



Accordingly, a Lead Management Plan should be prepared for the Site prior to initiating demolition activities.

8. Conclusions/Recommendations

The following conclusions/recommendations were developed based on the results of the DS Survey:

1. Notification and/or a copy of the limited DS Survey Report should be made available to employees and Contractors working in the Work Area.
2. GHD completed an Asbestos Survey in the Work Area in accordance with O. Reg. 278/05 as part of the DS Survey. GHD's Asbestos Survey identified the following building materials as ACMs:

North (Balsam) Building

Friable materials include drywall joint compound which was generally in good condition. Non-friable materials include flat tar and gravel roof in attic spaces, tar seal on foundation walls, vinyl floor tiles (12"x12" - brown, olive, dark brown with white streaks, 12"x12", tan with brown streaks, 12"x12" - brown with dark brown streaks) and pipe wrap.

West (Rochester) Building

Friable materials include drywall joint compound which was generally in good condition. Non-friable materials include tar seal on foundation walls and vinyl floor tiles (12"x12" – battleship brown, 12"x12" – mock tile pattern, 12"x12" – mock grey stone pattern).

South (Gladstone) Building

Friable materials include drywall joint compound which was generally in good condition. Non-friable materials include flat tar and gravel roof in attic spaces, tar seal on foundation walls, vinyl floor tiles (12"x12" – olive with white streaks, 12"x12" – brown with white streaks, 12"x12", olive/brown with white streaks) and pipe wrap (assumed based on testing in North (Balsam) Building).

All Buildings

A contractor, certified for asbestos abatement, should be retained to complete asbestos abatement services prior to demolition of the buildings. Handling and disposal of all ACM should be conducted in accordance with O.Reg. 278/05.

If hidden materials that may be potential ACM are discovered during maintenance, renovation or demolition activities, work should cease until samples are analysed. Alternatively, potential or suspected ACM can be managed as ACM for handling and disposal purposes.

3. The 16 of the 46 submitted paint samples contained lead between 90 ppm and 1,000 ppm, as such these samples are considered to be low-level lead-containing paints (LCP). For the purposes of maintenance, renovation, or demolition activities, all paint on surfaces should be



treated as LCP. The observed paint was noted to be generally well adhered to the substrate; some peeling paint was observed.

It is assumed that lead is present in electrical and plumbing services (solder), electrical conduit, batteries, and packing in older cast iron piping system materials at the Site.

A Lead Management Plan (LMP) should be prepared in accordance with 2011 Ontario Ministry of Labour (MOL) and 2014 Environmental Abatement Council of Ontario (EACO) guidelines. The LMP would protect workers during demolition, renovation, and maintenance activities which will disturb lead containing materials, until all lead containing materials are removed from the Site.

Building materials containing lead in surface coatings are typically characterized and disposed of as non-hazardous solid waste. However, the paint data should be provided to the disposal facility to provide confirmation of acceptance prior to shipping materials. Alternatively, a representative bulk sample of demolition debris could be collected and submitted for Toxicity Characteristic Leaching Procedure (TCLP) to provide confirmation that the material would not be classified as D008 leachate toxic hazardous waste.

4. Silica is present in footings, concrete block and poured concrete foundation walls, in plaster and texture coat, and in the fiberglass insulation in the Work Area. The Guideline for Silica on Construction Projects (MOL, April 2011) should be used to develop appropriate procedures to implement during maintenance, renovation, or demolition activities which disturb silica containing materials and may generate silica containing dust.
5. Man-made mineral fibre materials are present in fibreglass insulation on some of the pipes, and in fiberglass batt insulation found in the walls and attic space in the Work Area. Measures should be taken to control man-made mineral fibre dust hazard when the potential for creating airborne man-made mineral fibre dust entrained from such processes as renovation or demolition. The Guideline for Silica on Construction Projects (MOL, April 2011) should be used to develop appropriate procedures to implement during maintenance, renovation, or demolition activities that will disturb man-made mineral fibre materials in the Work Area.
6. No significant water intrusion or suspect mould growth was observed in above grade structures in the Work Area.

It was noted that the basement crawlspaces, particularly in the South (Gladstone) Building, were often partially flooded with standing water. This standing water could increase humidity in the lower floor materials and contribute to potential mould growth on these surfaces.

9. Limitations

The field work component of the DS Survey was conducted by GHD on January 30 and 31, 2018. The DS Survey was completed to identify designated substances and hazardous building materials within the area defined as 'the Work Area' as identified by the Client.



GHD does not typically collect samples of building materials if said collection has the potential to compromise the integrity of the Building or its components or materials are not readily accessible. These building materials include interior of fire doors, refractory materials within boilers, gasket materials, and below grade structures. In addition, GHD does not sample energized equipment due to the inherent electrical hazards. These include components or wiring within motors, high voltage wiring, elevators (including brakes), lights or other electrical equipment and fixtures.

This DS Survey was conducted in a manner consistent with the level of care and skill exercised by members of the profession, and was based upon information made available to GHD representatives at the time of this Assessment. GHD has analysed and evaluated the information collected during this investigation using applicable engineering and industrial hygiene techniques and principles.

Reliance or use of this report by any third party without explicit authorization from GHD and the Client does not make said third party a third party beneficiary to GHD's contract with the Client. Any such unauthorized reliance on or use of this report, including any of its information or conclusions, will be at the third party's risk. For the same reasons, no warranties or representations, expressed or implied in this report, are made to any such third party.

As applicable, the owner/operator of the subject Site is responsible for corrective or remedial action required and disclosure of any information obtained during this assessment or information contained in this report.



All of Which is Respectfully Submitted,

GHD

A handwritten signature in black ink that reads "S Wallis".

Scott Wallis, B. Sc.

A handwritten signature in blue ink that reads "Luke Lopers".

Luke Lopers, P. Eng.