Were samples received at an appropriate temperature (< 6 Degrees C)?**	☑ Yes ☐ No ☐ NA
4	**Were all QA/QC performance criteria specified in the CTDEP Reasonable Confidence Protocol documents achieved?**	☑ Yes ☐ No
5	**a) Were reporting limits specified or referenced on the chain-of-custody?** **b) Were these reporting limits met?**	☐ Yes ☑ No ☑ Yes ☐ No
6	**For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?**	☐ Yes ☑ No
7	**Are project-specific matrix spikes and laboratory duplicates included in the data set?**	☐ Yes ☑ No

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or 1B is "No", the data package does not meet the requirements for "Reasonable Confidence". This form may not be altered and all questions must be answered.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.

Authorized Signature: Ethan Lee **Position:** Project Manager

Printed Name: Ethan Lee **Date:** Monday, January 23, 2023

Name of Laboratory Phoenix Environmental Labs, Inc.

This certification form is to be used for RCP methods only.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

January 23, 2023

SDG I.D.: GCN25419

SDG Comments

Metals Analysis:
The client requested a shorter list of elements than the 6010 RCP list. Only Lead is reported as requested on the chain of custody.

ICP Metals Narration

Were all QA/QC performance criteria specified in the analytical method achieved? Yes.

Instrument:

ARCOS 01/19/23 09:57 Cindy Pearce, Chemist 01/19/23

CN25419, CN25420

Additional criteria for CCV and ICSAB:
Sodium and Potassium are poor performing elements, the laboratory's in-house limits are 85-115% (CCV) and 70-130% (ICSAB).The linear range is defined daily by the calibration range.
The following Initial Calibration Verification (ICV) compounds did not meet criteria: None.
The following Continuing Calibration Verification (CCV) compounds did not meet criteria: None.
The following ICP Interference Check (ICSAB) compounds did not meet criteria: None.

QC (Batch Specific):

Batch 660578 (CN25667)

CN25419, CN25420

All LCS recoveries were within 80 - 120 with the following exceptions: None.
All LCSD recoveries were within 80 - 120 with the following exceptions: None.
All LCS/LCSD RPDs were less than 20% with the following exceptions: None.
Additional Criteria: LCS acceptance range is 80-120% MS acceptance range 75-125%.

Temperature Narration

The samples were received at 1.5C with cooling initiated.
(Note acceptance criteria for relevant matrices is above freezing up to 6°C)

wcip .115

TRC
21 GRIFFIN ROAD NORTH
WINDSOR, CONNECTICUT 06095
TELEPHONE (860) 298-9692
FAX (860) 298-6380

DAS Rates Apply

TCLP CHAIN OF CUSTODY

Edition: November 2013
Supersede Previous Edition

LAB ID #.

PROJECT NUMBER	PROJECT NAME	PARAMETERS	TURNAROUND TIME
522705.0000.0000	McCartin School East Hartford, CT		24hr / 48hr (X) / 3day / 5day
INSPECTOR: (SIGNATURE)	(PRINTED) Michael Kostruba		

FIELD SAMPLE NUMBER	DATE	TIME	TYPE COMP	TYPE GRAB	SAMPLE LOCATION	RCRA Pb	RCRA Pb, AS, CR, CD	8 RCRA Metals	TCLP Pb	SPLP Pb		MATERIAL
25419 1	1/18/23	/		X	B Side Soffit				X			Wood Soffit only
25420 2	-		X		Throughout school				"			Sheetrock, Ceiling tile, soffit, Cabinet, wood
												Rec'd 1-bag per Sample.

Analyze both samples

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
[signature]	1/18/23	[signature]		1/18/23	
(Printed) Mike Kostruba	Time: 0825	(Printed)	(Printed)	Time: 1546	(Printed)
Send Results to MKostruba @ trccompanies.com - 860-817-2413					Page 1 of 1

[signature] — For Phoenix 1/18/23 [signature] 1-18-23 16:45

TCLP WASTE CHARACTERIZATION C&D
FIELD SAMPLE COMPUTATION TABLE

Site: Former McCartin School

Project No.: 525705

Date: 1/18/2023
Inspector: AS
Prepared by: MK

	A	B									C = A*B	D	E=C*D	G=E/F*100
		Thickness (inches) **ft**												
Building	**Area**	1/16"	1/8"	1/2"	3/4"	1"	2"	4"	6"	8"	12"	**Volume**	**Density**	**Mass**	**% of total**
Component	**(SF)**	**0.005**	**0.010**	**0.042**	**0.063**	**0.083**	**0.167**	**0.333**	**0.500**	**0.667**	**1.000**	**(CF)**	**(lb/CF)**	**(lb)**	**Mass**
sheetrock	11260.0			0.042								472.9	50	23646.0	31.6
plaster				0.042								0.0	45	0.0	0.0
brick								0.333				0.0	120	0.0	0.0
roofing				0.042								0.0	70	0.0	0.0
wood framing (walls) +								0.333				0.0	32	0.0	0.0
wood framing (roof/floors) +									0.500			0.0	32	0.0	0.0
hardwood (Stage)	760.0					0.083						63.1	45	2838.6	3.8
ceiling tile (cellulose)	21800.0			0.042								915.6	23	21058.8	28.1
Ceiling tile backer Wood	17000.0			0.042								714.0	38	27132.0	36.2
aluminum siding		0.005										0.0	169	0.0	0.0
vinyl			0.010									0.0	120	0.0	0.0
concrete										0.667		0.0	140	0.0	0.0
stone										0.667		0.0	140	0.0	0.0
plywood Soffit (+)	466.0		0.010									4.7	34	158.4	0.2
glass			0.010									0.0	170	0.0	0.0
cabinet wood (+)	20.0				0.063							1.3	38	47.9	0.1
													Total Mass	74882	100%

= typical thickness value

F=sum of E

+ framing area (SF) per wall = [(6L+3H+2LH)/18], where L & H are in feet, assuming 18" o.c. construction
* CTDEP waste characterization guidelines recommend one TCLP sample for every 2,500 SF of floor space
* concrete/stone foundation should not be included in TCLP sample unless foundation is to be completely removed during demolition and disposed off site
* steel should not be included in TCLP sample, steel to be recycled and not disposed of
* material density values taken from Lindeburg, ME reference manual, 10th edition, 1997
* components with very low density or very low volume (i.e. vinyl flooring/siding, insulations, carpet, ceramic tile, fixtures, etc) presumed negligible to mass and not included
* collect separate aliquot samples of applicable components
* calculate % of total mass for each component
* prepare 100 gram sample in lab by combining subsamples of aliquots at %'s calculated. Do not grind material up, this creates increased surface area and unrepresentative leachability
* submit entire 100 gram sample for TCLP analysis (this eliminates lab analyst error where only a non-representative portion of a larger submitted sample is analyzed) 100 g = method minimum

APPENDIX G

PCB LABORATORY ANALYSIS DATA

Wednesday, January 04, 2023

Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Project ID: EAST HARTFORD BOE MCCARTIN SCHOOL
SDG ID: GCN11908
Sample ID#s: CN11908 - CN11941

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #M-CT007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Sample Id Cross Reference

January 04, 2023

SDG I.D.: GCN11908

Project ID: EAST HARTFORD BOE MCCARTIN SCHOOL

Client Id	Lab Id	Matrix
1	CN11908	CAULK
2	CN11909	CAULK
3	CN11910	CAULK
4	CN11911	CAULK
5	CN11912	CAULK
6	CN11913	CAULK
7	CN11914	CAULK
8	CN11915	CAULK
9	CN11916	CAULK
10	CN11917	CAULK
11	CN11918	CAULK
12	CN11919	CAULK
13	CN11920	CAULK
14	CN11921	CAULK
15	CN11922	CAULK
16	CN11923	CAULK
17	CN11924	CAULK
18	CN11925	CAULK
19	CN11926	CAULK
20	CN11927	CAULK
21	CN11928	CAULK
22	CN11929	CAULK
23	CN11930	CAULK
24	CN11931	CAULK
25	CN11932	CAULK
26	CN11933	CAULK
27	CN11934	CAULK
28	CN11935	CAULK
29	CN11936	CAULK
30	CN11937	CAULK

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Sample Id Cross Reference

January 04, 2023

SDG I.D.: GCN11908

Project ID: EAST HARTFORD BOE MCCARTIN SCHOOL

Client Id	Lab Id	Matrix
31	CN11938	CAULK
32	CN11939	CAULK
33	CN11940	CAULK
34	CN11941	CAULK

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

January 04, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	CAULK	Collected by:		12/19/22	13:12
Location Code:	TRC-PCBDAS	Received by:	CP	12/27/22	9:55
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:	522705				

Laboratory Data

SDG ID: GCN11908
Phoenix ID: CN11908

Project ID: EAST HARTFORD BOE MCCARTIN SCHOOL
Client ID: 1

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Caulk Extraction for PCB	Completed				12/27/22	R/AL/K	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.81	mg/Kg	5	12/28/22	SC	SW8082A
PCB-1221	ND	0.81	mg/Kg	5	12/28/22	SC	SW8082A
PCB-1232	ND	0.81	mg/Kg	5	12/28/22	SC	SW8082A
PCB-1242	ND	0.81	mg/Kg	5	12/28/22	SC	SW8082A
PCB-1248	ND	0.81	mg/Kg	5	12/28/22	SC	SW8082A
PCB-1254	ND	0.81	mg/Kg	5	12/28/22	SC	SW8082A
PCB-1260	ND	0.81	mg/Kg	5	12/28/22	SC	SW8082A
PCB-1262	ND	0.81	mg/Kg	5	12/28/22	SC	SW8082A
PCB-1268	ND	0.81	mg/Kg	5	12/28/22	SC	SW8082A
Total PCBs	ND	0.81	mg/Kg	5	12/28/22	SC	SW8082A
QA/QC Surrogates							
% DCBP	66		%	5	12/28/22	SC	30 - 150 %
% DCBP (Confirmation)	63		%	5	12/28/22	SC	30 - 150 %
% TCMX	50		%	5	12/28/22	SC	30 - 150 %
% TCMX (Confirmation)	50		%	5	12/28/22	SC	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
January 04, 2023
Reviewed and Released by: Ethan Lee, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

January 04, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	CAULK	Collected by:		12/17/22	12:45
Location Code:	TRC-PCBDAS	Received by:	CP	12/27/22	9:55
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:	522705				

Laboratory Data

SDG ID: GCN11908
Phoenix ID: CN11909

Project ID: EAST HARTFORD BOE MCCARTIN SCHOOL
Client ID: 2

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Caulk Extraction for PCB	Completed				12/29/22	R	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.54	mg/Kg	2	12/30/22	AW	SW8082A
PCB-1221	ND	0.54	mg/Kg	2	12/30/22	AW	SW8082A
PCB-1232	ND	0.54	mg/Kg	2	12/30/22	AW	SW8082A
PCB-1242	ND	0.54	mg/Kg	2	12/30/22	AW	SW8082A
PCB-1248	ND	0.54	mg/Kg	2	12/30/22	AW	SW8082A
PCB-1254	ND	0.54	mg/Kg	2	12/30/22	AW	SW8082A
PCB-1260	3.8	0.54	mg/Kg	2	12/30/22	AW	SW8082A
PCB-1262	ND	0.54	mg/Kg	2	12/30/22	AW	SW8082A
PCB-1268	ND	0.54	mg/Kg	2	12/30/22	AW	SW8082A
Total PCBs	3.8	0.54	mg/Kg	2	12/30/22	AW	SW8082A
QA/QC Surrogates							
% DCBP	55		%	2	12/30/22	AW	30 - 150 %
% DCBP (Confirmation)	58		%	2	12/30/22	AW	30 - 150 %
% TCMX	39		%	2	12/30/22	AW	30 - 150 %
% TCMX (Confirmation)	39		%	2	12/30/22	AW	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
January 04, 2023
Reviewed and Released by: Ethan Lee, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

January 04, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	CAULK	Collected by:		12/17/22	12:45
Location Code:	TRC-PCBDAS	Received by:	CP	12/27/22	9:55
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:	522705				

Laboratory Data

SDG ID: GCN11908
Phoenix ID: CN11910

Project ID: EAST HARTFORD BOE MCCARTIN SCHOOL
Client ID: 3

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Caulk Extraction for PCB	Completed				12/28/22	R/AL	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.97	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1221	ND	0.97	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1232	ND	0.97	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1242	ND	0.97	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1248	ND	0.97	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1254	ND	0.97	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1260	8	0.97	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1262	ND	0.97	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1268	ND	0.97	mg/Kg	2	12/29/22	SC	SW8082A
Total PCBs	8	0.97	mg/Kg	2	12/29/22	SC	SW8082A
QA/QC Surrogates							
% DCBP	53		%	2	12/29/22	SC	30 - 150 %
% DCBP (Confirmation)	55		%	2	12/29/22	SC	30 - 150 %
% TCMX	31		%	2	12/29/22	SC	30 - 150 %
% TCMX (Confirmation)	37		%	2	12/29/22	SC	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
January 04, 2023
Reviewed and Released by: Ethan Lee, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

January 04, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	CAULK	Collected by:		12/17/22	12:46
Location Code:	TRC-PCBDAS	Received by:	CP	12/27/22	9:55
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:	522705				

Laboratory Data

SDG ID: GCN11908
Phoenix ID: CN11911

Project ID: EAST HARTFORD BOE MCCARTIN SCHOOL
Client ID: 4

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Caulk Extraction for PCB	Completed				12/28/22	R/AL	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.56	mg/Kg	5	12/29/22	SC	SW8082A
PCB-1221	ND	0.56	mg/Kg	5	12/29/22	SC	SW8082A
PCB-1232	ND	0.56	mg/Kg	5	12/29/22	SC	SW8082A
PCB-1242	ND	0.56	mg/Kg	5	12/29/22	SC	SW8082A
PCB-1248	ND	0.56	mg/Kg	5	12/29/22	SC	SW8082A
PCB-1254	ND	0.56	mg/Kg	5	12/29/22	SC	SW8082A
PCB-1260	1.7	0.56	mg/Kg	5	12/29/22	SC	SW8082A
PCB-1262	ND	0.56	mg/Kg	5	12/29/22	SC	SW8082A
PCB-1268	ND	0.56	mg/Kg	5	12/29/22	SC	SW8082A
Total PCBs	1.7	0.56	mg/Kg	5	12/29/22	SC	SW8082A
QA/QC Surrogates							
% DCBP	70		%	5	12/29/22	SC	30 - 150 %
% DCBP (Confirmation)	66		%	5	12/29/22	SC	30 - 150 %
% TCMX	38		%	5	12/29/22	SC	30 - 150 %
% TCMX (Confirmation)	39		%	5	12/29/22	SC	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
January 04, 2023
Reviewed and Released by: Ethan Lee, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

January 04, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	CAULK	Collected by:		12/19/22	13:25
Location Code:	TRC-PCBDAS	Received by:	CP	12/27/22	9:55
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:	522705				

Laboratory Data

SDG ID: GCN11908
Phoenix ID: CN11912

Project ID: EAST HARTFORD BOE MCCARTIN SCHOOL
Client ID: 5

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Caulk Extraction for PCB	Completed				12/28/22	R/AL	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.59	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1221	ND	0.59	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1232	ND	0.59	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1242	ND	0.59	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1248	ND	0.59	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1254	ND	0.59	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1260	ND	0.59	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1262	ND	0.59	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1268	ND	0.59	mg/Kg	2	12/29/22	SC	SW8082A
Total PCBs	ND	0.59	mg/Kg	2	12/29/22	SC	SW8082A
QA/QC Surrogates							
% DCBP	64		%	2	12/29/22	SC	30 - 150 %
% DCBP (Confirmation)	72		%	2	12/29/22	SC	30 - 150 %
% TCMX	57		%	2	12/29/22	SC	30 - 150 %
% TCMX (Confirmation)	56		%	2	12/29/22	SC	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
January 04, 2023
Reviewed and Released by: Ethan Lee, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

January 04, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	CAULK	Collected by:		12/19/22	15:17
Location Code:	TRC-PCBDAS	Received by:	CP	12/27/22	9:55
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:	522705				

Laboratory Data

SDG ID: GCN11908
Phoenix ID: CN11913

Project ID: EAST HARTFORD BOE MCCARTIN SCHOOL
Client ID: 6

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Caulk Extraction for PCB	Completed				12/28/22	R/AL	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.72	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1221	ND	0.72	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1232	ND	0.72	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1242	ND	0.72	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1248	ND	0.72	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1254	1.3	0.72	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1260	ND	0.72	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1262	ND	0.72	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1268	ND	0.72	mg/Kg	2	12/29/22	SC	SW8082A
Total PCBs	1.3	0.72	mg/Kg	2	12/29/22	SC	SW8082A
QA/QC Surrogates							
% DCBP	76		%	2	12/29/22	SC	30 - 150 %
% DCBP (Confirmation)	80		%	2	12/29/22	SC	30 - 150 %
% TCMX	65		%	2	12/29/22	SC	30 - 150 %
% TCMX (Confirmation)	63		%	2	12/29/22	SC	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
January 04, 2023
Reviewed and Released by: Ethan Lee, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

January 04, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	CAULK	Collected by:		12/19/22	15:17
Location Code:	TRC-PCBDAS	Received by:	CP	12/27/22	9:55
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:	522705				

Laboratory Data

SDG ID: GCN11908
Phoenix ID: CN11914

Project ID: EAST HARTFORD BOE MCCARTIN SCHOOL
Client ID: 7

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Caulk Extraction for PCB	Completed				12/28/22	R/AL	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.95	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1221	ND	0.95	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1232	ND	0.95	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1242	ND	0.95	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1248	ND	0.95	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1254	ND	0.95	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1260	ND	0.95	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1262	ND	0.95	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1268	ND	0.95	mg/Kg	2	12/29/22	SC	SW8082A
Total PCBs	ND	0.95	mg/Kg	2	12/29/22	SC	SW8082A
QA/QC Surrogates							
% DCBP	56		%	2	12/29/22	SC	30 - 150 %
% DCBP (Confirmation)	59		%	2	12/29/22	SC	30 - 150 %
% TCMX	48		%	2	12/29/22	SC	30 - 150 %
% TCMX (Confirmation)	47		%	2	12/29/22	SC	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
January 04, 2023
Reviewed and Released by: Ethan Lee, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

January 04, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	CAULK	Collected by:		12/19/22	15:17
Location Code:	TRC-PCBDAS	Received by:	CP	12/27/22	9:55
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:	522705				

Laboratory Data

SDG ID: GCN11908
Phoenix ID: CN11915

Project ID: EAST HARTFORD BOE MCCARTIN SCHOOL
Client ID: 8

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Caulk Extraction for PCB	Completed				12/29/22	R	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.69	mg/Kg	2	12/30/22	AW	SW8082A
PCB-1221	ND	0.69	mg/Kg	2	12/30/22	AW	SW8082A
PCB-1232	ND	0.69	mg/Kg	2	12/30/22	AW	SW8082A
PCB-1242	ND	0.69	mg/Kg	2	12/30/22	AW	SW8082A
PCB-1248	ND	0.69	mg/Kg	2	12/30/22	AW	SW8082A
PCB-1254	ND	0.69	mg/Kg	2	12/30/22	AW	SW8082A
PCB-1260	ND	0.69	mg/Kg	2	12/30/22	AW	SW8082A
PCB-1262	ND	0.69	mg/Kg	2	12/30/22	AW	SW8082A
PCB-1268	ND	0.69	mg/Kg	2	12/30/22	AW	SW8082A
Total PCBs	ND	0.69	mg/Kg	2	12/30/22	AW	SW8082A
QA/QC Surrogates							
% DCBP	64		%	2	12/30/22	AW	30 - 150 %
% DCBP (Confirmation)	58		%	2	12/30/22	AW	30 - 150 %
% TCMX	53		%	2	12/30/22	AW	30 - 150 %
% TCMX (Confirmation)	52		%	2	12/30/22	AW	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
January 04, 2023
Reviewed and Released by: Ethan Lee, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

January 04, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	CAULK	Collected by:		12/19/22	15:25
Location Code:	TRC-PCBDAS	Received by:	CP	12/27/22	9:55
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:	522705				

Laboratory Data

SDG ID: GCN11908
Phoenix ID: CN11916

Project ID: EAST HARTFORD BOE MCCARTIN SCHOOL
Client ID: 9

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Caulk Extraction for PCB	Completed				12/28/22	R/AL	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.74	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1221	ND	0.74	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1232	ND	0.74	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1242	ND	0.74	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1248	ND	0.74	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1254	ND	0.74	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1260	ND	0.74	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1262	ND	0.74	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1268	ND	0.74	mg/Kg	2	12/29/22	SC	SW8082A
Total PCBs	ND	0.74	mg/Kg	2	12/29/22	SC	SW8082A
QA/QC Surrogates							
% DCBP	57		%	2	12/29/22	SC	30 - 150 %
% DCBP (Confirmation)	54		%	2	12/29/22	SC	30 - 150 %
% TCMX	44		%	2	12/29/22	SC	30 - 150 %
% TCMX (Confirmation)	47		%	2	12/29/22	SC	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
January 04, 2023
Reviewed and Released by: Ethan Lee, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

January 04, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	CAULK	Collected by:		12/19/22	13:35
Location Code:	TRC-PCBDAS	Received by:	CP	12/27/22	9:55
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:	522705				

Laboratory Data

SDG ID: GCN11908
Phoenix ID: CN11917

Project ID: EAST HARTFORD BOE MCCARTIN SCHOOL
Client ID: 10

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Caulk Extraction for PCB	Completed				12/28/22	R/AL	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.55	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1221	ND	0.55	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1232	ND	0.55	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1242	ND	0.55	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1248	ND	0.55	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1254	1	0.55	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1260	ND	0.55	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1262	ND	0.55	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1268	ND	0.55	mg/Kg	2	12/29/22	SC	SW8082A
Total PCBs	1	0.55	mg/Kg	2	12/29/22	SC	SW8082A
QA/QC Surrogates							
% DCBP	71		%	2	12/29/22	SC	30 - 150 %
% DCBP (Confirmation)	71		%	2	12/29/22	SC	30 - 150 %
% TCMX	62		%	2	12/29/22	SC	30 - 150 %
% TCMX (Confirmation)	58		%	2	12/29/22	SC	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
January 04, 2023
Reviewed and Released by: Ethan Lee, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

January 04, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	CAULK	Collected by:		12/17/22	14:07
Location Code:	TRC-PCBDAS	Received by:	CP	12/27/22	9:55
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:	522705				

Laboratory Data

SDG ID: GCN11908
Phoenix ID: CN11918

Project ID: EAST HARTFORD BOE MCCARTIN SCHOOL
Client ID: 11

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Caulk Extraction for PCB	Completed				12/27/22	R/AL/K	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.65	mg/Kg	2	12/28/22	SC	SW8082A
PCB-1221	ND	0.65	mg/Kg	2	12/28/22	SC	SW8082A
PCB-1232	ND	0.65	mg/Kg	2	12/28/22	SC	SW8082A
PCB-1242	ND	0.65	mg/Kg	2	12/28/22	SC	SW8082A
PCB-1248	ND	0.65	mg/Kg	2	12/28/22	SC	SW8082A
PCB-1254	ND	0.65	mg/Kg	2	12/28/22	SC	SW8082A
PCB-1260	ND	0.65	mg/Kg	2	12/28/22	SC	SW8082A
PCB-1262	ND	0.65	mg/Kg	2	12/28/22	SC	SW8082A
PCB-1268	ND	0.65	mg/Kg	2	12/28/22	SC	SW8082A
Total PCBs	ND	0.65	mg/Kg	2	12/28/22	SC	SW8082A
QA/QC Surrogates							
% DCBP	80		%	2	12/28/22	SC	30 - 150 %
% DCBP (Confirmation)	73		%	2	12/28/22	SC	30 - 150 %
% TCMX	64		%	2	12/28/22	SC	30 - 150 %
% TCMX (Confirmation)	65		%	2	12/28/22	SC	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
January 04, 2023
Reviewed and Released by: Ethan Lee, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

January 04, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	CAULK	Collected by:		12/17/22	13:28
Location Code:	TRC-PCBDAS	Received by:	CP	12/27/22	9:55
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:	522705				

Laboratory Data

SDG ID: GCN11908
Phoenix ID: CN11919

Project ID: EAST HARTFORD BOE MCCARTIN SCHOOL
Client ID: 12

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Caulk Extraction for PCB	Completed				12/28/22	R/AL	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.65	mg/Kg	5	12/29/22	SC	SW8082A
PCB-1221	ND	0.65	mg/Kg	5	12/29/22	SC	SW8082A
PCB-1232	ND	0.65	mg/Kg	5	12/29/22	SC	SW8082A
PCB-1242	ND	0.65	mg/Kg	5	12/29/22	SC	SW8082A
PCB-1248	ND	0.65	mg/Kg	5	12/29/22	SC	SW8082A
PCB-1254	ND	0.65	mg/Kg	5	12/29/22	SC	SW8082A
PCB-1260	ND	0.65	mg/Kg	5	12/29/22	SC	SW8082A
PCB-1262	ND	0.65	mg/Kg	5	12/29/22	SC	SW8082A
PCB-1268	ND	0.65	mg/Kg	5	12/29/22	SC	SW8082A
Total PCBs	ND	0.65	mg/Kg	5	12/29/22	SC	SW8082A
QA/QC Surrogates							
% DCBP	74		%	5	12/29/22	SC	30 - 150 %
% DCBP (Confirmation)	68		%	5	12/29/22	SC	30 - 150 %
% TCMX	57		%	5	12/29/22	SC	30 - 150 %
% TCMX (Confirmation)	56		%	5	12/29/22	SC	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
January 04, 2023
Reviewed and Released by: Ethan Lee, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

January 04, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	CAULK	Collected by:		12/17/22	13:45
Location Code:	TRC-PCBDAS	Received by:	CP	12/27/22	9:55
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:	522705				

Laboratory Data

SDG ID: GCN11908
Phoenix ID: CN11920

Project ID: EAST HARTFORD BOE MCCARTIN SCHOOL
Client ID: 13

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Caulk Extraction for PCB	Completed				12/27/22	R/AL/K	SW3540C	
PCB (Soxhlet SW3540C)								
PCB-1016	ND	0.99	mg/Kg	5	12/29/22	SC	SW8082A	
PCB-1221	ND	0.99	mg/Kg	5	12/29/22	SC	SW8082A	
PCB-1232	ND	0.99	mg/Kg	5	12/29/22	SC	SW8082A	
PCB-1242	ND	0.99	mg/Kg	5	12/29/22	SC	SW8082A	
PCB-1248	ND	0.99	mg/Kg	5	12/29/22	SC	SW8082A	
PCB-1254	ND	0.99	mg/Kg	5	12/29/22	SC	SW8082A	
PCB-1260	ND	0.99	mg/Kg	5	12/29/22	SC	SW8082A	
PCB-1262	ND	0.99	mg/Kg	5	12/29/22	SC	SW8082A	
PCB-1268	ND	0.99	mg/Kg	5	12/29/22	SC	SW8082A	
Total PCBs	ND	0.99	mg/Kg	5	12/29/22	SC	SW8082A	
QA/QC Surrogates								
% DCBP	60		%	5	12/29/22	SC	30 - 150 %	
% DCBP (Confirmation)	53		%	5	12/29/22	SC	30 - 150 %	
% TCMX	32		%	5	12/29/22	SC	30 - 150 %	
% TCMX (Confirmation)	29		%	5	12/29/22	SC	30 - 150 %	3

Ver 1

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

3 = This parameter exceeds laboratory specified limits.

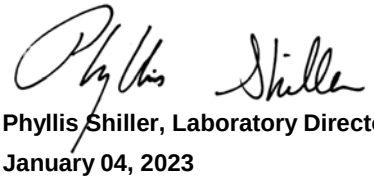
RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director
January 04, 2023
Reviewed and Released by: Ethan Lee, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

January 04, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	CAULK	Collected by:		12/19/22	14:32
Location Code:	TRC-PCBDAS	Received by:	CP	12/27/22	9:55
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:	522705				

Laboratory Data

SDG ID: GCN11908
Phoenix ID: CN11921

Project ID: EAST HARTFORD BOE MCCARTIN SCHOOL
Client ID: 14

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Caulk Extraction for PCB	Completed				12/28/22	R/AL	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.4	mg/Kg	1	12/29/22	SC	SW8082A
PCB-1221	ND	0.4	mg/Kg	1	12/29/22	SC	SW8082A
PCB-1232	ND	0.4	mg/Kg	1	12/29/22	SC	SW8082A
PCB-1242	ND	0.4	mg/Kg	1	12/29/22	SC	SW8082A
PCB-1248	ND	0.4	mg/Kg	1	12/29/22	SC	SW8082A
PCB-1254	ND	0.4	mg/Kg	1	12/29/22	SC	SW8082A
PCB-1260	ND	0.4	mg/Kg	1	12/29/22	SC	SW8082A
PCB-1262	ND	0.4	mg/Kg	1	12/29/22	SC	SW8082A
PCB-1268	ND	0.4	mg/Kg	1	12/29/22	SC	SW8082A
Total PCBs	ND	0.4	mg/Kg	1	12/29/22	SC	SW8082A
QA/QC Surrogates							
% DCBP	43		%	1	12/29/22	SC	30 - 150 %
% DCBP (Confirmation)	43		%	1	12/29/22	SC	30 - 150 %
% TCMX	34		%	1	12/29/22	SC	30 - 150 %
% TCMX (Confirmation)	36		%	1	12/29/22	SC	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
January 04, 2023
Reviewed and Released by: Ethan Lee, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

January 04, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	CAULK	Collected by:		12/19/22	9:07
Location Code:	TRC-PCBDAS	Received by:	CP	12/27/22	9:55
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:	522705				

Laboratory Data

SDG ID: GCN11908
Phoenix ID: CN11922

Project ID: EAST HARTFORD BOE MCCARTIN SCHOOL
Client ID: 15

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Caulk Extraction for PCB	Completed				12/28/22	R/AL	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.78	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1221	ND	0.78	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1232	ND	0.78	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1242	ND	0.78	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1248	ND	0.78	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1254	ND	0.78	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1260	ND	0.78	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1262	ND	0.78	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1268	ND	0.78	mg/Kg	2	12/29/22	SC	SW8082A
Total PCBs	ND	0.78	mg/Kg	2	12/29/22	SC	SW8082A
QA/QC Surrogates							
% DCBP	77		%	2	12/29/22	SC	30 - 150 %
% DCBP (Confirmation)	77		%	2	12/29/22	SC	30 - 150 %
% TCMX	53		%	2	12/29/22	SC	30 - 150 %
% TCMX (Confirmation)	61		%	2	12/29/22	SC	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
January 04, 2023
Reviewed and Released by: Ethan Lee, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

January 04, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	CAULK	Collected by:		12/19/22	9:06
Location Code:	TRC-PCBDAS	Received by:	CP	12/27/22	9:55
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:	522705				

Laboratory Data

SDG ID: GCN11908
Phoenix ID: CN11923

Project ID: EAST HARTFORD BOE MCCARTIN SCHOOL
Client ID: 16

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Caulk Extraction for PCB	Completed				12/30/22	R/AL/K	SW3540C	
PCB (Soxhlet SW3540C)								
PCB-1016	ND	0.88	mg/Kg	2	01/03/23	SC	SW8082A	
PCB-1221	ND	0.88	mg/Kg	2	01/03/23	SC	SW8082A	
PCB-1232	ND	0.88	mg/Kg	2	01/03/23	SC	SW8082A	
PCB-1242	ND	0.88	mg/Kg	2	01/03/23	SC	SW8082A	
PCB-1248	ND	0.88	mg/Kg	2	01/03/23	SC	SW8082A	
PCB-1254	ND	0.88	mg/Kg	2	01/03/23	SC	SW8082A	
PCB-1260	ND	0.88	mg/Kg	2	01/03/23	SC	SW8082A	
PCB-1262	ND	0.88	mg/Kg	2	01/03/23	SC	SW8082A	
PCB-1268	ND	0.88	mg/Kg	2	01/03/23	SC	SW8082A	
Total PCBs	ND	0.88	mg/Kg	2	01/03/23	SC	SW8082A	
QA/QC Surrogates								
% DCBP	28		%	2	01/03/23	SC	30 - 150 %	3
% DCBP (Confirmation)	32		%	2	01/03/23	SC	30 - 150 %	
% TCMX	12		%	2	01/03/23	SC	30 - 150 %	3
% TCMX (Confirmation)	12		%	2	01/03/23	SC	30 - 150 %	3

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

3 = This parameter exceeds laboratory specified limits.

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

PCB Comment:
Poor surrogate recovery was observed for PCBs. Sample was re-extracted with similar results.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
January 04, 2023
Reviewed and Released by: Ethan Lee, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

January 04, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	CAULK	Collected by:		12/19/22	10:44
Location Code:	TRC-PCBDAS	Received by:	CP	12/27/22	9:55
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:	522705				

Laboratory Data

SDG ID: GCN11908
Phoenix ID: CN11924

Project ID: EAST HARTFORD BOE MCCARTIN SCHOOL
Client ID: 17

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Caulk Extraction for PCB	Completed				12/29/22	R	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.7	mg/Kg	2	12/30/22	AW	SW8082A
PCB-1221	ND	0.7	mg/Kg	2	12/30/22	AW	SW8082A
PCB-1232	ND	0.7	mg/Kg	2	12/30/22	AW	SW8082A
PCB-1242	ND	0.7	mg/Kg	2	12/30/22	AW	SW8082A
PCB-1248	ND	0.7	mg/Kg	2	12/30/22	AW	SW8082A
PCB-1254	ND	0.7	mg/Kg	2	12/30/22	AW	SW8082A
PCB-1260	ND	0.7	mg/Kg	2	12/30/22	AW	SW8082A
PCB-1262	ND	0.7	mg/Kg	2	12/30/22	AW	SW8082A
PCB-1268	ND	0.7	mg/Kg	2	12/30/22	AW	SW8082A
Total PCBs	ND	0.7	mg/Kg	2	12/30/22	AW	SW8082A
QA/QC Surrogates							
% DCBP	75		%	2	12/30/22	AW	30 - 150 %
% DCBP (Confirmation)	63		%	2	12/30/22	AW	30 - 150 %
% TCMX	53		%	2	12/30/22	AW	30 - 150 %
% TCMX (Confirmation)	53		%	2	12/30/22	AW	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
January 04, 2023
Reviewed and Released by: Ethan Lee, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

January 04, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	CAULK	Collected by:		12/19/22	11:16
Location Code:	TRC-PCBDAS	Received by:	CP	12/27/22	9:55
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:	522705				

Laboratory Data

SDG ID: GCN11908
Phoenix ID: CN11925

Project ID: EAST HARTFORD BOE MCCARTIN SCHOOL
Client ID: 18

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Caulk Extraction for PCB	Completed				12/28/22	R/AL	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.93	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1221	ND	0.93	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1232	ND	0.93	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1242	ND	0.93	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1248	ND	0.93	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1254	ND	0.93	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1260	ND	0.93	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1262	ND	0.93	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1268	ND	0.93	mg/Kg	2	12/29/22	SC	SW8082A
Total PCBs	ND	0.93	mg/Kg	2	12/29/22	SC	SW8082A
QA/QC Surrogates							
% DCBP	67		%	2	12/29/22	SC	30 - 150 %
% DCBP (Confirmation)	59		%	2	12/29/22	SC	30 - 150 %
% TCMX	50		%	2	12/29/22	SC	30 - 150 %
% TCMX (Confirmation)	50		%	2	12/29/22	SC	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
January 04, 2023
Reviewed and Released by: Ethan Lee, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

January 04, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	CAULK	Collected by:		12/19/22	11:50
Location Code:	TRC-PCBDAS	Received by:	CP	12/27/22	9:55
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:	522705				

Laboratory Data

SDG ID: GCN11908
Phoenix ID: CN11926

Project ID: EAST HARTFORD BOE MCCARTIN SCHOOL
Client ID: 19

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Caulk Extraction for PCB	Completed				12/28/22	R/AL	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.91	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1221	ND	0.91	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1232	ND	0.91	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1242	ND	0.91	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1248	ND	0.91	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1254	ND	0.91	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1260	ND	0.91	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1262	ND	0.91	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1268	ND	0.91	mg/Kg	2	12/29/22	SC	SW8082A
Total PCBs	ND	0.91	mg/Kg	2	12/29/22	SC	SW8082A
QA/QC Surrogates							
% DCBP	64		%	2	12/29/22	SC	30 - 150 %
% DCBP (Confirmation)	74		%	2	12/29/22	SC	30 - 150 %
% TCMX	49		%	2	12/29/22	SC	30 - 150 %
% TCMX (Confirmation)	56		%	2	12/29/22	SC	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
January 04, 2023
Reviewed and Released by: Ethan Lee, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

January 04, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	CAULK	Collected by:		12/17/22	14:46
Location Code:	TRC-PCBDAS	Received by:	CP	12/27/22	9:55
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:	522705				

Laboratory Data

SDG ID: GCN11908
Phoenix ID: CN11927

Project ID: EAST HARTFORD BOE MCCARTIN SCHOOL
Client ID: 20

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Caulk Extraction for PCB	Completed				12/28/22	R/AL	SW3540C	
PCB (Soxhlet SW3540C)								
PCB-1016	ND	0.41	mg/Kg	2	12/29/22	SC	SW8082A	
PCB-1221	ND	0.41	mg/Kg	2	12/29/22	SC	SW8082A	
PCB-1232	ND	0.41	mg/Kg	2	12/29/22	SC	SW8082A	
PCB-1242	ND	0.41	mg/Kg	2	12/29/22	SC	SW8082A	
PCB-1248	ND	0.41	mg/Kg	2	12/29/22	SC	SW8082A	
PCB-1254	ND	0.41	mg/Kg	2	12/29/22	SC	SW8082A	
PCB-1260	ND	0.41	mg/Kg	2	12/29/22	SC	SW8082A	
PCB-1262	ND	0.41	mg/Kg	2	12/29/22	SC	SW8082A	
PCB-1268	ND	0.41	mg/Kg	2	12/29/22	SC	SW8082A	
Total PCBs	ND	0.41	mg/Kg	2	12/29/22	SC	SW8082A	
QA/QC Surrogates								
% DCBP	52		%	2	12/29/22	SC	30 - 150 %	
% DCBP (Confirmation)	53		%	2	12/29/22	SC	30 - 150 %	
% TCMX	33		%	2	12/29/22	SC	30 - 150 %	
% TCMX (Confirmation)	28		%	2	12/29/22	SC	30 - 150 %	3

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

3 = This parameter exceeds laboratory specified limits.

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

PCB Comment:
For PCBs, in order to reach the desired RL, multiple cleanup steps were performed. The extract was cleaned up with a combination of sulfuric acid, potassium permanganate, copper powder and additional florisil.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
January 04, 2023
Reviewed and Released by: Ethan Lee, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

January 04, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	CAULK	Collected by:		12/19/22	12:06
Location Code:	TRC-PCBDAS	Received by:	CP	12/27/22	9:55
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:	522705				

Laboratory Data

SDG ID: GCN11908
Phoenix ID: CN11928

Project ID: EAST HARTFORD BOE MCCARTIN SCHOOL
Client ID: 21

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Caulk Extraction for PCB	Completed				12/28/22	R/AL	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.79	mg/Kg	5	12/29/22	SC	SW8082A
PCB-1221	ND	0.79	mg/Kg	5	12/29/22	SC	SW8082A
PCB-1232	ND	0.79	mg/Kg	5	12/29/22	SC	SW8082A
PCB-1242	ND	0.79	mg/Kg	5	12/29/22	SC	SW8082A
PCB-1248	ND	0.79	mg/Kg	5	12/29/22	SC	SW8082A
PCB-1254	ND	0.79	mg/Kg	5	12/29/22	SC	SW8082A
PCB-1260	ND	0.79	mg/Kg	5	12/29/22	SC	SW8082A
PCB-1262	ND	0.79	mg/Kg	5	12/29/22	SC	SW8082A
PCB-1268	ND	0.79	mg/Kg	5	12/29/22	SC	SW8082A
Total PCBs	ND	0.79	mg/Kg	5	12/29/22	SC	SW8082A
QA/QC Surrogates							
% DCBP	59		%	5	12/29/22	SC	30 - 150 %
% DCBP (Confirmation)	57		%	5	12/29/22	SC	30 - 150 %
% TCMX	41		%	5	12/29/22	SC	30 - 150 %
% TCMX (Confirmation)	45		%	5	12/29/22	SC	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

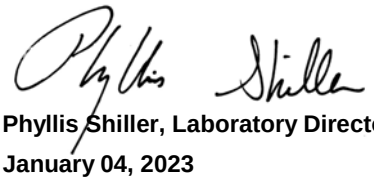
Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

PCB Comment:
For PCBs, in order to reach the desired RL, multiple cleanup steps were performed. The extract was cleaned up with a combination of sulfuric acid, potassium permanganate, copper powder and additional florisil.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director
January 04, 2023
Reviewed and Released by: Ethan Lee, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

January 04, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	CAULK	Collected by:		12/19/22	12:06
Location Code:	TRC-PCBDAS	Received by:	CP	12/27/22	9:55
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:	522705				

Laboratory Data

SDG ID: GCN11908
Phoenix ID: CN11929

Project ID: EAST HARTFORD BOE MCCARTIN SCHOOL
Client ID: 22

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Caulk Extraction for PCB	Completed				12/28/22	R/AL	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.82	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1221	ND	0.82	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1232	ND	0.82	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1242	ND	0.82	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1248	ND	0.82	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1254	ND	0.82	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1260	ND	0.82	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1262	ND	0.82	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1268	ND	0.82	mg/Kg	2	12/29/22	SC	SW8082A
Total PCBs	ND	0.82	mg/Kg	2	12/29/22	SC	SW8082A
QA/QC Surrogates							
% DCBP	63		%	2	12/29/22	SC	30 - 150 %
% DCBP (Confirmation)	64		%	2	12/29/22	SC	30 - 150 %
% TCMX	45		%	2	12/29/22	SC	30 - 150 %
% TCMX (Confirmation)	53		%	2	12/29/22	SC	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
January 04, 2023
Reviewed and Released by: Ethan Lee, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

January 04, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	CAULK	Collected by:		12/19/22	12:06
Location Code:	TRC-PCBDAS	Received by:	CP	12/27/22	9:55
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:	522705				

Laboratory Data

SDG ID: GCN11908
Phoenix ID: CN11930

Project ID: EAST HARTFORD BOE MCCARTIN SCHOOL
Client ID: 23

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Caulk Extraction for PCB	Completed				12/28/22	R/AL	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.56	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1221	ND	0.56	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1232	ND	0.56	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1242	ND	0.56	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1248	ND	0.56	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1254	ND	0.56	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1260	ND	0.56	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1262	ND	0.56	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1268	ND	0.56	mg/Kg	2	12/29/22	SC	SW8082A
Total PCBs	ND	0.56	mg/Kg	2	12/29/22	SC	SW8082A
QA/QC Surrogates							
% DCBP	60		%	2	12/29/22	SC	30 - 150 %
% DCBP (Confirmation)	58		%	2	12/29/22	SC	30 - 150 %
% TCMX	42		%	2	12/29/22	SC	30 - 150 %
% TCMX (Confirmation)	45		%	2	12/29/22	SC	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
January 04, 2023
Reviewed and Released by: Ethan Lee, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

January 04, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	CAULK	Collected by:		12/19/22	12:47
Location Code:	TRC-PCBDAS	Received by:	CP	12/27/22	9:55
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:	522705				

Laboratory Data

SDG ID: GCN11908
Phoenix ID: CN11931

Project ID: EAST HARTFORD BOE MCCARTIN SCHOOL
Client ID: 24

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Caulk Extraction for PCB	Completed				12/28/22	R/AL	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.42	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1221	ND	0.42	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1232	ND	0.42	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1242	ND	0.42	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1248	ND	0.42	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1254	0.43	0.42	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1260	ND	0.42	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1262	ND	0.42	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1268	ND	0.42	mg/Kg	2	12/29/22	SC	SW8082A
Total PCBs	0.43	0.42	mg/Kg	2	12/29/22	SC	SW8082A
QA/QC Surrogates							
% DCBP	71		%	2	12/29/22	SC	30 - 150 %
% DCBP (Confirmation)	63		%	2	12/29/22	SC	30 - 150 %
% TCMX	57		%	2	12/29/22	SC	30 - 150 %
% TCMX (Confirmation)	56		%	2	12/29/22	SC	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
January 04, 2023
Reviewed and Released by: Ethan Lee, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

January 04, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	CAULK	Collected by:		12/19/22	12:47
Location Code:	TRC-PCBDAS	Received by:	CP	12/27/22	9:55
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:	522705				

Laboratory Data

SDG ID: GCN11908
Phoenix ID: CN11932

Project ID: EAST HARTFORD BOE MCCARTIN SCHOOL
Client ID: 25

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Caulk Extraction for PCB	Completed				12/28/22	L/R/AL	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.77	mg/Kg	5	12/29/22	SC	SW8082A
PCB-1221	ND	0.77	mg/Kg	5	12/29/22	SC	SW8082A
PCB-1232	ND	0.77	mg/Kg	5	12/29/22	SC	SW8082A
PCB-1242	ND	0.77	mg/Kg	5	12/29/22	SC	SW8082A
PCB-1248	ND	0.77	mg/Kg	5	12/29/22	SC	SW8082A
PCB-1254	ND	0.77	mg/Kg	5	12/29/22	SC	SW8082A
PCB-1260	ND	0.77	mg/Kg	5	12/29/22	SC	SW8082A
PCB-1262	ND	0.77	mg/Kg	5	12/29/22	SC	SW8082A
PCB-1268	ND	0.77	mg/Kg	5	12/29/22	SC	SW8082A
Total PCBs	ND	0.77	mg/Kg	5	12/29/22	SC	SW8082A
QA/QC Surrogates							
% DCBP	49		%	5	12/29/22	SC	30 - 150 %
% DCBP (Confirmation)	47		%	5	12/29/22	SC	30 - 150 %
% TCMX	42		%	5	12/29/22	SC	30 - 150 %
% TCMX (Confirmation)	44		%	5	12/29/22	SC	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
January 04, 2023
Reviewed and Released by: Ethan Lee, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

January 04, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	CAULK	Collected by:		12/19/22	12:47
Location Code:	TRC-PCBDAS	Received by:	CP	12/27/22	9:55
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:	522705				

Laboratory Data

SDG ID: GCN11908
Phoenix ID: CN11933

Project ID: EAST HARTFORD BOE MCCARTIN SCHOOL
Client ID: 26

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Caulk Extraction for PCB	Completed				12/28/22	L/R/AL	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.59	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1221	ND	0.59	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1232	ND	0.59	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1242	ND	0.59	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1248	ND	0.59	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1254	ND	0.59	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1260	ND	0.59	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1262	ND	0.59	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1268	ND	0.59	mg/Kg	2	12/29/22	SC	SW8082A
Total PCBs	ND	0.59	mg/Kg	2	12/29/22	SC	SW8082A
QA/QC Surrogates							
% DCBP	84		%	2	12/29/22	SC	30 - 150 %
% DCBP (Confirmation)	82		%	2	12/29/22	SC	30 - 150 %
% TCMX	74		%	2	12/29/22	SC	30 - 150 %
% TCMX (Confirmation)	71		%	2	12/29/22	SC	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
January 04, 2023
Reviewed and Released by: Ethan Lee, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

January 04, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	CAULK	Collected by:		12/19/22	12:45
Location Code:	TRC-PCBDAS	Received by:	CP	12/27/22	9:55
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:	522705				

Laboratory Data

SDG ID: GCN11908
Phoenix ID: CN11934

Project ID: EAST HARTFORD BOE MCCARTIN SCHOOL
Client ID: 27

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Caulk Extraction for PCB	Completed				12/28/22	L/R/AL	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.57	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1221	ND	0.57	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1232	ND	0.57	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1242	ND	0.57	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1248	ND	0.57	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1254	ND	0.57	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1260	ND	0.57	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1262	ND	0.57	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1268	ND	0.57	mg/Kg	2	12/29/22	SC	SW8082A
Total PCBs	ND	0.57	mg/Kg	2	12/29/22	SC	SW8082A
QA/QC Surrogates							
% DCBP	107		%	2	12/29/22	SC	30 - 150 %
% DCBP (Confirmation)	82		%	2	12/29/22	SC	30 - 150 %
% TCMX	78		%	2	12/29/22	SC	30 - 150 %
% TCMX (Confirmation)	78		%	2	12/29/22	SC	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
January 04, 2023
Reviewed and Released by: Ethan Lee, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

January 04, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	CAULK	Collected by:		12/19/22	13:01
Location Code:	TRC-PCBDAS	Received by:	CP	12/27/22	9:55
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:	522705				

Laboratory Data

SDG ID: GCN11908
Phoenix ID: CN11935

Project ID: EAST HARTFORD BOE MCCARTIN SCHOOL
Client ID: 28

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Caulk Extraction for PCB	Completed				12/28/22	L/R/AL	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.58	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1221	ND	0.58	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1232	ND	0.58	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1242	ND	0.58	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1248	ND	0.58	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1254	ND	0.58	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1260	ND	0.58	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1262	ND	0.58	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1268	ND	0.58	mg/Kg	2	12/29/22	SC	SW8082A
Total PCBs	ND	0.58	mg/Kg	2	12/29/22	SC	SW8082A
QA/QC Surrogates							
% DCBP	69		%	2	12/29/22	SC	30 - 150 %
% DCBP (Confirmation)	84		%	2	12/29/22	SC	30 - 150 %
% TCMX	49		%	2	12/29/22	SC	30 - 150 %
% TCMX (Confirmation)	62		%	2	12/29/22	SC	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

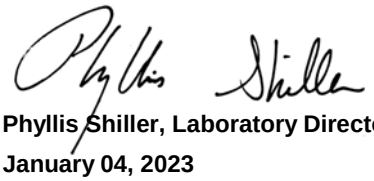
Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

PCB Comment:
For PCBs, in order to reach the desired RL, multiple cleanup steps were performed. The extract was cleaned up with a combination of sulfuric acid, potassium permanganate, copper powder and additional florisil.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director
January 04, 2023
Reviewed and Released by: Ethan Lee, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

January 04, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	CAULK	Collected by:		12/19/22	13:50
Location Code:	TRC-PCBDAS	Received by:	CP	12/27/22	9:55
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:	522705				

Laboratory Data

SDG ID: GCN11908
Phoenix ID: CN11936

Project ID: EAST HARTFORD BOE MCCARTIN SCHOOL
Client ID: 29

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Caulk Extraction for PCB	Completed				12/28/22	L/R/AL	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.48	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1221	ND	0.48	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1232	ND	0.48	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1242	ND	0.48	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1248	ND	0.48	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1254	ND	0.48	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1260	ND	0.48	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1262	ND	0.48	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1268	ND	0.48	mg/Kg	2	12/29/22	SC	SW8082A
Total PCBs	ND	0.48	mg/Kg	2	12/29/22	SC	SW8082A
QA/QC Surrogates							
% DCBP	55		%	2	12/29/22	SC	30 - 150 %
% DCBP (Confirmation)	51		%	2	12/29/22	SC	30 - 150 %
% TCMX	51		%	2	12/29/22	SC	30 - 150 %
% TCMX (Confirmation)	52		%	2	12/29/22	SC	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
January 04, 2023
Reviewed and Released by: Ethan Lee, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

January 04, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	CAULK	Collected by:		12/19/22	13:52
Location Code:	TRC-PCBDAS	Received by:	CP	12/27/22	9:55
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:	522705				

Laboratory Data

SDG ID: GCN11908
Phoenix ID: CN11937

Project ID: EAST HARTFORD BOE MCCARTIN SCHOOL
Client ID: 30

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Caulk Extraction for PCB	Completed				12/28/22	L/R/AL	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.41	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1221	ND	0.41	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1232	ND	0.41	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1242	ND	0.41	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1248	ND	0.41	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1254	ND	0.41	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1260	ND	0.41	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1262	ND	0.41	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1268	ND	0.41	mg/Kg	2	12/29/22	SC	SW8082A
Total PCBs	ND	0.41	mg/Kg	2	12/29/22	SC	SW8082A
QA/QC Surrogates							
% DCBP	58		%	2	12/29/22	SC	30 - 150 %
% DCBP (Confirmation)	53		%	2	12/29/22	SC	30 - 150 %
% TCMX	45		%	2	12/29/22	SC	30 - 150 %
% TCMX (Confirmation)	46		%	2	12/29/22	SC	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
January 04, 2023
Reviewed and Released by: Ethan Lee, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

January 04, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	CAULK	Collected by:		12/19/22	13:52
Location Code:	TRC-PCBDAS	Received by:	CP	12/27/22	9:55
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:	522705				

Laboratory Data

SDG ID: GCN11908
Phoenix ID: CN11938

Project ID: EAST HARTFORD BOE MCCARTIN SCHOOL
Client ID: 31

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Caulk Extraction for PCB	Completed				12/28/22	L/R/AL	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.83	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1221	ND	0.83	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1232	ND	0.83	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1242	ND	0.83	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1248	ND	0.83	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1254	ND	0.83	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1260	ND	0.83	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1262	ND	0.83	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1268	ND	0.83	mg/Kg	2	12/29/22	SC	SW8082A
Total PCBs	ND	0.83	mg/Kg	2	12/29/22	SC	SW8082A
QA/QC Surrogates							
% DCBP	57		%	2	12/29/22	SC	30 - 150 %
% DCBP (Confirmation)	53		%	2	12/29/22	SC	30 - 150 %
% TCMX	46		%	2	12/29/22	SC	30 - 150 %
% TCMX (Confirmation)	46		%	2	12/29/22	SC	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
January 04, 2023
Reviewed and Released by: Ethan Lee, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

January 04, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	CAULK	Collected by:		12/17/22	14:00
Location Code:	TRC-PCBDAS	Received by:	CP	12/27/22	9:55
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:	522705				

Laboratory Data

SDG ID: GCN11908
Phoenix ID: CN11939

Project ID: EAST HARTFORD BOE MCCARTIN SCHOOL
Client ID: 32

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Caulk Extraction for PCB	Completed				12/28/22	L/R/AL	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.44	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1221	ND	0.44	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1232	ND	0.44	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1242	ND	0.44	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1248	ND	0.44	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1254	1.9	0.44	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1260	ND	0.44	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1262	ND	0.44	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1268	ND	0.44	mg/Kg	2	12/29/22	SC	SW8082A
Total PCBs	1.9	0.44	mg/Kg	2	12/29/22	SC	SW8082A
QA/QC Surrogates							
% DCBP	61		%	2	12/29/22	SC	30 - 150 %
% DCBP (Confirmation)	63		%	2	12/29/22	SC	30 - 150 %
% TCMX	52		%	2	12/29/22	SC	30 - 150 %
% TCMX (Confirmation)	52		%	2	12/29/22	SC	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
January 04, 2023
Reviewed and Released by: Ethan Lee, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

January 04, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	CAULK	Collected by:		12/17/22	14:00
Location Code:	TRC-PCBDAS	Received by:	CP	12/27/22	9:55
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:	522705				

Laboratory Data

SDG ID: GCN11908
Phoenix ID: CN11940

Project ID: EAST HARTFORD BOE MCCARTIN SCHOOL
Client ID: 33

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Caulk Extraction for PCB	Completed				12/28/22	L/R/AL	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.48	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1221	ND	0.48	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1232	ND	0.48	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1242	ND	0.48	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1248	ND	0.48	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1254	4.7	0.48	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1260	ND	0.48	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1262	ND	0.48	mg/Kg	2	12/29/22	SC	SW8082A
PCB-1268	ND	0.48	mg/Kg	2	12/29/22	SC	SW8082A
Total PCBs	4.7	0.48	mg/Kg	2	12/29/22	SC	SW8082A
QA/QC Surrogates							
% DCBP	71		%	2	12/29/22	SC	30 - 150 %
% DCBP (Confirmation)	69		%	2	12/29/22	SC	30 - 150 %
% TCMX	53		%	2	12/29/22	SC	30 - 150 %
% TCMX (Confirmation)	57		%	2	12/29/22	SC	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
January 04, 2023
Reviewed and Released by: Ethan Lee, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

January 04, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	CAULK	Collected by:		12/17/22	14:01
Location Code:	TRC-PCBDAS	Received by:	CP	12/27/22	9:55
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:	522705				

Laboratory Data

SDG ID: GCN11908
Phoenix ID: CN11941

Project ID: EAST HARTFORD BOE MCCARTIN SCHOOL
Client ID: 34

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Caulk Extraction for PCB	Completed				12/27/22	R/AL	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.56	mg/Kg	2	12/28/22	SC	SW8082A
PCB-1221	ND	0.56	mg/Kg	2	12/28/22	SC	SW8082A
PCB-1232	ND	0.56	mg/Kg	2	12/28/22	SC	SW8082A
PCB-1242	ND	0.56	mg/Kg	2	12/28/22	SC	SW8082A
PCB-1248	ND	0.56	mg/Kg	2	12/28/22	SC	SW8082A
PCB-1254	ND	0.56	mg/Kg	2	12/28/22	SC	SW8082A
PCB-1260	ND	0.56	mg/Kg	2	12/28/22	SC	SW8082A
PCB-1262	ND	0.56	mg/Kg	2	12/28/22	SC	SW8082A
PCB-1268	ND	0.56	mg/Kg	2	12/28/22	SC	SW8082A
Total PCBs	ND	0.56	mg/Kg	2	12/28/22	SC	SW8082A
QA/QC Surrogates							
% DCBP	64		%	2	12/28/22	SC	30 - 150 %
% DCBP (Confirmation)	68		%	2	12/28/22	SC	30 - 150 %
% TCMX	51		%	2	12/28/22	SC	30 - 150 %
% TCMX (Confirmation)	51		%	2	12/28/22	SC	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
January 04, 2023
Reviewed and Released by: Ethan Lee, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

January 04, 2023

QA/QC Data

SDG I.D.: GCN11908

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 657991 (mg/Kg), QC Sample No: CN11618 10X (CN11909, CN11915, CN11924)											
Polychlorinated Biphenyls											
PCB-1016	ND	0.17	76	73	4.0				40 - 140	30	
PCB-1221	ND	0.17							40 - 140	30	
PCB-1232	ND	0.17							40 - 140	30	
PCB-1242	ND	0.17							40 - 140	30	
PCB-1248	ND	0.17							40 - 140	30	
PCB-1254	ND	0.17							40 - 140	30	
PCB-1260	ND	0.17	76	83	8.8				40 - 140	30	
PCB-1262	ND	0.17							40 - 140	30	
PCB-1268	ND	0.17							40 - 140	30	
% DCBP (Surrogate Rec)	97	%	91	82	10.4				30 - 150	30	
% DCBP (Surrogate Rec) (Confirm	88	%	83	83	0.0				30 - 150	30	
% TCMX (Surrogate Rec)	82	%	79	75	5.2				30 - 150	30	
% TCMX (Surrogate Rec) (Confirm	74	%	73	74	1.4				30 - 150	30	
Comment:											
A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.											
QA/QC Batch 657823 (mg/Kg), QC Sample No: CN11910 10X (CN11910, CN11911, CN11912, CN11913, CN11914, CN11916, CN11917, CN11919, CN11921, CN11922, CN11925, CN11926, CN11927, CN11928, CN11929, CN11930, CN11931)											
Polychlorinated Biphenyls											
PCB-1016	ND	0.17	74	81	9.0				40 - 140	30	
PCB-1221	ND	0.17							40 - 140	30	
PCB-1232	ND	0.17							40 - 140	30	
PCB-1242	ND	0.17							40 - 140	30	
PCB-1248	ND	0.17							40 - 140	30	
PCB-1254	ND	0.17							40 - 140	30	
PCB-1260	ND	0.17	82	99	18.8				40 - 140	30	
PCB-1262	ND	0.17							40 - 140	30	
PCB-1268	ND	0.17							40 - 140	30	
% DCBP (Surrogate Rec)	98	%	80	99	21.2				30 - 150	30	
% DCBP (Surrogate Rec) (Confirm	95	%	67	94	33.5				30 - 150	30	r
% TCMX (Surrogate Rec)	85	%	71	56	23.6				30 - 150	30	
% TCMX (Surrogate Rec) (Confirm	80	%	66	51	25.6				30 - 150	30	
Comment:											
A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.											
QA/QC Batch 657646 (mg/Kg), QC Sample No: CN11911 10X (CN11908, CN11918, CN11920)											
Polychlorinated Biphenyls											
PCB-1016	ND	0.17	84	73	14.0				40 - 140	30	
PCB-1221	ND	0.17							40 - 140	30	
PCB-1232	ND	0.17							40 - 140	30	
PCB-1242	ND	0.17							40 - 140	30	
PCB-1248	ND	0.17							40 - 140	30	

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
PCB-1254	ND	0.17							40 - 140	30	
PCB-1260	ND	0.17	101	89	12.6				40 - 140	30	
PCB-1262	ND	0.17							40 - 140	30	
PCB-1268	ND	0.17							40 - 140	30	
% DCBP (Surrogate Rec)	64	%	105	88	17.6				30 - 150	30	
% DCBP (Surrogate Rec) (Confirm	61	%	103	87	16.8				30 - 150	30	
% TCMX (Surrogate Rec)	51	%	89	73	19.8				30 - 150	30	
% TCMX (Surrogate Rec) (Confirm	51	%	87	74	16.1				30 - 150	30	

Comment:

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

QA/QC Batch 658157 (mg/Kg), QC Sample No: CN11923 10X (CN11923)

Polychlorinated Biphenyls

PCB-1016	ND	0.17	90	88	2.2				40 - 140	30	
PCB-1221	ND	0.17							40 - 140	30	
PCB-1232	ND	0.17							40 - 140	30	
PCB-1242	ND	0.17							40 - 140	30	
PCB-1248	ND	0.17							40 - 140	30	
PCB-1254	ND	0.17							40 - 140	30	
PCB-1260	ND	0.17	103	106	2.9				40 - 140	30	
PCB-1262	ND	0.17							40 - 140	30	
PCB-1268	ND	0.17							40 - 140	30	
% DCBP (Surrogate Rec)	91	%	104	119	13.5				30 - 150	30	
% DCBP (Surrogate Rec) (Confirm	101	%	108	123	13.0				30 - 150	30	
% TCMX (Surrogate Rec)	89	%	85	98	14.2				30 - 150	30	
% TCMX (Surrogate Rec) (Confirm	85	%	83	94	12.4				30 - 150	30	

Comment:

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

QA/QC Batch 657854 (mg/Kg), QC Sample No: CN11938 10X (CN11932, CN11933, CN11934, CN11935, CN11936, CN11937, CN11938, CN11939, CN11940)

Polychlorinated Biphenyls

PCB-1016	ND	0.17	97	89	8.6				40 - 140	30	
PCB-1221	ND	0.17							40 - 140	30	
PCB-1232	ND	0.17							40 - 140	30	
PCB-1242	ND	0.17							40 - 140	30	
PCB-1248	ND	0.17							40 - 140	30	
PCB-1254	ND	0.17							40 - 140	30	
PCB-1260	ND	0.17	110	101	8.5				40 - 140	30	
PCB-1262	ND	0.17							40 - 140	30	
PCB-1268	ND	0.17							40 - 140	30	
% DCBP (Surrogate Rec)	114	%	121	108	11.4				30 - 150	30	
% DCBP (Surrogate Rec) (Confirm	113	%	126	96	27.0				30 - 150	30	
% TCMX (Surrogate Rec)	91	%	104	89	15.5				30 - 150	30	
% TCMX (Surrogate Rec) (Confirm	94	%	101	72	33.5				30 - 150	30	r

Comment:

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

QA/QC Batch 657675 (mg/Kg), QC Sample No: CN12000 10X (CN11941)

Polychlorinated Biphenyls

PCB-1016	ND	0.17	71	69	2.9				40 - 140	30	
PCB-1221	ND	0.17							40 - 140	30	
PCB-1232	ND	0.17							40 - 140	30	
PCB-1242	ND	0.17							40 - 140	30	

QA/QC Data

SDG I.D.: GCN11908

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
PCB-1248	ND	0.17							40 - 140	30
PCB-1254	ND	0.17							40 - 140	30
PCB-1260	ND	0.17	82	82	0.0				40 - 140	30
PCB-1262	ND	0.17							40 - 140	30
PCB-1268	ND	0.17							40 - 140	30
% DCBP (Surrogate Rec)	78	%	89	72	21.1				30 - 150	30
% DCBP (Surrogate Rec) (Confirm	71	%	86	85	1.2				30 - 150	30
% TCMX (Surrogate Rec)	61	%	75	71	5.5				30 - 150	30
% TCMX (Surrogate Rec) (Confirm	61	%	78	73	6.6				30 - 150	30

Comment:

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

r = This parameter is outside laboratory RPD specified recovery limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference

Phyllis Shiller, Laboratory Director
January 04, 2023

Wednesday, January 04, 2023

Criteria: None

State: CT

Sample Criteria Exceedances Report

GCN11908 - TRC-PCBDAS

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CN11909	$PCB_SOXR_T	Total PCBs	CT / Requested PCB RL /	3800	540	1000	1000	ug/Kg
CN11909	$PCB_SOXR_T	PCB-1260	CT / Requested PCB RL /	3800	540	1000	1000	ug/Kg
CN11910	$PCB_SOXR_T	Total PCBs	CT / Requested PCB RL /	8000	970	1000	1000	ug/Kg
CN11910	$PCB_SOXR_T	PCB-1260	CT / Requested PCB RL /	8000	970	1000	1000	ug/Kg
CN11911	$PCB_SOXR_T	Total PCBs	CT / Requested PCB RL /	1700	560	1000	1000	ug/Kg
CN11911	$PCB_SOXR_T	PCB-1260	CT / Requested PCB RL /	1700	560	1000	1000	ug/Kg
CN11913	$PCB_SOXR_T	Total PCBs	CT / Requested PCB RL /	1300	720	1000	1000	ug/Kg
CN11913	$PCB_SOXR_T	PCB-1254	CT / Requested PCB RL /	1300	720	1000	1000	ug/Kg
CN11939	$PCB_SOXR_T	Total PCBs	CT / Requested PCB RL /	1900	440	1000	1000	ug/Kg
CN11939	$PCB_SOXR_T	PCB-1254	CT / Requested PCB RL /	1900	440	1000	1000	ug/Kg
CN11940	$PCB_SOXR_T	Total PCBs	CT / Requested PCB RL /	4700	480	1000	1000	ug/Kg
CN11940	$PCB_SOXR_T	PCB-1254	CT / Requested PCB RL /	4700	480	1000	1000	ug/Kg

REASONABLE CONFIDENCE PROTOCOL
LABORATORY ANALYSIS QA/QC CERTIFICATION FORM

Laboratory Name: Phoenix Environmental Labs, Inc. ***Client:*** TRC Environmental Corp.

Project Location: EAST HARTFORD BOE MCCARTIN S ***Project Number:***

Laboratory Sample ID(s): CN11908-CN11941 ***Sampling Date(s):*** 12/17/2022, 12/19/2022

List RCP Methods Used (e.g., 8260, 8270, et cetera) 8082

1	**For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP method-specific Reasonable Confidence Protocol documents?**	☑ Yes ☐ No
1A	**Were the method specified preservation and holding time requirements met?**	☑ Yes ☐ No
1B	***VPH and EPH methods only:*** **Was the VPH or EPH method conducted without significant modifications (see section 11.3 of respective RCP methods)**	☐ Yes ☐ No ☑ NA
2	**Were all samples received by the laboratory in a condition consistent with that described on the associated Chain-of-Custody document(s)?**	☑ Yes ☐ No
3	**Were samples received at an appropriate temperature (< 6 Degrees C)?**	☑ Yes ☐ No ☐ NA
4	**Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents acheived? See Section: PCB Narration.**	☐ Yes ☑ No
5	**a) Were reporting limits specified or referenced on the chain-of-custody?** **b) Were these reporting limits met?**	☐ Yes ☑ No ☑ Yes ☐ No
6	**For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?**	☑ Yes ☐ No
7	**Are project-specific matrix spikes and laboratory duplicates included in the data set?**	☐ Yes ☑ No

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or 1B is "No", the data package does not meet the requirements for "Reasonable Confidence". This form may not be altered and all questions must be answered.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.

Authorized Signature: Ethan Lee **Position:** Project Manager

Printed Name: Ethan Lee **Date:** Wednesday, January 04, 2023

Name of Laboratory Phoenix Environmental Labs, Inc.

This certification form is to be used for RCP methods only.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

NY # 11301

RCP Certification Report

January 04, 2023

SDG I.D.: GCN11908

PCB Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 657823 (Samples: CN11910, CN11911, CN11912, CN11913, CN11914, CN11916, CN11917, CN11919, CN11921, CN11922, CN11925, CN11926, CN11927, CN11928, CN11929, CN11930, CN11931): -----

The LCS/LCSD RPD exceeds the method criteria for one or more surrogates, therefore there may be variability in the reported result. (% DCBP (Surrogate Rec) (Confirmation))

QC Batch 657854 (Samples: CN11932, CN11933, CN11934, CN11935, CN11936, CN11937, CN11938, CN11939, CN11940): -----

The LCS/LCSD RPD exceeds the method criteria for one or more surrogates, therefore there may be variability in the reported result. (% TCMX (Surrogate Rec) (Confirmation))

Instrument:

AU-ECD1 12/28/22-1 Saadia Chudary, Chemist 12/28/22

CN11908 (5X), CN11918 (2X)

The initial calibration (PC1130AI) RSD for the compound list was less than 20% except for the following compounds: None.
The initial calibration (PC1130BI) RSD for the compound list was less than 20% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 15% except for the following compounds:None.

AU-ECD1 12/29/22-1 Saadia Chudary, Chemist 12/29/22

CN11910 (2X), CN11925 (2X), CN11927 (2X), CN11928 (5X), CN11931 (2X), CN11932 (5X), CN11934 (2X), CN11936 (2X), CN11937 (2X), CN11938 (2X)

The initial calibration (PC1130AI) RSD for the compound list was less than 20% except for the following compounds: None.
The initial calibration (PC1130BI) RSD for the compound list was less than 20% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 15% except for the following compounds:None.

AU-ECD1 12/30/22-1 Saadia Chudary, Chemist 12/30/22

CN11915 (2X), CN11924 (2X)

The initial calibration (PC1130AI) RSD for the compound list was less than 20% except for the following compounds: None.
The initial calibration (PC1130BI) RSD for the compound list was less than 20% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 15% except for the following compounds:None.

AU-ECD24 12/29/22-1 Saadia Chudary, Chemist 12/29/22

CN11930 (2X)

The initial calibration (PC1205AI) RSD for the compound list was less than 20% except for the following compounds: None.
The initial calibration (PC1205BI) RSD for the compound list was less than 20% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 15% except for the following compounds:None.

AU-ECD29 01/03/23-1 Saadia Chudary, Chemist 01/03/23

CN11923 (2X, 10X)

The initial calibration (PC1205AI) RSD for the compound list was less than 20% except for the following compounds: None.
The initial calibration (PC1205BI) RSD for the compound list was less than 20% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 15% except for the following compounds:None.

AU-ECD29 12/29/22-1 Saadia Chudary, Chemist 12/29/22

CN11913 (2X), CN11917 (2X), CN11926 (2X), CN11933 (2X), CN11939 (2X)

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

January 04, 2023

SDG I.D.: GCN11908

PCB Narration

The initial calibration (PC1205AI) RSD for the compound list was less than 20% except for the following compounds: None.
The initial calibration (PC1205BI) RSD for the compound list was less than 20% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 15% except for the following compounds:None.

AU-ECD29 12/30/22-1 Saadia Chudary, Chemist 12/30/22

CN11909 (2X)

The initial calibration (PC1205AI) RSD for the compound list was less than 20% except for the following compounds: None.
The initial calibration (PC1205BI) RSD for the compound list was less than 20% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 15% except for the following compounds:
Samples: CN11909
Preceding CC D30B003 - None.
Succeeding CC D30B008 - PCB 1016 -19%L (%)

AU-ECD48 12/28/22-1 Saadia Chudary, Chemist 12/28/22

CN11941 (2X)

The initial calibration (PC1201AI) RSD for the compound list was less than 20% except for the following compounds: None.
The initial calibration (PC1201BI) RSD for the compound list was less than 20% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 15% except for the following compounds:
Samples: CN11941
Preceding CC D28B019 - None.
Succeeding CC D28B032 - DCBP SURR -29%L (15%)

AU-ECD48 12/29/22-1 Saadia Chudary, Chemist 12/29/22

CN11912 (2X), CN11914 (2X)

The initial calibration (PC1201AI) RSD for the compound list was less than 20% except for the following compounds: None.
The initial calibration (PC1201BI) RSD for the compound list was less than 20% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 15% except for the following compounds:None.

AU-ECD5 12/29/22-1 Saadia Chudary, Chemist 12/29/22

CN11921 (1X), CN11922 (2X), CN11929 (2X), CN11940 (2X)

The initial calibration (PC1227AI) RSD for the compound list was less than 20% except for the following compounds: None.
The initial calibration (PC1227BI) RSD for the compound list was less than 20% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 15% except for the following compounds:
Samples: CN11921, CN11922, CN11929
Preceding CC D29B015 - DCBP SURR -51%L (15%), TCMX SURR -22%L (15%)
Succeeding CC D29B023 - TCMX SURR -19%L (15%)
Samples: CN11940
Preceding CC D29B023 - TCMX SURR -19%L (15%)
Succeeding CC D29B035 - TCMX SURR -21%L (15%)

AU-ECD7 12/29/22-1 Saadia Chudary, Chemist 12/29/22

CN11911 (5X), CN11916 (2X), CN11919 (5X), CN11920 (5X), CN11935 (2X)

The initial calibration (PC1228AI) RSD for the compound list was less than 20% except for the following compounds: None.
The initial calibration (PC1228BI) RSD for the compound list was less than 20% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 15% except for the following compounds:None.

QC (Batch Specific):

Batch 657646 (CN11911)

CN11908, CN11918, CN11920

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

NY # 11301

RCP Certification Report

January 04, 2023

SDG I.D.: GCN11908

PCB Narration

All LCS recoveries were within 40 - 140 with the following exceptions: None.
All LCSD recoveries were within 40 - 140 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.
A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

Batch 657675 (CN12000)

CN11941

All LCS recoveries were within 40 - 140 with the following exceptions: None.
All LCSD recoveries were within 40 - 140 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.
A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

Batch 657823 (CN11910)

CN11910, CN11911, CN11912, CN11913, CN11914, CN11916, CN11917, CN11919, CN11921, CN11922, CN11925, CN11926, CN11927, CN11928, CN11929, CN11930, CN11931

All LCS recoveries were within 40 - 140 with the following exceptions: None.
All LCSD recoveries were within 40 - 140 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: % DCBP (Surrogate Rec) (Confirmation)(33.5%)
A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

Batch 657854 (CN11938)

CN11932, CN11933, CN11934, CN11935, CN11936, CN11937, CN11938, CN11939, CN11940

All LCS recoveries were within 40 - 140 with the following exceptions: None.
All LCSD recoveries were within 40 - 140 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: % TCMX (Surrogate Rec) (Confirmation)(33.5%)
A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

Batch 657991 (CN11618)

CN11909, CN11915, CN11924

All LCS recoveries were within 40 - 140 with the following exceptions: None.
All LCSD recoveries were within 40 - 140 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.
A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

Batch 658157 (CN11923)

CN11923

All LCS recoveries were within 40 - 140 with the following exceptions: None.
All LCSD recoveries were within 40 - 140 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.
A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

Temperature Narration

The samples were received at 2.4C with cooling initiated.
(Note acceptance criteria for relevant matrices is above freezing up to 6°C)

2.4 cwx TP

TRC

21 GRIFFIN ROAD NORTH
WINDSOR, CONNECTICUT 06095
TELEPHONE (860) 298-9692
FAX (860) 298-6380

Edition: September 2007
Supersede Previous Edition

CHAIN OF CUSTODY

LAB ID #.

PROJECT NUMBER	PROJECT NAME	PARAMETERS	CONTAINERS	TURNAROUND TIME
522705	East Hartford BOE McCartin School 70 Canterbury Street East Hartford, CT			24hr / 48hr / X 3 day / 5 day

SIGNATURE	INSPECTOR(S)
	Hilton Hernandez

Lab ID	SAMPLE ID	DATE	TIME	TYPE COMP	TYPE GRAB	SAMPLE LOCATION	EPA 8082 (3540)	# of Amber Glass	# of Clear Glass	Matrix (X1= Solid, X2=)	Preservative (Cold)	MATERIALS & NOTES
11908	1	12/19/2022	13:12		X	Chimney	X		1	X	X	C1 - Grey chimney caulk
11909	2	12/17/2022	12:45		X	Room J	X		1	X	X	C2 - Tan Brittle tectum ceiling caulk
11910	3	12/17/2022	12:45		X	Room H	X		1	X	X	C2 - Tan Brittle tectum ceiling caulk
11911	4	12/17/2022	12:46		X	Room K	X		1	X	X	C2 - Tan Brittle tectum ceiling caulk
11912	5	12/19/2022	13:25		X	A side E-162 window	X		1	X	X	C3 - Grey rubbery caulk
11913	6	12/19/2022	15:17		X	A side	X		1	X	X	C4 - White sticky soffit caulking
11914	7	12/19/2022	15:17		X	B side	X		1	X	X	C4 - White sticky soffit caulking
11915	8	12/19/2022	15:17		X	D side	X		1	X	X	C4 - White sticky soffit caulking
11916	9	12/19/2022	15:25		X	Front entrance 1959	X		1	X	X	C5 - White caulk
11917	10	12/19/2022	13:35		X	Door outside room L	X		1	X	X	DC1 - Tan brittle caulk
11918	11	12/17/2022	14:07		X	Entry outside room D	X		1	X	X	DC2 - Grey rubbery caulk

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
	12/27/22				
(Printed) Hilton Hernandez	Time: 0955	(Printed) Monica Pelletier	(Printed)	Time:	(Printed)

Remarks: DAS rates apply. Please send results to hhernandez & mkostruba@trccompanies.com
Report to:
Include CT DPH RCP Report

Condition upon Receipt:

2.4°C

TRC

21 GRIFFIN ROAD NORTH
WINDSOR, CONNECTICUT 06095
TELEPHONE (860) 298-9692
FAX (860) 298-6380

CHAIN OF CUSTODY

Edition: September 2007
Supersede Previous Edition

LAB ID #.

PROJECT NUMBER	PROJECT NAME	PARAMETERS	CONTAINERS	TURNAROUND TIME
522705	East Hartford BOE McCartin School 70 Canterbury Street East Hartford, CT			24hr: ; 48hr: ; 3 day: X ; 5 day:
SIGNATURE: [signature]	INSPECTOR(S): Hilton Hernandez			

Lab ID	SAMPLE ID	DATE	TIME	COMP	GRAB	SAMPLE LOCATION	EPA 8082 (3540)	# of Amber Glass	# of Clear Glass	Matrix (X1= Solid, X2=)	Preservative (Cold)	MATERIALS & NOTES
11919	12	12/17/2022	13:28		X	Daycare front entry	X		1	X	X	DC3 - Red brittle caulk
11920	13	12/17/2022	13:45		X	B/C joint	X		1	X	X	DC3 - Red brittle caulk
11921	14	12/19/2022	14:32		X	A/B daycare exit door	X		1	X	X	DC4 - Grey rubbery caulk
11922	15	12/19/2022	09:07		X	Kitchen door between X and U	X		1	X	X	DWG1 - Grey door window glaze
11923	16	12/19/2022	09:06		X	Southeast entrance	X		1	X	X	DWG2 - Grey sticky door/window system glazing
11924	17	12/19/2022	10:44		X	Q door	X		1	X	X	DWG3 - Off White door window glaze
11925	18	12/19/2022	11:16		X	AA door main hall 2	X		1	X	X	DWG3 - Off White door window glaze
11926	19	12/19/2022	11:50		X	BB door	X		1	X	X	DWG3 - Off White door window glaze
11927	20	12/17/2022	14:46		X	M2 entry	X		1	X	X	DWG4 - Sticky black window glaze
11928	21	12/19/2022	12:06		X	Room AA	X		1	X	X	WC1 - Black interior/exterior window caulk
11929	22	12/19/2022	12:06		X	Room N	X		1	X	X	WC1 - Black interior/exterior window caulk

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
[signature]	12/27/22	[signature]			
(Printed) Hilton Hernandez	Time: 0959	(Printed) Monica Pellerin	(Printed)	Time:	(Printed)

Remarks: DAS rates apply. Please send results to hhernandez & mkostruba@trccompanies.com
Report to:
Include CT DPH RCP Report

Condition upon Receipt:

Page 2 of 4

2.4 owc ir

TRC

21 GRIFFIN ROAD NORTH
WINDSOR, CONNECTICUT 06095
TELEPHONE (860) 298-9692
FAX (860) 298-6380

Edition: September 2007
Supersede Previous Edition

CHAIN OF CUSTODY

LAB ID #.

PROJECT NUMBER	PROJECT NAME	PARAMETERS	CONTAINERS	TURNAROUND TIME
522705	East Hartford BOE McCartin School 70 Canterbury Street East Hartford, CT			24hr ☐ 48hr X 3 day ☐ 5 day

SIGNATURE	INSPECTOR(S)
	Hilton Hernandez

Lab ID	SAMPLE ID	DATE	TIME	TYPE COMP	TYPE GRAB	SAMPLE LOCATION	EPA 8082 (3540)	# of Amber Glass	# of Clear Glass	Matrix (X1= Solid, X2=)	Preservative (Cold)	MATERIALS & NOTES
11930	23	12/19/2022	12:06		X	Room GG	X		1	X	X	WC1 - Black interior/exterior window caulk
11931	24	12/19/2022	12:47		X	Room U south	X		1	X	X	WC2 - Tan brittle window caulk
11932	25	12/19/2022	12:47		X	Room U south	X		1	X	X	WC2 - Tan brittle window caulk
11933	26	12/19/2022	12:47		X	Room U south	X		1	X	X	WC2 - Tan brittle window caulk
11934	27	12/19/2022	12:45		X	U exterior window	X		1	X	X	WG1 - Grey brittle window glaze
11935	28	12/19/2022	13:01		X	Ext boiler room V	X		1	X	X	WG1 - Grey brittle window glaze
11936	29	12/19/2022	13:50		X	Exterior 1959 west	X		1	X	X	WSC1 - Light grey brittle caulk 1959
11937	30	12/19/2022	13:52		X	Exterior 1959 northeast	X		1	X	X	WSC1 - Light grey brittle caulk 1959
11938	31	12/19/2022	13:52		X	Exterior 1959 southeast	X		1	X	X	WSC1 - Light grey brittle caulk 1959
11939	32	12/17/2022	14:00		X	1962 Northwest	X		1	X	X	WSC2 - Dark grey brittle caulk 1962
11940	33	12/17/2022	14:00		X	1962 Northeast	X		1	X	X	WSC2 - Dark grey brittle caulk 1962

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
	12/27/22				
(Printed) Hilton Hernandez	Time: 0959	(Printed) Monica Pellerin	(Printed)	Time:	(Printed)

Remarks: DAS rates apply. Please send results to hhernandez & mkostruba@trccompanies.com
Report to:
Include CT DPH RCP Report

Condition upon Receipt:

2.4 WIC R

TRC

Edition: September 2007
Supersede Previous Edition

21 GRIFFIN ROAD NORTH
WINDSOR, CONNECTICUT 06095
TELEPHONE (860) 298-9692
FAX (860) 298-6380

CHAIN OF CUSTODY

LAB ID #.

PROJECT NUMBER	PROJECT NAME	PARAMETERS	CONTAINERS	TURNAROUND TIME
522705	East Hartford BOE McCartin School 70 Canterbury Street East Hartford, CT			24hr ☐ 48hr X 3 day ☐ 5 day
SIGNATURE	INSPECTOR(S) Hilton Hernandez			

Lab ID	SAMPLE ID	DATE	TIME	TYPE COMP	TYPE GRAB	SAMPLE LOCATION	EPA 8082 (3540)	# of Amber Glass	# of Clear Glass	Matrix (X1= Solid, X2=)	Preservative (Cold)	MATERIALS & NOTES
11941	34	12/17/2022	14:01		X	1962 east	X		1	X	X	WSC2 - Dark grey brittle caulk 1962

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
(Printed) Hilton Hernandez	Time: 0959	(Printed) Monica Pella	(Printed)	Time:	(Printed)

Remarks: DAS rates apply. Please send results to hhernandez & mkostruba@trccompanies.com
Report to:
Include CT DPH RCP Report

Condition upon Receipt:

PHOENIX
Environmental Laboratories, Inc.

Monday, January 23, 2023

Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Project ID: 522705.0000
SDG ID: GCN25408
Sample ID#s: CN25408 - CN25410

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #M-CT007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Sample Id Cross Reference

January 23, 2023

SDG I.D.: GCN25408

Project ID: 522705.0000

Client Id	Lab Id	Matrix
1-DC1	CN25408	BULK
1-DC5	CN25409	BULK
1-DC5	CN25410	BULK

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

January 23, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	BULK	Collected by:		01/18/23	
Location Code:	TRC-PCBDAS	Received by:	CP	01/18/23	16:45
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GCN25408
Phoenix ID: CN25408

Project ID: 522705.0000
Client ID: 1-DC1

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Percent Solid	98		%		01/18/23	AL	SW846-%Solid
Extraction for PCB	Completed				01/18/23	L	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.75	mg/Kg	2	01/19/23	SC	SW8082A
PCB-1221	ND	0.75	mg/Kg	2	01/19/23	SC	SW8082A
PCB-1232	ND	0.75	mg/Kg	2	01/19/23	SC	SW8082A
PCB-1242	ND	0.75	mg/Kg	2	01/19/23	SC	SW8082A
PCB-1248	ND	0.75	mg/Kg	2	01/19/23	SC	SW8082A
PCB-1254	1.5	0.75	mg/Kg	2	01/19/23	SC	SW8082A
PCB-1260	ND	0.75	mg/Kg	2	01/19/23	SC	SW8082A
PCB-1262	ND	0.75	mg/Kg	2	01/19/23	SC	SW8082A
PCB-1268	ND	0.75	mg/Kg	2	01/19/23	SC	SW8082A
Total PCBs	1.5	0.75	mg/Kg	2	01/19/23	SC	SW8082A
QA/QC Surrogates							
% DCBP	73		%	2	01/19/23	SC	30 - 150 %
% DCBP (Confirmation)	56		%	2	01/19/23	SC	30 - 150 %
% TCMX	64		%	2	01/19/23	SC	30 - 150 %
% TCMX (Confirmation)	59		%	2	01/19/23	SC	30 - 150 %

Project ID: 522705.0000
Client ID: 1-DC1

Phoenix I.D.: CN25408

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
January 23, 2023
Reviewed and Released by: Ethan Lee, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

January 23, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	BULK	Collected by:		01/18/23	
Location Code:	TRC-PCBDAS	Received by:	CP	01/18/23	16:45
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GCN25408
Phoenix ID: CN25409

Project ID: 522705.0000
Client ID: 1-DC5

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Percent Solid	100		%		01/18/23	AL	SW846-%Solid
Extraction for PCB	Completed				01/18/23	L	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.37	mg/Kg	2	01/19/23	SC	SW8082A
PCB-1221	ND	0.37	mg/Kg	2	01/19/23	SC	SW8082A
PCB-1232	ND	0.37	mg/Kg	2	01/19/23	SC	SW8082A
PCB-1242	ND	0.37	mg/Kg	2	01/19/23	SC	SW8082A
PCB-1248	ND	0.37	mg/Kg	2	01/19/23	SC	SW8082A
PCB-1254	0.82	0.37	mg/Kg	2	01/19/23	SC	SW8082A
PCB-1260	ND	0.37	mg/Kg	2	01/19/23	SC	SW8082A
PCB-1262	ND	0.37	mg/Kg	2	01/19/23	SC	SW8082A
PCB-1268	ND	0.37	mg/Kg	2	01/19/23	SC	SW8082A
Total PCBs	0.82	0.37	mg/Kg	2	01/19/23	SC	SW8082A
QA/QC Surrogates							
% DCBP	69		%	2	01/19/23	SC	30 - 150 %
% DCBP (Confirmation)	55		%	2	01/19/23	SC	30 - 150 %
% TCMX	65		%	2	01/19/23	SC	30 - 150 %
% TCMX (Confirmation)	58		%	2	01/19/23	SC	30 - 150 %

Project ID: 522705.0000
Client ID: 1-DC5

Phoenix I.D.: CN25409

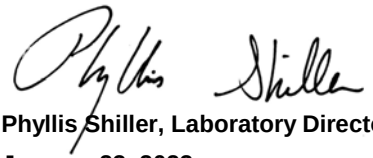
Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director
January 23, 2023
Reviewed and Released by: Ethan Lee, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

January 23, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	BULK	Collected by:		01/18/23	
Location Code:	TRC-PCBDAS	Received by:	CP	01/18/23	16:45
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GCN25408
Phoenix ID: CN25410

Project ID: 522705.0000
Client ID: 1-DC5

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Percent Solid	98		%		01/18/23	AL	SW846-%Solid
Extraction for PCB	Completed				01/18/23	L	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.44	mg/Kg	1	01/19/23	SC	SW8082A
PCB-1221	ND	0.44	mg/Kg	1	01/19/23	SC	SW8082A
PCB-1232	ND	0.44	mg/Kg	1	01/19/23	SC	SW8082A
PCB-1242	ND	0.44	mg/Kg	1	01/19/23	SC	SW8082A
PCB-1248	ND	0.44	mg/Kg	1	01/19/23	SC	SW8082A
PCB-1254	ND	0.44	mg/Kg	1	01/19/23	SC	SW8082A
PCB-1260	ND	0.44	mg/Kg	1	01/19/23	SC	SW8082A
PCB-1262	ND	0.44	mg/Kg	1	01/19/23	SC	SW8082A
PCB-1268	ND	0.44	mg/Kg	1	01/19/23	SC	SW8082A
Total PCBs	ND	0.44	mg/Kg	1	01/19/23	SC	SW8082A
QA/QC Surrogates							
% DCBP	48		%	1	01/19/23	SC	30 - 150 %
% DCBP (Confirmation)	47		%	1	01/19/23	SC	30 - 150 %
% TCMX	45		%	1	01/19/23	SC	30 - 150 %
% TCMX (Confirmation)	51		%	1	01/19/23	SC	30 - 150 %

Project ID: 522705.0000
Client ID: 1-DC5

Phoenix I.D.: CN25410

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
January 23, 2023
Reviewed and Released by: Ethan Lee, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

January 23, 2023

QA/QC Data

SDG I.D.: GCN25408

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 660497 (mg/Kg), QC Sample No: CN25294 10X (CN25408, CN25409, CN25410)										
Polychlorinated Biphenyls - Bulk										
PCB-1016	ND	0.17	71	68	4.3				40 - 140	30
PCB-1221	ND	0.17							40 - 140	30
PCB-1232	ND	0.17							40 - 140	30
PCB-1242	ND	0.17							40 - 140	30
PCB-1248	ND	0.17							40 - 140	30
PCB-1254	ND	0.17							40 - 140	30
PCB-1260	ND	0.17	64	68	6.1				40 - 140	30
PCB-1262	ND	0.17							40 - 140	30
PCB-1268	ND	0.17							40 - 140	30
% DCBP (Surrogate Rec)	80	%	91	94	3.2				30 - 150	30
% DCBP (Surrogate Rec) (Confirm	80	%	79	83	4.9				30 - 150	30
% TCMX (Surrogate Rec)	80	%	81	77	5.1				30 - 150	30
% TCMX (Surrogate Rec) (Confirm	78	%	74	71	4.1				30 - 150	30

Comment:

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference

Phyllis Shiller, Laboratory Director
January 23, 2023

Monday, January 23, 2023

Criteria: None

State: CT

Sample Criteria Exceedances Report

GCN25408 - TRC-PCBDAS

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CN25408	$PCB_SOXR_T	Total PCBs	CT / Requested PCB RL /	1500	750	1000	1000	ug/Kg
CN25408	$PCB_SOXR_T	PCB-1254	CT / Requested PCB RL /	1500	750	1000	1000	ug/Kg

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

REASONABLE CONFIDENCE PROTOCOL
LABORATORY ANALYSIS QA/QC CERTIFICATION FORM

Laboratory Name: Phoenix Environmental Labs, Inc. ***Client:*** TRC Environmental Corp.

Project Location: 522705.0000 ***Project Number:***

Laboratory Sample ID(s): CN25408-CN25410 ***Sampling Date(s):*** 1/18/2023

List RCP Methods Used (e.g., 8260, 8270, et cetera) 8082

1	**For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP method-specific Reasonable Confidence Protocol documents?**	☑ Yes ☐ No
1A	**Were the method specified preservation and holding time requirements met?**	☑ Yes ☐ No
1B	***VPH and EPH methods only:*** **Was the VPH or EPH method conducted without significant modifications (see section 11.3 of respective RCP methods)**	☐ Yes ☐ No ☑ NA
2	**Were all samples received by the laboratory in a condition consistent with that described on the associated Chain-of-Custody document(s)?**	☑ Yes ☐ No
3	**Were samples received at an appropriate temperature (< 6 Degrees C)?**	☑ Yes ☐ No ☐ NA
4	**Were all QA/QC performance criteria specified in the CTDEP Reasonable Confidence Protocol documents achieved?**	☑ Yes ☐ No
5	**a) Were reporting limits specified or referenced on the chain-of-custody?** **b) Were these reporting limits met?**	☐ Yes ☑ No ☑ Yes ☐ No
6	**For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?**	☑ Yes ☐ No
7	**Are project-specific matrix spikes and laboratory duplicates included in the data set?**	☐ Yes ☑ No

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or 1B is "No", the data package does not meet the requirements for "Reasonable Confidence". This form may not be altered and all questions must be answered.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.

Authorized Signature: Ethan Lee **Position:** Project Manager

Printed Name: Ethan Lee **Date:** Monday, January 23, 2023

Name of Laboratory Phoenix Environmental Labs, Inc.

This certification form is to be used for RCP methods only.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

January 23, 2023

SDG I.D.: GCN25408

PCB Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument:

AU-ECD1 01/19/23-1 Saadia Chudary, Chemist 01/19/23

CN25408 (2X), CN25409 (2X), CN25410 (1X)

The initial calibration (PC1130AI) RSD for the compound list was less than 20% except for the following compounds: None.
The initial calibration (PC1130BI) RSD for the compound list was less than 20% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 15% except for the following compounds:None.

QC (Batch Specific):

Batch 660497 (CN25294)

CN25408, CN25409, CN25410

All LCS recoveries were within 40 - 140 with the following exceptions: None.
All LCSD recoveries were within 40 - 140 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.
A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

Temperature Narration

The samples were received at 1.5C with cooling initiated.
(Note acceptance criteria for relevant matrices is above freezing up to 6°C)

DAS Rates Apply

Cooler: Yes ✓ No ☐
Coolant: WPK ☐ ICE ✓ No ☐

PHOENIX
Environmental Laboratories, Inc.

CHAIN OF CUSTODY RECORD

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email Makrina Nolan: makrina@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-1102

Temp 1.5 °C Pg of

Data Delivery/Contact Options:
☐ Fax:
☒ Phone: 860-817-2413
☒ Email: MKostuba@trccompanies.com

Customer: TRC
Address: 21 Griffin Rd North
Windsor, CT, 06095

Project: 522705.0000
Report to: Mike Kostuba
Invoice to: Mike Lesiuk
QUOTE #

Project P.O:

This section MUST be completed with Bottle Quantities.

Client Sample - Information - Identification

Sampler's Signature: [signature] Date: 1/18/23

Matrix Code:
DW=Drinking Water GW=Ground Water SW=Surface Water WW=Waste Water
RW=Raw Water SE=Sediment SL=Sludge S=Soil SD=Solid W=Wipe OIL=Oil
B=Bulk L=Liquid X = caulk (Other)

Analysis Request: 4042 / 8340

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	MS/MSD*	GL Amber 8 oz. [ ] H3PO4 [ ] NAHSO4	Soil VOA Vials [ ] H3PO4 [ ] methanol [ ] H2O	GL Soil container (4) oz	GL Soil container ( ) oz	40 ml VOA Vial [ ] As is [ ] HCL	GL Amber 1000ml [ ] As is [ ] H2SO4	PL As is [ ] 250ml [ ] 500ml [ ] 1000ml	PL H2SO4 [ ] 250ml [ ] 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle w/tho	Bacteria Bottle as is
~~1-DC1~~	1-DC-1	X	1/18/23		X			2 5 4 0 8				1					
~~2-DC3~~	1-DC-3				X			2 5 4 0 9				1					
~~3-DC5~~	1-DC-5				X			2 5 4 1 0				1					

Relinquished by:	Accepted by:	Date:	Time:
[signature]	[signature]	1/18/23	1553
[signature]	[signature]	1/18/23	1645

Comments, Special Requirements or Regulations:

*MS/MSD are considered site samples and will be billed as such in accordance with the prices quoted.

Turnaround Time:
☐ 1 Day*
☑ 2 Days*
☐ 3 Days*
☐ Standard
☐ Other
* SURCHARGE APPLIES

RI
☐ (Residential) Direct Exposure
☐ (Comm/Industrial) Direct Exposure
☐ GA Leachability
☐ GB Leachability
☐ GA-GW Objectives
☐ GB-GW Objectives

CT
☑ RCP Cert
☐ GW Protection
☐ SW Protection
☐ GA Mobility
☐ GB Mobility
☐ Residential DEC
☐ I/C DEC
☐ Other

MA
☐ MCP Certification
☐ GW-1 ☐ MWRA eSMART
☐ GW-2 ☐ S-1 10% CALC
☐ GW-3
☐ S-1 GW-1 ☐ S-1 GW-2 ☐ S-1 GW-3
☐ S-2 GW-1 ☐ S-2 GW-2 ☐ S-2 GW-3
☐ S-3 GW-1 ☐ S-3 GW-2 ☐ S-3 GW-3
☐ SW Protection

State where samples were collected: CT

Data Format
☐ Excel
☐ PDF
☐ GIS/Key
☐ EQuIS
☐ Other

Data Package
☐ Tier II Checklist
☐ Full Data Package*
☒ Phoenix Std Report
☐ Other
* SURCHARGE APPLIES

PEL-126 REV. 03/22

PHOENIX
Environmental Laboratories, Inc.

Monday, January 23, 2023

Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Project ID: **CRDA-MCCARTIN SCHOOL**
SDG ID: **GCN25411**
Sample ID#s: **CN25411 - CN25418**

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #M-CT007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Sample Id Cross Reference

January 23, 2023

SDG I.D.: GCN25411

Project ID: CRDA-MCCARTIN SCHOOL

Client Id	Lab Id	Matrix
1	CN25411	CAULK
2	CN25412	CAULK
3	CN25413	CAULK
4	CN25414	CAULK
5	CN25415	CAULK
6	CN25416	CAULK
7	CN25417	CAULK
8	CN25418	CAULK

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

January 23, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	CAULK	Collected by:		01/14/23	11:56
Location Code:	TRC-PCBDAS	Received by:	CP	01/18/23	16:45
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705.0000.0000				

Laboratory Data

SDG ID: GCN25411
Phoenix ID: CN25411

Project ID: CRDA-MCCARTIN SCHOOL
Client ID: 1

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Caulk Extraction for PCB	Completed				01/18/23	L	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.51	mg/Kg	2	01/19/23	SC	SW8082A
PCB-1221	ND	0.51	mg/Kg	2	01/19/23	SC	SW8082A
PCB-1232	ND	0.51	mg/Kg	2	01/19/23	SC	SW8082A
PCB-1242	ND	0.51	mg/Kg	2	01/19/23	SC	SW8082A
PCB-1248	ND	0.51	mg/Kg	2	01/19/23	SC	SW8082A
PCB-1254	1.1	0.51	mg/Kg	2	01/19/23	SC	SW8082A
PCB-1260	ND	0.51	mg/Kg	2	01/19/23	SC	SW8082A
PCB-1262	ND	0.51	mg/Kg	2	01/19/23	SC	SW8082A
PCB-1268	ND	0.51	mg/Kg	2	01/19/23	SC	SW8082A
Total PCBs	1.1	0.51	mg/Kg	2	01/19/23	SC	SW8082A
QA/QC Surrogates							
% DCBP	76		%	2	01/19/23	SC	30 - 150 %
% DCBP (Confirmation)	57		%	2	01/19/23	SC	30 - 150 %
% TCMX	56		%	2	01/19/23	SC	30 - 150 %
% TCMX (Confirmation)	54		%	2	01/19/23	SC	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

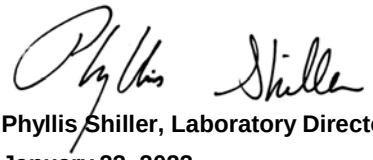
RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director
January 23, 2023
Reviewed and Released by: Ethan Lee, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

January 23, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	CAULK	Collected by:		01/14/23	11:57
Location Code:	TRC-PCBDAS	Received by:	CP	01/18/23	16:45
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705.0000.0000				

Laboratory Data

SDG ID: GCN25411
Phoenix ID: CN25412

Project ID: CRDA-MCCARTIN SCHOOL
Client ID: 2

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Caulk Extraction for PCB	Completed				01/18/23	L	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.76	mg/Kg	2	01/19/23	SC	SW8082A
PCB-1221	ND	0.76	mg/Kg	2	01/19/23	SC	SW8082A
PCB-1232	ND	0.76	mg/Kg	2	01/19/23	SC	SW8082A
PCB-1242	ND	0.76	mg/Kg	2	01/19/23	SC	SW8082A
PCB-1248	ND	0.76	mg/Kg	2	01/19/23	SC	SW8082A
PCB-1254	ND	0.76	mg/Kg	2	01/19/23	SC	SW8082A
PCB-1260	ND	0.76	mg/Kg	2	01/19/23	SC	SW8082A
PCB-1262	ND	0.76	mg/Kg	2	01/19/23	SC	SW8082A
PCB-1268	ND	0.76	mg/Kg	2	01/19/23	SC	SW8082A
Total PCBs	ND	0.76	mg/Kg	2	01/19/23	SC	SW8082A
QA/QC Surrogates							
% DCBP	71		%	2	01/19/23	SC	30 - 150 %
% DCBP (Confirmation)	58		%	2	01/19/23	SC	30 - 150 %
% TCMX	53		%	2	01/19/23	SC	30 - 150 %
% TCMX (Confirmation)	51		%	2	01/19/23	SC	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

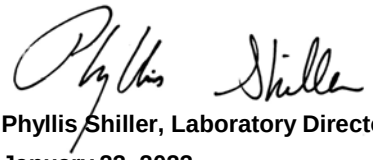
RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director
January 23, 2023
Reviewed and Released by: Ethan Lee, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

January 23, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	CAULK	Collected by:		01/14/23	11:58
Location Code:	TRC-PCBDAS	Received by:	CP	01/18/23	16:45
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705.0000.0000				

Laboratory Data

SDG ID: GCN25411
Phoenix ID: CN25413

Project ID: CRDA-MCCARTIN SCHOOL
Client ID: 3

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Caulk Extraction for PCB	Completed				01/18/23	L	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.72	mg/Kg	2	01/19/23	SC	SW8082A
PCB-1221	ND	0.72	mg/Kg	2	01/19/23	SC	SW8082A
PCB-1232	ND	0.72	mg/Kg	2	01/19/23	SC	SW8082A
PCB-1242	ND	0.72	mg/Kg	2	01/19/23	SC	SW8082A
PCB-1248	ND	0.72	mg/Kg	2	01/19/23	SC	SW8082A
PCB-1254	ND	0.72	mg/Kg	2	01/19/23	SC	SW8082A
PCB-1260	ND	0.72	mg/Kg	2	01/19/23	SC	SW8082A
PCB-1262	ND	0.72	mg/Kg	2	01/19/23	SC	SW8082A
PCB-1268	ND	0.72	mg/Kg	2	01/19/23	SC	SW8082A
Total PCBs	ND	0.72	mg/Kg	2	01/19/23	SC	SW8082A
QA/QC Surrogates							
% DCBP	69		%	2	01/19/23	SC	30 - 150 %
% DCBP (Confirmation)	57		%	2	01/19/23	SC	30 - 150 %
% TCMX	50		%	2	01/19/23	SC	30 - 150 %
% TCMX (Confirmation)	50		%	2	01/19/23	SC	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

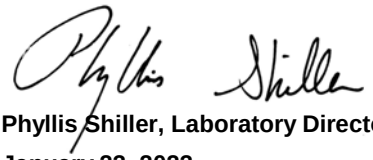
RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director
January 23, 2023
Reviewed and Released by: Ethan Lee, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

January 23, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	CAULK	Collected by:		01/14/23	12:02
Location Code:	TRC-PCBDAS	Received by:	CP	01/18/23	16:45
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705.0000.0000				

Laboratory Data

SDG ID: GCN25411
Phoenix ID: CN25414

Project ID: CRDA-MCCARTIN SCHOOL
Client ID: 4

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Caulk Extraction for PCB	Completed				01/18/23	L	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.75	mg/Kg	2	01/19/23	SC	SW8082A
PCB-1221	ND	0.75	mg/Kg	2	01/19/23	SC	SW8082A
PCB-1232	ND	0.75	mg/Kg	2	01/19/23	SC	SW8082A
PCB-1242	ND	0.75	mg/Kg	2	01/19/23	SC	SW8082A
PCB-1248	ND	0.75	mg/Kg	2	01/19/23	SC	SW8082A
PCB-1254	ND	0.75	mg/Kg	2	01/19/23	SC	SW8082A
PCB-1260	ND	0.75	mg/Kg	2	01/19/23	SC	SW8082A
PCB-1262	ND	0.75	mg/Kg	2	01/19/23	SC	SW8082A
PCB-1268	ND	0.75	mg/Kg	2	01/19/23	SC	SW8082A
Total PCBs	ND	0.75	mg/Kg	2	01/19/23	SC	SW8082A
QA/QC Surrogates							
% DCBP	71		%	2	01/19/23	SC	30 - 150 %
% DCBP (Confirmation)	54		%	2	01/19/23	SC	30 - 150 %
% TCMX	48		%	2	01/19/23	SC	30 - 150 %
% TCMX (Confirmation)	48		%	2	01/19/23	SC	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

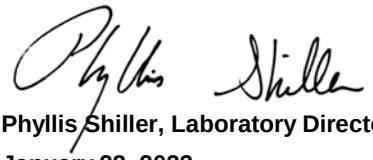
RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director
January 23, 2023
Reviewed and Released by: Ethan Lee, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

January 23, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	CAULK	Collected by:		01/14/23	12:04
Location Code:	TRC-PCBDAS	Received by:	CP	01/18/23	16:45
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705.0000.0000				

Laboratory Data

SDG ID: GCN25411
Phoenix ID: CN25415

Project ID: CRDA-MCCARTIN SCHOOL
Client ID: 5

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Caulk Extraction for PCB	Completed				01/18/23	L	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.93	mg/Kg	2	01/19/23	SC	SW8082A
PCB-1221	ND	0.93	mg/Kg	2	01/19/23	SC	SW8082A
PCB-1232	ND	0.93	mg/Kg	2	01/19/23	SC	SW8082A
PCB-1242	ND	0.93	mg/Kg	2	01/19/23	SC	SW8082A
PCB-1248	ND	0.93	mg/Kg	2	01/19/23	SC	SW8082A
PCB-1254	ND	0.93	mg/Kg	2	01/19/23	SC	SW8082A
PCB-1260	ND	0.93	mg/Kg	2	01/19/23	SC	SW8082A
PCB-1262	ND	0.93	mg/Kg	2	01/19/23	SC	SW8082A
PCB-1268	ND	0.93	mg/Kg	2	01/19/23	SC	SW8082A
Total PCBs	ND	0.93	mg/Kg	2	01/19/23	SC	SW8082A
QA/QC Surrogates							
% DCBP	65		%	2	01/19/23	SC	30 - 150 %
% DCBP (Confirmation)	54		%	2	01/19/23	SC	30 - 150 %
% TCMX	41		%	2	01/19/23	SC	30 - 150 %
% TCMX (Confirmation)	43		%	2	01/19/23	SC	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

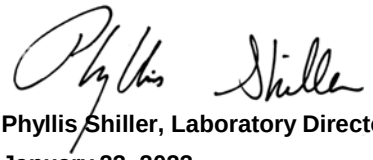
RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director
January 23, 2023
Reviewed and Released by: Ethan Lee, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

January 23, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	CAULK	Collected by:		01/14/23	12:07
Location Code:	TRC-PCBDAS	Received by:	CP	01/18/23	16:45
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705.0000.0000				

Laboratory Data

SDG ID: GCN25411
Phoenix ID: CN25416

Project ID: CRDA-MCCARTIN SCHOOL
Client ID: 6

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Caulk Extraction for PCB	Completed				01/18/23	L	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.83	mg/Kg	5	01/20/23	SC	SW8082A
PCB-1221	ND	0.83	mg/Kg	5	01/20/23	SC	SW8082A
PCB-1232	ND	0.83	mg/Kg	5	01/20/23	SC	SW8082A
PCB-1242	ND	0.83	mg/Kg	5	01/20/23	SC	SW8082A
PCB-1248	ND	0.83	mg/Kg	5	01/20/23	SC	SW8082A
PCB-1254	3.2	0.83	mg/Kg	5	01/20/23	SC	SW8082A
PCB-1260	ND	0.83	mg/Kg	5	01/20/23	SC	SW8082A
PCB-1262	ND	0.83	mg/Kg	5	01/20/23	SC	SW8082A
PCB-1268	ND	0.83	mg/Kg	5	01/20/23	SC	SW8082A
Total PCBs	3.2	0.83	mg/Kg	5	01/20/23	SC	SW8082A
QA/QC Surrogates							
% DCBP	72		%	5	01/20/23	SC	30 - 150 %
% DCBP (Confirmation)	78		%	5	01/20/23	SC	30 - 150 %
% TCMX	61		%	5	01/20/23	SC	30 - 150 %
% TCMX (Confirmation)	57		%	5	01/20/23	SC	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

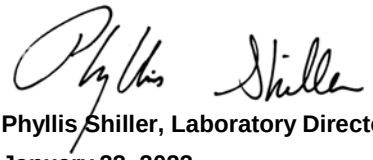
RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director
January 23, 2023
Reviewed and Released by: Ethan Lee, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

January 23, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	CAULK	Collected by:		01/14/23	12:08
Location Code:	TRC-PCBDAS	Received by:	CP	01/18/23	16:45
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705.0000.0000				

Laboratory Data

SDG ID: GCN25411
Phoenix ID: CN25417

Project ID: CRDA-MCCARTIN SCHOOL
Client ID: 7

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Caulk Extraction for PCB	Completed				01/18/23	L	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.76	mg/Kg	5	01/20/23	SC	SW8082A
PCB-1221	ND	0.76	mg/Kg	5	01/20/23	SC	SW8082A
PCB-1232	ND	0.76	mg/Kg	5	01/20/23	SC	SW8082A
PCB-1242	ND	0.76	mg/Kg	5	01/20/23	SC	SW8082A
PCB-1248	ND	0.76	mg/Kg	5	01/20/23	SC	SW8082A
PCB-1254	ND	0.76	mg/Kg	5	01/20/23	SC	SW8082A
PCB-1260	ND	0.76	mg/Kg	5	01/20/23	SC	SW8082A
PCB-1262	ND	0.76	mg/Kg	5	01/20/23	SC	SW8082A
PCB-1268	ND	0.76	mg/Kg	5	01/20/23	SC	SW8082A
Total PCBs	ND	0.76	mg/Kg	5	01/20/23	SC	SW8082A
QA/QC Surrogates							
% DCBP	53		%	5	01/20/23	SC	30 - 150 %
% DCBP (Confirmation)	72		%	5	01/20/23	SC	30 - 150 %
% TCMX	51		%	5	01/20/23	SC	30 - 150 %
% TCMX (Confirmation)	47		%	5	01/20/23	SC	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

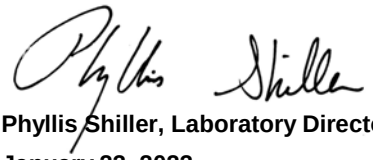
RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director
January 23, 2023
Reviewed and Released by: Ethan Lee, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

January 23, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	CAULK	Collected by:		01/14/23	12:09
Location Code:	TRC-PCBDAS	Received by:	CP	01/18/23	16:45
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705.0000.0000				

Laboratory Data

SDG ID: GCN25411
Phoenix ID: CN25418

Project ID: CRDA-MCCARTIN SCHOOL
Client ID: 8

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Caulk Extraction for PCB	Completed				01/18/23	L	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.48	mg/Kg	2	01/20/23	SC	SW8082A
PCB-1221	ND	0.48	mg/Kg	2	01/20/23	SC	SW8082A
PCB-1232	ND	0.48	mg/Kg	2	01/20/23	SC	SW8082A
PCB-1242	ND	0.48	mg/Kg	2	01/20/23	SC	SW8082A
PCB-1248	ND	0.48	mg/Kg	2	01/20/23	SC	SW8082A
PCB-1254	ND	0.48	mg/Kg	2	01/20/23	SC	SW8082A
PCB-1260	ND	0.48	mg/Kg	2	01/20/23	SC	SW8082A
PCB-1262	ND	0.48	mg/Kg	2	01/20/23	SC	SW8082A
PCB-1268	ND	0.48	mg/Kg	2	01/20/23	SC	SW8082A
Total PCBs	ND	0.48	mg/Kg	2	01/20/23	SC	SW8082A
QA/QC Surrogates							
% DCBP	43		%	2	01/20/23	SC	30 - 150 %
% DCBP (Confirmation)	32		%	2	01/20/23	SC	30 - 150 %
% TCMX	44		%	2	01/20/23	SC	30 - 150 %
% TCMX (Confirmation)	35		%	2	01/20/23	SC	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

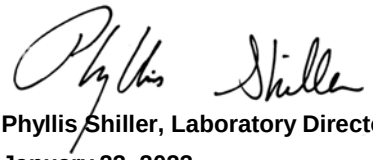
RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director
January 23, 2023
Reviewed and Released by: Ethan Lee, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

January 23, 2023

QA/QC Data

SDG I.D.: GCN25411

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 660497 (mg/Kg), QC Sample No: CN25294 10X (CN25411, CN25412, CN25413, CN25414, CN25415, CN25416, CN25417, CN25418)										
Polychlorinated Biphenyls										
PCB-1016	ND	0.17	71	68	4.3				40 - 140	30
PCB-1221	ND	0.17							40 - 140	30
PCB-1232	ND	0.17							40 - 140	30
PCB-1242	ND	0.17							40 - 140	30
PCB-1248	ND	0.17							40 - 140	30
PCB-1254	ND	0.17							40 - 140	30
PCB-1260	ND	0.17	64	68	6.1				40 - 140	30
PCB-1262	ND	0.17							40 - 140	30
PCB-1268	ND	0.17							40 - 140	30
% DCBP (Surrogate Rec)	80	%	91	94	3.2				30 - 150	30
% DCBP (Surrogate Rec) (Confirm	80	%	79	83	4.9				30 - 150	30
% TCMX (Surrogate Rec)	80	%	81	77	5.1				30 - 150	30
% TCMX (Surrogate Rec) (Confirm	78	%	74	71	4.1				30 - 150	30

Comment:

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference

Phyllis Shiller, Laboratory Director
January 23, 2023

Monday, January 23, 2023

Criteria: None

State: CT

Sample Criteria Exceedances Report

GCN25411 - TRC-PCBDAS

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CN25411	$PCB_SOXR_T	Total PCBs	CT / Requested PCB RL /	1100	510	1000	1000	ug/Kg
CN25411	$PCB_SOXR_T	PCB-1254	CT / Requested PCB RL /	1100	510	1000	1000	ug/Kg
CN25416	$PCB_SOXR_T	Total PCBs	CT / Requested PCB RL /	3200	830	1000	1000	ug/Kg
CN25416	$PCB_SOXR_T	PCB-1254	CT / Requested PCB RL /	3200	830	1000	1000	ug/Kg

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

REASONABLE CONFIDENCE PROTOCOL
LABORATORY ANALYSIS QA/QC CERTIFICATION FORM

Laboratory Name: Phoenix Environmental Labs, Inc. ***Client:*** TRC Environmental Corp.

Project Location: CRDA-MCCARTIN SCHOOL ***Project Number:***

Laboratory Sample ID(s): CN25411-CN25418 ***Sampling Date(s):*** 1/14/2023

List RCP Methods Used (e.g., 8260, 8270, et cetera) 8082

1	**For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP method-specific Reasonable Confidence Protocol documents?**	☑ Yes ☐ No
1A	**Were the method specified preservation and holding time requirements met?**	☑ Yes ☐ No
1B	***VPH and EPH methods only:*** **Was the VPH or EPH method conducted without significant modifications (see section 11.3 of respective RCP methods)**	☐ Yes ☐ No ☑ NA
2	**Were all samples received by the laboratory in a condition consistent with that described on the associated Chain-of-Custody document(s)?**	☑ Yes ☐ No
3	**Were samples received at an appropriate temperature (< 6 Degrees C)?**	☑ Yes ☐ No ☐ NA
4	**Were all QA/QC performance criteria specified in the CTDEP Reasonable Confidence Protocol documents achieved?**	☑ Yes ☐ No
5	**a) Were reporting limits specified or referenced on the chain-of-custody?** **b) Were these reporting limits met?**	☐ Yes ☑ No ☑ Yes ☐ No
6	**For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?**	☑ Yes ☐ No
7	**Are project-specific matrix spikes and laboratory duplicates included in the data set?**	☐ Yes ☑ No

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or 1B is "No", the data package does not meet the requirements for "Reasonable Confidence". This form may not be altered and all questions must be answered.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.

Authorized Signature: Ethan Lee **Position:** Project Manager

Printed Name: Ethan Lee **Date:** Monday, January 23, 2023

Name of Laboratory Phoenix Environmental Labs, Inc.

This certification form is to be used for RCP methods only.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

January 23, 2023

SDG I.D.: GCN25411

PCB Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument:

AU-ECD1 01/19/23-1 Saadia Chudary, Chemist 01/19/23

CN25411 (2X), CN25412 (2X), CN25413 (2X), CN25414 (2X), CN25415 (2X)

The initial calibration (PC1130AI) RSD for the compound list was less than 20% except for the following compounds: None.
The initial calibration (PC1130BI) RSD for the compound list was less than 20% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 15% except for the following compounds:None.

AU-ECD5 01/20/23-1 Saadia Chudary, Chemist 01/20/23

CN25416 (5X), CN25417 (5X), CN25418 (2X)

The initial calibration (PC0103AI) RSD for the compound list was less than 20% except for the following compounds: None.
The initial calibration (PC0103BI) RSD for the compound list was less than 20% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 15% except for the following compounds:None.

QC (Batch Specific):

Batch 660497 (CN25294)

CN25411, CN25412, CN25413, CN25414, CN25415, CN25416, CN25417, CN25418

All LCS recoveries were within 40 - 140 with the following exceptions: None.
All LCSD recoveries were within 40 - 140 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.
A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

Temperature Narration

The samples were received at 1.5C with cooling initiated.
(Note acceptance criteria for relevant matrices is above freezing up to 6°C)

TRC

21 GRIFFIN ROAD NORTH
WINDSOR, CONNECTICUT 06095
TELEPHONE (860) 298-9692
FAX (860) 298-6380

— DAS Rates Apply! —

CHAIN OF CUSTODY

Wrig 1.5

Edition September 2007
Supersedes Previous Edition

PROJECT NUMBER	PROJECT NAME	PARAMETERS	CONTAINER	TURNAROUND TIME
52[illegible]	[illegible] Mc[illegible]in School- Additional Sampling 70 Canterbury Street, East Hartford, CT			24hr / ~~48hr~~ X / 3 day
SIGNATURE	INSPECTOR(S)			
[signature]	C[illegible] [illegible]acko/Michael Kostruba			

Caulk

Recd 1-4oz clear glass jar per sample.

SAMPLE	TIME	COMP	GRAB	SAMPLE LOCATION	PCB	Amber Glass	Caulk	Cold	MATERIAL	Lab ID
[illegible]3	13:5[illegible]		X	59 B Side south	X	1	X	✓	WC 3 - Light Grey [illegible]	25411
[illegible]PCB			X	59 D side south	X	1			[illegible] system [illegible]	25412
20[illegible]				59 G side south	X	1			[illegible]	25413
			X	[illegible] main entry [illegible]		1			[illegible] system [illegible]	25414
			X	Exterior [illegible] main entry [illegible]	X	1			[illegible] window [illegible]	25415
02[illegible]	[illegible]			[illegible]	X	1			Dark [illegible] window sy[illegible]	25416
	[illegible]			[illegible]	X	1			Dark Grey [illegible] window sys[illegible]	25417
	[illegible]		X	[illegible]	X	1			WC 5 - Dark Grey [illegible] window sy[illegible]	25418

Relinquished By: [signature] 1/17/23 [signature]
Michael Kostruba 1300

Relinquished By: [illegible]
Date 1/18/23
Time 1546

Send Results to MKostruba@trccompanies.com
860-817-2413

Include [illegible] Report

[signature]

For Phoenix

1/18/23 [signature] 1-18-23 16:45

PHOENIX
Environmental Laboratories, Inc.

Thursday, April 13, 2023

Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Project ID: **CRDA-FORMER MCCARTIN SCHOOL PCB GROUND**
SDG ID: **GCN77269**
Sample ID#s: CN77269 - CN77307

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #M-CT007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Sample Id Cross Reference

April 13, 2023

SDG I.D.: GCN77269

Project ID: CRDA-FORMER MCCARTIN SCHOOL PCB GROUND

Client Id	Lab Id	Matrix
01	CN77269	SOIL
02	CN77270	SOIL
03	CN77271	SOIL
04	CN77272	SOIL
05	CN77273	SOIL
06	CN77274	SOIL
07	CN77275	SOIL
08	CN77276	SOIL
09	CN77277	SOIL
10	CN77278	SOIL
11	CN77279	SOIL
12	CN77280	SOIL
13	CN77281	SOIL
14	CN77282	SOIL
15	CN77283	SOIL
16	CN77284	SOIL
17	CN77285	SOIL
18	CN77286	SOIL
19	CN77287	SOIL
20	CN77288	SOIL
21	CN77289	ASPHALT
22	CN77290	ASPHALT
23	CN77291	ASPHALT
24	CN77292	ASPHALT
25	CN77293	CONCRETE
26	CN77294	ASPHALT
27	CN77295	ASPHALT
28	CN77296	CONCRETE
29	CN77297	SOIL
30	CN77298	SOIL

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Sample Id Cross Reference

April 13, 2023

SDG I.D.: GCN77269

Project ID: CRDA-FORMER MCCARTIN SCHOOL PCB GROUND

Client Id	Lab Id	Matrix
31	CN77299	SOIL
32	CN77300	SOIL
33	CN77301	SOIL
34	CN77302	SOIL
35	CN77303	SOIL
36	CN77304	SOIL
37	CN77305	SOIL
38	CN77306	SOIL
39	CN77307	SOIL

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 13, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:	MK,BA,TN	04/04/23	9:20
Location Code:	TRC-DAS	Received by:	CP	04/06/23	10:10
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705.0000.0000				

Laboratory Data

SDG ID: GCN77269
Phoenix ID: CN77269

Project ID: CRDA-FORMER MCCARTIN SCHOOL PCB GROUND
Client ID: 01

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Percent Solid	87		%		04/06/23	CV	SW846-%Solid
Extraction for PCB	Completed				04/06/23	Q/R/KD/C\	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.38	mg/Kg	10	04/07/23	AW	SW8082A
PCB-1221	ND	0.38	mg/Kg	10	04/07/23	AW	SW8082A
PCB-1232	ND	0.38	mg/Kg	10	04/07/23	AW	SW8082A
PCB-1242	ND	0.38	mg/Kg	10	04/07/23	AW	SW8082A
PCB-1248	ND	0.38	mg/Kg	10	04/07/23	AW	SW8082A
PCB-1254	ND	0.38	mg/Kg	10	04/07/23	AW	SW8082A
PCB-1260	ND	0.38	mg/Kg	10	04/07/23	AW	SW8082A
PCB-1262	ND	0.38	mg/Kg	10	04/07/23	AW	SW8082A
PCB-1268	ND	0.38	mg/Kg	10	04/07/23	AW	SW8082A
Total PCBs	ND	0.38	mg/Kg	10	04/07/23	AW	SW8082A
QA/QC Surrogates							
% DCBP	89		%	10	04/07/23	AW	30 - 150 %
% DCBP (Confirmation)	69		%	10	04/07/23	AW	30 - 150 %
% TCMX	62		%	10	04/07/23	AW	30 - 150 %
% TCMX (Confirmation)	65		%	10	04/07/23	AW	30 - 150 %

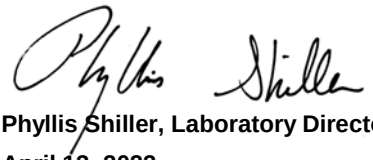
Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

April 13, 2023

Reviewed and Released by: Rashmi Makol, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 13, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:	MK,BA,TN	04/04/23	9:25
Location Code:	TRC-DAS	Received by:	CP	04/06/23	10:10
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705.0000.0000				

Laboratory Data

SDG ID: GCN77269
Phoenix ID: CN77270

Project ID: CRDA-FORMER MCCARTIN SCHOOL PCB GROUND
Client ID: 02

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Percent Solid	82		%		04/06/23	CV	SW846-%Solid
Extraction for PCB	Completed				04/06/23	Q/R/KD/C\	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1221	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1232	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1242	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1248	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1254	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1260	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1262	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1268	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
Total PCBs	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
QA/QC Surrogates							
% DCBP	64		%	10	04/07/23	CK	30 - 150 %
% DCBP (Confirmation)	68		%	10	04/07/23	CK	30 - 150 %
% TCMX	56		%	10	04/07/23	CK	30 - 150 %
% TCMX (Confirmation)	61		%	10	04/07/23	CK	30 - 150 %

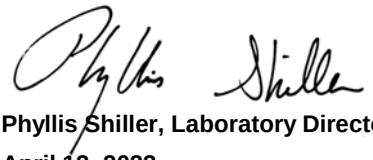
Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

April 13, 2023

Reviewed and Released by: Rashmi Makol, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 13, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:	MK,BA,TN	04/04/23	9:27
Location Code:	TRC-DAS	Received by:	CP	04/06/23	10:10
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705.0000.0000				

Laboratory Data

SDG ID: GCN77269
Phoenix ID: CN77271

Project ID: CRDA-FORMER MCCARTIN SCHOOL PCB GROUND
Client ID: 03

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Percent Solid	81		%		04/06/23	CV	SW846-%Solid
Extraction for PCB	Completed				04/06/23	Q/R/KD/C\	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1221	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1232	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1242	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1248	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1254	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1260	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1262	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1268	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
Total PCBs	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
QA/QC Surrogates							
% DCBP	74		%	10	04/07/23	CK	30 - 150 %
% DCBP (Confirmation)	81		%	10	04/07/23	CK	30 - 150 %
% TCMX	48		%	10	04/07/23	CK	30 - 150 %
% TCMX (Confirmation)	59		%	10	04/07/23	CK	30 - 150 %

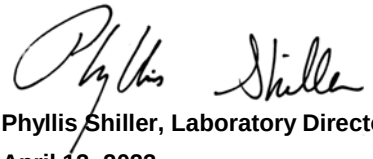
Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

April 13, 2023

Reviewed and Released by: Rashmi Makol, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 13, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:	MK,BA,TN	04/04/23	9:32
Location Code:	TRC-DAS	Received by:	CP	04/06/23	10:10
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705.0000.0000				

Laboratory Data

SDG ID: GCN77269
Phoenix ID: CN77272

Project ID: CRDA-FORMER MCCARTIN SCHOOL PCB GROUND
Client ID: 04

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Percent Solid	83		%		04/06/23	CV	SW846-%Solid
Extraction for PCB	Completed				04/06/23	Q/R/KD/C\	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.38	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1221	ND	0.38	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1232	ND	0.38	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1242	ND	0.38	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1248	ND	0.38	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1254	ND	0.38	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1260	ND	0.38	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1262	ND	0.38	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1268	ND	0.38	mg/Kg	10	04/07/23	CK	SW8082A
Total PCBs	ND	0.38	mg/Kg	10	04/07/23	CK	SW8082A
QA/QC Surrogates							
% DCBP	80		%	10	04/07/23	CK	30 - 150 %
% DCBP (Confirmation)	84		%	10	04/07/23	CK	30 - 150 %
% TCMX	61		%	10	04/07/23	CK	30 - 150 %
% TCMX (Confirmation)	61		%	10	04/07/23	CK	30 - 150 %

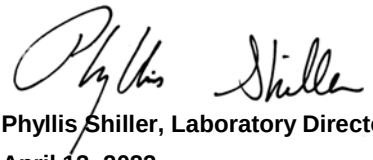
Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

April 13, 2023

Reviewed and Released by: Rashmi Makol, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 13, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:	MK,BA,TN	04/04/23	9:32
Location Code:	TRC-DAS	Received by:	CP	04/06/23	10:10
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705.0000.0000				

Laboratory Data

SDG ID: GCN77269
Phoenix ID: CN77273

Project ID: CRDA-FORMER MCCARTIN SCHOOL PCB GROUND
Client ID: 05

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Percent Solid	80		%		04/06/23	CV	SW846-%Solid
Extraction for PCB	Completed				04/06/23	Q/R/KD/C\	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.42	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1221	ND	0.42	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1232	ND	0.42	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1242	ND	0.42	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1248	ND	0.42	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1254	ND	0.42	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1260	ND	0.42	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1262	ND	0.42	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1268	ND	0.42	mg/Kg	10	04/07/23	CK	SW8082A
Total PCBs	ND	0.42	mg/Kg	10	04/07/23	CK	SW8082A
QA/QC Surrogates							
% DCBP	44		%	10	04/07/23	CK	30 - 150 %
% DCBP (Confirmation)	46		%	10	04/07/23	CK	30 - 150 %
% TCMX	38		%	10	04/07/23	CK	30 - 150 %
% TCMX (Confirmation)	40		%	10	04/07/23	CK	30 - 150 %

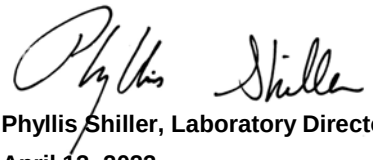
Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

April 13, 2023

Reviewed and Released by: Rashmi Makol, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 13, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:	MK,BA,TN	04/04/23	9:37
Location Code:	TRC-DAS	Received by:	CP	04/06/23	10:10
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705.0000.0000				

Laboratory Data

SDG ID: GCN77269
Phoenix ID: CN77274

Project ID: CRDA-FORMER MCCARTIN SCHOOL PCB GROUND
Client ID: 06

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Percent Solid	79		%		04/06/23	CV	SW846-%Solid
Extraction for PCB	Completed				04/06/23	Q/R/KD/C\	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.42	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1221	ND	0.42	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1232	ND	0.42	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1242	ND	0.42	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1248	ND	0.42	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1254	ND	0.42	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1260	ND	0.42	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1262	ND	0.42	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1268	ND	0.42	mg/Kg	10	04/07/23	CK	SW8082A
Total PCBs	ND	0.42	mg/Kg	10	04/07/23	CK	SW8082A
QA/QC Surrogates							
% DCBP	62		%	10	04/07/23	CK	30 - 150 %
% DCBP (Confirmation)	64		%	10	04/07/23	CK	30 - 150 %
% TCMX	54		%	10	04/07/23	CK	30 - 150 %
% TCMX (Confirmation)	56		%	10	04/07/23	CK	30 - 150 %

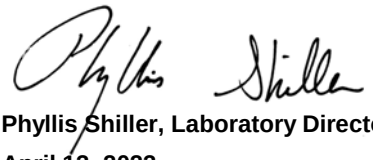
Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

April 13, 2023

Reviewed and Released by: Rashmi Makol, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 13, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:	MK,BA,TN	04/04/23	9:42
Location Code:	TRC-DAS	Received by:	CP	04/06/23	10:10
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705.0000.0000				

Laboratory Data

SDG ID: GCN77269
Phoenix ID: CN77275

Project ID: CRDA-FORMER MCCARTIN SCHOOL PCB GROUND
Client ID: 07

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Percent Solid	78		%		04/06/23	CV	SW846-%Solid
Extraction for PCB	Completed				04/06/23	Q/R/KD/C\	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.42	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1221	ND	0.42	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1232	ND	0.42	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1242	ND	0.42	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1248	ND	0.42	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1254	ND	0.42	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1260	ND	0.42	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1262	ND	0.42	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1268	ND	0.42	mg/Kg	10	04/07/23	CK	SW8082A
Total PCBs	ND	0.42	mg/Kg	10	04/07/23	CK	SW8082A
QA/QC Surrogates							
% DCBP	70		%	10	04/07/23	CK	30 - 150 %
% DCBP (Confirmation)	65		%	10	04/07/23	CK	30 - 150 %
% TCMX	62		%	10	04/07/23	CK	30 - 150 %
% TCMX (Confirmation)	65		%	10	04/07/23	CK	30 - 150 %

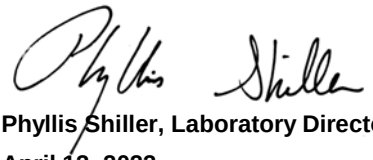
Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

April 13, 2023

Reviewed and Released by: Rashmi Makol, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 13, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:	MK,BA,TN	04/04/23	9:43
Location Code:	TRC-DAS	Received by:	CP	04/06/23	10:10
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705.0000.0000				

Laboratory Data

SDG ID: GCN77269
Phoenix ID: CN77276

Project ID: CRDA-FORMER MCCARTIN SCHOOL PCB GROUND
Client ID: 08

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Percent Solid	80		%		04/06/23	CV	SW846-%Solid
Extraction for PCB	Completed				04/06/23	Q/R/KD/C\	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.41	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1221	ND	0.41	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1232	ND	0.41	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1242	ND	0.41	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1248	ND	0.41	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1254	ND	0.41	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1260	ND	0.41	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1262	ND	0.41	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1268	ND	0.41	mg/Kg	10	04/07/23	CK	SW8082A
Total PCBs	ND	0.41	mg/Kg	10	04/07/23	CK	SW8082A
QA/QC Surrogates							
% DCBP	72		%	10	04/07/23	CK	30 - 150 %
% DCBP (Confirmation)	70		%	10	04/07/23	CK	30 - 150 %
% TCMX	66		%	10	04/07/23	CK	30 - 150 %
% TCMX (Confirmation)	79		%	10	04/07/23	CK	30 - 150 %

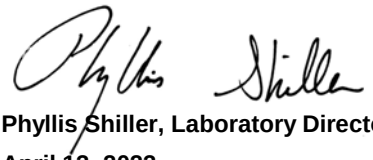
Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

April 13, 2023

Reviewed and Released by: Rashmi Makol, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 13, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:	MK,BA,TN	04/04/23	9:46
Location Code:	TRC-DAS	Received by:	CP	04/06/23	10:10
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705.0000.0000				

Laboratory Data

SDG ID: GCN77269
Phoenix ID: CN77277

Project ID: CRDA-FORMER MCCARTIN SCHOOL PCB GROUND
Client ID: 09

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Percent Solid	81		%		04/06/23	CV	SW846-%Solid
Extraction for PCB	Completed				04/06/23	Q/R/KD/C\	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1221	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1232	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1242	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1248	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1254	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1260	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1262	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1268	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
Total PCBs	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
QA/QC Surrogates							
% DCBP	63		%	10	04/07/23	CK	30 - 150 %
% DCBP (Confirmation)	74		%	10	04/07/23	CK	30 - 150 %
% TCMX	56		%	10	04/07/23	CK	30 - 150 %
% TCMX (Confirmation)	71		%	10	04/07/23	CK	30 - 150 %

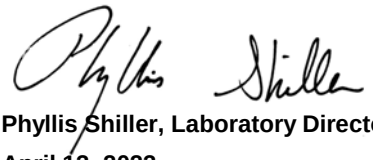
Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

April 13, 2023

Reviewed and Released by: Rashmi Makol, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 13, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:	MK,BA,TN	04/04/23	9:47
Location Code:	TRC-DAS	Received by:	CP	04/06/23	10:10
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705.0000.0000				

Laboratory Data

SDG ID: GCN77269
Phoenix ID: CN77278

Project ID: CRDA-FORMER MCCARTIN SCHOOL PCB GROUND
Client ID: 10

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Percent Solid	81		%		04/06/23	CV	SW846-%Solid
Extraction for PCB	Completed				04/06/23	Q/R/KD/C\	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1221	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1232	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1242	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1248	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1254	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1260	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1262	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1268	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
Total PCBs	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
QA/QC Surrogates							
% DCBP	65		%	10	04/07/23	CK	30 - 150 %
% DCBP (Confirmation)	77		%	10	04/07/23	CK	30 - 150 %
% TCMX	56		%	10	04/07/23	CK	30 - 150 %
% TCMX (Confirmation)	70		%	10	04/07/23	CK	30 - 150 %

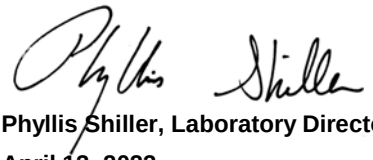
Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

April 13, 2023

Reviewed and Released by: Rashmi Makol, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 13, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:	MK,BA,TN	04/04/23	9:48
Location Code:	TRC-DAS	Received by:	CP	04/06/23	10:10
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705.0000.0000				

Laboratory Data

SDG ID: GCN77269
Phoenix ID: CN77279

Project ID: CRDA-FORMER MCCARTIN SCHOOL PCB GROUND
Client ID: 11

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Percent Solid	84		%		04/06/23	CV	SW846-%Solid
Extraction for PCB	Completed				04/06/23	Q/R/KD/C\	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.39	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1221	ND	0.39	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1232	ND	0.39	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1242	ND	0.39	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1248	ND	0.39	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1254	ND	0.39	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1260	ND	0.39	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1262	ND	0.39	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1268	ND	0.39	mg/Kg	10	04/07/23	CK	SW8082A
Total PCBs	ND	0.39	mg/Kg	10	04/07/23	CK	SW8082A
QA/QC Surrogates							
% DCBP	65		%	10	04/07/23	CK	30 - 150 %
% DCBP (Confirmation)	67		%	10	04/07/23	CK	30 - 150 %
% TCMX	57		%	10	04/07/23	CK	30 - 150 %
% TCMX (Confirmation)	61		%	10	04/07/23	CK	30 - 150 %

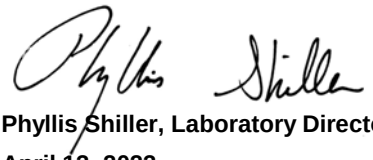
Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

April 13, 2023

Reviewed and Released by: Rashmi Makol, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 13, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:	MK,BA,TN	04/04/23	9:48
Location Code:	TRC-DAS	Received by:	CP	04/06/23	10:10
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705.0000.0000				

Laboratory Data

SDG ID: GCN77269
Phoenix ID: CN77280

Project ID: CRDA-FORMER MCCARTIN SCHOOL PCB GROUND
Client ID: 12

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Percent Solid	80		%		04/06/23	CV	SW846-%Solid
Extraction for PCB	Completed				04/06/23	Q/R/KD/C\	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.41	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1221	ND	0.41	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1232	ND	0.41	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1242	ND	0.41	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1248	ND	0.41	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1254	0.42	0.41	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1260	ND	0.41	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1262	ND	0.41	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1268	ND	0.41	mg/Kg	10	04/07/23	CK	SW8082A
Total PCBs	0.42	0.41	mg/Kg	10	04/07/23	CK	SW8082A
QA/QC Surrogates							
% DCBP	57		%	10	04/07/23	CK	30 - 150 %
% DCBP (Confirmation)	53		%	10	04/07/23	CK	30 - 150 %
% TCMX	51		%	10	04/07/23	CK	30 - 150 %
% TCMX (Confirmation)	54		%	10	04/07/23	CK	30 - 150 %

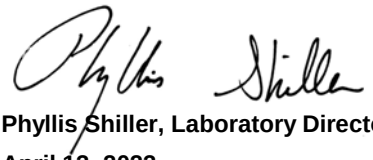
Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director
April 13, 2023
Reviewed and Released by: Rashmi Makol, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 13, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:	MK,BA,TN	04/04/23	9:51
Location Code:	TRC-DAS	Received by:	CP	04/06/23	10:10
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705.0000.0000				

Laboratory Data

SDG ID: GCN77269
Phoenix ID: CN77281

Project ID: CRDA-FORMER MCCARTIN SCHOOL PCB GROUND
Client ID: 13

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Percent Solid	84		%		04/06/23	CV	SW846-%Solid
Extraction for PCB	Completed				04/06/23	Q/R/KD/C\	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1221	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1232	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1242	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1248	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1254	1.2	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1260	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1262	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1268	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
Total PCBs	1.2	0.4	mg/Kg	10	04/07/23	CK	SW8082A
QA/QC Surrogates							
% DCBP	48		%	10	04/07/23	CK	30 - 150 %
% DCBP (Confirmation)	53		%	10	04/07/23	CK	30 - 150 %
% TCMX	41		%	10	04/07/23	CK	30 - 150 %
% TCMX (Confirmation)	43		%	10	04/07/23	CK	30 - 150 %

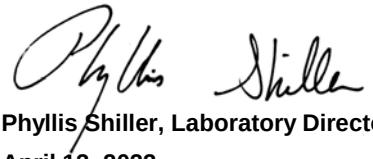
Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director
April 13, 2023
Reviewed and Released by: Rashmi Makol, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 13, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:	MK,BA,TN	04/04/23	9:51
Location Code:	TRC-DAS	Received by:	CP	04/06/23	10:10
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705.0000.0000				

Laboratory Data

SDG ID: GCN77269
Phoenix ID: CN77282

Project ID: CRDA-FORMER MCCARTIN SCHOOL PCB GROUND
Client ID: 14

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Percent Solid	86		%		04/06/23	CV	SW846-%Solid
Extraction for PCB	Completed				04/06/23	Q/R/KD/C\	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.38	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1221	ND	0.38	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1232	ND	0.38	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1242	ND	0.38	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1248	ND	0.38	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1254	1.3	0.38	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1260	ND	0.38	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1262	ND	0.38	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1268	ND	0.38	mg/Kg	10	04/07/23	CK	SW8082A
Total PCBs	1.3	0.38	mg/Kg	10	04/07/23	CK	SW8082A
QA/QC Surrogates							
% DCBP	64		%	10	04/07/23	CK	30 - 150 %
% DCBP (Confirmation)	66		%	10	04/07/23	CK	30 - 150 %
% TCMX	30		%	10	04/07/23	CK	30 - 150 %
% TCMX (Confirmation)	31		%	10	04/07/23	CK	30 - 150 %

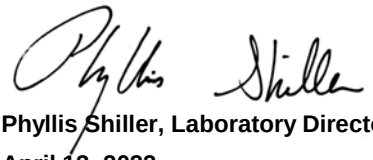
Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

April 13, 2023

Reviewed and Released by: Rashmi Makol, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 13, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:	MK,BA,TN	04/04/23	10:04
Location Code:	TRC-DAS	Received by:	CP	04/06/23	10:10
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705.0000.0000				

Laboratory Data

SDG ID: GCN77269
Phoenix ID: CN77283

Project ID: CRDA-FORMER MCCARTIN SCHOOL PCB GROUND
Client ID: 15

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Percent Solid	83		%		04/06/23	CV	SW846-%Solid
Extraction for PCB	Completed				04/06/23	Q/R/KD/C\	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1221	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1232	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1242	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1248	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1254	1.6	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1260	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1262	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1268	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
Total PCBs	1.6	0.4	mg/Kg	10	04/07/23	CK	SW8082A
QA/QC Surrogates							
% DCBP	69		%	10	04/07/23	CK	30 - 150 %
% DCBP (Confirmation)	74		%	10	04/07/23	CK	30 - 150 %
% TCMX	30		%	10	04/07/23	CK	30 - 150 %
% TCMX (Confirmation)	33		%	10	04/07/23	CK	30 - 150 %

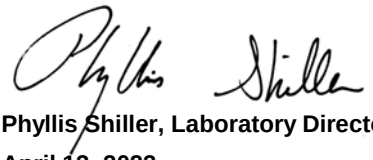
Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

April 13, 2023

Reviewed and Released by: Rashmi Makol, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 13, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:	MK,BA,TN	04/04/23	10:04
Location Code:	TRC-DAS	Received by:	CP	04/06/23	10:10
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705.0000.0000				

Laboratory Data

SDG ID: GCN77269
Phoenix ID: CN77284

Project ID: CRDA-FORMER MCCARTIN SCHOOL PCB GROUND
Client ID: 16

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Percent Solid	80		%		04/06/23	CV	SW846-%Solid
Extraction for PCB	Completed				04/06/23	Q/R/KD/C\	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.41	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1221	ND	0.41	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1232	ND	0.41	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1242	ND	0.41	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1248	ND	0.41	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1254	0.78	0.41	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1260	ND	0.41	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1262	ND	0.41	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1268	ND	0.41	mg/Kg	10	04/07/23	CK	SW8082A
Total PCBs	0.78	0.41	mg/Kg	10	04/07/23	CK	SW8082A
QA/QC Surrogates							
% DCBP	64		%	10	04/07/23	CK	30 - 150 %
% DCBP (Confirmation)	61		%	10	04/07/23	CK	30 - 150 %
% TCMX	57		%	10	04/07/23	CK	30 - 150 %
% TCMX (Confirmation)	60		%	10	04/07/23	CK	30 - 150 %

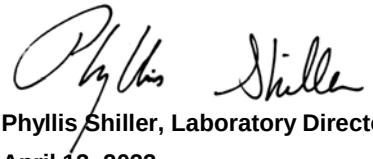
Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director
April 13, 2023
Reviewed and Released by: Rashmi Makol, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 13, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:	MK,BA,TN	04/04/23	10:05
Location Code:	TRC-DAS	Received by:	CP	04/06/23	10:10
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705.0000.0000				

Laboratory Data

SDG ID: GCN77269
Phoenix ID: CN77285

Project ID: CRDA-FORMER MCCARTIN SCHOOL PCB GROUND
Client ID: 17

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Percent Solid	88		%		04/06/23	CV	SW846-%Solid
Extraction for PCB	Completed				04/06/23	Q/R/KD/C\	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.37	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1221	ND	0.37	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1232	ND	0.37	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1242	ND	0.37	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1248	ND	0.37	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1254	0.81	0.37	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1260	ND	0.37	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1262	ND	0.37	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1268	ND	0.37	mg/Kg	10	04/07/23	CK	SW8082A
Total PCBs	0.81	0.37	mg/Kg	10	04/07/23	CK	SW8082A
QA/QC Surrogates							
% DCBP	57		%	10	04/07/23	CK	30 - 150 %
% DCBP (Confirmation)	54		%	10	04/07/23	CK	30 - 150 %
% TCMX	57		%	10	04/07/23	CK	30 - 150 %
% TCMX (Confirmation)	63		%	10	04/07/23	CK	30 - 150 %

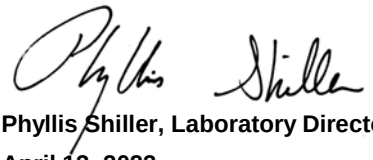
Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

April 13, 2023

Reviewed and Released by: Rashmi Makol, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 13, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:	MK,BA,TN	04/04/23	10:13
Location Code:	TRC-DAS	Received by:	CP	04/06/23	10:10
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705.0000.0000				

Laboratory Data

SDG ID: GCN77269
Phoenix ID: CN77286

Project ID: CRDA-FORMER MCCARTIN SCHOOL PCB GROUND
Client ID: 18

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Percent Solid	82		%		04/06/23	CV	SW846-%Solid
Extraction for PCB	Completed				04/06/23	Q/R/KD/C\	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1221	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1232	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1242	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1248	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1254	1.1	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1260	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1262	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1268	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
Total PCBs	1.1	0.4	mg/Kg	10	04/07/23	CK	SW8082A
QA/QC Surrogates							
% DCBP	53		%	10	04/07/23	CK	30 - 150 %
% DCBP (Confirmation)	59		%	10	04/07/23	CK	30 - 150 %
% TCMX	59		%	10	04/07/23	CK	30 - 150 %
% TCMX (Confirmation)	61		%	10	04/07/23	CK	30 - 150 %

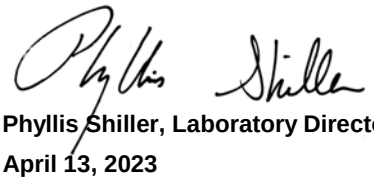
Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

April 13, 2023

Reviewed and Released by: Rashmi Makol, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 13, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:	MK,BA,TN	04/04/23	10:19
Location Code:	TRC-DAS	Received by:	CP	04/06/23	10:10
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705.0000.0000				

Laboratory Data

SDG ID: GCN77269
Phoenix ID: CN77287

Project ID: CRDA-FORMER MCCARTIN SCHOOL PCB GROUND
Client ID: 19

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Percent Solid	80		%		04/06/23	CV	SW846-%Solid
Extraction for PCB	Completed				04/06/23	Q/R/KD/C\	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.41	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1221	ND	0.41	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1232	ND	0.41	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1242	ND	0.41	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1248	ND	0.41	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1254	0.62	0.41	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1260	ND	0.41	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1262	ND	0.41	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1268	ND	0.41	mg/Kg	10	04/07/23	CK	SW8082A
Total PCBs	0.62	0.41	mg/Kg	10	04/07/23	CK	SW8082A
QA/QC Surrogates							
% DCBP	64		%	10	04/07/23	CK	30 - 150 %
% DCBP (Confirmation)	65		%	10	04/07/23	CK	30 - 150 %
% TCMX	62		%	10	04/07/23	CK	30 - 150 %
% TCMX (Confirmation)	71		%	10	04/07/23	CK	30 - 150 %

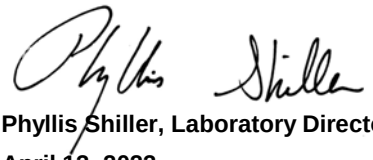
Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

April 13, 2023

Reviewed and Released by: Rashmi Makol, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 13, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:	MK,BA,TN	04/04/23	10:26
Location Code:	TRC-DAS	Received by:	CP	04/06/23	10:10
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705.0000.0000				

Laboratory Data

SDG ID: GCN77269
Phoenix ID: CN77288

Project ID: CRDA-FORMER MCCARTIN SCHOOL PCB GROUND
Client ID: 20

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Percent Solid	85		%		04/06/23	CV	SW846-%Solid
Extraction for PCB	Completed				04/06/23	Q/R/KD/K	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.39	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1221	ND	0.39	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1232	ND	0.39	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1242	ND	0.39	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1248	ND	0.39	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1254	0.81	0.39	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1260	ND	0.39	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1262	ND	0.39	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1268	ND	0.39	mg/Kg	10	04/07/23	CK	SW8082A
Total PCBs	0.81	0.39	mg/Kg	10	04/07/23	CK	SW8082A
QA/QC Surrogates							
% DCBP	66		%	10	04/07/23	CK	30 - 150 %
% DCBP (Confirmation)	61		%	10	04/07/23	CK	30 - 150 %
% TCMX	56		%	10	04/07/23	CK	30 - 150 %
% TCMX (Confirmation)	60		%	10	04/07/23	CK	30 - 150 %

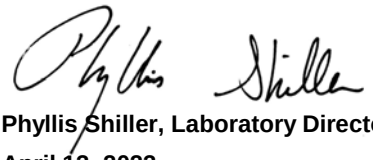
Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director
April 13, 2023
Reviewed and Released by: Rashmi Makol, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 13, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	ASPHALT	Collected by:	MK,BA,TN	04/04/23	10:32
Location Code:	TRC-DAS	Received by:	CP	04/06/23	10:10
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705.0000.0000				

Laboratory Data

SDG ID: GCN77269
Phoenix ID: CN77289

Project ID: CRDA-FORMER MCCARTIN SCHOOL PCB GROUND
Client ID: 21

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Extraction for PCB	Completed				04/06/23	Ş/R/KD/C\	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.48	mg/Kg	1	04/07/23	CK	SW8082A
PCB-1221	ND	0.48	mg/Kg	1	04/07/23	CK	SW8082A
PCB-1232	ND	0.48	mg/Kg	1	04/07/23	CK	SW8082A
PCB-1242	ND	0.48	mg/Kg	1	04/07/23	CK	SW8082A
PCB-1248	ND	0.48	mg/Kg	1	04/07/23	CK	SW8082A
PCB-1254	0.76	0.48	mg/Kg	1	04/07/23	CK	SW8082A
PCB-1260	ND	0.48	mg/Kg	1	04/07/23	CK	SW8082A
PCB-1262	ND	0.48	mg/Kg	1	04/07/23	CK	SW8082A
PCB-1268	ND	0.48	mg/Kg	1	04/07/23	CK	SW8082A
Total PCBs	0.76	0.48	mg/Kg	1	04/07/23	CK	SW8082A
QA/QC Surrogates							
% DCBP	43		%	1	04/07/23	CK	30 - 150 %
% DCBP (Confirmation)	44		%	1	04/07/23	CK	30 - 150 %
% TCMX	48		%	1	04/07/23	CK	30 - 150 %
% TCMX (Confirmation)	50		%	1	04/07/23	CK	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

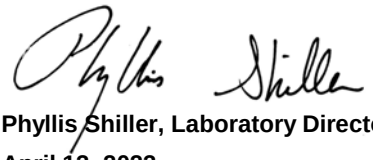
RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director
April 13, 2023
Reviewed and Released by: Rashmi Makol, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 13, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	ASPHALT	Collected by:	MK,BA,TN	04/04/23	10:43
Location Code:	TRC-DAS	Received by:	CP	04/06/23	10:10
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705.0000.0000				

Laboratory Data

SDG ID: GCN77269
Phoenix ID: CN77290

Project ID: CRDA-FORMER MCCARTIN SCHOOL PCB GROUND
Client ID: 22

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Extraction for PCB	Completed				04/06/23	Ş/R/KD/C\	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.66	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1221	ND	0.66	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1232	ND	0.66	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1242	ND	0.66	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1248	ND	0.66	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1254	ND	0.66	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1260	ND	0.66	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1262	ND	0.66	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1268	ND	0.66	mg/Kg	2	04/07/23	CK	SW8082A
Total PCBs	ND	0.66	mg/Kg	2	04/07/23	CK	SW8082A
QA/QC Surrogates							
% DCBP	45		%	2	04/07/23	CK	30 - 150 %
% DCBP (Confirmation)	43		%	2	04/07/23	CK	30 - 150 %
% TCMX	43		%	2	04/07/23	CK	30 - 150 %
% TCMX (Confirmation)	44		%	2	04/07/23	CK	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

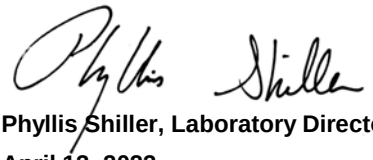
RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director
April 13, 2023
Reviewed and Released by: Rashmi Makol, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 13, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	ASPHALT	Collected by:	MK,BA,TN	04/04/23	10:55
Location Code:	TRC-DAS	Received by:	CP	04/06/23	10:10
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705.0000.0000				

Laboratory Data

SDG ID: GCN77269
Phoenix ID: CN77291

Project ID: CRDA-FORMER MCCARTIN SCHOOL PCB GROUND
Client ID: 23

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Extraction for PCB	Completed				04/06/23	Ş/R/KD/C\	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.43	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1221	ND	0.43	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1232	ND	0.43	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1242	ND	0.43	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1248	ND	0.43	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1254	ND	0.43	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1260	ND	0.43	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1262	ND	0.43	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1268	ND	0.43	mg/Kg	2	04/07/23	CK	SW8082A
Total PCBs	ND	0.43	mg/Kg	2	04/07/23	CK	SW8082A
QA/QC Surrogates							
% DCBP	51		%	2	04/07/23	CK	30 - 150 %
% DCBP (Confirmation)	51		%	2	04/07/23	CK	30 - 150 %
% TCMX	43		%	2	04/07/23	CK	30 - 150 %
% TCMX (Confirmation)	47		%	2	04/07/23	CK	30 - 150 %

Project ID: CRDA-FORMER MCCARTIN SCHOOL PCB GROUND
Client ID: 23

Phoenix I.D.: CN77291

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

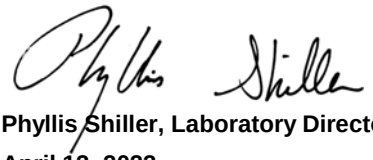
RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director
April 13, 2023
Reviewed and Released by: Rashmi Makol, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 13, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	ASPHALT	Collected by:	MK,BA,TN	04/04/23	11:06
Location Code:	TRC-DAS	Received by:	CP	04/06/23	10:10
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705.0000.0000				

Laboratory Data

SDG ID: GCN77269
Phoenix ID: CN77292

Project ID: CRDA-FORMER MCCARTIN SCHOOL PCB GROUND
Client ID: 24

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Extraction for PCB	Completed				04/06/23	Ş/R/KD/C\	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.47	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1221	ND	0.47	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1232	ND	0.47	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1242	ND	0.47	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1248	ND	0.47	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1254	ND	0.47	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1260	ND	0.47	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1262	ND	0.47	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1268	ND	0.47	mg/Kg	2	04/07/23	CK	SW8082A
Total PCBs	ND	0.47	mg/Kg	2	04/07/23	CK	SW8082A
QA/QC Surrogates							
% DCBP	52		%	2	04/07/23	CK	30 - 150 %
% DCBP (Confirmation)	48		%	2	04/07/23	CK	30 - 150 %
% TCMX	48		%	2	04/07/23	CK	30 - 150 %
% TCMX (Confirmation)	47		%	2	04/07/23	CK	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

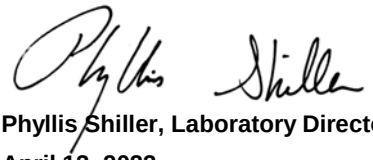
RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director
April 13, 2023
Reviewed and Released by: Rashmi Makol, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 13, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	CONCRETE	Collected by:	MK,BA,TN	04/04/23	11:27
Location Code:	TRC-DAS	Received by:	CP	04/06/23	10:10
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705.0000.0000				

Laboratory Data

SDG ID: GCN77269
Phoenix ID: CN77293

Project ID: CRDA-FORMER MCCARTIN SCHOOL PCB GROUND
Client ID: 25

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Extraction for PCB	Completed				04/06/23	Ş/R/KD/C\	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.48	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1221	ND	0.48	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1232	ND	0.48	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1242	ND	0.48	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1248	ND	0.48	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1254	ND	0.48	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1260	ND	0.48	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1262	ND	0.48	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1268	ND	0.48	mg/Kg	2	04/07/23	CK	SW8082A
Total PCBs	ND	0.48	mg/Kg	2	04/07/23	CK	SW8082A
QA/QC Surrogates							
% DCBP	63		%	2	04/07/23	CK	30 - 150 %
% DCBP (Confirmation)	61		%	2	04/07/23	CK	30 - 150 %
% TCMX	52		%	2	04/07/23	CK	30 - 150 %
% TCMX (Confirmation)	54		%	2	04/07/23	CK	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

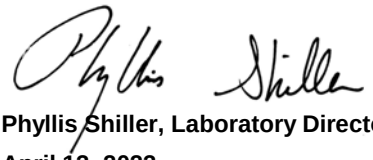
RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director
April 13, 2023
Reviewed and Released by: Rashmi Makol, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 13, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	ASPHALT	Collected by:	MK,BA,TN	04/04/23	11:41
Location Code:	TRC-DAS	Received by:	CP	04/06/23	10:10
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705.0000.0000				

Laboratory Data

SDG ID: GCN77269
Phoenix ID: CN77294

Project ID: CRDA-FORMER MCCARTIN SCHOOL PCB GROUND
Client ID: 26

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Extraction for PCB	Completed				04/06/23	Ş/R/KD/C\	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.65	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1221	ND	0.65	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1232	ND	0.65	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1242	ND	0.65	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1248	ND	0.65	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1254	ND	0.65	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1260	ND	0.65	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1262	ND	0.65	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1268	ND	0.65	mg/Kg	2	04/07/23	CK	SW8082A
Total PCBs	ND	0.65	mg/Kg	2	04/07/23	CK	SW8082A
QA/QC Surrogates							
% DCBP	56		%	2	04/07/23	CK	30 - 150 %
% DCBP (Confirmation)	50		%	2	04/07/23	CK	30 - 150 %
% TCMX	57		%	2	04/07/23	CK	30 - 150 %
% TCMX (Confirmation)	56		%	2	04/07/23	CK	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

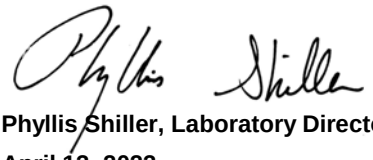
RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director
April 13, 2023
Reviewed and Released by: Rashmi Makol, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 13, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	ASPHALT	Collected by:	MK,BA,TN	04/04/23	11:48
Location Code:	TRC-DAS	Received by:	CP	04/06/23	10:10
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705.0000.0000				

Laboratory Data

SDG ID: GCN77269
Phoenix ID: CN77295

Project ID: CRDA-FORMER MCCARTIN SCHOOL PCB GROUND
Client ID: 27

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Extraction for PCB	Completed				04/06/23	Ş/R/KD/C\	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.79	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1221	ND	0.79	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1232	ND	0.79	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1242	ND	0.79	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1248	ND	0.79	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1254	ND	0.79	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1260	ND	0.79	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1262	ND	0.79	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1268	ND	0.79	mg/Kg	2	04/07/23	CK	SW8082A
Total PCBs	ND	0.79	mg/Kg	2	04/07/23	CK	SW8082A
QA/QC Surrogates							
% DCBP	50		%	2	04/07/23	CK	30 - 150 %
% DCBP (Confirmation)	62		%	2	04/07/23	CK	30 - 150 %
% TCMX	58		%	2	04/07/23	CK	30 - 150 %
% TCMX (Confirmation)	70		%	2	04/07/23	CK	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

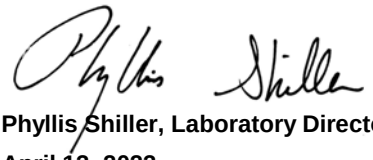
RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director
April 13, 2023
Reviewed and Released by: Rashmi Makol, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 13, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	CONCRETE	Collected by:	MK,BA,TN	04/04/23	11:54
Location Code:	TRC-DAS	Received by:	CP	04/06/23	10:10
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705.0000.0000				

Laboratory Data

SDG ID: GCN77269
Phoenix ID: CN77296

Project ID: CRDA-FORMER MCCARTIN SCHOOL PCB GROUND
Client ID: 28

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Extraction for PCB	Completed				04/06/23	Ş/R/KD/C\	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.54	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1221	ND	0.54	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1232	ND	0.54	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1242	ND	0.54	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1248	ND	0.54	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1254	ND	0.54	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1260	ND	0.54	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1262	ND	0.54	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1268	ND	0.54	mg/Kg	2	04/07/23	CK	SW8082A
Total PCBs	ND	0.54	mg/Kg	2	04/07/23	CK	SW8082A
QA/QC Surrogates							
% DCBP	64		%	2	04/07/23	CK	30 - 150 %
% DCBP (Confirmation)	55		%	2	04/07/23	CK	30 - 150 %
% TCMX	54		%	2	04/07/23	CK	30 - 150 %
% TCMX (Confirmation)	54		%	2	04/07/23	CK	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

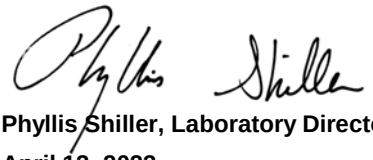
RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director
April 13, 2023
Reviewed and Released by: Rashmi Makol, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 13, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:	MK,BA,TN	04/04/23	11:58
Location Code:	TRC-DAS	Received by:	CP	04/06/23	10:10
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705.0000.0000				

Laboratory Data

SDG ID: GCN77269
Phoenix ID: CN77297

Project ID: CRDA-FORMER MCCARTIN SCHOOL PCB GROUND
Client ID: 29

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Percent Solid	80		%		04/06/23	CV	SW846-%Solid
Extraction for PCB	Completed				04/06/23	Q/R/KD/K	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.41	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1221	ND	0.41	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1232	ND	0.41	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1242	ND	0.41	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1248	ND	0.41	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1254	ND	0.41	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1260	ND	0.41	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1262	ND	0.41	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1268	ND	0.41	mg/Kg	10	04/07/23	CK	SW8082A
Total PCBs	ND	0.41	mg/Kg	10	04/07/23	CK	SW8082A
QA/QC Surrogates							
% DCBP	54		%	10	04/07/23	CK	30 - 150 %
% DCBP (Confirmation)	59		%	10	04/07/23	CK	30 - 150 %
% TCMX	54		%	10	04/07/23	CK	30 - 150 %
% TCMX (Confirmation)	56		%	10	04/07/23	CK	30 - 150 %

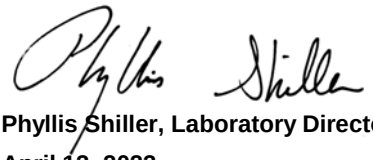
Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

April 13, 2023

Reviewed and Released by: Rashmi Makol, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 13, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:	MK,BA,TN	04/04/23	11:59
Location Code:	TRC-DAS	Received by:	CP	04/06/23	10:10
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705.0000.0000				

Laboratory Data

SDG ID: GCN77269
Phoenix ID: CN77298

Project ID: CRDA-FORMER MCCARTIN SCHOOL PCB GROUND
Client ID: 30

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Percent Solid	81		%		04/06/23	CV	SW846-%Solid
Extraction for PCB	Completed				04/06/23	Q/R/KD/K	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1221	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1232	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1242	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1248	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1254	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1260	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1262	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1268	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
Total PCBs	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
QA/QC Surrogates							
% DCBP	73		%	10	04/07/23	CK	30 - 150 %
% DCBP (Confirmation)	71		%	10	04/07/23	CK	30 - 150 %
% TCMX	66		%	10	04/07/23	CK	30 - 150 %
% TCMX (Confirmation)	70		%	10	04/07/23	CK	30 - 150 %

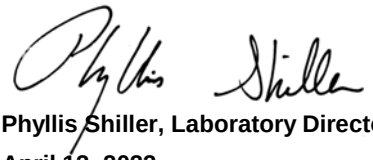
Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

April 13, 2023

Reviewed and Released by: Rashmi Makol, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 13, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:	MK,BA,TN	04/04/23	12:05
Location Code:	TRC-DAS	Received by:	CP	04/06/23	10:10
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705.0000.0000				

Laboratory Data

SDG ID: GCN77269
Phoenix ID: CN77299

Project ID: CRDA-FORMER MCCARTIN SCHOOL PCB GROUND
Client ID: 31

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Percent Solid	79		%		04/06/23	CV	SW846-%Solid
Extraction for PCB	Completed				04/06/23	Q/R/KD/K	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.42	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1221	ND	0.42	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1232	ND	0.42	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1242	ND	0.42	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1248	ND	0.42	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1254	ND	0.42	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1260	ND	0.42	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1262	ND	0.42	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1268	ND	0.42	mg/Kg	10	04/07/23	CK	SW8082A
Total PCBs	ND	0.42	mg/Kg	10	04/07/23	CK	SW8082A
QA/QC Surrogates							
% DCBP	85		%	10	04/07/23	CK	30 - 150 %
% DCBP (Confirmation)	88		%	10	04/07/23	CK	30 - 150 %
% TCMX	73		%	10	04/07/23	CK	30 - 150 %
% TCMX (Confirmation)	74		%	10	04/07/23	CK	30 - 150 %

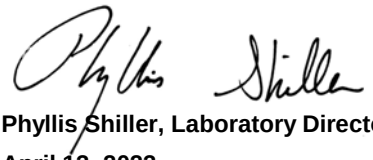
Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

April 13, 2023

Reviewed and Released by: Rashmi Makol, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 13, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:	MK,BA,TN	04/04/23	12:06
Location Code:	TRC-DAS	Received by:	CP	04/06/23	10:10
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705.0000.0000				

Laboratory Data

SDG ID: GCN77269
Phoenix ID: CN77300

Project ID: CRDA-FORMER MCCARTIN SCHOOL PCB GROUND
Client ID: 32

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Percent Solid	84		%		04/06/23	CV	SW846-%Solid
Extraction for PCB	Completed				04/07/23	Q/KD	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.39	mg/Kg	10	04/10/23	SC	SW8082A
PCB-1221	ND	0.39	mg/Kg	10	04/10/23	SC	SW8082A
PCB-1232	ND	0.39	mg/Kg	10	04/10/23	SC	SW8082A
PCB-1242	ND	0.39	mg/Kg	10	04/10/23	SC	SW8082A
PCB-1248	ND	0.39	mg/Kg	10	04/10/23	SC	SW8082A
PCB-1254	ND	0.39	mg/Kg	10	04/10/23	SC	SW8082A
PCB-1260	ND	0.39	mg/Kg	10	04/10/23	SC	SW8082A
PCB-1262	ND	0.39	mg/Kg	10	04/10/23	SC	SW8082A
PCB-1268	ND	0.39	mg/Kg	10	04/10/23	SC	SW8082A
Total PCBs	ND	0.39	mg/Kg	10	04/10/23	SC	SW8082A
QA/QC Surrogates							
% DCBP	80		%	10	04/10/23	SC	30 - 150 %
% DCBP (Confirmation)	80		%	10	04/10/23	SC	30 - 150 %
% TCMX	69		%	10	04/10/23	SC	30 - 150 %
% TCMX (Confirmation)	69		%	10	04/10/23	SC	30 - 150 %

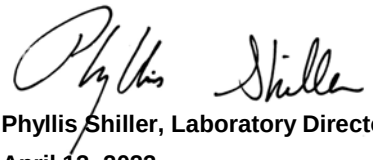
Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director
April 13, 2023
Reviewed and Released by: Rashmi Makol, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 13, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:	MK,BA,TN	04/04/23	12:10
Location Code:	TRC-DAS	Received by:	CP	04/06/23	10:10
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705.0000.0000				

Laboratory Data

SDG ID: GCN77269
Phoenix ID: CN77301

Project ID: CRDA-FORMER MCCARTIN SCHOOL PCB GROUND
Client ID: 33

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Percent Solid	82		%		04/06/23	CV	SW846-%Solid
Extraction for PCB	Completed				04/06/23	Q/R/KD/K	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1221	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1232	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1242	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1248	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1254	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1260	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1262	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1268	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
Total PCBs	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
QA/QC Surrogates							
% DCBP	77		%	10	04/07/23	CK	30 - 150 %
% DCBP (Confirmation)	72		%	10	04/07/23	CK	30 - 150 %
% TCMX	76		%	10	04/07/23	CK	30 - 150 %
% TCMX (Confirmation)	75		%	10	04/07/23	CK	30 - 150 %

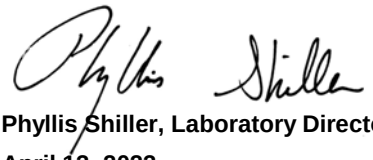
Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

April 13, 2023

Reviewed and Released by: Rashmi Makol, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 13, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:	MK,BA,TN	04/04/23	12:10
Location Code:	TRC-DAS	Received by:	CP	04/06/23	10:10
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705.0000.0000				

Laboratory Data

SDG ID: GCN77269
Phoenix ID: CN77302

Project ID: CRDA-FORMER MCCARTIN SCHOOL PCB GROUND
Client ID: 34

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Percent Solid	85		%		04/06/23	CV	SW846-%Solid
Extraction for PCB	Completed				04/06/23	Q/R/KD/K	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.38	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1221	ND	0.38	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1232	ND	0.38	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1242	ND	0.38	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1248	ND	0.38	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1254	ND	0.38	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1260	ND	0.38	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1262	ND	0.38	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1268	ND	0.38	mg/Kg	10	04/07/23	CK	SW8082A
Total PCBs	ND	0.38	mg/Kg	10	04/07/23	CK	SW8082A
QA/QC Surrogates							
% DCBP	52		%	10	04/07/23	CK	30 - 150 %
% DCBP (Confirmation)	50		%	10	04/07/23	CK	30 - 150 %
% TCMX	46		%	10	04/07/23	CK	30 - 150 %
% TCMX (Confirmation)	48		%	10	04/07/23	CK	30 - 150 %

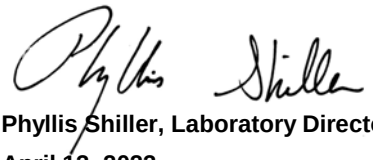
Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

April 13, 2023

Reviewed and Released by: Rashmi Makol, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 13, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:	MK,BA,TN	04/04/23	12:15
Location Code:	TRC-DAS	Received by:	CP	04/06/23	10:10
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705.0000.0000				

Laboratory Data

SDG ID: GCN77269
Phoenix ID: CN77303

Project ID: CRDA-FORMER MCCARTIN SCHOOL PCB GROUND
Client ID: 35

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Percent Solid	82		%		04/06/23	CV	SW846-%Solid
Extraction for PCB	Completed				04/06/23	Q/R/KD/K	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1221	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1232	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1242	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1248	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1254	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1260	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1262	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1268	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
Total PCBs	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
QA/QC Surrogates							
% DCBP	42		%	10	04/07/23	CK	30 - 150 %
% DCBP (Confirmation)	38		%	10	04/07/23	CK	30 - 150 %
% TCMX	37		%	10	04/07/23	CK	30 - 150 %
% TCMX (Confirmation)	40		%	10	04/07/23	CK	30 - 150 %

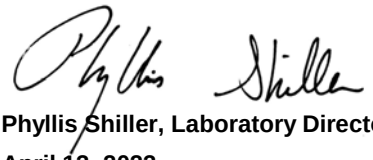
Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director
April 13, 2023
Reviewed and Released by: Rashmi Makol, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 13, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:	MK,BA,TN	04/04/23	12:16
Location Code:	TRC-DAS	Received by:	CP	04/06/23	10:10
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705.0000.0000				

Laboratory Data

SDG ID: GCN77269
Phoenix ID: CN77304

Project ID: CRDA-FORMER MCCARTIN SCHOOL PCB GROUND
Client ID: 36

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Percent Solid	83		%		04/06/23	CV	SW846-%Solid
Extraction for PCB	Completed				04/06/23	Q/R/KD/K	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1221	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1232	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1242	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1248	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1254	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1260	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1262	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1268	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
Total PCBs	ND	0.4	mg/Kg	10	04/07/23	CK	SW8082A
QA/QC Surrogates							
% DCBP	38		%	10	04/07/23	CK	30 - 150 %
% DCBP (Confirmation)	48		%	10	04/07/23	CK	30 - 150 %
% TCMX	40		%	10	04/07/23	CK	30 - 150 %
% TCMX (Confirmation)	40		%	10	04/07/23	CK	30 - 150 %

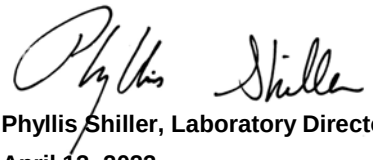
Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

April 13, 2023

Reviewed and Released by: Rashmi Makol, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 13, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:	MK,BA,TN	04/04/23	12:18
Location Code:	TRC-DAS	Received by:	CP	04/06/23	10:10
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705.0000.0000				

Laboratory Data

SDG ID: GCN77269
Phoenix ID: CN77305

Project ID: CRDA-FORMER MCCARTIN SCHOOL PCB GROUND
Client ID: 37

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Percent Solid	80		%		04/06/23	CV	SW846-%Solid
Extraction for PCB	Completed				04/06/23	Q/R/KD/K	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.41	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1221	ND	0.41	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1232	ND	0.41	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1242	ND	0.41	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1248	ND	0.41	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1254	ND	0.41	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1260	ND	0.41	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1262	ND	0.41	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1268	ND	0.41	mg/Kg	10	04/07/23	CK	SW8082A
Total PCBs	ND	0.41	mg/Kg	10	04/07/23	CK	SW8082A
QA/QC Surrogates							
% DCBP	48		%	10	04/07/23	CK	30 - 150 %
% DCBP (Confirmation)	39		%	10	04/07/23	CK	30 - 150 %
% TCMX	39		%	10	04/07/23	CK	30 - 150 %
% TCMX (Confirmation)	38		%	10	04/07/23	CK	30 - 150 %

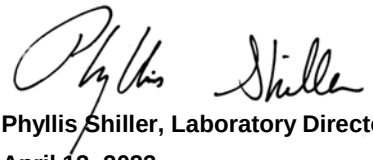
Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

April 13, 2023

Reviewed and Released by: Rashmi Makol, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 13, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:	MK,BA,TN	04/04/23	12:20
Location Code:	TRC-DAS	Received by:	CP	04/06/23	10:10
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705.0000.0000				

Laboratory Data

SDG ID: GCN77269
Phoenix ID: CN77306

Project ID: CRDA-FORMER MCCARTIN SCHOOL PCB GROUND
Client ID: 38

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Percent Solid	88		%		04/06/23	CV	SW846-%Solid
Extraction for PCB	Completed				04/06/23	Q/R/KD/K	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.38	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1221	ND	0.38	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1232	ND	0.38	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1242	ND	0.38	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1248	ND	0.38	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1254	ND	0.38	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1260	ND	0.38	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1262	ND	0.38	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1268	ND	0.38	mg/Kg	10	04/07/23	CK	SW8082A
Total PCBs	ND	0.38	mg/Kg	10	04/07/23	CK	SW8082A
QA/QC Surrogates							
% DCBP	36		%	10	04/07/23	CK	30 - 150 %
% DCBP (Confirmation)	38		%	10	04/07/23	CK	30 - 150 %
% TCMX	33		%	10	04/07/23	CK	30 - 150 %
% TCMX (Confirmation)	34		%	10	04/07/23	CK	30 - 150 %

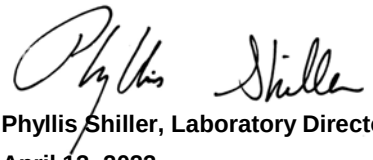
Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

April 13, 2023

Reviewed and Released by: Rashmi Makol, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 13, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:	MK,BA,TN	04/04/23	12:24
Location Code:	TRC-DAS	Received by:	CP	04/06/23	10:10
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705.0000.0000				

Laboratory Data

SDG ID: GCN77269
Phoenix ID: CN77307

Project ID: CRDA-FORMER MCCARTIN SCHOOL PCB GROUND
Client ID: 39

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Percent Solid	87		%		04/06/23	CV	SW846-%Solid
Extraction for PCB	Completed				04/06/23	Q/R/KD/K	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.38	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1221	ND	0.38	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1232	ND	0.38	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1242	ND	0.38	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1248	ND	0.38	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1254	ND	0.38	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1260	ND	0.38	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1262	ND	0.38	mg/Kg	10	04/07/23	CK	SW8082A
PCB-1268	ND	0.38	mg/Kg	10	04/07/23	CK	SW8082A
Total PCBs	ND	0.38	mg/Kg	10	04/07/23	CK	SW8082A
QA/QC Surrogates							
% DCBP	60		%	10	04/07/23	CK	30 - 150 %
% DCBP (Confirmation)	61		%	10	04/07/23	CK	30 - 150 %
% TCMX	56		%	10	04/07/23	CK	30 - 150 %
% TCMX (Confirmation)	56		%	10	04/07/23	CK	30 - 150 %

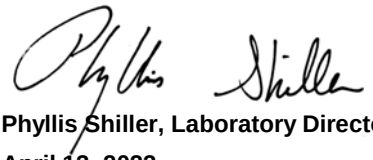
Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

April 13, 2023

Reviewed and Released by: Rashmi Makol, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102

QA/QC Report

April 13, 2023

QA/QC Data

SDG I.D.: GCN77269

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 671838 (mg/Kg), QC Sample No: CN75659 10X (CN77300)											
Polychlorinated Biphenyls - Soil											
PCB-1016	ND	0.17	73	86	16.4	63	74	16.1	40 - 140	30	
PCB-1221	ND	0.17							40 - 140	30	
PCB-1232	ND	0.17							40 - 140	30	
PCB-1242	ND	0.17							40 - 140	30	
PCB-1248	ND	0.17							40 - 140	30	
PCB-1254	ND	0.17							40 - 140	30	
PCB-1260	ND	0.17	83	87	4.7	62	72	14.9	40 - 140	30	
PCB-1262	ND	0.17							40 - 140	30	
PCB-1268	ND	0.17							40 - 140	30	
% DCBP (Surrogate Rec)	83	%	83	87	4.7	63	72	13.3	30 - 150	30	
% DCBP (Surrogate Rec) (Confirm	86	%	85	88	3.5	63	72	13.3	30 - 150	30	
% TCMX (Surrogate Rec)	70	%	48	78	47.6	56	64	13.3	30 - 150	30	r
% TCMX (Surrogate Rec) (Confirm	70	%	49	78	45.7	58	67	14.4	30 - 150	30	r
QA/QC Batch 671604 (mg/Kg), QC Sample No: CN77275 10X (CN77269, CN77270, CN77271, CN77272, CN77273, CN77274, CN77275, CN77276, CN77277, CN77278, CN77279, CN77280, CN77281, CN77282, CN77283, CN77284, CN77285, CN77286, CN77287)											
Polychlorinated Biphenyls - Soil											
PCB-1016	ND	0.17	89	88	1.1	74	69	7.0	40 - 140	30	
PCB-1221	ND	0.17							40 - 140	30	
PCB-1232	ND	0.17							40 - 140	30	
PCB-1242	ND	0.17							40 - 140	30	
PCB-1248	ND	0.17							40 - 140	30	
PCB-1254	ND	0.17							40 - 140	30	
PCB-1260	ND	0.17	95	100	5.1	72	67	7.2	40 - 140	30	
PCB-1262	ND	0.17							40 - 140	30	
PCB-1268	ND	0.17							40 - 140	30	
% DCBP (Surrogate Rec)	88	%	92	97	5.3	75	72	4.1	30 - 150	30	
% DCBP (Surrogate Rec) (Confirm	88	%	91	95	4.3	73	68	7.1	30 - 150	30	
% TCMX (Surrogate Rec)	69	%	74	74	0.0	57	55	3.6	30 - 150	30	
% TCMX (Surrogate Rec) (Confirm	71	%	75	74	1.3	64	60	6.5	30 - 150	30	
QA/QC Batch 671631 (mg/Kg), QC Sample No: CN77300 10X (CN77288, CN77297, CN77298, CN77299, CN77301, CN77302, CN77303, CN77304, CN77305, CN77306, CN77307)											
Polychlorinated Biphenyls - Soil											
PCB-1016	ND	0.17	77	65	16.9	63			40 - 140	30	
PCB-1221	ND	0.17							40 - 140	30	
PCB-1232	ND	0.17							40 - 140	30	
PCB-1242	ND	0.17							40 - 140	30	
PCB-1248	ND	0.17							40 - 140	30	
PCB-1254	ND	0.17							40 - 140	30	
PCB-1260	ND	0.17	101	82	20.8	57			40 - 140	30	
PCB-1262	ND	0.17							40 - 140	30	

QA/QC Data

SDG I.D.: GCN77269

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
PCB-1268	ND	0.17							40 - 140	30
% DCBP (Surrogate Rec)	104	%	101	86	16.0	56			30 - 150	30
% DCBP (Surrogate Rec) (Confirm	98	%	96	84	13.3	54			30 - 150	30
% TCMX (Surrogate Rec)	55	%	56	47	17.5	44			30 - 150	30
% TCMX (Surrogate Rec) (Confirm	55	%	56	48	15.4	47			30 - 150	30

Comment:

This batch consists of a Blank, LCS, LCSD and MS.

QA/QC Batch 671623 (mg/Kg), QC Sample No: CN77308 10X (CN77289, CN77290, CN77291, CN77292, CN77293, CN77294, CN77295, CN77296)

Polychlorinated Biphenyls

PCB-1016	ND	0.17	91	84	8.0				40 - 140	30
PCB-1221	ND	0.17							40 - 140	30
PCB-1232	ND	0.17							40 - 140	30
PCB-1242	ND	0.17							40 - 140	30
PCB-1248	ND	0.17							40 - 140	30
PCB-1254	ND	0.17							40 - 140	30
PCB-1260	ND	0.17	91	88	3.4				40 - 140	30
PCB-1262	ND	0.17							40 - 140	30
PCB-1268	ND	0.17							40 - 140	30
% DCBP (Surrogate Rec)	90	%	97	91	6.4				30 - 150	30
% DCBP (Surrogate Rec) (Confirm	84	%	91	86	5.6				30 - 150	30
% TCMX (Surrogate Rec)	64	%	73	64	13.1				30 - 150	30
% TCMX (Surrogate Rec) (Confirm	64	%	74	64	14.5				30 - 150	30

Comment:

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

r = This parameter is outside laboratory RPD specified recovery limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference

Phyllis Shiller, Laboratory Director
April 13, 2023

Thursday, April 13, 2023

Criteria: None

State: CT

Sample Criteria Exceedances Report

GCN77269 - TRC-DAS

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CN77281	$PCB_SOXR_T	Total PCBs	CT / Requested PCB RL /	1200	400	1000	1000	ug/Kg
CN77281	$PCB_SOXR_T	PCB-1254	CT / Requested PCB RL /	1200	400	1000	1000	ug/Kg
CN77282	$PCB_SOXR_T	Total PCBs	CT / Requested PCB RL /	1300	380	1000	1000	ug/Kg
CN77282	$PCB_SOXR_T	PCB-1254	CT / Requested PCB RL /	1300	380	1000	1000	ug/Kg
CN77283	$PCB_SOXR_T	Total PCBs	CT / Requested PCB RL /	1600	400	1000	1000	ug/Kg
CN77283	$PCB_SOXR_T	PCB-1254	CT / Requested PCB RL /	1600	400	1000	1000	ug/Kg
CN77286	$PCB_SOXR_T	Total PCBs	CT / Requested PCB RL /	1100	400	1000	1000	ug/Kg
CN77286	$PCB_SOXR_T	PCB-1254	CT / Requested PCB RL /	1100	400	1000	1000	ug/Kg

REASONABLE CONFIDENCE PROTOCOL
LABORATORY ANALYSIS QA/QC CERTIFICATION FORM

Laboratory Name: Phoenix Environmental Labs, Inc. ***Client:*** TRC Environmental Corp.

Project Location: CRDA-FORMER MCCARTIN SCHOOL ***Project Number:***

Laboratory Sample ID(s): CN77269-CN77307 ***Sampling Date(s):*** 4/4/2023

List RCP Methods Used (e.g., 8260, 8270, et cetera) 8082

1	**For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP method-specific Reasonable Confidence Protocol documents?**	☑ Yes ☐ No
1A	**Were the method specified preservation and holding time requirements met?**	☑ Yes ☐ No
1B	***VPH and EPH methods only:*** **Was the VPH or EPH method conducted without significant modifications (see section 11.3 of respective RCP methods)**	☐ Yes ☐ No ☑ NA
2	**Were all samples received by the laboratory in a condition consistent with that described on the associated Chain-of-Custody document(s)?**	☑ Yes ☐ No
3	**Were samples received at an appropriate temperature (< 6 Degrees C)?**	☑ Yes ☐ No ☐ NA
4	**Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents acheived? See Section: PCB Narration.**	☐ Yes ☑ No
5	**a) Were reporting limits specified or referenced on the chain-of-custody?** **b) Were these reporting limits met?**	☐ Yes ☑ No ☑ Yes ☐ No
6	**For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?**	☑ Yes ☐ No
7	**Are project-specific matrix spikes and laboratory duplicates included in the data set?**	☑ Yes ☐ No

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or 1B is "No", the data package does not meet the requirements for "Reasonable Confidence". This form may not be altered and all questions must be answered.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.

Authorized Signature: Rashmi Makol **Position:** Project Manager

Printed Name: Rashmi Makol **Date:** Thursday, April 13, 2023

Name of Laboratory Phoenix Environmental Labs, Inc.

This certification form is to be used for RCP methods only.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

April 13, 2023

SDG I.D.: GCN77269

PCB Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 671838 (Samples: CN77300): -----

The LCS/LCSD RPD exceeds the method criteria for one or more surrogates, therefore there may be variability in the reported result. (% TCMX (Surrogate Rec), % TCMX (Surrogate Rec) (Confirmation))

Instrument:

AU-ECD1 04/07/23-1 Christina Kozikis, Chemist 04/07/23

CN77292 (2X), CN77294 (2X), CN77296 (2X), CN77301 (10X), CN77304 (10X), CN77305 (10X)

The initial calibration (PC0329AI) RSD for the compound list was less than 20% except for the following compounds: None.
The initial calibration (PC0329BI) RSD for the compound list was less than 20% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 15% except for the following compounds:
Samples: CN77292, CN77294, CN77296, CN77301, CN77304, CN77305
Preceding CC 407B003 - None.
Succeeding CC 407B019 - DCBP SURR -16%L (15%)

AU-ECD1 04/10/23-1 Saadia Chudary, Chemist 04/10/23

CN77300 (10X)

The initial calibration (PC0329AI) RSD for the compound list was less than 20% except for the following compounds: None.
The initial calibration (PC0329BI) RSD for the compound list was less than 20% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 15% except for the following compounds:None.

AU-ECD24 04/07/23-1 Christina Kozikis, Chemist 04/07/23

CN77269 (10X), CN77286 (10X), CN77289 (1X), CN77290 (2X), CN77293 (2X), CN77297 (10X), CN77306 (10X)

The initial calibration (PC0314AI) RSD for the compound list was less than 20% except for the following compounds: None.
The initial calibration (PC0314BI) RSD for the compound list was less than 20% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 15% except for the following compounds:
Samples: CN77269, CN77286, CN77289, CN77290, CN77293, CN77297, CN77306
Preceding CC 407A003 - DCBP SURR -21%L (15%), PCB 1260 -18%L (%)
Succeeding CC 407A021 - DCBP SURR -16%L (15%)

AU-ECD3 04/07/23-1 Christina Kozikis, Chemist 04/07/23

CN77270 (10X), CN77275 (10X), CN77276 (10X), CN77279 (10X), CN77283 (10X), CN77288 (10X), CN77291 (2X), CN77303 (10X)

The initial calibration (PC0321AI) RSD for the compound list was less than 20% except for the following compounds: None.
The initial calibration (PC0321BI) RSD for the compound list was less than 20% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 15% except for the following compounds:
Samples: CN77270, CN77275, CN77276, CN77279, CN77283, CN77288, CN77291, CN77303
Preceding CC 407B004 - None.
Succeeding CC 407B019 - TCMX SURR -16%L (15%)

AU-ECD48 04/07/23-1 Christina Kozikis, Chemist 04/07/23

CN77272 (10X), CN77273 (10X), CN77274 (10X), CN77281 (10X), CN77282 (10X), CN77299 (10X), CN77307 (10X)

The initial calibration (PC0327AI) RSD for the compound list was less than 20% except for the following compounds: None.
The initial calibration (PC0327BI) RSD for the compound list was less than 20% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 15% except for the following compounds:None.

AU-ECD5 04/07/23-1 Christina Kozikis, Chemist 04/07/23

CN77280 (10X), CN77284 (10X), CN77285 (10X), CN77287 (10X), CN77295 (2X)

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

April 13, 2023

SDG I.D.: GCN77269

PCB Narration

The initial calibration (PC0329AI) RSD for the compound list was less than 20% except for the following compounds: None.
The initial calibration (PC0329BI) RSD for the compound list was less than 20% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 15% except for the following compounds:
Samples: CN77280, CN77284, CN77285, CN77287, CN77295
Preceding CC 407B003 - None.
Succeeding CC 407B019 - DCBP SURR -19%L (15%)

AU-ECD7 04/07/23-1 Christina Kozikis, Chemist 04/07/23

CN77271 (10X), CN77277 (10X), CN77278 (10X), CN77298 (10X), CN77302 (10X)

The initial calibration (PC0302AI) RSD for the compound list was less than 20% except for the following compounds: None.
The initial calibration (PC0302BI) RSD for the compound list was less than 20% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 15% except for the following compounds:None.

QC (Batch Specific):

Batch 671623 (CN77308)

CN77289, CN77290, CN77291, CN77292, CN77293, CN77294, CN77295, CN77296

All LCS recoveries were within 40 - 140 with the following exceptions: None.
All LCSD recoveries were within 40 - 140 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.
A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

Batch 671838 (CN75659)

CN77300

All LCS recoveries were within 40 - 140 with the following exceptions: None.
All LCSD recoveries were within 40 - 140 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: % TCMX (Surrogate Rec)(47.6%), % TCMX (Surrogate Rec) (Confirmation)(45.7%)

QC (Site Specific):

Batch 671604 (CN77275)

CN77269, CN77270, CN77271, CN77272, CN77273, CN77274, CN77275, CN77276, CN77277, CN77278, CN77279, CN77280, CN77281, CN77282, CN77283, CN77284, CN77285, CN77286, CN77287

All LCS recoveries were within 40 - 140 with the following exceptions: None.
All LCSD recoveries were within 40 - 140 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.
All MS recoveries were within 40 - 140 with the following exceptions: None.
All MSD recoveries were within 40 - 140 with the following exceptions: None.
All MS/MSD RPDs were less than 30% with the following exceptions: None.

Batch 671631 (CN77300)

CN77288, CN77297, CN77298, CN77299, CN77301, CN77302, CN77303, CN77304, CN77305, CN77306, CN77307

All LCS recoveries were within 40 - 140 with the following exceptions: None.
All LCSD recoveries were within 40 - 140 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.
All MS recoveries were within 40 - 140 with the following exceptions: None.
This batch consists of a Blank, LCS, LCSD and MS.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

April 13, 2023

SDG I.D.: GCN77269

Temperature Narration

The samples were received at 1.0C with cooling initiated.
(Note acceptance criteria for relevant matrices is above freezing up to 6°C)

1.0°C wcip

TRC

21 GRIFFIN ROAD NORTH
WINDSOR, CONNECTICUT 06095
TELEPHONE (860) 298-9692
FAX (860) 298-6380

CHAIN OF CUSTODY

DAS Rates Apply!

Edition: September 2007
Supersede Previous Edition

LAB ID #

PROJECT NUMBER	PROJECT NAME	PARAMETERS	CONTAINERS	TURNAROUND TIME
522705 · 000 · 000	CRDA – Former McCartin School PCB Ground Cover, 70 Canterbury St, East Hartford, Connecticut			24hr / 48hr (X) / 3-day / 5-day
SIGNATURE: (signature)	INSPECTOR(S) Michael Kostruba, Boris Armel, Tyler Noll			

Lab ID	SAMPLE ID	DATE	TIME	COMP	GRAB	SAMPLE LOCATION	EPA 8082 (3540)	# of Amber Glass	# of Clear Glass	Matrix	Preservative	MATERIALS & NOTES
77269	01	4/4/2023	09:20		X	See Print	X		1	Soil	Ice	12" from building/wall - Soil (3")
77270	02	4/4/2023	09:25		X		X		1	Soil	Ice	12" from building/wall - Soil (3")
77271	03	4/4/2023	09:27		X		X		1	Soil	Ice	12" from building/wall - Soil (3")
77272	04	4/4/2023	09:32		X		X		1	Soil	Ice	12" from building/wall - Soil (3")
77273	05	4/4/2023	09:32		X		X		1	Soil	Ice	12" from building/wall - Soil (3")
77274	06	4/4/2023	09:37		X		X		1	Soil	Ice	12" from building/wall - Soil (3")
77275	07	4/4/2023	09:42		X		X		1	Soil	Ice	12" from building/wall - Soil (3")
77276	08	4/4/2023	09:43		X		X		1	Soil	Ice	12" from building/wall - Soil (3")
77277	09	4/4/2023	09:46		X		X		1	Soil	Ice	12" from building/wall - Soil (3")
77278	10	4/4/2023	09:47		X		X		1	Soil	Ice	12" from building/wall - Soil (3")
77279	11	4/4/2023	09:48		X		X		1	Soil	Ice	12" from building/wall - Soil (3")
77280	12	4/4/2023	09:48		X		X		1	Soil	Ice	12" from building/wall - Soil (3")

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
(signature)	4/5/23	(signature)	(signature)	4/6/23	Emily A 4/6/23 1010
(Printed) Michael Kostruba	Time: 15:30	(Printed)	(Printed)	Time: 9:25	(Printed)

Remarks: Include CT DPH RCP Report. **DAS RATES APPLY**
Report to: Mkostruba@trccomapanies.com

Condition upon Receipt:

Page 1 of 1

1.0oc wcip

TRC

Edition: September 2007
Supersede Previous Edition

21 GRIFFIN ROAD NORTH
WINDSOR, CONNECTICUT 06095
TELEPHONE (860) 298-9692
FAX (860) 298-6380

CHAIN OF CUSTODY

LAB ID #

PROJECT NUMBER	PROJECT NAME	PARAMETERS	CONTAINERS	TURNAROUND TIME
522705	CRDA — Former McCartin School PCB Ground Cover, 70 Canterbury St, East Hartford, Connecticut			24hr [X] 48hr [ ] 3-day [ ] 5-day
SIGNATURE	INSPECTOR(S) Michael Kostruba, Boris Armel, Tyler Noll			

Lab ID	SAMPLE ID	DATE	TIME	TYPE COMP	TYPE GRAB	SAMPLE LOCATION	EPA 8082 (3540)	# of Amber Glass	# of Clear Glass	Matrix	Preservative	MATERIALS & NOTES
77281	13	4/4/2023	09:51		X	See Print	X		1	Soil	Ice	12" from building/wall - Soil (3")
77282	14	4/4/2023	09:51		X		X		1	Soil	Ice	12" from building/wall - Soil (3")
77283	15	4/4/2023	10:04		X		X		1	Soil	Ice	12" from building/wall - Soil (3")
77284	16	4/4/2023	10:04		X		X		1	Soil	Ice	12" from building/wall - Soil (3")
77285	17	4/4/2023	10:05		X		X		1	Soil	Ice	12" from building/wall - Soil (3")
77286	18	4/4/2023	10:13		X		X		1	Soil	Ice	12" from building/wall - Soil (3")
77287	19	4/4/2023	10:19		X		X		1	Soil	Ice	12" from building/wall - Soil (3")
77288	20	4/4/2023	10:26		X		X		1	Soil	Ice	12" from building/wall - Soil (3")
77289	21	4/4/2023	10:32		X		X		1	Asphalt	Ice	12" from building/wall - Asphalt (3")
77290	22	4/4/2023	10:43		X		X		1	Asphalt	Ice	12" from building/wall - Asphalt (3")
77291	23	4/4/2023	10:55		X		X		1	Asphalt	Ice	12" from building/wall - Asphalt (3")
77292	24	4/4/2023	11:06		X		X		1	Asphalt	Ice	12" from building/wall - Asphalt (3")

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature) 1010
	4/5/23			4/6/23	Emily A 4/6/23
(Printed) Michael Kostruba	Time: 15:30	(Printed)	(Printed)	Time: 9:25	(Printed)

Remarks: Include CT DPH RCP Report. **DAS RATES APPLY**
Report to: Mkostruba@trccomapanies.com

Condition upon Receipt:

1.0°C wdp

TRC

21 GRIFFIN ROAD NORTH
WINDSOR, CONNECTICUT 06095
TELEPHONE (860) 298-9692
FAX (860) 298-6380

Edition: September 2007
Supersede Previous Edition

CHAIN OF CUSTODY

LAB ID #

PROJECT NUMBER	PROJECT NAME	PARAMETERS	CONTAINERS	TURNAROUND TIME
522705	CRDA — Former McCartin School PCB Ground Cover, 70 Canterbury St, East Hartford, Connecticut			24hr X 48hr 3-day 5-day

SIGNATURE	INSPECTOR(S)
	Michael Kostruba Boris Armel, Tyler Noll

Lab ID	SAMPLE ID	DATE	TIME	TYPE COMP	TYPE GRAB	SAMPLE LOCATION	EPA 8082 (3540)	# of Amber Glass	# of Clear Glass	Matrix	Preservative	MATERIALS & NOTES
77293	25	4/4/2023	11:27		X	See Print	X		1	Concrete	Ice	12" from building/wall - Concrete (3")
77294	26	4/4/2023	11:41		X		X		1	Asphalt	Ice	12" from building/wall - Asphalt (3")
77295	27	4/4/2023	11:48		X		X		1	Asphalt	Ice	12" from building/wall - Asphalt (3")
77296	28	4/4/2023	11:54		X		X		1	Concrete	Ice	12" from building/wall - Concrete (3")
77297	29	4/4/2023	11:58		X		X		1	Soil	Ice	12" from building/wall - Soil (3")
77298	30	4/4/2023	11:59		X		X		1	Soil	Ice	12" from building/wall - Soil (3"
77299	31	4/4/2023	12:05		X		X		1	Soil	Ice	12" from building/wall - Soil (3")
77300	32	4/4/2023	12:06		X		X		1	Soil	Ice	12" from building/wall - Soil (3")
77301	33	4/4/2023	12:10		X		X		1	Soil	Ice	12" from building/wall - Soil (3")
77302	34	4/4/2023	12:10		X		X		1	Soil	Ice	12" from building/wall - Soil (3")
77303	35	4/4/2023	12:15		X		X		1	Soil	Ice	12" from building/wall - Soil (3")
77304	36	4/4/2023	12:16		X		X		1	Soil	Ice	12" from building/wall - Soil (3")

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
	4/5/23			4/6/23	1010 Emily A 4/6/23
(Printed) Michael Kostruba	Time: 15:30	(Printed)	(Printed)	Time: 9:25	(Printed)

Remarks: Include CT DPH RCP Report. **DAS RATES APPLY**
Report to: Mkostruba@trccomapanies.com

Condition upon Receipt:

1.0ac wcip

TRC

Edition: September 2007
Supersede Previous Edition

21 GRIFFIN ROAD NORTH
WINDSOR, CONNECTICUT 06095
TELEPHONE (860) 298-9692
FAX (860) 298-6380

CHAIN OF CUSTODY

LAB ID #

PROJECT NUMBER	PROJECT NAME	PARAMETERS	CONTAINERS	TURNAROUND TIME
522705	CRDA – Former McCartin School PCB Ground Cover, 70 Canterbury St, East Hartford, Connecticut			24hr [X] 48hr [ ] 3-day [ ] 5-day
SIGNATURE	INSPECTOR(S) Michael Kostruba, Boris Armel, Tyler Noll			

Lab ID	SAMPLE ID	DATE	TIME	TYPE COMP	TYPE GRAB	SAMPLE LOCATION	EPA 8082 (3540)	# of Amber Glass	# of Clear Glass	Matrix	Preservative	MATERIALS & NOTES
77305	37	4/4/2023	12:18		X	sceprint	X		1	Soil	Ice	12" from building/wall - Soil (3")
77306	38	4/4/2023	12:20		X	"	X		1	Soil	Ice	12" from building/wall - Soil (3")
77307	39	4/4/2023	12:24		X	"	X		1	Soil	Ice	12" from building/wall - Soil (3")

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
	4/5/23			4/6/23	Emily S 4/6/23 1010
(Printed) Michael Kostruba	Time: 15:30	(Printed)	(Printed)	Time: 9:25	(Printed)

Remarks: Include CT DPH RCP Report. **DAS RATES APPLY**
Report to: Mkostruba@trccomapanies.com

Condition upon Receipt:

PHOENIX
Environmental Laboratories, Inc.

Thursday, April 13, 2023

Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Project ID: **CRDA-FORMER MCCARTIN SCHOOL PCB SUBSTR.**
SDG ID: **GCN77308**
Sample ID#s: **CN77308, CN77310, CN77312, CN77314, CN77316, CN77318, CN77320, CN77322, CN77324, CN77326, CN77328, CN77330, CN77332, CN77334, CN77336, CN77338**

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #M-CT007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Sample Id Cross Reference

April 13, 2023

SDG I.D.: GCN77308

Project ID: CRDA-FORMER MCCARTIN SCHOOL PCB SUBSTR.

Client Id	Lab Id	Matrix
01	CN77308	BRICK
04	CN77310	BRICK
07	CN77312	BRICK
10	CN77314	BRICK
13	CN77316	BRICK
16	CN77318	BRICK
19	CN77320	BRICK
22	CN77322	BRICK
25	CN77324	BRICK
28	CN77326	BRICK
31	CN77328	BRICK
34	CN77330	BRICK
37	CN77332	BRICK
40	CN77334	BRICK
43	CN77336	BRICK
46	CN77338	BRICK

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 13, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	BRICK	Collected by:	MK,BA,TN	04/04/23	13:06
Location Code:	TRC-DAS	Received by:	CP	04/06/23	10:10
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705				

Laboratory Data

SDG ID: GCN77308
Phoenix ID: CN77308

Project ID: CRDA-FORMER MCCARTIN SCHOOL PCB SUBSTR.
Client ID: 01

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Extraction for PCB	Completed				04/06/23	Ş/R/KD/C\	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.76	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1221	ND	0.76	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1232	ND	0.76	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1242	ND	0.76	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1248	ND	0.76	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1254	ND	0.76	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1260	ND	0.76	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1262	ND	0.76	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1268	ND	0.76	mg/Kg	2	04/07/23	CK	SW8082A
Total PCBs	ND	0.76	mg/Kg	2	04/07/23	CK	SW8082A
QA/QC Surrogates							
% DCBP	54		%	2	04/07/23	CK	30 - 150 %
% DCBP (Confirmation)	52		%	2	04/07/23	CK	30 - 150 %
% TCMX	50		%	2	04/07/23	CK	30 - 150 %
% TCMX (Confirmation)	51		%	2	04/07/23	CK	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
April 13, 2023
Reviewed and Released by: Rashmi Makol, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 13, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	BRICK	Collected by:	MK,BA,TN	04/04/23	13:33
Location Code:	TRC-DAS	Received by:	CP	04/06/23	10:10
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705				

Laboratory Data

SDG ID: GCN77308
Phoenix ID: CN77310

Project ID: CRDA-FORMER MCCARTIN SCHOOL PCB SUBSTR.
Client ID: 04

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Extraction for PCB	Completed				04/06/23	Ş/R/KD/C\	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.62	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1221	ND	0.62	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1232	ND	0.62	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1242	ND	0.62	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1248	ND	0.62	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1254	ND	0.62	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1260	ND	0.62	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1262	ND	0.62	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1268	ND	0.62	mg/Kg	2	04/07/23	CK	SW8082A
Total PCBs	ND	0.62	mg/Kg	2	04/07/23	CK	SW8082A
QA/QC Surrogates							
% DCBP	62		%	2	04/07/23	CK	30 - 150 %
% DCBP (Confirmation)	59		%	2	04/07/23	CK	30 - 150 %
% TCMX	58		%	2	04/07/23	CK	30 - 150 %
% TCMX (Confirmation)	60		%	2	04/07/23	CK	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

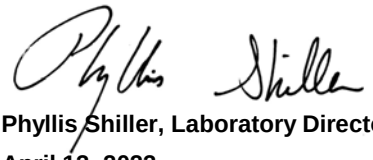
RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director
April 13, 2023
Reviewed and Released by: Rashmi Makol, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 13, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	BRICK	Collected by:	MK,BA,TN	04/04/23	13:50
Location Code:	TRC-DAS	Received by:	CP	04/06/23	10:10
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705				

Laboratory Data

SDG ID: GCN77308
Phoenix ID: CN77312

Project ID: CRDA-FORMER MCCARTIN SCHOOL PCB SUBSTR.
Client ID: 07

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Extraction for PCB	Completed				04/06/23	Ş/R/KD/C\	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.71	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1221	ND	0.71	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1232	ND	0.71	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1242	ND	0.71	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1248	ND	0.71	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1254	ND	0.71	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1260	ND	0.71	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1262	ND	0.71	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1268	ND	0.71	mg/Kg	2	04/07/23	CK	SW8082A
Total PCBs	ND	0.71	mg/Kg	2	04/07/23	CK	SW8082A
QA/QC Surrogates							
% DCBP	51		%	2	04/07/23	CK	30 - 150 %
% DCBP (Confirmation)	65		%	2	04/07/23	CK	30 - 150 %
% TCMX	57		%	2	04/07/23	CK	30 - 150 %
% TCMX (Confirmation)	68		%	2	04/07/23	CK	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

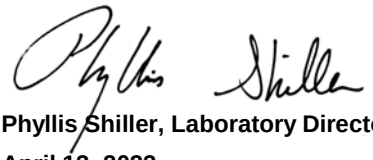
RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director
April 13, 2023
Reviewed and Released by: Rashmi Makol, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 13, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	BRICK	Collected by:	MK,BA,TN	04/04/23	14:07
Location Code:	TRC-DAS	Received by:	CP	04/06/23	10:10
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705				

Laboratory Data

SDG ID: GCN77308
Phoenix ID: CN77314

Project ID: CRDA-FORMER MCCARTIN SCHOOL PCB SUBSTR.
Client ID: 10

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Extraction for PCB	Completed				04/06/23	Ş/R/KD/C\	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.39	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1221	ND	0.39	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1232	ND	0.39	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1242	ND	0.39	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1248	ND	0.39	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1254	ND	0.39	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1260	ND	0.39	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1262	ND	0.39	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1268	ND	0.39	mg/Kg	2	04/07/23	CK	SW8082A
Total PCBs	ND	0.39	mg/Kg	2	04/07/23	CK	SW8082A
QA/QC Surrogates							
% DCBP	55		%	2	04/07/23	CK	30 - 150 %
% DCBP (Confirmation)	58		%	2	04/07/23	CK	30 - 150 %
% TCMX	54		%	2	04/07/23	CK	30 - 150 %
% TCMX (Confirmation)	58		%	2	04/07/23	CK	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

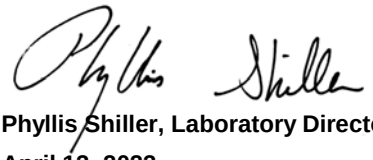
RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director
April 13, 2023
Reviewed and Released by: Rashmi Makol, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 13, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	BRICK	Collected by:	MK,BA,TN	04/04/23	14:22
Location Code:	TRC-DAS	Received by:	CP	04/06/23	10:10
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705				

Laboratory Data

SDG ID: GCN77308
Phoenix ID: CN77316

Project ID: CRDA-FORMER MCCARTIN SCHOOL PCB SUBSTR.
Client ID: 13

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Extraction for PCB	Completed				04/06/23	Ş/R/KD/C\	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.52	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1221	ND	0.52	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1232	ND	0.52	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1242	ND	0.52	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1248	ND	0.52	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1254	ND	0.52	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1260	ND	0.52	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1262	ND	0.52	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1268	ND	0.52	mg/Kg	2	04/07/23	CK	SW8082A
Total PCBs	ND	0.52	mg/Kg	2	04/07/23	CK	SW8082A
QA/QC Surrogates							
% DCBP	63		%	2	04/07/23	CK	30 - 150 %
% DCBP (Confirmation)	61		%	2	04/07/23	CK	30 - 150 %
% TCMX	57		%	2	04/07/23	CK	30 - 150 %
% TCMX (Confirmation)	59		%	2	04/07/23	CK	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

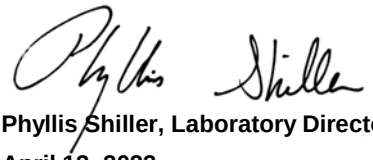
RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director
April 13, 2023
Reviewed and Released by: Rashmi Makol, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 13, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	BRICK	Collected by:	MK,BA,TN	04/04/23	14:33
Location Code:	TRC-DAS	Received by:	CP	04/06/23	10:10
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705				

Laboratory Data

SDG ID: GCN77308
Phoenix ID: CN77318

Project ID: CRDA-FORMER MCCARTIN SCHOOL PCB SUBSTR.
Client ID: 16

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Extraction for PCB	Completed				04/06/23	Ǫ/R/KD/C\	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.72	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1221	ND	0.72	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1232	ND	0.72	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1242	ND	0.72	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1248	ND	0.72	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1254	ND	0.72	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1260	ND	0.72	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1262	ND	0.72	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1268	ND	0.72	mg/Kg	2	04/07/23	CK	SW8082A
Total PCBs	ND	0.72	mg/Kg	2	04/07/23	CK	SW8082A
QA/QC Surrogates							
% DCBP	61		%	2	04/07/23	CK	30 - 150 %
% DCBP (Confirmation)	58		%	2	04/07/23	CK	30 - 150 %
% TCMX	53		%	2	04/07/23	CK	30 - 150 %
% TCMX (Confirmation)	55		%	2	04/07/23	CK	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

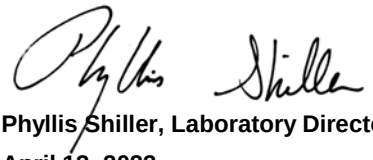
RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director
April 13, 2023
Reviewed and Released by: Rashmi Makol, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 13, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	BRICK	Collected by:	MK,BA,TN	04/04/23	14:48
Location Code:	TRC-DAS	Received by:	CP	04/06/23	10:10
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705				

Laboratory Data

SDG ID: GCN77308
Phoenix ID: CN77320

Project ID: CRDA-FORMER MCCARTIN SCHOOL PCB SUBSTR.
Client ID: 19

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Extraction for PCB	Completed				04/06/23	Ş/R/KD/C\	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.68	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1221	ND	0.68	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1232	ND	0.68	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1242	ND	0.68	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1248	ND	0.68	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1254	ND	0.68	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1260	ND	0.68	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1262	ND	0.68	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1268	ND	0.68	mg/Kg	2	04/07/23	CK	SW8082A
Total PCBs	ND	0.68	mg/Kg	2	04/07/23	CK	SW8082A
QA/QC Surrogates							
% DCBP	60		%	2	04/07/23	CK	30 - 150 %
% DCBP (Confirmation)	58		%	2	04/07/23	CK	30 - 150 %
% TCMX	57		%	2	04/07/23	CK	30 - 150 %
% TCMX (Confirmation)	58		%	2	04/07/23	CK	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
April 13, 2023
Reviewed and Released by: Rashmi Makol, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 13, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	BRICK	Collected by:	MK,BA,TN	04/04/23	14:56
Location Code:	TRC-DAS	Received by:	CP	04/06/23	10:10
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705				

Laboratory Data

SDG ID: GCN77308
Phoenix ID: CN77322

Project ID: CRDA-FORMER MCCARTIN SCHOOL PCB SUBSTR.
Client ID: 22

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Extraction for PCB	Completed				04/06/23	Ş/R/KD/C\	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.62	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1221	ND	0.62	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1232	ND	0.62	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1242	ND	0.62	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1248	ND	0.62	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1254	ND	0.62	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1260	ND	0.62	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1262	ND	0.62	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1268	ND	0.62	mg/Kg	2	04/07/23	CK	SW8082A
Total PCBs	ND	0.62	mg/Kg	2	04/07/23	CK	SW8082A
QA/QC Surrogates							
% DCBP	63		%	2	04/07/23	CK	30 - 150 %
% DCBP (Confirmation)	62		%	2	04/07/23	CK	30 - 150 %
% TCMX	53		%	2	04/07/23	CK	30 - 150 %
% TCMX (Confirmation)	57		%	2	04/07/23	CK	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

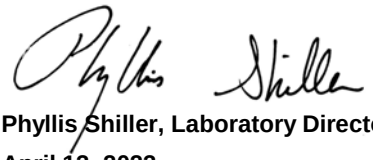
RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director
April 13, 2023
Reviewed and Released by: Rashmi Makol, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 13, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	BRICK	Collected by:	MK,BA,TN	04/04/23	15:14
Location Code:	TRC-DAS	Received by:	CP	04/06/23	10:10
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705				

Laboratory Data

SDG ID: GCN77308
Phoenix ID: CN77324

Project ID: CRDA-FORMER MCCARTIN SCHOOL PCB SUBSTR.
Client ID: 25

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Extraction for PCB	Completed				04/06/23	Ş/R/KD/C\	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.79	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1221	ND	0.79	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1232	ND	0.79	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1242	ND	0.79	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1248	ND	0.79	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1254	ND	0.79	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1260	ND	0.79	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1262	ND	0.79	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1268	ND	0.79	mg/Kg	2	04/07/23	CK	SW8082A
Total PCBs	ND	0.79	mg/Kg	2	04/07/23	CK	SW8082A
QA/QC Surrogates							
% DCBP	70		%	2	04/07/23	CK	30 - 150 %
% DCBP (Confirmation)	61		%	2	04/07/23	CK	30 - 150 %
% TCMX	63		%	2	04/07/23	CK	30 - 150 %
% TCMX (Confirmation)	52		%	2	04/07/23	CK	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

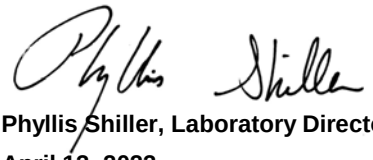
RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director
April 13, 2023
Reviewed and Released by: Rashmi Makol, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 13, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	BRICK	Collected by:	MK,BA,TN	04/04/23	15:27
Location Code:	TRC-DAS	Received by:	CP	04/06/23	10:10
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705				

Laboratory Data

SDG ID: GCN77308
Phoenix ID: CN77326

Project ID: CRDA-FORMER MCCARTIN SCHOOL PCB SUBSTR.
Client ID: 28

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Extraction for PCB	Completed				04/06/23	Ş/R/KD/C\	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.65	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1221	ND	0.65	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1232	ND	0.65	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1242	ND	0.65	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1248	ND	0.65	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1254	ND	0.65	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1260	ND	0.65	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1262	ND	0.65	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1268	ND	0.65	mg/Kg	2	04/07/23	CK	SW8082A
Total PCBs	ND	0.65	mg/Kg	2	04/07/23	CK	SW8082A
QA/QC Surrogates							
% DCBP	64		%	2	04/07/23	CK	30 - 150 %
% DCBP (Confirmation)	54		%	2	04/07/23	CK	30 - 150 %
% TCMX	62		%	2	04/07/23	CK	30 - 150 %
% TCMX (Confirmation)	64		%	2	04/07/23	CK	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
April 13, 2023
Reviewed and Released by: Rashmi Makol, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 13, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	BRICK	Collected by:	MK,BA,TN	04/05/23	9:43
Location Code:	TRC-DAS	Received by:	CP	04/06/23	10:10
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705				

Laboratory Data

SDG ID: GCN77308
Phoenix ID: CN77328

Project ID: CRDA-FORMER MCCARTIN SCHOOL PCB SUBSTR.
Client ID: 31

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Extraction for PCB	Completed				04/06/23	Ş/R/KD/C\	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.48	mg/Kg	1	04/07/23	CK	SW8082A
PCB-1221	ND	0.48	mg/Kg	1	04/07/23	CK	SW8082A
PCB-1232	ND	0.48	mg/Kg	1	04/07/23	CK	SW8082A
PCB-1242	ND	0.48	mg/Kg	1	04/07/23	CK	SW8082A
PCB-1248	ND	0.48	mg/Kg	1	04/07/23	CK	SW8082A
PCB-1254	ND	0.48	mg/Kg	1	04/07/23	CK	SW8082A
PCB-1260	0.52	0.48	mg/Kg	1	04/07/23	CK	SW8082A
PCB-1262	ND	0.48	mg/Kg	1	04/07/23	CK	SW8082A
PCB-1268	ND	0.48	mg/Kg	1	04/07/23	CK	SW8082A
Total PCBs	0.52	0.48	mg/Kg	1	04/07/23	CK	SW8082A
QA/QC Surrogates							
% DCBP	45		%	1	04/07/23	CK	30 - 150 %
% DCBP (Confirmation)	36		%	1	04/07/23	CK	30 - 150 %
% TCMX	40		%	1	04/07/23	CK	30 - 150 %
% TCMX (Confirmation)	40		%	1	04/07/23	CK	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

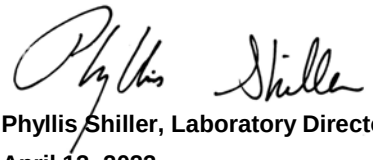
RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director
April 13, 2023
Reviewed and Released by: Rashmi Makol, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 13, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	BRICK	Collected by:	MK,BA,TN	04/05/23	10:18
Location Code:	TRC-DAS	Received by:	CP	04/06/23	10:10
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705				

Laboratory Data

SDG ID: GCN77308
Phoenix ID: CN77330

Project ID: CRDA-FORMER MCCARTIN SCHOOL PCB SUBSTR.
Client ID: 34

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Extraction for PCB	Completed				04/06/23	Ş/R/KD/C\	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.44	mg/Kg	1	04/07/23	CK	SW8082A
PCB-1221	ND	0.44	mg/Kg	1	04/07/23	CK	SW8082A
PCB-1232	ND	0.44	mg/Kg	1	04/07/23	CK	SW8082A
PCB-1242	ND	0.44	mg/Kg	1	04/07/23	CK	SW8082A
PCB-1248	ND	0.44	mg/Kg	1	04/07/23	CK	SW8082A
PCB-1254	ND	0.44	mg/Kg	1	04/07/23	CK	SW8082A
PCB-1260	ND	0.44	mg/Kg	1	04/07/23	CK	SW8082A
PCB-1262	ND	0.44	mg/Kg	1	04/07/23	CK	SW8082A
PCB-1268	ND	0.44	mg/Kg	1	04/07/23	CK	SW8082A
Total PCBs	ND	0.44	mg/Kg	1	04/07/23	CK	SW8082A
QA/QC Surrogates							
% DCBP	52		%	1	04/07/23	CK	30 - 150 %
% DCBP (Confirmation)	41		%	1	04/07/23	CK	30 - 150 %
% TCMX	46		%	1	04/07/23	CK	30 - 150 %
% TCMX (Confirmation)	45		%	1	04/07/23	CK	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

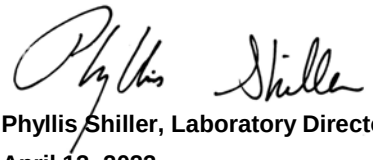
RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director
April 13, 2023
Reviewed and Released by: Rashmi Makol, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 13, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	BRICK	Collected by:	MK,BA,TN	04/05/23	9:26
Location Code:	TRC-DAS	Received by:	CP	04/06/23	10:10
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705				

Laboratory Data

SDG ID: GCN77308
Phoenix ID: CN77332

Project ID: CRDA-FORMER MCCARTIN SCHOOL PCB SUBSTR.
Client ID: 37

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Extraction for PCB	Completed				04/07/23	Q/KD	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.96	mg/Kg	2	04/10/23	SC	SW8082A
PCB-1221	ND	0.96	mg/Kg	2	04/10/23	SC	SW8082A
PCB-1232	ND	0.96	mg/Kg	2	04/10/23	SC	SW8082A
PCB-1242	ND	0.96	mg/Kg	2	04/10/23	SC	SW8082A
PCB-1248	ND	0.96	mg/Kg	2	04/10/23	SC	SW8082A
PCB-1254	ND	0.96	mg/Kg	2	04/10/23	SC	SW8082A
PCB-1260	ND	0.96	mg/Kg	2	04/10/23	SC	SW8082A
PCB-1262	ND	0.96	mg/Kg	2	04/10/23	SC	SW8082A
PCB-1268	ND	0.96	mg/Kg	2	04/10/23	SC	SW8082A
Total PCBs	ND	0.96	mg/Kg	2	04/10/23	SC	SW8082A
QA/QC Surrogates							
% DCBP	50		%	2	04/10/23	SC	30 - 150 %
% DCBP (Confirmation)	47		%	2	04/10/23	SC	30 - 150 %
% TCMX	48		%	2	04/10/23	SC	30 - 150 %
% TCMX (Confirmation)	48		%	2	04/10/23	SC	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

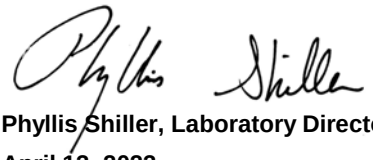
RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director
April 13, 2023
Reviewed and Released by: Rashmi Makol, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 13, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	BRICK	Collected by:	MK,BA,TN	04/05/23	10:32
Location Code:	TRC-DAS	Received by:	CP	04/06/23	10:10
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705				

Laboratory Data

SDG ID: GCN77308
Phoenix ID: CN77334

Project ID: CRDA-FORMER MCCARTIN SCHOOL PCB SUBSTR.
Client ID: 40

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Extraction for PCB	Completed				04/06/23	Ş/R/KD/C\	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.68	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1221	ND	0.68	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1232	ND	0.68	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1242	ND	0.68	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1248	ND	0.68	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1254	ND	0.68	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1260	ND	0.68	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1262	ND	0.68	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1268	ND	0.68	mg/Kg	2	04/07/23	CK	SW8082A
Total PCBs	ND	0.68	mg/Kg	2	04/07/23	CK	SW8082A
QA/QC Surrogates							
% DCBP	57		%	2	04/07/23	CK	30 - 150 %
% DCBP (Confirmation)	63		%	2	04/07/23	CK	30 - 150 %
% TCMX	59		%	2	04/07/23	CK	30 - 150 %
% TCMX (Confirmation)	62		%	2	04/07/23	CK	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

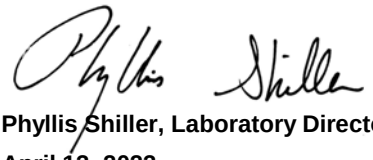
RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director
April 13, 2023
Reviewed and Released by: Rashmi Makol, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 13, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	BRICK	Collected by:	MK,BA,TN	04/05/23	11:01
Location Code:	TRC-DAS	Received by:	CP	04/06/23	10:10
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705				

Laboratory Data

SDG ID: GCN77308
Phoenix ID: CN77336

Project ID: CRDA-FORMER MCCARTIN SCHOOL PCB SUBSTR.
Client ID: 43

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Extraction for PCB	Completed				04/06/23	ϙ/R/KD/C\	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.8	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1221	ND	0.8	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1232	ND	0.8	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1242	ND	0.8	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1248	ND	0.8	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1254	ND	0.8	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1260	ND	0.8	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1262	ND	0.8	mg/Kg	2	04/07/23	CK	SW8082A
PCB-1268	ND	0.8	mg/Kg	2	04/07/23	CK	SW8082A
Total PCBs	ND	0.8	mg/Kg	2	04/07/23	CK	SW8082A
QA/QC Surrogates							
% DCBP	59		%	2	04/07/23	CK	30 - 150 %
% DCBP (Confirmation)	57		%	2	04/07/23	CK	30 - 150 %
% TCMX	50		%	2	04/07/23	CK	30 - 150 %
% TCMX (Confirmation)	52		%	2	04/07/23	CK	30 - 150 %

Project ID: CRDA-FORMER MCCARTIN SCHOOL PCB SUBSTR. Phoenix I.D.: CN77336
Client ID: 43

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
April 13, 2023
Reviewed and Released by: Rashmi Makol, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 13, 2023

FOR: Attn: Mike Kostruba
TRC Environmental Corp.
21 Griffin Rd North
Windsor, CT 06095

Sample Information		Custody Information		Date	Time
Matrix:	BRICK	Collected by:	MK,BA,TN	04/05/23	11:17
Location Code:	TRC-DAS	Received by:	CP	04/06/23	10:10
Rush Request:	48 Hour	Analyzed by:	see "By" below		
P.O.#:	522705				

Laboratory Data

SDG ID: GCN77308
Phoenix ID: CN77338

Project ID: CRDA-FORMER MCCARTIN SCHOOL PCB SUBSTR.
Client ID: 46

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Extraction for PCB	Completed				04/10/23	Q/AL	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	0.84	mg/Kg	2	04/11/23	SC	SW8082A
PCB-1221	ND	0.84	mg/Kg	2	04/11/23	SC	SW8082A
PCB-1232	ND	0.84	mg/Kg	2	04/11/23	SC	SW8082A
PCB-1242	ND	0.84	mg/Kg	2	04/11/23	SC	SW8082A
PCB-1248	ND	0.84	mg/Kg	2	04/11/23	SC	SW8082A
PCB-1254	ND	0.84	mg/Kg	2	04/11/23	SC	SW8082A
PCB-1260	ND	0.84	mg/Kg	2	04/11/23	SC	SW8082A
PCB-1262	ND	0.84	mg/Kg	2	04/11/23	SC	SW8082A
PCB-1268	ND	0.84	mg/Kg	2	04/11/23	SC	SW8082A
Total PCBs	ND	0.84	mg/Kg	2	04/11/23	SC	SW8082A
QA/QC Surrogates							
% DCBP	59		%	2	04/11/23	SC	30 - 150 %
% DCBP (Confirmation)	63		%	2	04/11/23	SC	30 - 150 %
% TCMX	59		%	2	04/11/23	SC	30 - 150 %
% TCMX (Confirmation)	56		%	2	04/11/23	SC	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

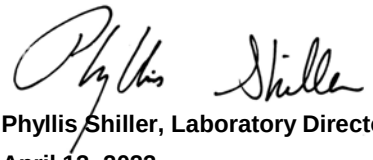
RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director
April 13, 2023
Reviewed and Released by: Rashmi Makol, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102

QA/QC Report

April 13, 2023

QA/QC Data

SDG I.D.: GCN77308

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 671638 (mg/Kg), QC Sample No: CN77157 10X (CN77334, CN77336)										
Polychlorinated Biphenyls										
PCB-1016	ND	0.17	88	83	5.8				40 - 140	30
PCB-1221	ND	0.17							40 - 140	30
PCB-1232	ND	0.17							40 - 140	30
PCB-1242	ND	0.17							40 - 140	30
PCB-1248	ND	0.17							40 - 140	30
PCB-1254	ND	0.17							40 - 140	30
PCB-1260	ND	0.17	88	83	5.8				40 - 140	30
PCB-1262	ND	0.17							40 - 140	30
PCB-1268	ND	0.17							40 - 140	30
% DCBP (Surrogate Rec)	90	%	92	84	9.1				30 - 150	30
% DCBP (Surrogate Rec) (Confirm	88	%	90	80	11.8				30 - 150	30
% TCMX (Surrogate Rec)	79	%	79	71	10.7				30 - 150	30
% TCMX (Surrogate Rec) (Confirm	78	%	81	71	13.2				30 - 150	30
Comment:										
A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.										
QA/QC Batch 671623 (mg/Kg), QC Sample No: CN77308 10X (CN77308, CN77310, CN77312, CN77314, CN77316, CN77318, CN77320, CN77322, CN77324, CN77326, CN77328, CN77330)										
Polychlorinated Biphenyls										
PCB-1016	ND	0.17	91	84	8.0				40 - 140	30
PCB-1221	ND	0.17							40 - 140	30
PCB-1232	ND	0.17							40 - 140	30
PCB-1242	ND	0.17							40 - 140	30
PCB-1248	ND	0.17							40 - 140	30
PCB-1254	ND	0.17							40 - 140	30
PCB-1260	ND	0.17	91	88	3.4				40 - 140	30
PCB-1262	ND	0.17							40 - 140	30
PCB-1268	ND	0.17							40 - 140	30
% DCBP (Surrogate Rec)	90	%	97	91	6.4				30 - 150	30
% DCBP (Surrogate Rec) (Confirm	84	%	91	86	5.6				30 - 150	30
% TCMX (Surrogate Rec)	64	%	73	64	13.1				30 - 150	30
% TCMX (Surrogate Rec) (Confirm	64	%	74	64	14.5				30 - 150	30
Comment:										
A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.										
QA/QC Batch 672027 (mg/Kg), QC Sample No: CN77557 10X (CN77338)										
Polychlorinated Biphenyls										
PCB-1016	ND	0.17	73	75	2.7				40 - 140	30
PCB-1221	ND	0.17							40 - 140	30
PCB-1232	ND	0.17							40 - 140	30
PCB-1242	ND	0.17							40 - 140	30
PCB-1248	ND	0.17							40 - 140	30

QA/QC Data

SDG I.D.: GCN77308

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
PCB-1254	ND	0.17							40 - 140	30	
PCB-1260	ND	0.17	68	80	16.2				40 - 140	30	
PCB-1262	ND	0.17							40 - 140	30	
PCB-1268	ND	0.17							40 - 140	30	
% DCBP (Surrogate Rec)	54	%	73	79	7.9				30 - 150	30	
% DCBP (Surrogate Rec) (Confirm	58	%	81	76	6.4				30 - 150	30	
% TCMX (Surrogate Rec)	48	%	71	72	1.4				30 - 150	30	
% TCMX (Surrogate Rec) (Confirm	49	%	74	76	2.7				30 - 150	30	

Comment:

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

QA/QC Batch 671871 (mg/Kg), QC Sample No: CN78025 10X (CN77332)

Polychlorinated Biphenyls

PCB-1016	ND	0.17	55	40	31.6				40 - 140	30	r
PCB-1221	ND	0.17							40 - 140	30	
PCB-1232	ND	0.17							40 - 140	30	
PCB-1242	ND	0.17							40 - 140	30	
PCB-1248	ND	0.17							40 - 140	30	
PCB-1254	ND	0.17							40 - 140	30	
PCB-1260	ND	0.17	65	51	24.1				40 - 140	30	
PCB-1262	ND	0.17							40 - 140	30	
PCB-1268	ND	0.17							40 - 140	30	
% DCBP (Surrogate Rec)	69	%	72	59	19.8				30 - 150	30	
% DCBP (Surrogate Rec) (Confirm	79	%	64	53	18.8				30 - 150	30	
% TCMX (Surrogate Rec)	72	%	57	43	28.0				30 - 150	30	
% TCMX (Surrogate Rec) (Confirm	73	%	57	43	28.0				30 - 150	30	

Comment:

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

r = This parameter is outside laboratory RPD specified recovery limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference

Phyllis Shiller, Laboratory Director
April 13, 2023

Thursday, April 13, 2023

Criteria: None

State: CT

Sample Criteria Exceedances Report

GCN77308 - TRC-DAS

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units

*** No Data to Display ***

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

REASONABLE CONFIDENCE PROTOCOL
LABORATORY ANALYSIS QA/QC CERTIFICATION FORM

Laboratory Name: Phoenix Environmental Labs, Inc. ***Client:*** TRC Environmental Corp.

Project Location: CRDA-FORMER MCCARTIN SCHOOL ***Project Number:***

Laboratory Sample ID(s): CN77308, ***Sampling Date(s):*** 4/4/2023, 4/5/2023
CN77310, CN77312, CN77314, CN77316, CN77318, CN77320, CN77322, CN77324, CN77326, CN77328, CN77330, CN77332, CN77334, CN77336, CN77338

List RCP Methods Used (e.g., 8260, 8270, et cetera) 8082

1	**For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP method-specific Reasonable Confidence Protocol documents?**	☑ Yes ☐ No
1A	**Were the method specified preservation and holding time requirements met?**	☑ Yes ☐ No
1B	***VPH and EPH methods only:*** **Was the VPH or EPH method conducted without significant modifications (see section 11.3 of respective RCP methods)**	☐ Yes ☐ No ☑ NA
2	**Were all samples received by the laboratory in a condition consistent with that described on the associated Chain-of-Custody document(s)?**	☑ Yes ☐ No
3	**Were samples received at an appropriate temperature (< 6 Degrees C)?**	☑ Yes ☐ No ☐ NA
4	**Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents acheived? See Section: PCB Narration.**	☐ Yes ☑ No
5	**a) Were reporting limits specified or referenced on the chain-of-custody?** **b) Were these reporting limits met?**	☐ Yes ☑ No ☑ Yes ☐ No
6	**For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?**	☑ Yes ☐ No
7	**Are project-specific matrix spikes and laboratory duplicates included in the data set?**	☐ Yes ☑ No

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or 1B is "No", the data package does not meet the requirements for "Reasonable Confidence". This form may not be altered and all questions must be answered.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.

Authorized Signature: Rashmi Makol **Position:** Project Manager

Printed Name: Rashmi Makol **Date:** Thursday, April 13, 2023

Name of Laboratory Phoenix Environmental Labs, Inc.

This certification form is to be used for RCP methods only.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

April 13, 2023

SDG I.D.: GCN77308

PCB Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 671871 (Samples: CN77332): -----

The LCS/LCSD RPD exceeds the method criteria for one or more analytes, but these analytes were not reported in the sample(s) so no variability is suspected. (PCB-1016)

Instrument:

AU-ECD1 04/07/23-1 Christina Kozikis, Chemist 04/07/23

CN77326 (2X), CN77328 (1X)

The initial calibration (PC0329AI) RSD for the compound list was less than 20% except for the following compounds: None.
The initial calibration (PC0329BI) RSD for the compound list was less than 20% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 15% except for the following compounds:
Samples: CN77326, CN77328
Preceding CC 407B003 - None.
Succeeding CC 407B019 - DCBP SURR -16%L (15%)

AU-ECD1 04/10/23-1 Saadia Chudary, Chemist 04/10/23

CN77332 (2X)

The initial calibration (PC0329AI) RSD for the compound list was less than 20% except for the following compounds: None.
The initial calibration (PC0329BI) RSD for the compound list was less than 20% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 15% except for the following compounds:None.

AU-ECD24 04/07/23-1 Christina Kozikis, Chemist 04/07/23

CN77308 (2X), CN77310 (2X), CN77316 (2X), CN77320 (2X)

The initial calibration (PC0314AI) RSD for the compound list was less than 20% except for the following compounds: None.
The initial calibration (PC0314BI) RSD for the compound list was less than 20% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 15% except for the following compounds:None.

AU-ECD29 04/11/23-1 Saadia Chudary, Chemist 04/11/23

CN77338 (2X)

The initial calibration (PC0407AI) RSD for the compound list was less than 20% except for the following compounds: None.
The initial calibration (PC0407BI) RSD for the compound list was less than 20% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 15% except for the following compounds:None.

AU-ECD3 04/07/23-1 Christina Kozikis, Chemist 04/07/23

CN77318 (2X), CN77322 (2X), CN77330 (1X)

The initial calibration (PC0321AI) RSD for the compound list was less than 20% except for the following compounds: None.
The initial calibration (PC0321BI) RSD for the compound list was less than 20% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 15% except for the following compounds:
Samples: CN77318, CN77322, CN77330
Preceding CC 407B004 - None.
Succeeding CC 407B019 - TCMX SURR -16%L (15%)

AU-ECD48 04/07/23-1 Christina Kozikis, Chemist 04/07/23

CN77336 (2X)

The initial calibration (PC0327AI) RSD for the compound list was less than 20% except for the following compounds: None.
The initial calibration (PC0327BI) RSD for the compound list was less than 20% except for the following compounds: None.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

April 13, 2023

SDG I.D.: GCN77308

PCB Narration

The continuing calibration %D for the compound list was less than 15% except for the following compounds:None.

AU-ECD5 04/07/23-1 Christina Kozikis, Chemist 04/07/23

CN77312 (2X), CN77314 (2X), CN77334 (2X)

The initial calibration (PC0329AI) RSD for the compound list was less than 20% except for the following compounds: None.
The initial calibration (PC0329BI) RSD for the compound list was less than 20% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 15% except for the following compounds:
Samples: CN77312, CN77314, CN77334
Preceding CC 407B003 - None.
Succeeding CC 407B019 - DCBP SURR -19%L (15%)

AU-ECD7 04/07/23-1 Christina Kozikis, Chemist 04/07/23

CN77324 (2X)

The initial calibration (PC0302AI) RSD for the compound list was less than 20% except for the following compounds: None.
The initial calibration (PC0302BI) RSD for the compound list was less than 20% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 15% except for the following compounds:None.

QC (Batch Specific):

Batch 671623 (CN77308)

CN77308, CN77310, CN77312, CN77314, CN77316, CN77318, CN77320, CN77322, CN77324, CN77326, CN77328, CN77330

All LCS recoveries were within 40 - 140 with the following exceptions: None.
All LCSD recoveries were within 40 - 140 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.
A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

Batch 671638 (CN77157)

CN77334, CN77336

All LCS recoveries were within 40 - 140 with the following exceptions: None.
All LCSD recoveries were within 40 - 140 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.
A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

Batch 671871 (CN78025)

CN77332

All LCS recoveries were within 40 - 140 with the following exceptions: None.
All LCSD recoveries were within 40 - 140 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: PCB-1016(31.6%)
A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

Batch 672027 (CN77557)

CN77338

All LCS recoveries were within 40 - 140 with the following exceptions: None.
All LCSD recoveries were within 40 - 140 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.
A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

Temperature Narration

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

April 13, 2023

SDG I.D.: GCN77308

The samples were received at 1.0C with cooling initiated.
(Note acceptance criteria for relevant matrices is above freezing up to 6°C)

1.0°C wcip

TRC

21 GRIFFIN ROAD NORTH
WINDSOR, CONNECTICUT 06095
TELEPHONE (860) 298-9692
FAX (860) 298-6380

CHAIN OF CUSTODY

DAS Rates Apply!

Edition: September 2007
Supersede Previous Edition

LAB ID #

PROJECT NUMBER	PROJECT NAME	PARAMETERS	CONTAINERS	TURNAROUND TIME
522705	CRDA — Former McCartin School PCB Substrates, , 70 Canterbury St, East Hartford, Connecticut			24hr [X] 48hr [ ] 3-day [ ] 5-day

SIGNATURE

INSPECTOR(S)
Michael Kostruba
Boris Armel, Tyler Noll

Lab ID	SAMPLE ID	DATE	TIME	TYPE COMP	TYPE GRAB	SAMPLE LOCATION	EPA 8082 (3540)	# of Amber Glass	# of Clear Glass	Matrix	Preservative	MATERIALS & NOTES
77308	01	4/4/2023	13:06		X	(exterior)	X		1	Brick	Ice	0" from WC 3 - BR1 - Brick (0" - 0.5")
77309	02	4/4/2023	13:13		X	(exterior)	X		1	Brick	Ice	3" from WC 3 - BR1 - Brick (0" - 0.5")
—	03	4/4/2023	13:18		X	(exterior)	X			Brick	Ice	6" from WC 3 - BR1 - Brick (0" - 0.5") - **NS**
77310	04	4/4/2023	13:33		X	(exterior)	X		1	Brick	Ice	0" from WC 3 - BR2 - Brick (0" - 0.5")
77311	05	4/4/2023	13:28		X	(exterior)	X		1	Brick	Ice	3" from WC 3 - BR2 - Brick (0" - 0.5")
—	06	4/4/2023	13:27		X	(exterior)	X			Brick	Ice	6" from WC 3 - BR2 - Brick (0" - 0.5") - **NS**
77312	07	4/4/2023	13:50		X	(exterior)	X		1	Brick	Ice	0" from WC 3 - BR3 - Brick (0" - 0.5")
77313	08	4/4/2023	13:47		X	(exterior)	X		1	Brick	Ice	3" from WC 3 - BR3 - Brick (0" - 0.5")
—	09	4/4/2023	13:43		X	(exterior)	X			Brick	Ice	6" from WC 3 - BR3 - Brick (0" - 0.5") - **NS**
77314	10	4/4/2023	14:07		X	(exterior)	X		1	Brick	Ice	0" from DC 1 - BR1 - Brick (0" - 0.5")
77315	11	4/4/2023	14:05		X	(exterior)	X		1	Brick	Ice	3" from DC 1 - BR1 - Brick (0" - 0.5")

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
	4/5/23			4/6/23	1010 Emily A 4/6/23
(Printed) Michael Kostruba	Time: 15:45	(Printed)	(Printed)	Time: 9:25	(Printed)

Remarks: Include CT DPH RCP Report. **DAS RATES APPLY. Hold 3" samples until 0" results are reviewed by TRC. NS = Samples Not Submitted** = #'s 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39, 42

Report to: Mkostruba@trccompanies.com

Hold 3" Samples = #'s 2, 5, 8, 11, 14, 17, 20, 23, 26, 29, 32, 35, 38, 41, 44, 47

Condition upon Receipt:

1.0°C WCP

TRC

Edition: September 2007
Supersede Previous Edition

21 GRIFFIN ROAD NORTH
WINDSOR, CONNECTICUT 06095
TELEPHONE (860) 298-9692
FAX (860) 298-6380

CHAIN OF CUSTODY

LAB ID #

PROJECT NUMBER	PROJECT NAME	PARAMETERS	CONTAINERS	TURNAROUND TIME
522705	CRDA – Former McCartin School PCB Substrates, , 70 Canterbury St, East Hartford, Connecticut			24hr [X] 48hr [ ] 3-day [ ] 5-day

SIGNATURE

INSPECTOR(S): Michael Kostruba, Boris Armel, Tyler Noll

Lab ID	SAMPLE ID	DATE	TIME	TYPE COMP	TYPE GRAB	SAMPLE LOCATION	EPA 8082 (3540)	# of Amber Glass	# of Clear Glass	Matrix	Preservative	MATERIALS & NOTES
—	12	4/4/2023	14:01		X	(exterior)	X			Brick	Ice	6" from DC 1 - BR1 - Brick (0" - 0.5") - **NS**
77316	13	4/4/2023	14:22		X	(exterior)	X		1	Brick	Ice	0" from WC 5 - BR1 - Brick (0" - 0.5")
77317	14	4/4/2023	14:18		X	(exterior)	X		1	Brick	Ice	3" from WC 5 - BR1 - Brick (0" - 0.5")
—	15	4/4/2023	14:15		X	(exterior)	X			Brick	Ice	6" from WC 5 - BR1 - Brick (0" - 0.5") - **NS**
77318	16	4/4/2023	14:33		X	(exterior)	X		1	Brick	Ice	0" from WC 5 - BR2 - Brick (0" - 0.5")
77319	17	4/4/2023	14:31		X	(exterior)	X		1	Brick	Ice	3" from WC 5 - BR2 - Brick (0" - 0.5")
—	18	4/4/2023	14:27		X	(exterior)	X			Brick	Ice	6" from WC 5 - BR2 - Brick (0" - 0.5") - **NS**
77320	19	4/4/2023	14:48		X	(exterior)	X		1	Brick	Ice	0" from WC 5 - BR3 - Brick (0" - 0.5")
77321	20	4/4/2023	14:44		X	(exterior)	X		1	Brick	Ice	3" from WC 5 - BR3 - Brick (0" - 0.5")
—	21	4/4/2023	14:41		X	(exterior)	X			Brick	Ice	6" from WC 5 - BR3 - Brick (0" - 0.5") - **NS**
77322	22	4/4/2023	14:56		X	(exterior)	X		1	Brick	Ice	0" from WSC 2 - BR1 - Brick (0" - 0.5")

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
	4/5/23			4/6/23	4/6/23 1010
(Printed) Michael Kostruba	Time: 1545	(Printed)	(Printed)	Time: 9:25	(Printed)

Remarks: Include CT DPH RCP Report. **DAS RATES APPLY. Hold 3" samples until 0" results are reviewed by TRC. NS = Samples Not Submitted**
Report to: Mkostruba@trccompanies.com

Condition upon Receipt:

1.0°C wip

TRC

21 GRIFFIN ROAD NORTH
WINDSOR, CONNECTICUT 06095
TELEPHONE (860) 298-9692
FAX (860) 298-6380

Edition: September 2007
Supersede Previous Edition

CHAIN OF CUSTODY

LAB ID #

PROJECT NUMBER	PROJECT NAME	PARAMETERS	CONTAINERS	TURNAROUND TIME
522705	CRDA – Former McCartin School PCB Substrates, , 70 Canterbury St, East Hartford, Connecticut			24hr [X] 48hr [ ] 3-day [ ] 5-day

SIGNATURE

INSPECTOR(S) Michael Kostruba
Boris Armel, Tyler Noll

Lab ID	SAMPLE ID	DATE	TIME	TYPE COMP	TYPE GRAB	SAMPLE LOCATION	EPA 8082 (3540)	# of Amber Glass	# of Clear Glass	Matrix	Preservative	MATERIALS & NOTES
77323	23	4/4/2023	14:59		X	(exterior)	X		1	Brick	Ice	3" from WSC 2 - BR1 - Brick (0" - 0.5")
—	24	4/4/2023	15:02		X	(exterior)	X			Brick	Ice	6" from WSC 2 - BR1 - Brick (0" - 0.5") - **NS**
77324	25	4/4/2023	15:14		X	(exterior)	X		1	Brick	Ice	0" from WSC 2 - BR2 - Brick (0" - 0.5")
77325	26	4/4/2023	15:17		X	(exterior)	X		1	Brick	Ice	3" from WSC 2 - BR2 - Brick (0" - 0.5")
—	27	4/4/2023	15:21		X	(exterior)	X			Brick	Ice	6" from WSC 2 - BR2 - Brick (0" - 0.5") - **NS**
77326	28	4/4/2023	15:27		X	(exterior)	X		1	Brick	Ice	0" from WSC 2 - BR3 - Brick (0" - 0.5")
77327	29	4/4/2023	15:30		X	(exterior)	X		1	Brick	Ice	3" from WSC 2 - BR3 - Brick (0" - 0.5")
—	30	4/4/2023	15:33		X	(exterior)	X			Brick	Ice	6" from WSC 2 - BR3 - Brick (0" - 0.5") - **NS**
77328	31	4/5/2023	09:43		X	(interior)	X		1	Tectum	Ice	0" from C 2 - TCTM1 - Tectum (0" - 0.5")
77329	32	4/5/2023	09:44		X	(interior)	X		1	Tectum	Ice	3" from C 2 - TCTM1 - Tectum (0" - 0.5")
—	33	4/5/2023	09:45		X	(interior)	X			Tectum	Ice	6" from C 2 - TCTM1 - Tectum (0" - 0.5") - **NS**

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
	4/5/23			4/6/23	Emily 4/6/23 1010
(Printed) Michael Kostruba	Time: 1595	(Printed)	(Printed)	Time: 9:25	(Printed)

Remarks: Include CT DPH RCP Report. **DAS RATES APPLY. Hold 3" samples until 0" results are reviewed by TRC. NS = Samples Not Submitted**
Report to: Mkostruba@trccompanies.com

Condition upon Receipt:

1.0°C wdp

TRC

Edition: September 2007
Supersede Previous Edition

21 GRIFFIN ROAD NORTH
WINDSOR, CONNECTICUT 06095
TELEPHONE (860) 298-9692
FAX (860) 298-6380

CHAIN OF CUSTODY

LAB ID #

PROJECT NUMBER	PROJECT NAME	PARAMETERS	CONTAINERS	TURNAROUND TIME
522705	CRDA — Former McCartin School PCB Substrates, , 70 Canterbury St, East Hartford, Connecticut			24hr [X] 48hr [ ] 3-day [ ] 5-day
SIGNATURE	INSPECTOR(S) Michael Kostruba, Boris Armel, Tyler Noll			

Lab ID	SAMPLE ID	DATE	TIME	TYPE COMP	TYPE GRAB	SAMPLE LOCATION	EPA 8082 (3540)	# of Amber Glass	# of Clear Glass	Matrix	Preservative	MATERIALS & NOTES
77330	34	4/5/2023	10:18		X	(interior)	X		1	Tectum	Ice	0" from C 2 - TCTM2 - Tectum (0" - 0.5")
77331	35	4/5/2023	10:19		X	(interior)	X		1	Tectum	Ice	3" from C 2 - TCTM 2 - Tectum (0" - 0.5")
—	36	4/5/2023	10:19		X	(interior)	X			Tectum	Ice	6" from C 2 - TCTM2 - Tectum (0" - 0.5") - NS
77332	37	4/5/2023	09:26		X	(interior)	X		1	Tectum	Ice	0" from C 2 - TCTM3 - Tectum (0" - 0.5")
77333	38	4/5/2023	09:26		X	(interior)	X		1	Tectum	Ice	3" from C 2 - TCTM3 - Tectum (0" - 0.5")
—	39	4/5/2023	09:27		X	(interior)	X			Tectum	Ice	6" from C 2 - TCTM3 - Tectum (0" - 0.5") - NS
77334	40	4/5/2023	10:32		X	(interior)	X		1	CMU	Ice	0" from C 2 - CMU1 - CMU (0" - 0.5")
77335	41	4/5/2023	10:42		X	(interior)	X		1	CMU	Ice	3" from C 2 - CMU1 - CMU (0" - 0.5")
—	42	4/5/2023	10:47		X	(interior)	X			CMU	Ice	6" from C 2 - CMU1 - CMU (0" - 0.5") - NS
77336	43	4/5/2023	11:01		X	(interior)	X		1	CMU	Ice	0" from C 2 - CMU2 - CMU (0" - 0.5")
77337	44	4/5/2023	11:05		X	(interior)	X		1	CMU	Ice	3" from C 2 - CMU2 - CMU (0" - 0.5")

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
	4/5/23			4/6/23	1010 Emily ed 4/6/23
(Printed) Michael Kostruba	Time: 1545	(Printed)	(Printed)	Time: 9:25	(Printed)

Remarks: Include CT DPH RCP Report. **DAS RATES APPLY. Hold 3" samples until 0" results are reviewed by TRC. NS = Samples Not Submitted**
Report to: Mkostruba@trccompanies.com

Condition upon Receipt:

1.0° wip

TRC

Edition: September 2007
Supersede Previous Edition

21 GRIFFIN ROAD NORTH
WINDSOR, CONNECTICUT 06095
TELEPHONE (860) 298-9692
FAX (860) 298-6380

CHAIN OF CUSTODY

LAB ID #

PROJECT NUMBER	PROJECT NAME	PARAMETERS	CONTAINERS				TURNAROUND TIME
522705	CRDA – Former McCartin School PCB Substrates, , 70 Canterbury St, East Hartford, Connecticut						24hr [X] 48hr [ ] 3-day [ ] 5-day
SIGNATURE	INSPECTOR(S) Boris Armel, Tyler Noll						

Lab ID	SAMPLE ID	DATE	TIME	TYPE COMP	TYPE GRAB	SAMPLE LOCATION	EPA 8082 (3540)	# of Amber Glass	# of Clear Glass	Matrix	Preservative	MATERIALS & NOTES
—	45	4/5/2023	11:09		X	(interior)	X			CMU	Ice	6" from C 2 - CMU2 - CMU (0" - 0.5") - NS
77338	46	4/5/2023	11:17		X	(interior)	X		1	CMU	Ice	0" from C 2 - CMU3 - CMU (0" - 0.5")
77339	47	4/5/2023	11:21		X	(interior)	X		1	CMU	Ice	3" from C 2 - CMU3 - CMU (0" - 0.5")
—	48	4/5/2023	11:28		X	(interior)	X			CMU	Ice	6" from C 2 - CMU3 - CMU (0" - 0.5") - NS

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature) 1010
	4/5/23			4/6/23	Emailed 4/6/23
(Printed) Michael Kostelnik	Time: 1545	(Printed)	(Printed)	Time: 9:25	(Printed)

Remarks: Include CT DPH RCP Report. **DAS RATES APPLY. Hold 3" samples until 0" results are reviewed by TRC. NS = Samples Not Submitted**
Report to: Mkostruba@trccompanies.com

Condition upon Receipt:

APPENDIX H

RELATED DOCUMENTS

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

January 26, 2004

Mr. Erik R. Plimpton, P.E., CHMM, Senior Consulting Engineer
TRC Environmental Corporation
5 Waterside Crossing
Windsor, CT 06095

RE: Characterization of lead-based paint debris.

Dear Mr. Plimpton:

Pursuant to our recent discussions by email, I am writing to confirm that the policy elaborated in my July 22, 1997 letter to Steven Murdzia of ATC Associates concerning the use of XRF testing to characterize lead-based paint debris is still in effect. In particular, my statement in that letter that obtaining an XRF reading less than 1.0 mg/cm^2 is sufficient to demonstrate that a given debris is not a hazardous waste is still our current policy.

As noted in my July 22, 1997 letter, this policy is subject to the following limitations:

1.) The material being sampled consists only of building debris (such as painted wood or masonry). Non-debris materials (such as concentrated paint chips, sand blasting debris, or paint stripping wastes) may not be characterized in this manner.

2.) The material being sampled has only surficial lead contamination (i.e. lead-based paint). Materials which have more than just surficial contamination (such as floor boards soaked with lead plating solutions) may not be characterized in this manner.

3.) The material is sampled in accordance with appropriate protocols regarding sampling frequency and location, to ensure that the reading of 1.0 mg/cm^2 or less is truly representative of the material as a whole.

I should also note that this approach is only useful in situations in which all of a particular debris stream does not exceed 1.0 mg/cm^2. If portions of the debris stream exceed 1.0 mg/cm^2, you cannot use this standard to characterize the debris, and must resort to another method (such as composite sampling). In addition, in employing this method to characterize the debris, the areas which had XRF readings under the 1.0 mg/cm^2 limit must not be ignored (since falling below the standard only means they are not hazardous, not that they are lead-free).

My July 22, 1997 letter also addressed the use of the Connecticut Department of Public Health's 0.5 weight percent limit for a "toxic" level of lead under its lead abatement regulations in order to determine whether or not lead-based paint debris is hazardous. Unlike the 1.0 mg/cm^2 XRF standard, the weight percent number is not appropriate for waste characterization purposes, due to a lack of relevant data. The 1.0 mg/cm^2 XRF policy discussed above was based on certain data generated by EPA correlating XRF readings to TCLP sampling of architectural debris.[1] While EPA's data did not show a predictable relationship between these two measures, it did indicate that there was an XRF threshold below which such debris did not contain sufficient lead to fail TCLP. However, there is no similar data establishing a similar threshold for weight percent lead in lead-based paint below which debris does not fail TCLP.

I should also note that we intend to include the above policy in the next revision of our lead-based paint guidance document, Guidance for the Management and Disposal of Lead-Contaminated Materials Generated in the Lead Abatement, Renovation, and Demolition Industries, which was last revised in 1996, prior to the letter to Mr. Murdzia.

Sincerely,

Ross Q. Bunnell, Sanitary Engineer 3
Bureau of Waste Management
Engineering & Enforcement Division

RQB:rqb
Attachment: March, 1993 EPA Guidance Document

1 See in particular the March 1993 EPA guidance document entitled "Applicability of RCRA Disposal Requirements to Lead-Based Paint Abatement Wastes," Page 16, Table II. A copy of this guidance document is attached.

Town of East Hartford Property Summary Report

70 CANTERBURY ST

MAP LOT:	30-293	**CAMA PID:**	2195
LOCATION:	70 CANTERBURY ST		
OWNER NAME:	TOWN OF EAST HARTFORD		

2195 03/23/2016

OWNER OF RECORD
TOWN OF EAST HARTFORD
740 MAIN ST
EAST HARTFORD, CT 06108

LIVING AREA:	27061	**ZONING:**	R3	**ACREAGE:**	7.00

SALES HISTORY

OWNER	BOOK / PAGE	SALE DATE	SALE PRICE
TOWN OF EAST HARTFORD	0218/0324	30-Dec-1899	$0.00

CURRENT PARCEL ASSESSMENT

TOTAL:	$2,901,510.00	**IMPROVEMENTS:**	$2,575,460.00	**LAND:**	$326,050.00

ASSESSING HISTORY

FISCAL YEAR	TOTAL VALUE	IMPROVEMENT VALUE	LAND VALUE
2021	$2,901,510.00	$2,575,460.00	$326,050.00
2019	$2,606,200.00	$2,304,300.00	$301,900.00
2018	$2,606,200.00	$2,304,300.00	$301,900.00
2017	$2,606,200.00	$2,304,300.00	$301,900.00
2016	$2,606,200.00	$2,304,300.00	$301,900.00

Town of East Hartford Property Summary Report

70 CANTERBURY ST

MAP LOT:	30-293	**CAMA PID:**	2195
LOCATION:	70 CANTERBURY ST		
OWNER NAME:	TOWN OF EAST HARTFORD		

BUILDING # 1

YEAR BUILT	1959	**EXT WALL 1**	Brick
STYLE	School	**INT WALLS 1**	Painted Block
MODEL	Comm/Ind	**HEAT FUEL**	Other
STORIES	1.0	**HEAT TYPE**	Hot Water
OCCUPANCY	School	**AC TYPE**	None
ROOF	Flat	**BEDROOMS**	
ROOF COVER	Typical	**FULL BATHS**	
FLOOR COVER 1	Asphalt Tile	**HALF BATHS**	
% BSMT	null	**TOTAL ROOMS**	0
% FIN BSMT	null	**% REC RM**	null
% SEMI FIN		**% ATTIC FINISH**	null
BSMT GARAGE	null	**FIREPLACES**	null

2195 03/23/2016

Connecticut Department of
Energy & Environmental Protection
Bureau of Materials Management & Compliance Assurance
Emergency Response & Spill Prevention Division

Notification for Underground Storage Tanks

CPPU USE ONLY
App #:
Doc #:
Check #:
Program: UST

Please complete this form, in accordance with the instructions (DEEP-UST-INST-001) to ensure the proper handling of your notification. Print or type unless otherwise noted.

Submit one notification form per site.

Part I: Notification and Fee Type

Check the appropriate box(es) identifying the notification type.

1. LOCATION of UST(s)

Name of site: Senior Center

Street Address or Location Description: 70 Canterbury St

City/Town: East Hartford State: CT Zip Code: 06118 - 2666

2. UST Site ID Number: 43-5020

3. This notification is for: choose i, ii, iii **or** iv	**Fee (a)**	**No. of Fee exempt (b)**	***No. of Tanks excluding (b) (c)**	**Total Fee = (a x c)**
☐ i) first time site notification [new] **(Complete entire application)**	$100.00/ tank [#1032]			
☐ ii) annual notification [renewal] with NO modifications **(Complete Parts I and VII only)**	$100.00/ tank [#1032]			
☐ iii) annual notification [renewal] **with** modifications, (specify modifications under iv below) **(Complete Parts I and VII and modifications only)**	$100.00/ tank [#1032]	0	0	$0
☑ iv) a modification to an existing notification; check any of the following to specify. **(Complete Parts I and VII and modifications only)**				
☐ adding new UST system (Part IV)	$100.00/ tank [#1032]	0	0	$0

Part I: Notification and Fee Type (continued)

3. (modifications continued)	Fee (a)	No. of Fee exempt tanks ($0) (b)	*No. of Tanks excluding (b) (c)	Total Fee = (a x c)
☐ adding an orphan UST system (newly discovered) (Part IV)	$100.00/ tank [#1032]	0	0	$0
☐ update/correction to Part II: owner/operator info/financial responsibility	$0			
☐ transfer of ownership (Part II)	$0			
☐ update/correction to Part III: record info	$0			
☐ update/correction to Part IV: UST system info	$0			
☑ Permanent Closure of an UST system (Part V)	$0		1	$0
Compartmentalized tanks are counted as one tank. ***Manifolded or interconnected tanks count as separate tanks***			**Total Fee:**	$0

*For municipalities, the 50% discount applies. The notification will not be processed without the fee. The fee shall be non-refundable and shall be paid by check or money order to the Department of Energy and Environmental Protection.

Part II: Owner/Operator Information

If an Owner/Operator is a corporation, limited liability company, limited partnership, limited liability partnership, or a statutory trust, it must be registered with the Secretary of State. If applicable, the applicant's name shall be stated **exactly as it is registered with the Secretary of State. Please note, for those entities registered with the Secretary of State, the registered name will be the name used by DEEP.* This information can be accessed at *the Secretary of State's database (CONCORD).* **(www.concord-sots.ct.gov/CONCORD/index.jsp)**

If an Owner/Operator is an individual, provide the legal name (include suffix) in the following format: First Name; Middle Initial; Last Name; Suffix (Jr, Sr., II, III, etc.).

1. UST Owner Name: TOWN OF EAST HARTFORD

This affiliate is the registrant (check if true): ☑

Mailing Address: 740 MAIN ST

City/Town: EAST HARTFORD State: CT Zip Code: 06108

Business Phone: (860) 291-7318 ext.:

Contact Person: Warren Disbrow Phone: (860) 291-7318 ext.

*E-mail: wdisbrow@easthartfordct.gov

*By providing this e-mail address you are agreeing to receive official correspondence from the department, at this electronic address, concerning the subject application. Please remember to check your security settings to be sure you can receive e-mails from "ct.gov" addresses. Also, please notify the department if your e-mail address changes

a) Business Type (check one):

☐ individual ☐ federal agency ☐ state agency ☑ municipality ☐ **tribal

☐ *business entity (*If a business entity complete i through ii):

Part II: Owner/Operator Information

i) provide Secretary of the State business ID #: _____ This information can be accessed at *the Secretary of State's database (CONCORD).* **(**www.concord-sots.ct.gov/CONCORD/index.jsp **)**

ii) ☐ Check here if your business is **NOT** registered with the Secretary of State's office.

***Notification or fee is NOT required for UST systems located on tribal lands.*

2. UST Operator

Name: TOWN OF EAST HARTFORD

This affiliate is the registrant (check if true): ☐

Mailing Address: 740 Main St

City/Town: East Hartford State: CT Zip Code: 06108

Business Phone: (860) 291-7318 ext.: _____

Contact Person: Warren Disbrow Phone: (860) 291-7318 ext. _____

*E-mail: wdisbrow@easthartfordct.gov

a) Business Type (check one):

☐ individual ☐ federal agency ☐ state agency ☑ municipality ☐ **tribal

☐ *business entity (*If a business entity complete i through ii):

i) provide Secretary of the State business ID #: _____ This information can be accessed at *the Secretary of State's database (CONCORD).* **(**www.concord-sots.ct.gov/CONCORD/index.jsp**)**

ii) ☐ Check here if your business is **NOT**registered with the Secretary of State's office.

***Notification or fee is NOT required for UST systems located on tribal lands.*

☐ Check if any co-owners/operators. If so, attach additional sheet(s) with the required information as requested above.

3. Billing contact

Name: TOWN OF EAST HARTFORD

Mailing Address: 740 Main St

City/Town: East Hartford State: CT Zip Code: 06108

Business Phone: (860) 291-7318 ext.: _____

Contact Person: Warren Disbrow Phone: (860) 291-7318 ext. _____

E-mail: wdisbrow@easthartfordct.gov

4. Primary contact, if different than UST owner

Name: TOWN OF EAST HARTFORD

Mailing Address: 740 MAIN ST

City/Town: EAST HARTFORD State: CT Zip Code: 06108

Business Phone: (860) 291-7318 ext.: _____

Contact Person: Warren Disbrow Phone: (860) 291-7318 ext. _____

*E-mail: wdisbrow@easthartfordct.gov

*By providing this e-mail address you are agreeing to receive official correspondence from the department, at this electronic address, concerning the subject application. Please remember to check your security settings to be sure you can receive e-mails from "ct.gov" addresses. Also, please notify the department if your e-mail address changes.

Part II: Owner/Operator Information (continued)

5. Property Owner, if different than UST owner

Name: TOWN OF EAST HARTFORD

Mailing Address: 740 MAIN ST

City/Town: EAST HARTFORD State: CT Zip Code: 06108

Business Phone: (860) 291-7318 ext.:

Contact Person: Warren Disbrow Phone: (860) 291-7318 ext.

E-mail: wdisbrow@easthartfordct.gov

6. Class A Operator: must be the individual who was trained.

Name:

Mailing Address:

City/Town: State: Zip Code:

Business Phone: ext.:

E-mail:

Company Name, if applicable:

Approved Training Course:

Training Date: ☐ initial or biennial training

OR

☐ retraining ordered for non-compliance

Certification Expiration Date:

Class A Operator's Signature:

7. Class B Operator: must be the individual who was trained.

Name:

Mailing Address:

City/Town: State: Zip Code:

Business Phone: ext.:

E-mail:

Company Name, if applicable:

Approved Training Course:

Training Date: ☐ initial or biennial training

OR

☐ retraining ordered for non-compliance

Certification Expiration Date:

Class B Operator's Signature:

Part II: Owner/Operator Information (continued)

8. Financial Mechanism(s): Complete the table below identifying the financial assurance mechanism(s) used to demonstrate financial responsibility as specified in the Federal Register. Use the list of surety types below. If an 'other method' is chosen, please specify the method in the table.

A. Self Insurance
B. Commercial Insurance
C. Risk Retention Group
D. Local Government Financial Test
E. Guarantee
F. Surety Bond
G. Letter of Credit
H. Bond Rating Test
I. Trust Fund
J. *State Fund
K. Other Method (specify in table below)

*Pursuant to section 262 of Public Act 12-1 of the June 12th Special Session, the state fund (UST Petroleum Clean-Up Program) will cease to serve as a financial responsibility mechanism on:
October 1, 2012, for those who own or operate USTs on more than five separate sites; and
October 1, 2013 for municipalities and for those who own or operate USTs on five or less separate sites.

Name Of Insurer	Policy Number	Surety Type (insert letter from list above or specify)	Amount Of Coverage	Coverage Start Date	Coverage End Date

Owners/Operators shall complete the attached *"Certification of Financial Responsibility Form" and maintain* such completed form at the facility where the storage tank system(s) are located.**THIS FORM DOES NOT NEED TO BE SUBMITTED but must be updated to reflect any changes.**

Part III: Record Information

Off- Site Storage of Records at a Centralized Location

Does the owner/operator **of more than 10 facilities with UST systems** request to store **certain** records at a centralized location ? ☐ Yes (Leave unchecked if 'No')

If yes, provide the central location address below.

Address: _____

City/Town: _____ State: _____ Zip Code: -_____

Such records must be immediately available for inspection by the commissioner or the commissioner's designee at any such central location. Please refer to section 22a-449 q CGS; for storage of underground storage tank system records that may be kept at a centralized location or that must be kept on site.

Part IV: Underground Storage Tank Information

Complete for all tanks and piping at the subject location. Begin by labeling tanks (including compartments, if applicable). Label tanks as required by the instructions. If you have more than 5 tanks in one location, reproduce this section and complete for additional tanks. **You must read the instructions (DEEP-UST-INST-001) in order to properly complete this Part.**

Tank Identification Number ***(see instructions)***	**Tank No.:** A1R1	**Tank No.:**	**Tank No.:**	**Tank No.:**	**Tank No.:**
Part of a compartmentalized tank	☐	☐	☐	☐	☐
Part of a manifolded or interconnected tank	☐	☐	☐	☐	☐
Complete items 1 through 5 for the entire tank- you do not have to complete the columns labeled for compartments.					
1. Status of Tank Currently in Use	☐	☐	☐	☐	☐
Temporarily Closed	☐	☐	☐	☐	☐
Date Temporarily Closed					
Permanently Closed *(check here and skip to Part V)*	☑	☐	☐	☐	☐
2. Date of Installation of Tank (month/year)	07/01/1989				
3. Life Expectancy of Tank (years)	30				
4. Material of Construction - Tank - *check one per tank*					
Asphalt Coated or Bare Steel	☐	☐	☐	☐	☐
Coated and Cathodically Protected Steel (STI-P3)	☑	☐	☐	☐	☐
Composite (Steel clad with Fiberglass)	☐	☐	☐	☐	☐
Composite (Steel with Plastic Jacket)	☐	☐	☐	☐	☐
Composite (Steel with Urethane)	☐	☐	☐	☐	☐
Fiberglass Reinforced Plastic	☐	☐	☐	☐	☐
Other (e.g., concrete, etc.) (please specify)					
5. Construction Type – Tank – *check all that apply*					
Lined Interior with Epoxy Coating	☐	☐	☐	☐	☐
Excavation Liner	☐	☐	☐	☐	☐
Double Walled	☑	☐	☐	☐	☐
Single Walled	☐	☐	☐	☐	☐
Tank Manufacturer					
Check box if tank has ever been repaired	☐	☐	☐	☐	☐
Complete the following for each compartment or tank.					
6. Emergency Generator Use Only	☐	☐	☐	☐	☐
7. Estimated Total Capacity (gallons)	5000				
Farm Use	☐	☐	☐	☐	☐

Part IV: Underground Storage Tank Information (continued)

Tank Identification Number ***(see instructions)***	**Tank No.:** A1R1	**Tank No.:**	**Tank No.:**	**Tank No.:**	**Tank No.:**
Part of a compartmentalized tank	☐	☐	☐	☐	☐
Part of a manifolded or interconnected tank	☐	☐	☐	☐	☐
8. Substance Currently Stored (or last stored in the case of closed compartments/tanks) *check one per compartment/tank*					
Gasoline	☐	☐	☐	☐	☐
Diesel	☐	☐	☐	☐	☐
Kerosene (for resale)	☐	☐	☐	☐	☐
Kerosene (on-site consumption)	☐	☐	☐	☐	☐
Heating Oil (on-site consumption)	☑	☐	☐	☐	☐
Heating Oil (for resale)	☐	☐	☐	☐	☐
Used Oil	☐	☐	☐	☐	☐
Biodiesel	☐	☐	☐	☐	☐
E-85	☐	☐	☐	☐	☐
E-15	☐	☐	☐	☐	☐
If Other, please specify here					
Hazardous Substance	☐	☐	☐	☐	☐
CERCLA name					
CAS Number					
9. Primary Release Detection - *check one per compartment/tank*					
Annual Precision Tightness Testing	☐	☐	☐	☐	☐
Tank Tightness Test with Inventory Control	☐	☐	☐	☐	☐
Continuous (Electronic) Interstitial Monitoring	☐	☐	☐	☐	☐
ATG - CSLD – Continuous with Inventory Reconciliation/Control	☐	☐	☐	☐	☐
ATG - Static with Inventory Reconciliation/Control	☐	☐	☐	☐	☐
Monthly Groundwater/Vapor Monitoring	☐	☐	☐	☐	☐
Manual Tank Gauging	☐	☐	☐	☐	☐
Monthly Visual Interstitial Monitoring	☐	☐	☐	☐	☐
No release detection required (see instructions)	☐	☐	☐	☐	☐
If Other Method, please specify here					

Part IV: Underground Storage Tank Information (continued)

Tank Identification Number	Tank No.: A1R1	Tank No.:	Tank No.:	Tank No.:	Tank No.:
Part of a compartmentalized tank	☐	☐	☐	☐	☐
Part of a manifolded or interconnected tank	☐	☐	☐	☐	☐
Piping Construction					
10. Piping Installation Date	07/01/1989				
11. Piping Material - *check one per compartment/tank*					
Bare Steel	☐	☐	☐	☐	☐
Galvanized Steel	☐	☐	☐	☐	☐
Epoxy Coated Steel	☐	☐	☐	☐	☐
Flexible Plastic	☐	☐	☐	☐	☐
No Piping associated with Tank or Above Ground Only	☐	☐	☐	☐	☐
Fiberglass Reinforced Plastic	☐	☐	☐	☐	☐
Semi-Rigid Plastic	☐	☐	☐	☐	☐
Copper	☑	☐	☐	☐	☐
Other	☐	☐	☐	☐	☐
12. Piping – Secondary Containment – *check all that apply*					
Containment Sumps at Dispensers	☐	☐	☐	☐	☐
Containment Sumps at Tanks	☑	☐	☐	☐	☐
13. Pipe Fitting - *check one per compartment/tank*					
Metallic Fitting Isolated from Soil and Water	☐	☐	☐	☐	☐
Metallic Fitting Cathodically Protected	☐	☐	☐	☐	☐
14. Construction Type-Piping – *check all that apply*					
Cathodically Protected	☐	☐	☐	☐	☐
Double Walled	☐	☐	☐	☐	☐
Metallic Piping Isolated form Soil and Water	☐	☐	☐	☐	☐
Single Walled	☑	☐	☐	☐	☐
Unknown	☐	☐	☐	☐	☐
15. Piping Type - *check one per compartment/tank*					
Pressure	☐	☐	☐	☐	☐
“U.S.” Suction (valve at tank)	☐	☐	☐	☐	☐
Gravity Feed Only	☐	☐	☐	☐	☐
“Safe” Suction (no valve at tank)	☐	☐	☐	☐	☐
If Other, please specify here					
Check box if piping has ever been repaired	☐	☐	☐	☐	☐

Part IV: Underground Storage Tank Information (continued)

Tank Identification Number	Tank No.: A1R1	Tank No.:	Tank No.:	Tank No.:	Tank No.:
Part of a compartmentalized tank	☐	☐	☐	☐	☐
Part of a manifolded or interconnected tank	☐	☐	☐	☐	☐
16. Primary Release Detection - Piping - *check one per compartment/tank*					
Annual Precision Line Tightness Testing	☐	☐	☐	☐	☐
Precision Line Tightness Testing Every 3 years	☐	☐	☐	☐	☐
Continuous (Electronic) Interstitial Monitoring	☐	☐	☐	☐	☐
Monthly Visual Interstitial Monitoring	☐	☐	☐	☐	☐
Groundwater/Vapor Monitoring	☐	☐	☐	☐	☐
PLLD – Annual .1gph Leak Test	☐	☐	☐	☐	☐
PLLD – Monthly Elec. 0.2gph Leak Testing	☐	☐	☐	☐	☐
No release detection required (see instructions)	☐	☐	☐	☐	☐
If Other Method, please specify here					
17. If piping type is pressure - *check one per compartment/tank*					
Electronic Auto Line Leak Detectors	☐	☐	☐	☐	☐
Mechanical Auto Line Leak Detectors	☐	☐	☐	☐	☐
18. Spill and Overfill Protection – *check all that apply*					
Audible Alarm	☐	☐	☐	☐	☐
Ball Float Device	☐	☐	☐	☐	☐
Flapper Device	☐	☐	☐	☐	☐
None	☐	☐	☐	☐	☐
Spill Prevention Device Installed	☐	☐	☐	☐	☐

Part V: Permanent Tank Closure

Tank Identification Number	Tank No.: A1R1	Tank No.:	Tank No.:	Tank No.:	Tank No.:
Part of a compartmentalized tank	☐	☐	☐	☐	☐
Part of a manifolded or interconnected tank	☐	☐	☐	☐	☐
1. General Information of Closed Tank					
Date of Installation (month/year)	07/01/1989				
Estimated Total Capacity (gallons)	5000				
Estimated date tank closed (month/day/year)	07/18/2019				
(check one per tank):					
Tank was removed from ground	☑	☐	☐	☐	☐
Tank was closed in ground	☐	☐	☐	☐	☐
Tank filled with inert material	☐	☐	☐	☐	☐
Describe the inert fill material here					

Part V: Permanent Tank Closure (continued)

Tank Identification Number	Tank No.: A1R1	Tank No.:	Tank No.:	Tank No.:	Tank No.:
Part of a compartmentalized tank	☐	☐	☐	☐	☐
Part of a manifolded or interconnected tank	☐	☐	☐	☐	☐
2. Estimated date the UST was last used for storing regulated substances (month/day/year)	07/18/2019				
3. Site Assessment					
Required Site Assessment Completed (If Yes, provide consultant/contractor information below)	☑	☐	☐	☐	☐
Consultant/Contractor Name(s)	ENVIRONMENTAL SERVICES, INC.				
Consultant/Contractor Addresses(s)	90 BROOKFIELD ST, SOUTH WINDSOR, CT 06074				
Consultant/Contractor Phone(s)	(860) 528-9500				
Soil Samples Collected and Analyzed for one or more of the following: VOCs, SVOCs, Metals, ETPH	☑	☐	☐	☐	☐
Groundwater Encountered During Assessment	☐	☐	☐	☐	☐
Groundwater Samples Collected and Analyzed for one or more of the following: VOCs, SVOCs, Metals, ETPH	☐	☐	☐	☐	☐
Soil Samples had Constituents of Concern above the following RSR Criteria: – *check all that apply					
GA PMC	☐	☐	☐	☐	☐
GB PMC	☐	☐	☐	☐	☐
Res DEC	☐	☐	☐	☐	☐
I/C DEC	☐	☐	☐	☐	☐
* If any boxes were checked above, include a table summarizing the data and highlighting the exceedances (See R.C.S.A. Sections 22a-133k-1 through 3 for definitions).					
Groundwater Samples had Constituents of Concern above the following RSR Criteria: – *check all that apply					
GWPC	☐	☐	☐	☐	☐
SWPC	☐	☐	☐	☐	☐
Res GWVC	☐	☐	☐	☐	☐
I/C GWVC	☐	☐	☐	☐	☐
* If any boxes were checked above, include a table summarizing the data and highlighting the exceedances (See R.C.S.A. Sections 22a-133k-1 through 3 for definitions).					
Remedial Actions Recommended by Environmental Consultant/Contractor If box is checked, a closure report must be submitted to the LUST Coordination Program for evaluation.	☐	☐	☐	☐	☐
Remedial Actions Completed If box is checked, a closure report must be submitted to the LUST Coordination Program for evaluation.	☐	☐	☐	☐	☐

Part VI: Certification of Installation

Complete within 30 days of installing an UST or adding an UST system to an existing notification. If you have more than 5 tanks in one location, reproduce this part and complete for additional tanks.

Tank Identification Number	**Tank No.:**	**Tank No.:**	**Tank No.:**	**Tank No.:**	**Tank No.:**
Part of a Compartmentalized Tank	☐	☐	☐	☐	☐
Installer of tank and piping must check all that apply					
Installer certified by tank and piping manufacturers	☐	☐	☐	☐	☐
Installation inspected by a registered engineer	☐	☐	☐	☐	☐
Installation inspected and approved by implementing agency	☐	☐	☐	☐	☐
Manufacturer's installation checklists have been completed	☐	☐	☐	☐	☐
If Other Method, please specify here					

Provide signature of UST Installer to certify proper installation of subject UST System.

Company Name: _____

License Type: _____

Company Address: _____

City/Town: _____ State: _____ Zip Code: _____

Business Phone: _____ ext.: _____

Name of UST Installer (print or type): _____ Title: _____

E-mail: _____ Phone: _____ ext.: _____

Signature and Date of UST Installer: _____

Part VII: Owner/Operator Certification

The owner/operator *and* the individual(s) responsible for actually preparing the notification must sign this part. A notification will be considered incomplete unless all required signatures are provided.

"I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that based on reasonable investigation, including my inquiry of the individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief.

I understand that a false statement in the submitted information may be punishable as a criminal offense, in accordance with section 22a-6 of the General Statutes, pursuant to section 53a-157b of the General Statutes, and in accordance with any other applicable statute.

I certify that I have completed a *Certification of Financial Responsibility Form* and such completed form is maintained on-site.

I also certify that this underground storage tank notification is on complete and accurate forms as prescribed by the commissioner without alteration of the text."

Signed on: 8/13/2019 10:09:40 PM

Signature of Owner/Operator	Date
Name of Owner/Operator (print or type)	Title (if applicable)
Signature of Preparer (if different than above)	Date
Name of Preparer (print or type)	Title (if applicable)

☐ Check here if additional signatures are required. If so, please reproduce this sheet and attach signed copies to this sheet.

Note: Please submit a completed Underground Storage Tank Notification and all Supporting Documents to:

CENTRAL PERMIT PROCESSING UNIT
DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION
79 ELM STREET
HARTFORD, CT 06106-5127

A copy of all completed Notification Forms must be maintained on site and the most recent completed form must also be forwarded to the local fire marshal.

If you have any questions, please contact the UST Program at 860-424-3374 or by e-mail (DEEP.USTFee@ct.gov)

FORM CWM-2: DEMOLITION WASTE IDENTIFICATION				
MATERIAL DESCRIPTION	**EST. QUANTITY**	**EST. VOLUME CY (CM)**	**EST. WEIGHT TONS (TONNES)**	**REMARKS AND ASSUMPTIONS**
Asphaltic Concrete Paving				
Concrete				
Brick				
CMU				
Lumber				
Plywood and OSB				
Wood Paneling				
Wood Trim				
Miscellaneous Metals				
Structural Steel				
Rough Hardware				
Insulation				
Roofing				
Doors and Frames				
Door Hardware				
Windows				
Glazing				
Acoustical Tile				
Carpet				
Carpet Pad				
Demountable Partitions				
Equipment				
Cabinets				
Plumbing Fixtures				
Piping				
Piping Supports and Hangers				
Valves				
Sprinklers				
Mechanical Equipment				
Electrical Conduit				
Copper Wiring				
Light Fixtures				
Lamps				
Lighting Ballasts				
Electrical Devices				
Switchgear and Panelboards				
Transformers				
Other:				

FORM CWM-4: DEMOLITION WASTE REDUCTION WORK PLAN

MATERIAL CATEGORY	GENERATION POINT	TOTAL EST. QUANTITY OF WASTE TONS (TONNES)	DISPOSAL METHOD AND QUANTITY			HANDLING AND TRANSPORTION PROCEDURES
			EST. AMOUNT SALVAGED TONS (TONNES)	EST. AMOUNT RECYCLED TONS (TONNES)	EST. AMOUNT DISPOSED TO LANDFILL TONS (TONNES)	
Asphaltic Concrete Paving						
Concrete						
Brick						
CMU						
Lumber						
Plywood and OSB						
Wood Paneling						
Wood Trim						
Miscellaneous Metals						
Structural Steel						
Rough Hardware						
Insulation						
Roofing						
Doors and Frames						
Door Hardware						
Windows						
Glazing						
Acoustical Tile						
Carpet						
Carpet Pad						
Demountable Partitions						
Equipment						
Cabinets						
Plumbing Fixtures						
Piping						
Supports and Hangers						
Valves						
Sprinklers						
Mechanical Equipment						
Electrical Conduit						
Copper Wiring						
Light Fixtures						
Lamps						
Lighting Ballasts						
Electrical Devices						
Switchgear and Panelboards						
Transformers						
Other:						

FORM CWM-6: COST/REVENUE ANALYSIS OF DEMOLITION WASTE REDUCTION WORK PLAN								
MATERIALS	**TOTAL QUANTITY OF MATERIALS (VOL. OR WEIGHT) (A)**	**EST. COST OF DISPOSAL (B)**	**TOTAL EST. COST OF DISPOSAL (C = A x B)**	**REVENUE FROM SALVAGED MATERIALS (D)**	**REVENUE FROM RECYCLED MATERIALS (E)**	**LANDFILL TIPPING FEES AVOIDED (F)**	**HANDLING AND TRANSPORTATION COSTS AVOIDED (G)**	**NET COST SAVINGS OF WORK PLAN (H = D+E+F+G)**
Asphaltic Concrete Paving								
Concrete								
Brick								
CMU								
Lumber								
Plywood and OSB								
Wood Paneling								
Wood Trim								
Miscellaneous Metals								
Structural Steel								
Rough Hardware								
Insulation								
Roofing								
Doors and Frames								
Door Hardware								
Windows								
Glazing								
Acoustical Tile								
Carpet								
Carpet Pad								
Demountable Partitions								
Equipment								
Cabinets								
Plumbing Fixtures								
Piping								
Supports and Hangers								
Valves								
Sprinklers								
Mech. Equipment								
Electrical Conduit								
Copper Wiring								
Light Fixtures								
Lamps								
Lighting Ballasts								
Electrical Devices								
Switchgear and Panelboards								
Transformers								
Other:								

FORM CWM-8: DEMOLITION WASTE REDUCTION PROGRESS REPORT								
MATERIAL CATEGORY	GENERATION POINT	TOTAL QUANTITY OF WASTE TONS (TONNES) (A)	QUANTITY OF WASTE SALVAGED		QUANTITY OF WASTE RECYCLED		TOTAL QUANTITY OF WASTE RECOVERED TONS (TONNES) (D = B + C)	TOTAL QUANTITY OF WASTE RECOVERED % (D / A x 100)
			ESTIMATED TONS (TONNES)	ACTUAL TONS (TONNES) (B)	ESTIMATED TONS (TONNES)	ACTUAL TONS (TONNES) (C)		
Asphaltic Concrete Paving								
Concrete								
Brick								
CMU								
Lumber								
Plywood and OSB								
Wood Paneling								
Wood Trim								
Miscellaneous Metals								
Structural Steel								
Rough Hardware								
Insulation								
Roofing								
Doors and Frames								
Door Hardware								
Windows								
Glazing								
Acoustical Tile								
Carpet								
Carpet Pad								
Demountable Partitions								
Equipment								
Cabinets								
Plumbing Fixtures								
Piping								
Supports and Hangers								
Valves								
Sprinklers								
Mechanical Equipment								
Electrical Conduit								
Copper Wiring								
Light Fixtures								
Lamps								
Lighting Ballasts								
Electrical Devices								
Switchgear and Panelboards								
Transformers								
Other:								

* * * * *

Cleanup

Dust/Mud Control
Provide mitigation/control of fugitive dust and tracking of soil onto the public right of way. Promptly remove any and all earthen materials and other debris from the public way.

Removal of Debris
All materials not approved for backfilling shall be legally disposed of, off-site.

Foundation Hole
Open foundations must be protected; backfill of holes shall be done only with approved spoil or clean soils; graded to eliminate any standing water.

DEMOLITIONS

NOTES

Location Date

Inspector Time

PENALTIES
Fines are established by ordinance for failure to safely and neatly maintain these conditions. A fine of up to $99 can be assessed for uncorrected violations.
Information/questions, call 291-7340 [8:30-4:30]

Town of East Hartford

DEMOLITION OF BUILDINGS

DEMOLITIONS

Historic District Commission
Approval = Checklist #2

Applicability

All buildings and structures intended to be demolished, dismembered, disassembled, dismantled or razed shall require approval of a permit for such activity by the Building Department.

Exception: Those structures exempted n accordance with Section 29-402 of Connecticut General Statutes [CGS]

Letter of Intent/Historic Structures

Notifications **Checklist #1 (Ordinance 7-22)**
A Letter of Intent To Demolish shall be filed with the Building Official for any structures more than fifty (50) years old prior to applying for a Demolition Permit.
A waiting period of sixty (60) days is required before demolition applications can be accepted for review. **Per Ordinance 7-22**

Postings of Property **Checklist #4**
A Notice sign shall be prominently posted on the property for a period of thirty (30) days during the required waiting period, visible from the public street.

Demolition Permit Application **Checklist #5**

Contractor Certification/Registration **Checklist #6**
Persons applying for demolition permits shall possess a current Connecticut Certification of Demolition Contractor Registration.
Contractors for structures over 2 stories or more than 35 feet in height shall be certified as Class A. All other contractors shall be certified as Class B.
Exceptions. A Contractor Registration is not required for:
Single family home owners taking down dwellings or accessory structures on their own property, or for any person(s) demolishing single family dwellings and attached garages/decks, and only when the owner is physically present on site.

Minimum Liability Insurance **Checklist #7**
Evidence of liability and property damage insurance shall be filed at the time of application in the minimum amounts of $1,000,000/$250,000, with the Town of East Hartford named as an additional insured.

Cutoffs of Utilities **Checklist #10**
Furnish a cutoff certificate from each utility servicing the structure, indicating the date on which service was terminated or capped. Furnish a "dig number" for excavation work.

Notices to Adjacent Property Owners **Checklist #8**
Notice of Intent to Demolish shall be sent by certified mail to all adjoining property owners of record at least one week before demolition is to commence. Submit evidence of mailings with Application.

Certifications **Checklist #9**
Provide reports on investigations for, and remediation of, asbestos and any other hazardous materials on the site as listed by the Department of Environmental Protection.

Details of the Work
Provide a schedule of activities with target dates for demolition operations, filling of foundation holes, disposal of debris.

Procedures During Demolition

Notification Before Commencing Work
The Building Division shall be notified at least forty-eight (48) hours before any demolition operations are scheduled to begin.
A new "Call Before You Dig" number shall be furnished if any prior number for a utility location submitted is more than ten (10) days beyond its date of issue.
Notify Fire Department of water cutoffs to any building sprinkler system(s).

Protection of the Public
Fencing and other barricades as approved by the Building Official. shall be erected and maintained as required by Chapter 541, Part Ia, Connecticut General Statutes [C.G.S.].

Protection of Adjoining Properties
Protect the adjoining premises from damage, including the lot, the buildings and structures. Secure permission from adjacent owners for any necessary access to their property. Repair/replace any adjacent property damages with approved materials equivalent in use and function.

Blasting
Shall be allowed and accomplished only in strict accordance with blasting regulations, licensing and other applicable laws, as further provided in Chapter 541, Part II, CGS.

DEMOLITION CHECKLIST

1. Letter of intent to demolish structure(s) over 50 years.
2. Historic District Commission approval letter for demolition for a structure 50 years or older
3. Cost of Demolition Job
4. Demolition notice posted on property (30 days)
5. Demolition Application
6. Demolition contractors registration
   A. Class A registration for building over 2 stories or more than 35 feet in height
   B. Class B registration for all other demolition
7. Minimum liability insurance $1000.00/$250000. Town of East Hartford named as an additional insured.
8. Notices to adjacent property owners of intent to demolish
9. Certification-reports on investigations and remediation of asbestos and any other hazardous materials.
10. Utility shut off's- CNG(gas)
    Eversource (electric)
    MDC (water &sewer)
    Comcast or AT&T (cable & telephone)
    Fiber optics
11. Call before you dig number
12. Town's wetlands approval (sign off).
13. State of Connecticut- Department of Public Health (Demolition Notification Form)

Use latest DPH Form (downloadable)

14. Hold Harmless letter to the Director of Inspections and Permits

SHADED AREAS FOR DEPARTMENT USE ONLY:

INSPECTIONS AND PERMITS DEPARTMENT DECISION

APPLICATION IS HEREBY:
[ ] APPROVED [ ] DISAPPROVED

DATE _____ CHIEF INSPECTOR _____

ASSESSOR'S VALUATION

Value of Structure _____

Assessor's Sign-off _____

Date _____

FEE SCHEDULE

$20.00 Assessor's valuation of building, first $10,000
$ 4.00 Each additional $1,000 valuation

INLAND WETLAND

Flood Zone _____

Wetlands _____

Buffer Area _____

Commission Approval Date _____

PROOF OF UTILITY DISCONNECTIONS:
[ ] Water [ ] Sewer [ ] Cable
[ ] Telephone [ ] Natural Gas
[ ] Electric: CRS # _____

NOTICES TO ABUTTING LANDOWNERS: [ ]

HISTORIC DISTRICT COMMISSION APPROVAL: [ ]
(If over 50 years old)

APPLICATION FOR DEMOLITION PERMIT

PERMIT #

TOWN OF EAST HARTFORD
Department of Licenses and Inspections

APPLICATION MUST BE TYPED, OR PRINTED USING PEN.

1. LOCATION OF JOB: _____
   Street # Street Name
2. DESCRIPTION OF STRUCTURE TO BE DEMOLISHED: _____
3. SIZE OF STRUCTURE: _____ SF
3. AGE OF STRUCTURE: _____ YRS
5. OWNER: _____
6. ADDRESS: _____
   Street # and Name
   _____
   Town, State, and Zip Code
7. PHONE # _____ CELL # _____
8. APPLICANT: _____
9. COMPANY NAME: _____
10. ADDRESS: _____
    Street # and Name
    _____
    Town, State, and Zip Code
11. PHONE # _____ CELL # _____
12. LIC/REG # _____ EXP. _____
13. COST: $ N/A
14. FEE ENCLOSED: $ _____
15. BUILDING TYPE: [ ] Residential [ ] Commercial

STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH

DEMOLITION NOTIFICATION FORM

FOR STATE USE ONLY	
Postmark Date	
Check #	
Transmittal No.	
Amount Paid	
Record No.	

This form is to be completed and postmarked or hand delivered to the Connecticut Department of Public Health at least ten (10) days prior to the start of demolition as required by the Regulations of Connecticut State Agencies (RCSA), Section 19a-332a-3. Each demolition notification must be accompanied by a fee of FIFTY ($50) dollars. A check in that amount made payable to **"Treasurer, State of Connecticut"** must be submitted with the notification form. In case of emergency notifications, this form is to be completed and postmarked or hand delivered within one (1) working day following the start of demolition. **A copy of the written order requiring demolition prepared by a state or local building official shall accompany each emergency demolition notification.** Faxed originals are not acceptable. Revisions to the original notification form may be faxed. Further instructions are found on back of this form.

1. TYPE OF NOTIFICATION:

A. ☐ NEW B. ☐ EMERGENCY C. ☐ REVISED ITEMS REVISED:

2. FACILITY OWNER:

NAME:

ADDRESS:

CITY: STATE:

ZIP: PHONE NO.:

3. LOCATION OF FACILITY TO BE DEMOLISHED:

NAME:

ADDRESS:

CITY: STATE:

ZIP: PHONE NO.:

HAS AN ASBESTOS INSPECTION BEEN CONDUCTED? YES ☐ NO ☐

4. INSPECTION INFORMATION:

NAME OF INSPECTOR:

LICENSE #: DATE OF INSPECTION:

INSPECTOR ADDRESS: CITY:

STATE: ZIP: PHONE NO.:

(Inspection information applicable to facilities subject to the asbestos NESHAP, 40 C.F.R., Part 61)

In accordance with *Section 61.145* of the U.S. Environmental Protection Agency's National Emission Standards for Hazardous Air Pollutants (NESHAPs) regulation, the owner or operator of a facility shall, prior to the commencement of renovation or demolition, inspect the affected portions of the facility for asbestos, including Category I and Category II nonfriable asbestos.

5(A.)	*DEMOLITION START DATE:*	*5(B.)*	*DEMOLITION COMPLETION DATE:*

Phone: (860) 509-7367/ Fax (860) 509-7378
Telephone Device for the Deaf: (860) 509- 7191
410 Capitol Avenue, MS# 51 AIR
P.O. Box 340308
Hartford, CT 06134-0308

6. USE OF FACILITY:

A. SCHOOL (K-12) | B. PUBLIC BUILDING | C. MANUFACTURING | D. OFFICE | E. COLLEGE

F. COMMERCIAL | G. CHURCH/SYNAGOGUE | H. RESIDENTIAL, # OF DWELLINGS | I. OTHER

(I. SPECIFY)

7. BUILDING DATA: SQUARE FEET: | # OF FLOORS: | AGE:

8. DEMOLITION CONTRACTOR:

NAME: CONTACT PERSON:

ADDRESS:

CITY: STATE:

ZIP: PHONE NO.:

9. DEMOLITION DISPOSAL FACILITY:

NAME:

ADDRESS:

CITY: STATE:

ZIP: PHONE NO.:

10. DEMOLITION WASTE HAULER:

NAME:

ADDRESS:

CITY: STATE:

ZIP: PHONE NO.:

11. PERSON COMPLETING THIS FORM:

NAME:

ADDRESS:

CITY: STATE:

ZIP: PHONE NO.:

SIGNATURE **DATE:**

The submission of the **Notification of Demolition Form** is not required provided that an **Asbestos Abatement Notification Form** was previously submitted to the Department of Public Health involving abatement related to the demolition of the facility. In that case, the **Asbestos Abatement Notification Form** submitted to the agency satisfied the notification requirement for demolition of the facility. In all cases of demolition, one and only one form (**Notification of Demolition Form** or **Asbestos Abatement Notification Form,** as applicable) shall be sufficient to satisfy the Department of Public Health notification requirements detailed in Section 19a-332a-3 of the RCSA.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 1 – NEW ENGLAND

5 POST OFFICE SQUARE, SUITE 100
BOSTON, MA 02109-3912

LESS-THAN-10-DAY NOTIFICATIONS UNDER THE ASBESTOS NESHAP REGULATIONS – 40 C.F.R. PART 61, SUBPART M

INTRODUCTION

The Asbestos NESHAP notification provisions generally require owners and operators of demolition and renovation activities to provide EPA with written notification of a regulated operation at least 10 business days prior to commencement of work.[1] The regulations allow something less than the full 10-day notice for initial notifications (as opposed to revised or updated notifications) only under certain limited factual circumstances. Note that neither the Asbestos NESHAP nor EPA policy or guidance allows regional Asbestos NESHAP staff or other regional personnel to grant a "waiver" from the 10-day notification requirement.

Alternatives to the 10-day notification requirement under the Asbestos NESHAP are limited to certain circumstances specified by the rule (e.g., emergency renovations, ordered demolitions). One rationale for the less-than-10-day notifications is that EPA did not intend that notification requirements for renovations result in disruption of important industrial processes (e.g., power production). In some instances, however, it is necessary and appropriate to stop certain activities to comply with the notification waiting period. For example, when a removal is part of a planned, scheduled repair or maintenance activity, there should be no additional burden associated with notifying in advance since the operation was planned in advance.

On the other hand, if a removal operation is necessitated by an unscheduled and unplanned event, then the operation may be covered by the emergency renovation provisions and not subject to the same waiting period as the planned and scheduled event. Other removals are necessitated by unscheduled events that, although unscheduled, can be predicted from past experience and are to be reported to EPA in advance. Such reports estimate the amounts and nature of these nonscheduled renovation operations.

---

[1] In New England states where EPA has delegated authority to implement and enforce Asbestos NESHAP requirements under applicable state authority, EPA considers proper notification to the delegated state authority to satisfy the federal Asbestos NESHAP requirement. *See* 62 Fed. Reg. 51654 (October 2, 1997). The New England states where EPA has delegated such authority to implement and enforce the Asbestos NESHAP include Connecticut (partial), Maine, Massachusetts, and Maine. For regulated sources in the non-delegated New England states of Connecticut (partial), Rhode Island, and Vermont, however, prior written notification of demolition and renovation operations regulated by the Asbestos NESHAP must be provided to EPA to satisfy federal requirements.

EMERGENCY RENOVATION OPERATIONS
[40 C.F.R. §§ 61.145(a)(4)(iv) and 61.145(b)(3)(iii)]

Emergency renovations are unexpected events that cannot be predicted and are caused by disruption of important industrial operations or by unsafe conditions. An emergency renovation operation is defined at 40 C.F.R. § 61.141 to mean "*a renovation operation that was not planned but results from a sudden, unexpected event that, if not immediately attended to, presents a safety or public health hazard, is necessary to protect equipment from damage, or is necessary to avoid imposing an unreasonable financial burden. This term includes operations necessitated by nonroutine failures of equipment.*"

For emergency renovation operations involving threshold amounts of asbestos, as per 40 C.F.R. § 61.145(a)(4)(iv), written notice of intent to renovate is required "as early as possible before [work begins], but not later than, the following working day." Events that would necessitate an emergency renovation include those that may produce immediately unsafe conditions as well as those that, if not quickly remedied, could reasonably be foreseen to result in an unsafe or detrimental effect on health. For example, a boiler in an apartment building that suddenly malfunctions during the winter would need to be repaired immediately. The rule also includes equipment damage and financial burden as reasons for emergency renovations. These reasons serve to protect equipment from significant damage and to avoid imposing an unreasonable financial burden by requiring sources that experience a sudden unexpected equipment failure to wait 10 days.[2]

The basic characteristic that distinguishes an emergency renovation from a planned renovation is the degree of predictability of their occurrence. *See* 40 Fed. Reg. 48292 (October 14, 1975). In planned renovations, the amount of asbestos to be stripped or removed within a given period of time can be predicted, whereas no such prediction can be made for emergency renovations. Therefore, by their unexpected occurrence, emergency renovations cannot be included in notifications given for planned, individual, nonscheduled renovations.

For emergency renovations, the rule requires a written notification be prepared and submitted (postmarked) not later than one working day after renovation begins. If an incomplete notification is provided, the owner/operator must follow up with a revised/complete notification. Notification by facsimile technology (fax) is not considered an acceptable means for transmitting notifications. EPA does not require annual predictions of the quantities of asbestos to be removed as a result of emergency

[2] Consult the Applicability Determination Index (ADI) database web site for clarification and examples on this and other aspects of the Asbestos NESHAP. EPA periodically issues determinations of whether certain intended actions constitute the commencement of regulated activities such as construction, reconstruction, or modification ("applicability determinations"), permissions to use monitoring or record keeping which is different from the promulgated NESHAP standards ("alternative monitoring"), and a broad range of NESHAP regulatory interpretations as they pertain to sources or source categories ("regulatory interpretations"). EPA Headquarters has maintained a compilation of such letters and memoranda since they were first issued and this compilation is currently available on the Applicability Determination Index (ADI) through the link provided, below.

renovations as annual predictions are required for individual nonscheduled renovations that can be predicted based on past experience.

[A note about nonscheduled renovations: Although the usage of the term "nonscheduled renovation operation" in the context of planned renovations may appear contradictory, the term applies to individual events that cannot be precisely predicted as to their specific nature and time of occurrence but, based on experience, will occur. *See* 40 C.F.R. § 61.141. For example, a petroleum refinery or chemical plant must routinely deal with faulty valves, pumps, and pipes and other failures that occur occasionally. Because such equipment failures have occurred in the past, plant operators know that similar problems will occur in the future, even though the exact date and location are unknown. But the plant operators can be certain that they will occur and can plan accordingly. Similarly, use of the word "routine" in the definition applies to equipment failures that, based on experience, can be predicted to occur in that they occur as a matter of routine, although the exact date and location cannot be predicted. *Activities that do not occur routinely are not covered by the provisions governing individual, nonscheduled operations.* For instance, if the amount of asbestos that will be disturbed as part of a maintenance activity will exceed the threshold amounts and the activity can be planned (that is, the date and nature of the work to be done are known in advance), then the activity is a planned renovation subject to the requirements of Section 61.145(a)(4). Maintenance activities that occur as a result of the routine failure of equipment cannot be precisely predicted and would be included in the annual notification requirement for planned renovation operations involving individual nonscheduled operations. *A maintenance activity performed in connection with a sudden unexpected event, where the amount of asbestos affected exceeds the thresholds, is considered an emergency renovation.* A nonscheduled renovation differs from an emergency renovation in that, while nonscheduled renovations can be anticipated based on experience, emergency renovations cannot be predicted.]

ORDERED DEMOLITIONS

The Asbestos NESHAP, at 40 C.F.R. § 61.145(a)(3), provides that, among other things, "if the facility is being demolished under an order of a State or local government agency, issued because the facility is structurally unsound and in danger of imminent collapse," then written notice of intent to renovate is required as early as possible before work begins but not later than the following working day. *See* 40 C.F.R. § 61.145(b)(3)(iii). Typically, a demolition is ordered when a building has been declared unsafe and in danger of collapse as a result of damage caused by fire. A representative from the fire department or a building inspector employed by the appropriate government agency makes this determination. These structures must typically be demolished immediately and often cannot await an inspection by EPA. To discourage abuse of this provision, the notification that is submitted must identify the government representative who ordered the demolition and the date the order was issued and the date the demolition was ordered to begin.

CONCLUSION

Under the Asbestos NESHAP, all original notifications must be submitted by owners and operators of regulated demolition and renovation activities at least 10 business days prior to the commencement of work, unless certain limited factual circumstances exist. These circumstances include emergency renovations and ordered demolitions. For any demolition or renovation, it is the reasonability of the notifying owners and operators to establish and document their classification of a regulated operation and to comply with all applicable Asbestos NESHAP requirements.

For more information:

EPA Asbestos NESHAP Rule Summary and contact page – https://www.epa.gov/stationary-sources-air-pollution/asbestos-national-emission-standards-hazardous-air-pollutants

EPA Headquarters Asbestos page – http://www.epa.gov/asbestos/ and https://www.epa.gov/asbestos/asbestos-professionals (for asbestos professionals)

OSHA Asbestos page – http://www.osha.gov/SLTC/asbestos/

EPA Applicability Determination Index– http://www.epa.gov/compliance/monitoring/programs/caa/adi.html

Updated: 9/14/2017

DATE

Milton Gregory Grew

Director of Inspections and Permits

Town of East Hartford

740 Main Street

East Hartford, CT 06108

RE: Demolition at _____

In accordance with Connecticut Public Act No. 15-131, I am writing to declare that I shall hold the Town of East Hartford and its agents harmless from any claim or claims arising out of my negligence or the negligence of my agents or employees during the course of the demolition operation.

If you have any questions, please feel free to call me.

Sincerely,

Indemnification Agreement to protect the Town against claims and demands from injured parties.

Effective: 5/24/91 (all of 7-20)

Sec. 7-21. Notice Required.

(a) Upon the issuance of the moving permit, the Director of Public Works shall notify the Chief of Police and Fire Department as to the route to be taken and the time.

(b) The permittee shall notify the telephone and electric company of such moving.

ARTICLE 5. DEMOLITION OF STRUCTURES.

Sec. 7-22. Demolition of Structures More Than Fifty Years Old; Permit; Fee.

(a) No person shall demolish a building or structure located within the town that is larger than five hundred (500) square feet and more than fifty (50) years old without first obtaining a permit from the Department of Inspections and Permits.

(b) The permit shall be issued upon completion by the applicant of the following requirements:

(1) Filing of a notice of intent to demolish with the Department of Inspections and Permits stating the address of the building, along with a description.

(2) Within ten (10) days of filing, the applicant shall post on the property upon which the building to be demolished is located, in a conspicuous place for at least thirty (30) consecutive days, a sign provided by the Department of Inspections and Permits.

(3) A waiting period of sixty (60) days after the filing of the notice of intent to demolish.

(c) The Director of the Department of Inspections and Permits shall maintain on file a list of all parties, along with their address, who are interested in receiving notice of the filing of an intent to demolish. The Director may notify these parties by mail within five (5) days of the filing of a notice of intent to demolish.

(d) The fee for a demolition permit issued pursuant to this section shall be as provided by the Town Council in the Schedule of Fees.

(e) The permit shall be good for one (1) year

Effective: 11/17/82