

July 18, 2023

## WalterFedy

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## Attn: Clay Cope Senior Project Manager, Mechanical; Partner <u>ccope@walterfedy.com</u>

#### Re: Post-Abatement Inspection and Air Monitoring Report Safetech Project Number: 2-3230058 Avon Crest Tunnel – Type 2 Glove Bag Operation Avon Crest Building, 89 John Street South, Stratford, Ontario

## 1.0 BACKGROUND

On July 18, 2023, Safetech Environmental Limited (Safetech) conducted a postabatement visual inspection and air testing associated with the asbestos abatement work conducted in the Avon Crest Tunnel for the Avon Crest Demolition project, Avon Crest Building, 89 John Street South, Stratford, Ontario (subject area). These services were conducted on behalf of WalterFedy to ensure that identified asbestos-containing pipe insulation had been removed from the subject area. To supplement our visual inspection, air sampling for airborne fibres was also conducted in the Type 2 work area.

# 2.0 METHODOLOGY

# 2.1 Visual Inspections

A post-abatement visual inspection was conducted to verify that asbestos-containing materials were removed as per the project specifications and to ensure that the work area was adequately cleaned to an acceptable level of visible dust, debris, or residue that may contain asbestos.

# 2.2 Air Testing

Air sampling for airborne fibres was performed once our post-abatement visual inspection confirmed that asbestos abatement was deemed to be successfully completed. Sampling and analysis were conducted in accordance with the U.S. National Institute of







Occupational Safety and Health (NIOSH) Manual of Analytical Methods, Method 7400, Issue 3: Asbestos and other Fibres by PCM (June 14, 2019), using "A" counting rules.

Air sampling was conducted using a 25-mm three-piece filter cassette containing a 0.8 µm cellulose ester membrane filter and equipped with a 50-mm electrically conductive extension cowl. The filter cassette was attached to a high-volume air sampling pump calibrated with a filter cassette in line to a known flow rate. As required by NIOSH Method 7400, field blanks were also analyzed to ensure that no contamination of the filters occurred during sampling or analytical procedures.

The quantitative working range of this method is 0.04 to 0.5 fibre/cc for a 1000 L air sample. The Limit of Detection (LOD) depends on sample volume and quantity of interfering dust, and is <0.01 fibre/cc for atmospheres free of interferences. Fibres less than approximately 0.25  $\mu$ m in diameter will not be detected by this method. This analytical method gives an index of airborne fibres as it cannot differentiate between asbestos and other fibres. Other airborne particles that fall within the counting range criteria will act as positive interferences.

Results of analysis were compared to the generally accepted post-abatement standard of 0.01 fibres/cc for Type 2 operations (not regulated).

#### 3.0 RESULTS

#### 3.1 Visual Inspections

Results of our visual inspection noted the following:

- An enclosure had been constructed within the subject area;
- Asbestos cautionary signage had been posted at the entrance to the work area;
- Asbestos-containing pipe insulation in the subject had been removed; and
- The work area was deemed to have been cleaned to an acceptable level.

Please refer to attached site photographs (see below) for typical conditions observed during our site inspection.

Based on the result of our visual inspection, the reported scope of work was adequately completed to allow for post-abatement air sampling to be performed.



## 3.2 Air Testing

Results of air testing conducted following asbestos abatement are summarized in the table below.

| Sample No. | Sample Location                  | Sample Volume<br>(L) | Airborne<br>Fibre Conc.<br>(f/cc) |
|------------|----------------------------------|----------------------|-----------------------------------|
| PCM1       | Avon Crest Tunnel – West Side    | 1260                 | 0.008                             |
| PCM2       | Avon Crest Tunnel – Central Area | 1260                 | 0.006                             |
| PCM3       | Avon Crest Tunnel – East Side    | 1260                 | 0.007                             |

Table 1: Results of Post-Abatement Air Testing

# 4.0 CONCLUSIONS AND RECOMMENDATIONS

Results of our post-abatement visual inspections on July 18, 2023, verified that asbestoscontaining pipe insulation within the subject area had been removed and the work was deemed to be acceptably clean.

As indicated in Table 1, results of post-abatement air testing conducted within the work area at the completion of asbestos abatement confirmed that airborne fibre levels were below the generally accepted post-abatement standard of 0.01 fibres/cc.

Based on the results of our visual inspection and air testing, asbestos abatement was deemed to be acceptably completed to allow for further work to proceed.

# 5.0 LIMITATIONS

The investigation, assessments and recommendations detailed in this report were carried out in a manner consistent with the level of care and skill normally exercised by reasonable members of the environmental and industrial hygiene consulting profession currently practicing under similar conditions in the area. Furthermore, the investigation, assessments and recommendations in this report have been made based on conditions observed at the time of the assessment and are limited to the areas investigated.

In preparing this report, Safetech Environmental Limited (Safetech) relied on information supplied by others, including independent laboratories and testing services. Conclusions made in this report are based on the laboratory analytical results for the air samples analyzed. Except as expressly set-out in this report, Safetech has not made any independent verification of such information.



The analytical method used meets the requirements of O.Reg. 278/05. However, it is important to note that this method is not specific to the identification of asbestos fibres. All particles with a length greater than 5 micrometres, less than 3 micrometres in diameter and a length to diameter ratio of 3 to 1 or greater are included in the count. Fibres with diameters less than about 0.3 micrometres cannot be detected using this method regardless of length.

This report has been prepared for the sole use of the person or entity to who it is addressed. No other person or entity is entitled to use or rely upon this report without the express written consent of Safetech Environmental Limited and the person or entity to who it is addressed. Any use that a third party makes of this report, or any reliance based on conclusions and recommendations made, are the responsibility of such third parties. Safetech accepts no responsibility for damages suffered by third parties as a result of actions based on this report.

Should you have any questions regarding this project, please contact our office.

Sincerely,

### SAFETECH ENVIRONMENTAL LIMITED

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Jordan Miller, B.Sc., CRSP Senior Project Manager

#### Attachments:

1. Site Photographs





**Picture 1 – Avon Crest Tunnel** View of the Avon Crest Tunnel Work Area, facing East (towards the hospital).



Picture 2 – Avon Crest Tunnel View of the Avon Crest Tunnel, facing West (towards the Avon Crest Building).