

Project No.: 25244
Date: April 1st, 2026
Tender No: RFT #2026-OPS-01
Project: **The Corporation of the Town of Deep River
Deep River Arena Complex Rink Slab Replacement**

The following information supplements and/or supersedes the bid documents issued to Tender by the Town of Deep River

This Addendum forms part of the contract documents and is to be read, interpreted, and coordinated with all other parts. The cost of all contained herein is to be included in the contract sum. The following revisions supersede the information contained in the original drawings and specifications issued for the above-named project to the extent referenced and shall become part thereof. Acknowledge receipt of this Addendum by inserting its number and date on the Tender Form. Failure to do so may subject bidder to disqualification.

GENERAL

- 2.1 All existing dashboards and glass to be salvaged and turned over to the Township of Deep River.
- 2.2 The dashboards shall be 48" high boards.
- 2.3 Dashboard glass at the lobby end shall be seamless acrylic
- 2.4 All gates on the project shall be swing gates not vertical lift.
- 2.5 Coaches benches are not required for this project.
- 2.6 Raised floors in penalty boxes are not required in this project.

QUESTIONS

2.7 **Question:** **Please confirm if there is a designated substance report, specifications note there is one available.**

Answer: *The designated substance survey is attached to this addendum.*

2.8 **Question:** **There is a painting specification, please provide the painting schedule or more details on what is to be painted.**

Answer: *There is only miscellaneous paint touch ups for areas effected by the project scope of work included in the base bid scope of work.*

2.9 **Question:** **Can you please provide a Skate / Rubber Flooring Specification**

Answer: *All new flooring is 19mm rubber matting with exception of the 6mm flooring areas which is material supplied by the owner and installed by the general contractor.*

2.10 **Question:** Please confirm the scope that is covered by the electrical cash allowance (i.e timekeepers box cap, make safe, scoreboard disconnect). Drawing indicate to refer to electrical for capped services, but no drawing is included. Is on available.

Answer: The electrical allowance will be used for electrical isolations, relocates etc to complete the project. Electrical drawings are not available.

2.11 **Question:** What is meant by “clean sled form base of pit” regarding the header trench? What is the extents of cleaning.

Answer: The intent is to clean accumulated dirt and debris from the pit to bare concrete.

2.12 **Question:** Please confirm which refrigeration contractor will be utilized under the cash allowance. Is there a detailed refrigeration scope of work available that indicates what is covered by the cash allowance.

Answer: The refrigeration contractors will be selected after award, refer to the specification and past addendums for refrigeration scopes of work.

2.13 **Question:** Has a room readiness assessment been completed for the refrigeration room? Please confirm that all work within the refrigeration room including any by the GC needed to certify the system is covered by the cash allowance.

Answer: There should not be any new work in the room beyond replacement of the headers to the isolation valves. Any new work in the room identified will be dealt with through change order if determined necessary for commissioning of the system.

End of Addendum No. 3

Barry Bryan Associates
Architects, Engineers, Project Managers



Doug McLaughlin, P. Eng.

DM/sm

ENCL DSS Report

51 Pages



BULLER CRICHTON
ENVIRONMENTAL INC.

Designated Substances Survey & Report Asset Retirement Obligations

Deep River Arena
2 Club House Road, Deep River, ON

BCE Project: 24-1445.r1
Report Issued: April 17, 2025



Prepared for:
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Executive Summary

Buller Crichton Environmental Inc. (BCE) was retained by Town of Deep River (Client) to complete a Designated Substances Survey and Report (DSR) within the Deep River Arena located at 2 Club House Road, Deep River, ON. The scope of work included the assessment of the Deep River Arena (herein referred to as the “Site”).

The fieldwork was completed on January 22, 2025 by Derek Stashick and Xiomara Alfaro of BCE. The scope of work included an assessment and sampling for eleven (11) provincially regulated designated substances, as defined in Ontario Regulation 490/09: Designated Substances made under the Ontario Occupational Health and Safety Act, R.S.O. 1990 Chapter O.1, (as amended), which included:

- Asbestos
- Acrylonitrile
- Arsenic
- Benzene
- Coke Oven Emissions
- Ethylene Oxide
- Isocyanates
- Lead
- Mercury
- Silica
- Vinyl Chloride

This report was prepared for the Client to fulfill the Duty of owner’s requirement under:

- Section 30 (1) of the Ontario Occupational Health and Safety Act, and
- Section 10 of Ontario Regulation 278/05: Designated Substance – Asbestos on Construction Projects and in Buildings and Repair Operations, as amended (O. Reg. 278/05).

This report must be provided to contractors prior to conducting demolition or renovation work at the Site.

For complete information and findings, as well as the limitations and recommendations, the reader must read the complete report.

Asbestos

Twelve (12) homogeneous building materials were observed within the arena which could potentially contain asbestos. Based on the visual assessment and analytical results of samples collected, a regulated concentration of asbestos was identified within the following building materials:

- 60cm x 120cm Acoustic Ceiling Tile (small pinholes with lengthwise fissures), Dressing Room 6 (**1% Chrysotile asbestos**)
- 30cm x 30cm Vinyl Floor Tiles (white with grey streaks), Exit Stairwell from 2nd Floor Hall (**2% Chrysotile asbestos**)
- A texture ceiling coat was observed within the ceiling space above the acoustic ceiling tiles in the arena viewing area on the 1st floor. Due to height restrictions, this material was not accessible for sampling. In accordance with industry best practices and regulatory guidelines, the texture coat will be classified as presumed asbestos-containing material (**PACM**) until confirmatory sampling and laboratory analysis can be conducted to determine its asbestos content.

The estimated quantities of asbestos-containing materials (ACMs) within the arena are outlined below:

- Acoustic Ceiling Tiles: Approximately 25 m² located within Dressing Room 6 and the Maintenance Room.
- Vinyl Floor Tiles: Approximately 6 m² located within the Exit Stairwell from the 2nd Floor Hall.
- Texture Ceiling Coat (Presumed ACM): Approximately 80 m² within the ceiling space of the 1st Floor Arena Viewing Area.

Work on the identified ACMs must comply with the applicable regulations and follow appropriate abatement procedures, handling protocols, and worker protection measures to prevent asbestos exposure.

Lead

A total of eleven (11) paint and painted tile samples were collected from the Site. Lead was detected in seven (7) samples, with concentrations ranging from 6 µg/g to 797 µg/g, all of which are below the Environmental Abatement Council of Canada (EACC) guideline limit of 1,000 µg/g. Four (4) samples were below the Method Detection Limit (MDL) of 5 µg/g. A summary of the samples with detectable lead below the EACC guideline Limit is as follows:

- Dark Grey Floor Paint / 1st Floor Viewing Area (6 µg/g)
- Red Wall Paint / Dressing Room Corridor (797 µg/g)
- Blue Wall Paint / Skating Club Office (740 µg/g)
- Light Blue Wall Paint / Olympia Room (259 µg/g)

- Tiles / Within Room 6 (7.7 ug/g)
- Beige Wall Paint / First Aid Room (106 ug/g)
- Light Grey Floor Paint / 1st Floor Storage Room (95 ug/g)

The presence of lead in paint necessitates lead-safe work practices in accordance with the EACC Lead Guideline and Ontario Ministry of Labour, Immigration, Training and Skills Development (MLITSD) regulations. Proper handling, exposure controls, and, where applicable, abatement procedures must be implemented to mitigate the risk of lead exposure to workers and occupants.

In addition, the following materials, where found, should be considered to contain lead:

- cast iron pipe fitting caulking
- glazing and flashing
- electrical components, including wiring connectors, grounding conductors, and solder

Mercury

Fluorescent lighting, where found, should be considered to contain mercury.

Exercise caution to prevent breakage of these items during renovations, as this could release harmful mercury droplets.

Silica

Suspected silica-containing materials were not physically sampled during the DSR as they are known to be present in drywall, acoustic ceiling tiles, ceramic tile, concrete, concrete block, brick, mortar, masonry, stone, and any other aggregates.

Disturbance of these materials may generate respirable silica dust, requiring controls in accordance with O. Reg. 490/09 (Designated Substances) and MLITSD regulations to protect worker safety.

Other Designated Substances

No other designated substances, as defined in O. Reg. 490/09 under the OH&S Act, were observed within at the Site.

Although BCE assessed all physically accessible areas, the possibility still exists that concealed materials may be found during any renovation or demolition process.

In the event any additional suspect designated substances are encountered during renovation or demolition activities, work on those materials must stop immediately and remain undisturbed until testing confirms the presence or absence of asbestos or other designated substances.

Table of Contents

EXECUTIVE SUMMARY i

1 Introduction 1

2 Description of SITE 1

3 Scope of Work 1

4 Standards, Regulations and Guidelines 1

 4.1 Designated Substances..... 1

 4.1.1 Asbestos..... 2

 4.1.2 Lead 2

 4.1.3 Mercury 3

 4.1.4 Silica 3

5 Methodology 4

 5.1 Designated Substances..... 4

 5.1.1 Asbestos..... 4

 5.1.2 Lead 5

 5.1.3 Mercury 5

 5.1.4 Silica 6

6 Results and Discussion 6

 6.1 Designated Substances..... 6

 6.1.1 Asbestos-Containing Materials 6

 6.1.2 Lead-Containing Materials..... 7

 6.1.3 Mercury 8

 6.1.4 Silica..... 8

 6.1.5 Other Designated Substances..... 8

7 Recommendations 9

 7.1 General Recommendations 9

 7.2 Designated Substances..... 9

 7.2.1 Asbestos..... 9

 7.2.2 Lead & Silica Exposure 10

 7.2.3 Mercury 11

 7.2.4 Other Designated Substances..... 11

8 Limitations 12

9 Closure 13

TABLES

Table 1 - Material Sampling Requirements 5
Table 2 - Results of Bulk Material Asbestos Analysis 6
Table 3 - Results of Bulk Material Lead Analysis..... 7
Table 4 - ACMs Removal Recommendations..... 9

APPENDICES

- Appendix A: Project Photographs
 - Appendix B: Asbestos Laboratory Results
 - Appendix C: Lead Laboratory Results
 - Appendix D: Asset Retirement Obligations Budget Estimate
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1 INTRODUCTION

Buller Crichton Environmental Inc. (BCE) was retained by Town of Deep River (Client) to complete a Designated Substances Survey and Report (DSR) within the Deep River Arena located at 2 Club House Road, Deep River, ON. The scope of work included the assessment of the Deep River Arena (herein referred to as the "Site").

2 DESCRIPTION OF SITE

The Site included the two-storey Deep River Arena which consisted of drywall, ceramic tile, and concrete block walls. The floors consisted of concrete, non-asbestos and asbestos containing vinyl floor tiles and the ceiling consisted of non-asbestos and asbestos containing acoustic ceiling tiles and drywall. The mechanical systems are uninsulated. The exterior was comprised of brick and steel. A textured ceiling coat was observed above acoustic ceiling tiles within the 1st floor but was not accessible due to height restrictions. Should this area be impacted by the upcoming project, further assessment and sampling is warranted.

3 SCOPE OF WORK

BCE's scope of work included the following:

1. Reviewing the Site to identify any building materials suspected of containing designated substances.
2. Collecting samples of accessible building materials that are suspected to contain asbestos and lead for laboratory analysis by an independent, third-party accredited laboratory.
3. Providing a comprehensive summary report of designated substances identified at the Site with recommendations for removal and/or management as required.

BCE was not provided historical documentation for review in advance of the field work.

4 STANDARDS, REGULATIONS AND GUIDELINES

4.1 Designated Substances

Section 30 of the Occupational Health & Safety Act (OH&S Act) requires that a document summarizing the presence of these designated substances must be available to contractors and subcontractors requesting tenders, prior to beginning a construction project (including building renovation or demolition). This report serves that purpose. However, scaled drawings and contract specifications are still required should this job be tendered to multiple contractors.

4.1.1 Asbestos

Ontario Regulation 278/05 – Designated Substance – Asbestos on Construction Projects and in Buildings and Repair Operations and made under the OH&S Act, outlines specific procedures for identifying asbestos in buildings and on construction sites. In addition, it outlines requirements for their removal and/or re-assessment and management depending on whether any identified materials are to remain in the building. Asbestos-containing materials (ACM) in good condition can remain in the building if it is managed as prescribed in this regulation, including but not limited to implementation of an Asbestos Management Plan (AMP), annual condition assessment, notification to tenants and training for specified workers. However, any ACM must be removed prior to disturbance because of renovations and/or demolition at the Site.

R.R.O. 1990, Regulation 347 General – Waste Management as amended (O. Reg. 347/90), made under the Ontario Environmental Protection Act, R.S.O. 1990, Chapter E.19, as amended (EPA) sets out requirements for general waste management including ACM. This regulation requires the disposal of asbestos waste in double sealed containers (e.g., a six-mil polyethylene bag or hard plastic barrel), properly labelled and free of cuts, tears, or punctures. The waste must be disposed of in a licensed waste facility which has been properly notified of the presence of asbestos waste.

All asbestos waste must be disposed of as prescribed by Section 17 of O. Reg. 347/90.

4.1.2 Lead

The Occupational Exposure Limit – Time Weighted Average (OEL-TWA) of a worker to lead dust is to be maintained at the lowest practical level with a view to achieving an ambient air concentration lower than 0.05 mg/m³.

Ontario Regulation 490/09 – Designated Substances (O. Reg. 490/09), as amended regulates lead exposure in the work environment. Apart from construction sites, this regulation is enforceable at all work sites in Ontario. Lead on construction sites is regulated through Ontario Regulation 833 – Control of Exposure to Biological or Chemical Exposure (O. Reg 833) as well as through the Ministry of Labour, Immigration, Training, and Skills Development (MLITSD) Guideline – *Lead on Construction Projects* (revised in April 2011) and enforceable through section 25 (2) (h) of the OH&S Act.

The *Environmental Abatement Council of Canada (EACC) Lead Guideline for Construction, Renovation, Maintenance or Repair* is intended for the environmental abatement industry, construction industry and the painting industry in general.

Various occupational and workplace safety authorities and agencies consider that, depending on the type of disturbance, airborne lead could be generated in hazardous levels from any amount of lead in a paint or

surface coating. As such, these agencies have not set a level of lead in paint at which lead-related precautions are not required (a de minimis level).

Similarly, there is no established concentration of lead below which lead procedures are not required if a lead-containing material is disturbed. However, the EACC guideline establishes a de minimis (i.e., virtually safe) level of lead in paint or surface coatings where a hazard would not likely be present.

For the purpose of this guideline, paints or surface coatings containing less than or equal to 0.1% lead by weight (1,000 µg/g) are considered low-level lead paints or surface coatings. If these materials (and the surfaces to which they are applied) are disturbed in a non-aggressive manner, performed using normal dust control procedures and are completed so that the time-weighted average (TWA) for Particles Not Otherwise Specified (PNOS) is not exceeded, then worker protection from the inhalation of lead is likely not required.

General health and safety precautions must still be implemented, which may include, in part, prohibiting eating, drinking, smoking, and chewing in the work area, implementing dust suppression techniques, and washing facilities for workers to wash hands and face.

Disposal of lead must be conducted in accordance with the requirements of Reg. 347 General – Waste Management. The regulation details the minimum requirements for the appropriate transport and disposal of wastes, including acceptable Leachate Quality Criteria (Toxicity Characteristic Leaching Procedure – TCLP).

4.1.3 Mercury

O. Reg. 490/09 as amended regulates mercury exposure in the work environment. Except for construction sites, this regulation is enforceable at all work sites in Ontario. Mercury on construction sites is regulated O. Reg 833.

Disposal of materials containing mercury shall be done in accordance with Reg. 347 General – Waste Management.

4.1.4 Silica

The Occupational Exposure Limit – Time Weighted Average (OEL-TWA) of a worker to silica dust is to be maintained at the lowest practical level with a view to achieving an ambient air concentration lower than 0.10 mg/m³ of air for quartz and Tripoli, and 0.05 mg/m³ of air for cristobalite and tridymite.

O. Reg. 490/09, as amended, regulates silica exposure in the work environment. Except for construction sites, this regulation is enforceable at all work sites in Ontario. Exposure to silica on construction sites can happen through the inhalation of dust created from the disturbance of concrete, drywall, ceiling tiles, mortars etc. As a result, airborne exposure to silica on construction sites is regulated through O. Reg 833. In addition, the MLITSD Guideline – Silica on Construction Projects (revised in April 2011) outlines ways to reduce exposure and protect workers on construction sites. This guideline is enforceable through section 25 (2) (h) of the OH&S Act.

5 METHODOLOGY

5.1 Designated Substances

5.1.1 Asbestos

5.1.1.1 Friability

O. Reg 278/05 requires that ACMs be classified according to their friability. The classification is either designated as friable or non-friable. Friable products are those which can easily be crumbled by hand and release asbestos fibres into the air presenting a risk of inhalation exposure to those around. Non-friable products are not easily crumbled by hand and as a result less likely to release airborne asbestos fibres. However, precautions are important as non-friable ACMs can still release fibres when sanded, cut, abraded, or drilled, especially with power tools.

5.1.1.2 Homogeneous Materials

Homogenous materials are those that are uniform in colour and texture. Homogeneous materials were assumed to be similar in content. Samples were randomly collected to be representative of each suspect asbestos containing material and then assigned a homogenous material number accordingly.

5.1.1.3 Sampling and Analysis

Building materials suspected of containing asbestos were sampled in a manner to ensure that adequate sample volume was collected. Locations of materials sampled were documented and an indication of whether the material was friable or not was documented.

The number of samples collected for each suspect material was completed as prescribed by O. Reg. 278/05 and detailed in the table below on the next page:

Table 1 - Material Sampling Requirements

Type of Material	Size of Area of Homogeneous Material	Minimum # of Samples
Surfacing material, including without limitation material that is applied to surfaces by spraying, by troweling or otherwise. Examples include acoustical plaster on ceilings and fireproofing materials on structural members	Less than 90 m ² (969 ft ²)	3
	90 m ² or more, but less than 450 m ² (4,844 ft ²)	5
	450 m ² or more (more than 4,844 ft ²)	7
Thermal insulation, except as described below	Any size	3
Thermal insulation patch	Less than 2 linear meters (6.6 ft.) or 0.5 m ² (approximately 5.4 ft ²)	1
Any other material	Any size	3

Samples of suspected ACMs were submitted to an independent accredited laboratory Paracel Laboratories Ltd. (Paracel) of Ottawa, Ontario for asbestos content analysis. Paracel is a fully accredited facility for asbestos analysis. Polarized Light Microscopy was completed in accordance with U.S. Environmental Protection Agency (EPA) methodologies and dispersion staining techniques (EPA 600/R-93/116).

Materials are defined as asbestos-containing if they are more than 0.5% asbestos by dry weight. Less than this amount is not considered to be an asbestos-containing material in the province of Ontario.

5.1.2 Lead

Samples of the primary interior finishes were collected using destructive means (i.e., a razor scraper) to ensure that adequate sample volume was collected. Samples of interior finishes were submitted to an independent accredited laboratory (Paracel) of Ottawa, Ontario for analysis of lead content using flame atomic absorption. Paracel is a fully accredited facility for lead analysis. Flame atomic absorption was completed following method SW846-7000B. In addition, any suspected lead products that could not be sampled were visually assessed and documented (e.g., lead in pipe solder, lead in cast-iron pipe fittings and lead in emergency lighting batteries).

5.1.3 Mercury

Mercury was not physically sampled as part of the assessment but was visually assessed and documented where noted. In a building environment, this typically includes mercury vials in older thermostats, mercury vapour in fluorescent light tubes and metal halide lamps. The elemental mercury in the thermostat vials and light tubes presents an occupational exposure risk to workers when the glass is broken and the liquid and/or vapour is released.

5.1.4 Silica

Silica is ubiquitous in our environment and present in numerous building products including, but not limited to, drywall, acoustic ceiling tiles, ceramic tile, concrete, concrete block, brick, mortar, masonry, stone. The silica in these products is confined within the substrate of the material and therefore does not pose a hazard unless released and inhaled by an individual. As a result, it is not possible to sample the silica without causing a significant amount of disturbance. Therefore, BCE visually assessed and documented these materials where noted.

6 RESULTS AND DISCUSSION

The survey was completed on January 22, 2025, by Derek Stashick and Xiomara Alfaro of BCE. Based on the visual assessment and sampling completed at the Site, the following is a summary of the results.

6.1 Designated Substances

6.1.1 Asbestos-Containing Materials

A texture ceiling coat was observed within the ceiling space above the acoustic ceiling tiles in the arena viewing area on the 1st floor. Due to height restrictions, this material was not accessible for sampling. In accordance with industry best practices and regulatory guidelines, the texture coat will be classified as presumed asbestos-containing material (**PACM**) until confirmatory sampling and laboratory analysis can be conducted to determine its asbestos content.

Twelve (12) of homogenous materials were observed for a total of forty (40) samples that were collected and analyzed for asbestos content. Based on the results of visual assessment and sample analysis, the following table outlines a summary of the bulk sampling:

Table 2 - Results of Bulk Material Asbestos Analysis

Sample Reference	Material Description / Location	Results	Friable (Y/N)
2-AS-01 (A-G)	Drywall Joint Compound / Throughout	ND	N/A
2-AS-02 (A-C)	Acoustic Ceiling Tile - 60cm X 60cm - Small and Medium Pinholes / 1 st Floor Viewing Area	ND	N/A
2-AS-03 (A-C)	Acoustic Ceiling Tile - 60cm X 60cm - Small Pinhole with Widthwise Fissures / Dressing Room Corridor	ND	N/A
2-AS-04 (A-C)	Tile Grout / Dressing Room 6	ND	N/A
2-AS-05 (A-C)	Acoustic Ceiling Tile - 60cm X 120cm - Small Pinholes with Lengthwise Fissures / Dressing Room 6	1% CH	N
2-AS-06 (A-C)	Concrete Block Mortar / First Aid Room	ND	N/A
2-AS-07 (A-C)	Vinyl Floor Tile (red with white streaks) / 2 nd Floor Staff Room	ND	N/A
2-AS-08 (A-C)	Yellow Vinyl Floor Tile Mastic / 2 nd Floor Staff Room	ND	N/A

Sample Reference	Material Description / Location	Results	Friable (Y/N)
2-AS-09 (A-C)	Vinyl Floor Tile – 30cm X 30cm - Grey with white streaks / Exit Stairwell from 2 nd Floor Hall	2% CH	N
	Brown Mastic / Exit Stairwell from 2 nd Floor Hall	ND	N/A
2-AS-10 (A-C)	Grey Calking / Exterior	ND	N/A
2-AS-11 (A-C)	Brick Mortar / Exterior	ND	N/A
2-AS-12 (A-C)	Foundational Parging Cement / Exterior	ND	N/A

ND = No asbestos detected in sample

N/A = Not applicable (material is not asbestos-containing)

CH = Chrysotile asbestos

*Friable when disturbed

Photographs are provided in **Appendix A**. Laboratory analytical reports are included within **Appendix B**.

A texture ceiling coat was observed within the ceiling space above the acoustic ceiling tiles in the arena viewing area on the 1st floor. Due to height restrictions, this material was not accessible for sampling. In accordance with industry best practices and regulatory guidelines, the texture coat will be classified as presumed asbestos-containing material (**PACM**) until confirmatory sampling and laboratory analysis can be conducted to determine its asbestos content.

Note: If additional materials suspected to contain designated substances that were not previously visible / uncovered are encountered during the demolition activities that are not included in this report, work must be stopped, and further investigation be conducted at that time. In the case that suspected ACMs cannot be tested, they must be treated as ACMs until proven otherwise.

6.1.2 Lead-Containing Materials

Eleven (11) samples of paint were collected from the Site. A summary of the materials analyzed for lead is presented in the following table:

Table 3 - Results of Bulk Material Lead Analysis

Sample Reference	Material Description / Location	Results µg/g
2-LS-01	Dark Grey Floor Paint / 1 st Floor Viewing Area	6
2-LS-02	White Wall Paint / 1 st Floor Viewing Area	<MDL
2-LS-03	Black Paint / 1 st Floor Viewing Area	<MDL
2-LS-04	White Ceiling Paint / Dressing Room Corridor	<MDL
2-LS-05	Red Wall Paint / Dressing Room Corridor	797
2-LS-06	Blue Wall Paint / Skating Club Office	740
2-LS-07	Light Blue Wall Paint / Olympia Room	259
2-LS-08	Ceramic Tile / Dressing Room 6	7.7
2-LS-09	Beige Wall Paint / First Aid Room	106

Sample Reference	Material Description / Location	Results µg/g
2-LS-10	White Beam Paint / Arena	<MDL
2-LS-11	Light Grey Floor Paint / 1 st Floor Storage Room	95

MDL =Method Detection Limit = 5 µg/g

Bold information indicates the materials contain lead above the EACC guideline limit of 1,000 µg/g.

Laboratory analytical reports are included within **Appendix C**.

In addition, the following materials, where found, should be considered to contain lead:

- cast iron pipe fitting caulking
- glazing and flashing
- electrical components, including wiring connectors, grounding conductors, and solder

6.1.3 Mercury

Fluorescent lighting, where found, should be considered to contain mercury.

6.1.4 Silica

Silica was not physically sampled during the assessment as it would cause damage to the building material. Silica is presumed to be present in the drywall, acoustic ceiling tiles, ceramic tile, concrete, concrete block, brick, mortar, masonry, stone and other such aggregates used as construction material present at the Site.

6.1.5 Other Designated Substances

No other designated substances, as defined in O. Reg. 490/09 under the OH&S Act, were observed at the Site.

7 RECOMMENDATIONS

7.1 General Recommendations

Based on the findings, the *general recommendations* are:

1. This report must be provided to contractors prior to conducting demolition or renovation work at the Site. A copy of the survey must be immediately available whenever workers are present. Further, contractors shall have an exposure control plan in place for each designated substance identified in this report as being in way of the planned work.
2. Work must STOP if additional suspect materials are encountered during renovations and/or demolition activities. These suspect materials must be left undisturbed until testing determines the presence or absence of asbestos or other hazardous materials. In addition, work must also STOP in the event these suspect materials are disturbed inadvertently.

Based on the findings, the *designated substance specific recommendations* are:

7.2 Designated Substances

7.2.1 Asbestos

Asbestos-containing materials (ACMs) and presumed ACMs have been identified at the Site, as detailed below. Material specific recommendations that align with the requirements of Ontario Regulation 278/05 are detailed in Table 4 below:

Table 4 - ACMs Removal Recommendations

Asbestos-Containing Material	Material Location	Recommendations
Acoustic Ceiling Tiles (60cm x 120cm - Small Pinholes with Lengthwise Fissures)	Dressing Room 6 & Maintenance Room	Remove/disturb following Type 1 operations if less than 7.5 m ² is disturbed without damaging materials and materials are wetted. Remove/disturb following Type 2 operations if more than 7.5 m ² is disturbed without damaging materials and materials are wetted. *See O. Reg. 278/05 for other operations and procedures if water cannot be used and/or power tools must be used.

Asbestos-Containing Material	Material Location	Recommendations
Vinyl Floor Tiles (30cm x 30cm Grey with streaks)	Exit Stairwell from 2 nd Floor Hall	Remove following Type 1 operations if non-powered hand tools and water are used. *See O. Reg. 278/05 for other operations and procedures if water cannot be used and/or power tools must be used.
Texture Ceiling Coat (PACM)	Arena Viewing Area, 1 st Floor	Remove following Type 3 operations if more than one square meter of material will be removed. *See O. Reg. 278/05 for other operations and procedures if less than one square meter is removed.

7.2.2 Lead & Silica Exposure

Silica is expected to be present in drywall, acoustic ceiling tiles, ceramic tile, concrete, concrete block, brick, mortar, masonry, stone, and other such aggregates present at the Site and can become airborne during renovation or demolition activities. Lead was identified in the red wall paint, blue wall paint, light blue wall paint, beige wall paint, and light grey floor paint collected from the Site as outlined above and is expected to be present in cast iron pipe fitting caulking, glazing and flashing, and electrical components, including wiring connectors, grounding conductors. The following recommendations are made with respect to silica and lead:

- Although the dark grey floor paint, red wall paint, blue wall paint, light blue wall paint, ceramic tile, beige wall paint, and light grey floor paint finishes were identified under the 1,000 µg/g lead content limit, precautions around its abatement are recommended if the material is to be disturbed. A risk assessment must be conducted if the paint is to be disturbed in a non-aggressive manner to determine what control procedures must be put in place (e.g. dust suppression, PPE, washing facilities for workers). If the material is to be disturbed in an aggressive manner, work must follow the MLITSD Guidelines - *Lead on Construction Projects* and/or the *EACC Lead Guideline for Construction, Repair, Renovation, Maintenance or Repair*. In addition to normal dust control, this may include use of HEPA-filter vacuums and appropriate respirators.
- All work must be completed with procedures as described in the MLITSD Guidelines – *Silica on Construction Projects, 2011* and *Lead on Construction Projects, 2011*.
- All workers present during activities which disturbed these materials must be trained against the hazards of silica and lead exposure and provided with a respirator with P-100 High Efficiency Particulate Air (HEPA) filtration that is personally fit tested to the worker wearing it.
- Water and ventilation must be used to keep dust levels to a minimum.
- The work area must be isolated with banner tape warning of the hazards of silica and lead exposure. Workers within this isolated work area should be wearing the required personal protective equipment.

- No dry sweeping or use of compressed air should be use during clean-up activities. Instead, HEPA filtered vacuums, and wet sweeping should be used.
- Workers must wash their hands and face prior to leaving their work area to avoid the spread of silica and lead dust.
- Precautions should be taken as required during renovation projects impacting materials expected to contain silica (i.e., coring through concrete slabs, demolition of masonry or concrete, brick, etc.) where dust may be generated. Whenever practical changing how a process is performed to lower the silica exposure is preferable. Wet methods reduce dust and should be used whenever practical, particularly in cutting, grinding, and drilling operations.
- The work tasks required and the ways in which lead based paints will be impacted will determine the appropriate respirators, measures and procedures that should be followed to protect workers from lead exposure, and protect the natural environment including soils, water, and other adjacent surfaces. This is to be determined by the Contractor through their own Risk Assessment.
- Prior to removal and disposal, materials containing lead should be subject to toxicity characteristic leaching procedure (TCLP) testing to determine toxicity with respect to lead in accordance with O. Reg. 347/90 under the EPA.
- A “leachable toxic” waste, as defined in the provincial Regulation, is a waste that produces an extract with a lead concentration greater than 5 mg/L, when subjected to the regulatory extraction procedure US EPA Method 1311 (TCLP). A lead-containing waste that analytically proves to be a “leachable toxic waste” is characterized as a regulated hazardous waste and would require special disposal. If TCLP testing is not completed, contractor to assume paint to be disposed of as lead waste.

7.2.3 Mercury

Do not break lamps or separate liquid mercury from components. Recycle and reclaim mercury from fluorescent lamps when taken out of service. Mercury is classified as a hazardous waste and must be disposed of in accordance with local regulations.

Best management practices dictate that the mercury containing tubes, fixtures and equipment must be returned to a participating recycling centre or picked up a disposed of by a licensed hazardous materials contractor.

7.2.4 Other Designated Substances

The following Designated Substances do not require any action and are not addressed in this section:

- Acrylonitrile
- Arsenic
- Benzene
- Coke Oven Emissions
- Ethylene Oxide
- Isocyanates
- Vinyl Chloride

8 LIMITATIONS

This report was prepared for the exclusive use of the Client. This report is based on data and information collected during the assessment work conducted January 22, 2025, by BCE Inc. as described in this report.

The conclusions and recommendations contained in this report are based upon professional opinions regarding the subject matter. These opinions are in accordance with currently accepted environmental assessment standards and practices applicable to these locations and are subject to the following inherent limitations:

- The data and findings presented in this report are valid as of the date of the investigation. The passage of time, manifestation of latent conditions or occurrence of future events may warrant further exploration at the properties, analysis of the data, and re-evaluation of the findings, observations, and conclusions expressed in this report.
- The findings, observations and conclusions expressed by BCE in this report are not, and should not be considered, an opinion concerning compliance of any past or present owner or operator of the building with any federal, provincial, or local laws or regulations.
- Additional Designated Substances not identified in this report may become evident during demolition activities. Should additional information become available, BCE requests that this information be brought to our attention so that we may re-assess the conclusions presented herein. All quantities contained in this report are approximate and based on visual observations made in accessible areas.
- Although effort was made to expose and sample potential designated substances, there is a possibility that additional concealed substances/materials may be present beneath existing flooring, behind wall cavities, roof systems, above ceilings, and any other inaccessible areas such as pipe chases at the Site.
- Should further designated substances be encountered during any renovation or demolition activities, those materials must be managed in accordance with applicable regulations.

9 CLOSURE

If you have any questions or require any further information, please feel free to contact the undersigned at 613-729-5291. Thank you for the opportunity to be of service. We look forward to working with you again.

Best Regards,

BULLER CRICHTON ENVIRONMENTAL INC.

Prepared by:



Xiomara Alfaro, HBSc.
Environmental Health & Safety Technician

Reviewed by:



Alex Johnson, BSc.
Project Manager/Consultant

Appendix A: Project Photographs


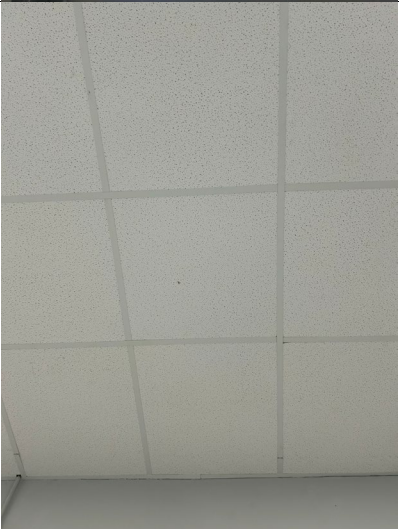

Photo #	Material Location / Description	
1		<p>Representative view of drywall joint compound (2-AS-01 A-G) observed throughout the Arena. It was found not to contain asbestos.</p>
2		<p>Representative view of 60cm x 60cm acoustic ceiling tile (small and medium pinholes) (2-AS-02 A-C) observed throughout the 1st Floor viewing area. It was found not to contain asbestos.</p>
3		<p>Representative view of 60cm x 120cm acoustic ceiling tile (small pinhole with width-wise fissures) (2-AS-03 A-C) observed within the dressing room corridor. It was found not to contain asbestos.</p>


Photo #	Material Location / Description	
4		<p>Representative view of grout (2-AS-04 A-C) observed within Dressing Room 6. It was found not to contain asbestos.</p>
5		<p>Representative view of 60cm x 120cm acoustic ceiling tile (small pinholes with length-wise fissures) (2-AS-05 A-C) observed within Dressing Room 6. It was found to contain 1% Chrysotile asbestos.</p>
6		<p>Representative view of concrete block mortar (2-AS-06 A-C) observed within the First Aid Room. It was found not to contain asbestos.</p>

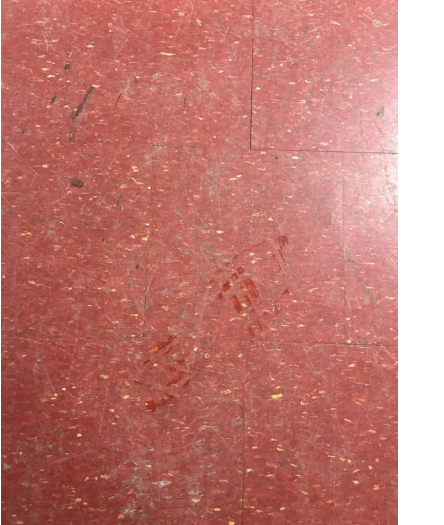


Photo #		Material Location / Description
7		<p>Representative view of 30cm x 30cm vinyl floor tile (red with white streaks) (2-AS-07 A-C) observed within the 2nd Floor Staff Room. It was found not to contain asbestos.</p>
8		<p>Representative view of yellow vinyl floor tile mastic (yellow arrow) (2-AS-08 A-C) observed within the 2nd Floor Staff Room. It was found not to contain asbestos.</p>
9		<p>Representative view of 30cm x 30cm vinyl floor tiles (grey with white streaks) and associated brown mastic (2-AS-09 A-C) observed within the 2nd Floor Exit Stairwell. The vinyl floor tile was found to contain 2% Chrysotile asbestos while the brown mastic was found not to contain asbestos.</p>




Photo #		Material Location / Description
10		<p>Representative view of brick mortar (2-AS-11 A-C) observed within the exterior of the building. It was found not to contain asbestos.</p>
11		<p>Representative view of ceiling space with uninsulated mechanical systems.</p>
12		<p>Representative view of the dark grey floor paint (2-LS-01) observed within the 1st floor viewing area. It was found to contain lead concentrations below the EACC guideline limit.</p>




Photo #	Material Location / Description	
13		<p>Representative view of white wall paint (2-LS-02) observed within the 1st floor viewing area. It was found to contain lead concentrations below the method detection limit.</p>
14		<p>Representative view of black door paint (2-LS-03) observed within the 1st floor viewing area. It was found to contain lead concentrations below the method detection limit.</p>
15		<p>Representative view of white wall ceiling (2-LS-04) observed within the 1st floor corridor. It was found to contain lead concentrations below the method detection limit.</p>


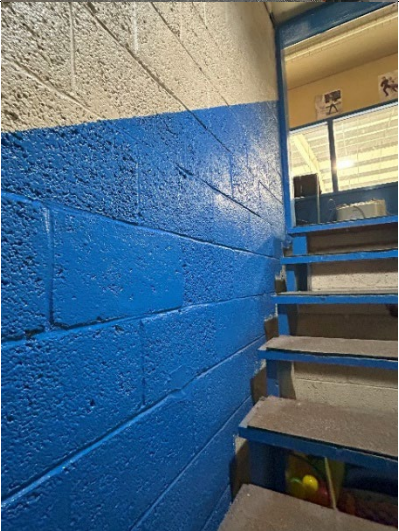

Photo #		Material Location / Description
16		<p>Representative view of red wall paint (2-LS-05) observed within the 1st Floor Corridor. It was found to contain lead concentrations below the EACC guideline limit of 1,000 ug/g.</p>
17		<p>Representative view of blue wall paint (2-LS-06) observed within the skating club office. It was found to contain lead concentrations below the EACC guideline limit of 1,000 ug/g.</p>
18		<p>Representative view of light blue wall paint (yellow arrow) (2-LS-07) observed within the 2nd floor Skating Club Office. It was found to contain lead concentrations below the EACC guideline limit of 1,000 ug/g.</p>


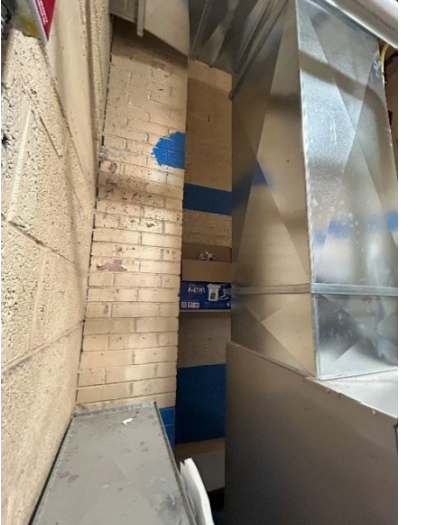



Photo #		Material Location / Description
19		<p>Representative view of ceramic tile (2-LS-08) observed within the showers of Dressing Room 6. It was found to contain lead concentrations below the EACC guideline limit of 1,000 ug/g.</p>
20		<p>Representative view of beige wall paint (2-LS-09) observed within the first aid room. It was found to contain lead concentrations below the EACC guideline limit of 1,000 ug/g.</p>
21		<p>Representative view of white wall paint (2-LS-10) observed within the Arena. It was found to contain lead concentrations below the EACC guideline limit of 1,000 ug/g.</p>

Photo #	Material Location / Description	
22		<p>Representative view of light grey floor paint (2-LS-11) observed within the 1st Floor storage room. It was found to contain lead concentrations below the EACC guideline limit of 1,000 ug/g.</p>
23		<p>Representative view of the textured ceiling coat observed within the 1st Floor Viewing Area.</p> <p>This material is to be presumed asbestos containing (PACM) until sampling can be conducted.</p>

Appendix B: Asbestos Laboratory Results

Certificate of Analysis

Buller Crichton Environmental Inc.

1 Raymond Street Suite 102
Ottawa, ON K1R 1A2
Attn: Xiomara Alfaro

Client PO: 24-1445 Deep River - DSR (Arena - 2)
Project: 24-1445
Custody:

Report Date: 11-Feb-2025
Order Date: 5-Feb-2025

Order #: 2506289

This Certificate of Analysis contains analytical data applicable to the following samples as submitted :

Parcel ID	Client ID
2506289-01	2-AS-01 A
2506289-02	2-AS-01 B
2506289-03	2-AS-01 C
2506289-04	2-AS-01 D
2506289-05	2-AS-01 E
2506289-06	2-AS-01 F
2506289-07	2-AS-01 G
2506289-08	2-AS-02 A
2506289-09	2-AS-02 B
2506289-10	2-AS-02 C
2506289-11	2-AS-03 A
2506289-12	2-AS-03 B
2506289-13	2-AS-03 C
2506289-14	2-AS-04 A
2506289-15	2-AS-04 B
2506289-16	2-AS-04 C
2506289-17	2-AS-05 A
2506289-18	2-AS-05 B
2506289-19	2-AS-05 C
2506289-20	2-AS-06 A
2506289-21	2-AS-06 B
2506289-22	2-AS-06 C
2506289-23	2-AS-07 A
2506289-24	2-AS-07 B
2506289-25	2-AS-07 C
2506289-26	2-AS-08 A

Approved By:



Heather S.H. McGregor, BSc

Laboratory Director - Microbiology

Any use of these results implies your agreement that our total liability in connection with this work, however arising, shall be limited to the amount paid by you for this work, and that our employees or agents shall not under any circumstances be liable to you in connection with this work.

Certificate of Analysis

Client: **Buller Crichton Environmental Inc.**

Client PO: **24-1445 Deep River - DSR (Arena - 2)**

Report Date: 11-Feb-2025

Order Date: 5-Feb-2025

Project Description: **24-1445**

2506289-27	2-AS-08 B
2506289-28	2-AS-08 C
2506289-29.1	2-AS-09 A
2506289-29.2	2-AS-09 A
2506289-30.1	2-AS-09 B
2506289-30.2	2-AS-09 B
2506289-31.1	2-AS-09 C
2506289-31.2	2-AS-09 C
2506289-32	2-AS-10 A
2506289-33	2-AS-10 B
2506289-34	2-AS-10 C
2506289-35	2-AS-11 A
2506289-36	2-AS-11 B
2506289-37	2-AS-11 C
2506289-38	2-AS-12 A
2506289-39	2-AS-12 B
2506289-40	2-AS-12 C

Certificate of Analysis

Report Date: 11-Feb-2025

Client: Buller Crichton Environmental Inc.

Order Date: 5-Feb-2025

Client PO: 24-1445 Deep River - DSR (Arena - 2)

Project Description: 24-1445

Asbestos, PLM Visual Estimation **MDL - 0.5%**

Parcel ID	Sample Date	Colour	Description	Asbestos Detected	Material Identification	% Content
2506289-01	22-Jan-25	White	Drywall Joint Compound	No	Client ID: 2-AS-01 A	
					Non-Fibers	100
2506289-02	22-Jan-25	White	Drywall Joint Compound	No	Client ID: 2-AS-01 B	
					Non-Fibers	100
2506289-03	22-Jan-25	White	Drywall Joint Compound	No	Client ID: 2-AS-01 C	
					Non-Fibers	100
2506289-04	22-Jan-25	White	Drywall Joint Compound	No	Client ID: 2-AS-01 D	
					Non-Fibers	100
2506289-05	22-Jan-25	White	Drywall Joint Compound	No	Client ID: 2-AS-01 E	
					Non-Fibers	100
2506289-06	22-Jan-25	White	Drywall Joint Compound	No	Client ID: 2-AS-01 F	
					Non-Fibers	100
2506289-07	22-Jan-25	White	Drywall Joint Compound	No	Client ID: 2-AS-01 G	
					Non-Fibers	100
2506289-08	22-Jan-25	White/Grey/ Brown	Acoustic Ceiling Tile	No	Client ID: 2-AS-02 A	
					Cellulose	30
					MMVF	30
					Non-Fibers	40
2506289-09	22-Jan-25	White/Grey/ Brown	Acoustic Ceiling Tile	No	Client ID: 2-AS-02 B	
					Cellulose	30
					MMVF	30
					Non-Fibers	40
2506289-10	22-Jan-25	White/Grey/ Brown	Acoustic Ceiling Tile	No	Client ID: 2-AS-02 C	
					Cellulose	30
					MMVF	30
					Non-Fibers	40

Certificate of Analysis
 Client: Buller Crichton Environmental Inc.
 Client PO: 24-1445 Deep River - DSR (Arena - 2)

Report Date: 11-Feb-2025
 Order Date: 5-Feb-2025
 Project Description: 24-1445

Asbestos, PLM Visual Estimation **MDL - 0.5%**

Parcel ID	Sample Date	Colour	Description	Asbestos Detected	Material Identification	% Content
2506289-11	22-Jan-25	White/Grey/Beige	Acoustic Ceiling Tile	No	Client ID: 2-AS-03 A	
					Cellulose	30
					MMVF	30
					Non-Fibers	40
2506289-12	22-Jan-25	White/Grey/Beige	Acoustic Ceiling Tile	No	Client ID: 2-AS-03 B	
					Cellulose	30
					MMVF	30
					Non-Fibers	40
2506289-13	22-Jan-25	White/Grey/Beige	Acoustic Ceiling Tile	No	Client ID: 2-AS-03 C	
					Cellulose	30
					MMVF	30
					Non-Fibers	40
2506289-14	22-Jan-25	Off-white	Grout	No	Client ID: 2-AS-04 A	
					Non-Fibers	100
2506289-15	22-Jan-25	Off-white/Gr ey	Grout	No	Client ID: 2-AS-04 B	[AS-LR-NA]
					Non-Fibers	100
2506289-16	22-Jan-25	Off-white/Gr ey	Grout	No	Client ID: 2-AS-04 C	[AS-LR-NA]
					Non-Fibers	100
2506289-17	22-Jan-25	White/Grey/ Pink	Acoustic Ceiling Tile	Yes	Client ID: 2-AS-05 A	
					Chrysotile	1
					Cellulose	30
					MMVF	30
					Non-Fibers	39
2506289-18	22-Jan-25	White/Grey/ Pink	Acoustic Ceiling Tile		Client ID: 2-AS-05 B	
					not analyzed, positive stop	
2506289-19	22-Jan-25	White/Grey/ Pink	Acoustic Ceiling Tile		Client ID: 2-AS-05 C	
					not analyzed, positive stop	
2506289-20	22-Jan-25	Grey	Concrete Block Mortar	No	Client ID: 2-AS-06 A	
					Non-Fibers	100

Certificate of Analysis
 Client: Buller Crichton Environmental Inc.
 Client PO: 24-1445 Deep River - DSR (Arena - 2)

Report Date: 11-Feb-2025
 Order Date: 5-Feb-2025
 Project Description: 24-1445

Asbestos, PLM Visual Estimation **MDL - 0.5%**

Parcel ID	Sample Date	Colour	Description	Asbestos Detected	Material Identification	% Content
2506289-21	22-Jan-25	Grey	Concrete Block Mortar	No	Client ID: 2-AS-06 B Non-Fibers	100
2506289-22	22-Jan-25	Grey	Concrete Block Mortar	No	Client ID: 2-AS-06 C Non-Fibers	100
2506289-23	22-Jan-25	Red	Vinyl Floor Tile	No	Client ID: 2-AS-07 A Non-Fibers	100
2506289-24	22-Jan-25	Red	Vinyl Floor Tile	No	Client ID: 2-AS-07 B Non-Fibers	100
2506289-25	22-Jan-25	Red	Vinyl Floor Tile	No	Client ID: 2-AS-07 C Non-Fibers	100
2506289-26	22-Jan-25	Yellow	Mastic	No	Client ID: 2-AS-08 A Cellulose Non-Fibers	1 99
2506289-27	22-Jan-25	Yellow	Mastic	No	Client ID: 2-AS-08 B Cellulose Non-Fibers	1 99
2506289-28	22-Jan-25	Yellow	Mastic	No	Client ID: 2-AS-08 C Cellulose Non-Fibers	1 99
2506289-29.1	22-Jan-25	Grey	Vinyl Floor Tile	Yes	Client ID: 2-AS-09 A Chrysotile Non-Fibers	2 98
2506289-29.2	22-Jan-25	Brown	Mastic	No	Client ID: 2-AS-09 A Cellulose Non-Fibers	1 99
2506289-30.1	22-Jan-25	Grey	Vinyl Floor Tile		Client ID: 2-AS-09 B not analyzed, positive stop	

Certificate of Analysis
 Client: **Buller Crichton Environmental Inc.**
 Client PO: **24-1445 Deep River - DSR (Arena - 2)**

Report Date: 11-Feb-2025
 Order Date: 5-Feb-2025
 Project Description: **24-1445**

Asbestos, PLM Visual Estimation **MDL - 0.5%**

Parcel ID	Sample Date	Colour	Description	Asbestos Detected	Material Identification	% Content
2506289-30.2	22-Jan-25	Brown	Mastic	No	Client ID: 2-AS-09 B	
					Cellulose	1
					Non-Fibers	99
2506289-31.1	22-Jan-25	Grey	Vinyl Floor Tile		Client ID: 2-AS-09 C	
					not analyzed, positive stop	
2506289-31.2	22-Jan-25	Brown	Mastic	No	Client ID: 2-AS-09 C	
					Cellulose	1
					Non-Fibers	99
2506289-32	22-Jan-25	Grey	Caulking	No	Client ID: 2-AS-10 A	
					Non-Fibers	100
2506289-33	22-Jan-25	Grey	Caulking	No	Client ID: 2-AS-10 B	
					Non-Fibers	100
2506289-34	22-Jan-25	Grey	Caulking	No	Client ID: 2-AS-10 C	
					Non-Fibers	100
2506289-35	22-Jan-25	Grey	Brick Mortar	No	Client ID: 2-AS-11 A	
					Non-Fibers	100
2506289-36	22-Jan-25	Grey	Brick Mortar	No	Client ID: 2-AS-11 B	
					Non-Fibers	100
2506289-37	22-Jan-25	Grey	Brick Mortar	No	Client ID: 2-AS-11 C	
					Non-Fibers	100
2506289-38	22-Jan-25	Dark Grey/Light	Parging Cement	No	Client ID: 2-AS-12 A	[AS-LR-NA]
					Non-Fibers	100
2506289-39	22-Jan-25	Dark Grey/Light	Parging Cement	No	Client ID: 2-AS-12 B	[AS-LR-NA]
					Non-Fibers	100
2506289-40	22-Jan-25	Dark Grey/Light	Parging Cement	No	Client ID: 2-AS-12 C	[AS-LR-NA]
					Non-Fibers	100

Certificate of Analysis

Report Date: 11-Feb-2025

Client: **Buller Crichton Environmental Inc.**

Order Date: 5-Feb-2025

Client PO: **24-1445 Deep River - DSR (Arena - 2)**

Project Description: **24-1445**

* MMVF: Man Made Vitreous Fibers: Fiberglass, Mineral Wool, Rockwool, Glasswool

** Analytes in bold indicate asbestos mineral content.

Analysis Summary Table

Analysis	Method Reference/Description	Lab Location	Lab Accreditation	Analysis Date
Asbestos, PLM Visual Estimation	AppE to SubE of 40CFR Part763 and EPA/600/R-93/116	2 - Ottawa West	CALA 1262	11-Feb-25

Ottawa West Lab: 25 Northside Rd, Unit C Nepean, Ontario K2H 8S1

Qualifier Notes

Sample Qualifiers :

AS-LR-NA: Layers/materials inseparable, combined and not analysed separately

Work Order Revisions | Comments

None

Appendix C: Lead Laboratory Results

Certificate of Analysis

Buller Crichton Environmental Inc.

1 Raymond Street Suite 102
Ottawa, ON K1R 1A2
Attn: Xiomara Alfaro

Client PO: 24-1445 Deep River - DSR (Arena - 2)
Project: 24-1445

Custody:

Report Date: 11-Feb-2025
Order Date: 5-Feb-2025

Order #: 2506334

This Certificate of Analysis contains analytical data applicable to the following samples as submitted:

Parcel ID	Client ID
2506334-01	2-LS-01 Dark Grey Floor Paint/1st Floor V.A
2506334-02	2-LS-02 White Wall Paint/1st Flr. V.A
2506334-03	2-LS-03 Black Paint (door)/1st Flr V.A
2506334-04	2-LS-04 White Wall/Ceiling Paint/1st Flr Corr.
2506334-05	2-LS-05 Red Wall Paint/1st Flr Corridor
2506334-06	2-LS-06 Blue Wall Paint/Olympia R.
2506334-07	2-LS-07 Light Blue Wall Paint/Olympia R.
2506334-08	2-LS-08 Tile/Room 6
2506334-09	2-LS-09 Beige Wall Paint/First Aid R.
2506334-10	2-LS-10 White Paint/Arena
2506334-11	2-LS-11 Light Grey Floor Paint/Storage R.

Approved By:



Mark Foto, M.Sc.

Laboratory Director

Certificate of Analysis

Report Date: 11-Feb-2025

Client: **Buller Crichton Environmental Inc.**

Order Date: 5-Feb-2025

Client PO: 24-1445 Deep River - DSR (Arena - 2)

Project Description: 24-1445

Analysis Summary Table

Analysis	Method Reference/Description	Extraction Date	Analysis Date
Metals, ICP-MS	EPA 6020 - Digestion - ICP-MS	7-Feb-25	11-Feb-25
Solids, %	CWS Tier 1 - Gravimetric	10-Feb-25	11-Feb-25

Certificate of Analysis

Report Date: 11-Feb-2025

Client: Buller Crichton Environmental Inc.

Order Date: 5-Feb-2025

Client PO: 24-1445 Deep River - DSR (Arena - 2)

Project Description: 24-1445

Client ID:	2-LS-01 Dark Grey Floor Paint/1st Floor V.A	2-LS-02 White Wall Paint/1st Flr. V.A	2-LS-03 Black Paint (door)/1st Flr V.A	2-LS-04 White Wall/Ceiling Paint/1st Flr Corr.	-	-
Sample Date:	22-Jan-25 09:00	22-Jan-25 09:00	22-Jan-25 09:00	22-Jan-25 09:00	-	-
Sample ID:	2506334-01	2506334-02	2506334-03	2506334-04	-	-
Matrix:	Paint	Paint	Paint	Paint	-	-
MDL/Units						

Metals

Lead	5 ug/g	6	<5 [1]	<5	<5 [1]	-	-
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Certificate of Analysis

Report Date: 11-Feb-2025

Client: Buller Crichton Environmental Inc.

Order Date: 5-Feb-2025

Client PO: 24-1445 Deep River - DSR (Arena - 2)

Project Description: 24-1445

Client ID:	2-LS-05 Red Wall Paint/1st Flr Corridor	2-LS-06 Blue Wall Paint/Olympia R.	2-LS-07 Light Blue Wall Paint/Olympia R.	2-LS-08 Tile/Room 6		
Sample Date:	22-Jan-25 09:00	22-Jan-25 09:00	22-Jan-25 09:00	22-Jan-25 09:00	-	-
Sample ID:	2506334-05	2506334-06	2506334-07	2506334-08		
Matrix:	Paint	Paint	Paint	Other		
MDL/Units						

Physical Characteristics

% Solids	0.1 % by Wt.	-	-	-	100	-	-
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Metals

Lead	5 ug/g	797 [1]	740 [1]	259 [1]	-	-	-
Lead	1.0 ug/g	-	-	-	7.7	-	-

Certificate of Analysis

Report Date: 11-Feb-2025

Client: Buller Crichton Environmental Inc.

Order Date: 5-Feb-2025

Client PO: 24-1445 Deep River - DSR (Arena - 2)

Project Description: 24-1445

Client ID:	2-LS-09 Beige Wall Paint/First Aid R.	2-LS-10 White Paint/Arena	2-LS-11 Light Grey Floor Paint/Storage R.		
Sample Date:	22-Jan-25 09:00	22-Jan-25 09:00	22-Jan-25 09:00		
Sample ID:	2506334-09	2506334-10	2506334-11		
Matrix:	Paint	Paint	Paint		
MDL/Units					

Metals

Lead	5 ug/g	106	<5	95	-	-	-
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Certificate of Analysis

Report Date: 11-Feb-2025

Client: Buller Crichton Environmental Inc.

Order Date: 5-Feb-2025

Client PO: 24-1445 Deep River - DSR (Arena - 2)

Project Description: 24-1445

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	%REC	%REC Limit	RPD	RPD Limit	Notes
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Metals

Lead	ND	1.0	ug/g					
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Certificate of Analysis

Report Date: 11-Feb-2025

Client: Buller Crichton Environmental Inc.

Order Date: 5-Feb-2025

Client PO: 24-1445 Deep River - DSR (Arena - 2)

Project Description: 24-1445

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Metals									
Lead	17.6	1.0	ug/g	15.4			13.5	30	
Physical Characteristics									
% Solids	82.9	0.1	% by Wt.	82.2			0.8	25	

Certificate of Analysis

Report Date: 11-Feb-2025

Client: Buller Crichton Environmental Inc.

Order Date: 5-Feb-2025

Client PO: 24-1445 Deep River - DSR (Arena - 2)

Project Description: 24-1445

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Metals									
Lead	51.4	1.0	ug/g	6.2	90.4	70-130			

Certificate of Analysis

Report Date: 11-Feb-2025

Client: Buller Crichton Environmental Inc.

Order Date: 5-Feb-2025

Client PO: 24-1445 Deep River - DSR (Arena - 2)

Project Description: 24-1445

Qualifier Notes:

Sample Qualifiers :

- 1: Complete separation of paint from substrate not possible for this sample and a small amount of substrate has been included in the paint digestion.
Applies to Samples: 2-LS-02 White Wall Paint/1st Flr. V.A, 2-LS-04 White Wall/Ceiling Paint/1st Flr Corr., 2-LS-05 Red Wall Paint/1st Flr Corridor, 2-LS-06 Blue Wall Paint/Olympia R., 2-LS-07 Light Blue Wall Paint/Olympia R.

Sample Data Revisions:

None

Work Order Revisions / Comments:

None

Other Report Notes:

n/a: not applicable

ND: Not Detected

MDL: Method Detection Limit

Source Result: Data used as source for matrix and duplicate samples

%REC: Percent recovery.

RPD: Relative percent difference.

NC: Not Calculated

Soil results are reported on a dry weight basis unless otherwise noted.

Where %Solids is reported, moisture loss includes the loss of volatile hydrocarbons.

Any use of these results implies your agreement that our total liability in connection with this work, however arising, shall be limited to the amount paid by you for this work, and that our employees or agents shall not under any circumstances be liable to you in connection with this work.

Appendix D: Asset Retirement Obligations Budget Estimate

Town of Deep River
Ontario, Canada

BCE File: 24-1445.r1
Proposal Date: April 17, 2025

Attention: Elaine Taylor, CPA, CA
Director of Finance / Treasurer

Sent by e-mail: etaylor@deeperiver.ca

For: Asset Retirement Obligations Budget Estimate
Deep River Arena, 2 Club House Road, Deep River, ON

INTRODUCTION & BACKGROUND

Buller Crichton Environmental Inc. (BCE) has prepared this document for the Town of Deep River (Client) to develop a budget estimate for removal of identified hazardous materials from the above noted Site as required by the PS3280 Asset Retirement Obligations (ARO). To achieve this, BCE completed a Designated Substance Survey and Report for the noted asset, inclusive of testing and identification of asbestos-containing materials (ACMs) at the Site.

The Public Sector Accounting Board (PSAB) is the authoritative body responsible for setting financial reporting standards in the public sector. Comprising stakeholders from government, industry, and public sector management, PSAB issues and maintains Public Sector Accounting Standards (PSAS), including PS 3280 – Asset Retirement Obligations. Achieving compliance with PS 3280 requires that the Township of Augusta recognize the costs of asset retirement obligations prior to the time in which they occur and to incorporate Asset Retirement Costs (ARCs) into their accounting practices, both at the time of asset construction or acquisition and retroactively for existing assets. Notably, PS 3280 explicitly includes buildings with asbestos within its scope, mandating a thorough understanding of potential retirement obligations.

METHODS & LIMITATIONS

BCE has populated the ARO Costing Model 1 with ACMs and their corresponding quantities, outlined in this Designated Substances Report (DSR). It is important to acknowledge certain limitations inherent in the DSR:

1. The site survey was conducted using non-destructive and non-intrusive methods, thus encompassing only accessible and visible materials.
2. Some materials are presumed ACM (PACM).

Notable assumptions were made for PACMs visible during the survey:

1. Texture Ceiling Coat.

The estimated costs associated with PACMs are based on professional judgment and BCE's comprehensive understanding of the building, considering historical use and the likelihood of the material containing asbestos.

Any services provided by BCE will adhere strictly to generally accepted engineering and scientific practices prevalent in this geographical area at the time of the work. This agreement or the provision of oral or written reports and findings does not imply or express any warranty.

It's essential to recognize the possibility of encountering unexpected environmental conditions at the Site, particularly in areas not specifically observed or investigated.

COST ESTIMATES

The ARO costing Model 1 documents for the asset are provided below in Table 1 & 2 with Unit Rates generated to meet 2025 industry standards. As years progress, cost of inflation should be added.

Table 1: Asset Retirement Obligation (ARO) - Hazardous Materials Abatement

Description & Details		Measurement	Unit Cost for Asset & Findings	Quantity Identified	Total ARO
Asbestos Abatement – Identified ACM (Including mobilization, trained, certified insured asbestos workers, containment, equipment, hauling and disposal)					
Acoustic Ceiling Tiles	Dressing Room 6	m ²	\$60.00	25	\$1,500.00
	Maintenance Room				
Vinyl Floor Tile	Vault Room	m ²	\$60.00	6	\$360.00
Asbestos Abatement – Presumed ACM (Including mobilization, trained, certified insured asbestos workers, containment, equipment, hauling and disposal)					
Texture Ceiling Coat	Arena Viewing Area	m ²	\$245.44	80	\$19,635.20
Other Asbestos Abatement Unit Rates					
Disposal (incl. bin drop-off/pick-up and disposal fees)			10% of Abatement Cost	1	\$2,149.52
Mobilization Fee (fixed lump sum)			\$ 5,000.00	1	\$5,000.00
Hoarding / Protection (incl. decontamination)			15% of Abatement Cost	1	\$3,224.28
Other Designated Substances (Removal / Disposal)					
Other Designated Substances			10% of Abatement Cost	1	\$2,149.52

Unforeseen Materials	10% of Abatement Cost	1	\$2,149.52
Other Directly Attributable Overhead Costs			
Professional & Project Management Costs Associated with Asbestos Abatement	10% of Abatement Costs	N/A	\$2,149.52
Total Estimated ARO (Including identified ACM and PACM) (excluding HST)			\$ 38,317.56

Table 2: Asset Retirement Obligation (ARO) – Summary

Asset Name:		Deep River Arena
Asset Address:		2 Club House Road, Deep River, Ontario
ARO Liability		
Total ARO Liability**	\$ 38,317.56 + HST	

* See full January 2025 DSSR completed by BCE for further detail

** Adjust for Applicable Inflation Rate for applicable additional Years

CLOSURE

Thank you again for the opportunity and we look forward to working with you. If you have any questions or require additional information, please do not hesitate to contact the undersigned at 613-729-5291.

Best regards,

BULLER CRICHTON ENVIRONMENTAL INC.

Prepared by:



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 Project Manager/Consultant

Reviewed by:



Mike Buller, ROHT, CRSP, CMI
 Partner