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1.0 INTRODUCTION

In 2007, St. Lawrence College retained The Thompson Rosemount Group Inc. (TRG) to complete a designated substances survey of the Glengarry, Stormont, Dundas, and Technology Halls of the campus, located at 100 Portsmouth Avenue, Kingston, Ontario. The Energy House, Newcourt House, and the Root Cellar were also surveyed. The survey was undertaken as a requirement of Ontario Regulation 278/05.

Two new wood-frame garages (Paint Shop and Lawn Care) were visually surveyed. No asbestos containing materials were observed in either of these buildings. The Plumbing Lab (2005), Link Building (2003), Student Residences (1998-2005), auditorium and Student Fitness Centre (2003) were not surveyed given their recent construction dates.

SLC retained TRG (now GENIVAR) to update the survey in 2010.

1.1 College Details

- Newcourt House is an 1840's farmhouse that was renovated (circa 1968) and is presently utilized as a daycare facility and home to the Early Childhood Education faculty.
- The Root Cellar is also constructed using antiquated building techniques and materials circa the early 1900's. It was home to the Native Resource Centre in 2007 but is currently vacant.
- Energy House consists of two "portable" type buildings that house equipment for alternative energy generation. Their original construction date is suggested as 1980's.
- The Technology Building (blue room codes) was constructed in 1968. It is predominantly one storey, except for the gymnasium.
- Stormont Hall (brown room codes) was constructed in 1969 and contains 2 floors. Extensive renovations were made to the ground floor in 2003 for the Veterinary Technology area;
- Dundas Hall (green room codes) was constructed in 1969 and contains 2 floors;
- Glengarry Hall (orange room codes) was constructed in 1970 and contains 4 floors;
- Construction details: Steel, terracotta, masonry and concrete construction, with a brick, concrete and metal siding exterior and various steel/concrete flat roof(s). Sprayed-on fire-proofing was employed on the structural and ceiling elements throughout Glengarry, Stormont and Dundas Halls.
- Improvements: A mechanical/storage tunnel joins Dundas and Stormont Halls.

1.2 Previous Surveys and Findings

- In the 1990's, sprayed-on fire-proofing that contained asbestos was removed (by Quincon Limited) from Stormont and Dundas Halls (per William Peairs, site visit).
- The Dundas Hall Boiler Room 00040 was scheduled for a Type 3 abatement subsequent to TRG's June 2007 survey.
- Subsequent to the 2007 survey, much of the asbestos in the Dundas Hall Boiler Room was removed however some remains

1.3 Regulatory Requirements

This section describes the designated substances, routes of exposure, associated diseases, time weighted average exposure values and applicable regulations.

Designated substances are minerals and chemicals that the Ministry of Labour (MOL) regulates in the workplace. The following is a current list of designated substances: asbestos, lead, mercury, silica, isocyanates, vinyl chloride monomer, benzene, acrylonitrile, coke oven emissions, arsenic, and ethylene oxide.

These substances are regulated under the Occupational Health and Safety Act (OSHA) and the Designated Substances Regulation identified as Ontario Regulation 490/09. The Designated Substances Regulation specifies the occupational exposure limits - time weighted average exposure limit (OEL-TWAEL) for each substance and prescribe control programs. However, under Section 14 of the Regulation, construction projects are excluded from OELs and most other requirements of the Regulation. This exclusion should not be interpreted as meaning that nothing is to be done for construction workers who are exposed to designated substances. The OELs establish Ontario standards for worker protection. Procedures that provide the equivalent level of protection should therefore be implemented on construction projects where exposure to designated substances is a hazard. Ensuring that such procedures are in place, would in the words of 25(2)(h) of OHSA be “taking reasonable precautions to protect the health and safety of workers”.

For this reason the MOL has prepared two Guidelines, to assist owners to meet this standard.

- Guideline- Lead on Construction Projects, September 2004
- Guideline- Silica on Construction Projects, September 2004

Copies of these Guidelines are available at the following web links:

Lead – http://www.labour.gov.on.ca/english/hs/guidelines/lead/index.html , and
Silica - http://www.labour.gov.on.ca/english/hs/guidelines/silica/index.html.

1.3.1 Asbestos

Asbestos is a component of a variety of building materials manufactured before 1984 including mechanical insulation, floor tiles, ceiling tiles, caulking, plaster, wiring etc. Workers and building occupants may be exposed during demolition/renovation activities. Exposure to asbestos can cause cancer and lung disease. The route of exposure is primarily by inhalation.

The regulations refer to asbestos as either friable or non-friable. Friable asbestos-containing materials (ACM) can be readily reduced to dust or powder by hand pressure and include items such as sprayed-on or pipe insulation. Non-friable ACM is generally bound in the matrix of the material such and includes items such as vinyl asbestos tiles or transite. This survey assessed both friable and non-friable ACM.

The management of ACM in buildings and construction projects is controlled through Ontario Regulation 278/05 - Regulation respecting Designated Substance - Asbestos on Construction Projects and in Buildings and Repair Operations, made under the Occupational Health and Safety Act. The regulation specifies abatement procedures, training and reporting requirements and post-clearance air quality limits of 0.01 fibres per cubic centimetre of air.

The disposal of asbestos is regulated by the Ontario Environmental Protection Act and the Transportation of Dangerous Goods Act.

1.3.2 Lead

Lead may be present in paint, solder used on copper pipes, caulking on cast iron water pipes, glazing on ceramic tiles, and electrical wires and fixtures. Workers and building occupants may be exposed during demolition/renovation activities. Primary routes of exposure include inhalation, absorption through the skin and ingestion. Over exposure can affect the blood, kidneys, gastro-intestinal system, nervous system and reproductive system.

The Hazardous Products Act identifies paint with a lead concentration in excess of 0.5% as "lead paint". The U.S. Department of Housing and Urban Development (HUD) classify paints that contain 1 mg/cm^2 of lead or 5,000 ug/g by weight as "leaded paint". The Regulation 490/09 defines the TWAEV for elemental lead and inorganic and organic compounds of lead at 0.05 mg/m^3 and the TWAEV for tetraethyl lead at 0.10 mg/m^3.

In April 2005, the Federal Hazardous Products Act Surface Coating Materials Regulation (SOR/2005-109) reduced the allowable concentration of total lead present in a surface coating material to 600 ug/g (600ppm). In February 2010, an amendment to the Surface Coating Materials Regulation was made, reducing the total allowable concentration of lead present in a surface coating material to 90 ug/g. Using this criterion, surface coating materials with lead concentrations greater than 90 ug/g are now considered to be a lead paint.

The Ontario Ministry of Labour also enforces the Guideline Respecting Lead on Construction Sites. This guideline recommends procedures to minimize the workers exposure to lead following Type 1, 2, 3 procedures similar to those identified in the asbestos regulations and requires workers to wear personal protective equipment.

1.3.3 Mercury

Mercury may be present in thermostats, batteries, level gauges, recording devices, thermometers fluorescent light tubes and some paints. Workers and building occupants may be exposed during demolition/renovation activities. Over exposure can affect the nervous system, organs, skin, eyes, respiratory system, gastro-intestinal system and reproductive system. Regulation 490/09 specifies a TWAEV of 0.025 mg/m^3 for all forms of mercury except alkyl mercury and 0.01 mg/m^3 for alkyl mercury.

In 1991, the MOL published the "Safe Handling of Mercury, A Guideline for the Construction Industry". This guideline describes potential health effects of mercury exposure, potential sources of mercury on construction sites, provides remedial measures, and worker protection procedures.

1.3.4 Silica

Silica is present in cement, masonry, drywall and sand. Workers and building occupants may be exposed during demolition/renovation activities. Primary routes of exposure include inhalation, skin absorption and ingestion. Over exposure can affect the blood, organs and reproductive system. Regulation 490/09 specifies a TWAEV of 0.05 mg/m^3 for cristobalite and 0.1 mg/m^3 for quartz/tripoli.

The Ontario Ministry of Labour also enforces the Guideline Respecting Silica on Construction Sites. This regulation recommends procedures to minimize the workers exposure to silica following Type 1, 2, 3, 4 procedures similar to those identified in the asbestos/lead regulations and recommends that workers wear personal protective equipment. There are no restrictions on the disposal of silica under O.Reg. 347 of the EPA.

1.3.5 Isocyanates

Isocyanate compounds are commonly used in the production of certain types of plastics, foams, coatings, drugs, pesticides, polyurethane, polyisocyanurates, diisocyanates and other products. Primary routes of exposure include the eyes, skin and respiratory system. Over exposure can affect the respiratory system, the skin and eyes. Regulation 490/09 specifies a TWAEV of 0.005 ppm. This industrial regulation does not apply to construction projects.

1.3.6 Vinyl Chloride Monomer

Vinyl chloride monomers are generally present in industries producing resins. Primary routes of exposure are inhalation, ingestion and absorption. Regulation 490/09 specifies a TWAEV of 1 ppm.

1.3.7 Benzene

Benzene, an aromatic hydrocarbon, is produced as a by-product of coal gasification, coke production and from refining petroleum. Primary routes of exposure are inhalation, ingestion and absorption. Regulation 490/09 specifies a TWAEV of 0.5 ppm.

1.3.8 Acrylonitrile

Acrylonitrile is a clear colourless, toxic liquid. It is used to manufacture ABS and SAN resins, nitrile rubber, plastics, coatings and adhesives. Primary routes of exposure include inhalation of vapours, direct contact and ingestion. Regulation 490/09 specifies a TWAEV of 2 ppm.

1.3.9 Coke Oven Emissions

Coke oven emissions are generally present in the steel-related industry. Primary routes of exposure include inhalation of vapours, direct contact and ingestion. Regulation 490/09 specifies a TWAEV of 0.15 mg/m^3.

1.3.10 Arsenic

Arsenic is a heavy metal generally found in coal cinders and in the mining industry. Overexposure to arsenic can impair many human systems. Primary routes of exposure include inhalation and ingestion. Regulation 490/09 specifies a TWAEV of 0.01 mg/m^3.

1.3.11 Ethylene Oxide

Ethylene oxide is generally present in organic chemical laboratories and in the petroleum industry. Primary routes of exposure include inhalation and ingestion. Regulation 490/09 specifies a TWAEV of 1.8 mg/m^3.

1.3.12 PCBs

PCBs are not a designated substances regulated by the Ministry of Labour. They are fluids that are generally added to mineral oils contained within transformers, capacitors, ballasts and some hydraulic fluids. Due to their toxicity, PCBs are regulated by both the federal and provincial environment ministries. Environment Canada controls the transportation and storage and disposal of PCBs through SOR/2008-273 while the Ministry of Environment controls their storage and disposal through O.Reg. 347 and 362 of the Environmental Protection Act. PCBs must be managed on-site or disposed of, under manifest to a licensed waste disposal site.

1.3.13 Mould and Water Damage

Mould micro-organisms are rapidly growing fungi present throughout the natural world. Mould spores are always present in buildings, whether they are tracked in with dirt, or blown in through ducts and windows. Proliferation can occur when susceptible building materials are wet long enough for spores to grow and multiply. Common growth sites include wood and paper based products including drywall, ceiling tiles and carpet. Once the spores become airborne, they represent a health hazard. No amount of mould growth can be present without health risks among some occupants.

Several professional bodies have released standards in recent years on the assessment and remediation of mould growth in buildings including:

- Guidelines on Assessment and Remediation of Fungi in Indoor Environments, 2000, New York City Department of Health;
- Construction – Related Nosocomial Infections in Patients in Health Care Facilities: Decreasing the Risk of Aspergillus, Legionella and Other Infections, 2001, Health Canada;
- Standard and Reference Guide for Professional Water Damage Restoration, 3rd Edition, 2006, U.S. Institute of Inspection, Cleaning and Restoration;
- Mould Remediation in Schools and Commercial Buildings, 2001, U.S. Environmental Protection Agency;
- Mould Remediation Procedures, 2004, Environmental Abatement Council of Ontario;
- Mould Guidelines for the Canadian Construction Industry, 2004, Canadian Construction Association;
- Fungal Contamination in Buildings, Health Effects and Investigation Methods, 2004, Health Canada.

2.0 SURVEY AND ANALYTICAL METHODOLOGY

2.1 Survey Methodology

The original field work was completed between June 4th and 8th, 2007 by Mr. Lyle Casselman, Mr. Dale Phippen, Ms. Shannon Picard and Mr. Marc St. Germain of TRG's Cornwall and Guelph offices. The common applications of building materials made from designated substances were surveyed. TRG staff entered each accessible room of the buildings to conduct a visual assessment as discussed in Section 3.2.

GENIVAR Staff updated the designated substances survey in November 2010.

The designated substances were assessed as follows during the initial survey:

- The presence of asbestos-containing materials (ACM) such as pipe and fitting insulation, gaskets, spray-on insulation, floor tiles, caulking, ceiling tiles, wall/ceiling boards, plasters and stuccos were assessed by collecting and analyzing representative bulk samples as required by the Regulation.
- The presence of lead paint was assessed by collecting and analyzing representative bulk samples.
- The presence of poly-chlorinated biphenyls (PCBs) was assessed by visually surveying capacitors and transformers. Based on information provided by SLC, fluorescent light ballasts were assumed not to contain PCBs. No samples were collected or analysed.
- The presence of mercury was assessed by visually surveying the building for thermostats and fluorescent light tubes. No samples were collected or analysed.
- The presence of silica was assessed by visually surveying the building for common materials including concrete and masonry products. No samples were collected or analysed.
- A visual survey for the presence of mould was completed within the study area. No samples were collected or analyzed.

TRG staff also photographed select designated substances. The photographs are presented in ***Appendix B.***

The 2010 field work included the following tasks:

- Review abatement activities conducted since 2007 with management;
- Assess the condition of the previously identified asbestos containing materials;
- Update the written report and provide mark-up to SLC architectural staff.

2.2 Schedule of Sample and Category Codes

Room by room survey results are presented in ***Appendix C***. These tables identify the type of designated substance observed or suspected in each room of the college, identify potential hazards and provide general information. These tables and sample codes employed on the room by room survey sheets are illustrated below.

Building Codes

G -	Glengarry Hall
S -	Stormont Hall
D -	Dundas Hall
T -	Technology
NC -	Newcourt House
RC	Root Cellar
EH	Energy House
STAH	Stormont (Air Handling Unit) Penthouse
DNAH	Dundas (Air Handling Unit) Penthouse

Insulation Codes

1	Not Insulated	5	Foam
2	Asbestos	6	Paper
3	Fibreglass	7	Spray-on
4	Calcium Silicate		

Asbestos/Silica Categories

11	Insulation	53	Terracotta
12	Spray-on	54	Texture Coat
13	Transite	55	Wood
14	Vermiculite	56	Ceramic
15	Fibreglass	57	Glass
16	Blown-in Cellulose	58	Window Panel
21	Caulking	59	Joint Compound
22	Gasket	60	Stucco
23	Tarpaper	61	Carpet
24	Fire or welding curtain	62	Ceramic
31	Ceiling Tile – 12”	63	Floor Tile – 12”
32	Ceiling Tile – 2’x2’	64	Floor Tile – 8”
33	Ceiling Tile – 2’x4’	65	Laminate
41	Cinder Block	66	Linoleum
42	Ciporex	67	Mastic
43	Concrete Block	68	Terrazzo
44	Insulbrick	69	Floor Parging (level-coat)
45	Metal	71	Shingles – Asphalt
46	Brick	72	Tar & Gravel
47	Mortar	72	Tar & Gravel
48	Field Stone	73	Polymer/Composite
51	Drywall	74	Roof Felts
52	Plaster	75	Wiring insulation (Bell, electrical)

PCB Categories

101	Transformer- oil filled	103	Fluorescent Lights
102	Transformer –dry core	104	Incandescent Lights

Mercury Categories

201	Thermostat – Mercury	203	Fluorescent/Halide Lights
202	Thermostat– Air/Electric		

Lead Categories

301	Paint	303	Ceramic Tiles
302	Solder		

Mould Categories

402	Mould

Asbestos Hazard Rating

1	Friable ACM is damaged and exposed to students/staff.
2	Friable ACM not damaged and is readily accessible to students/staff.
3	Friable ACM is damaged but not accessible to student/staff.
4	Non-friable ACM is accessible to students/staff.
5	Non-friable ACM is inaccessible to students/staff.
6	Friable ACM not damaged and inaccessible to students/staff.
7	Friable sprayed-on ACM is accessible to staff that enter wall or ceiling spaces.
8	Friable ACM is accessible to staff who clean/dismantle ducts in areas containing sprayed-on ACM.

Blue triangular symbols containing the number 1 or 2 are illustrated on Figures 1 to 6. With respect to the Asbestos Hazard Rating table immediately above, a triangular blue symbol containing the number 1 indicates that friable ACM is damaged and exposed to students/staff. Likewise, a triangular blue symbol containing the number 2 indicates that friable ACM is not damaged but is readily accessible to students/staff. Damaged friable asbestos must be encapsulated or abated as soon as possible.

2.3 Analytical Methodology

Five hundred and twenty-three (523) bulk samples of materials suspected of containing asbestos were analysed by MACCK Industrial Hygiene Inc., utilizing polarized light microscopy and dispersion staining. Two additional sets of linoleum samples were collected during the 2010 survey. This analytical method followed the Ministry of Labour (MOL) code for the Determination of Asbestos from Bulk Samples. The MOL considers materials containing greater than 0.5 % asbestos are classified as asbestos-containing materials. The analytical results for the bulk

asbestos samples collected during this assignment are discussed herein and presented in ***Appendix D.***

Twenty (20) paint chips and one (1) ceramic floor tile were submitted to Caduceon™ Environmental Laboratories Inc. for lead (Pb) analysis. The samples were prepared utilizing hot block digestion EPA Method 3050 on an ICP-AES. The Hazardous Products Act states that paint with greater than 0.5 % lead by weight is considered to be lead-based paint. The analytical results for the paint samples collected during this assessment are discussed herein and presented in ***Appendix E.***

3.0 OBSERVATIONS AND RESULTS

Room by room survey results are presented in ***Appendix C***. These tables identify the type of designated substance observed or suspected in each room of the college and identify potential hazards. These tables, which were not updated during the 2010 survey, are further discussed in the report sections to follow. Floor plans identifying the locations of samples and designated substances are presented as ***Figures 1 to 6.***

3.1 Asbestos Findings

MACCK Industrial Hygiene Inc. analyzed a total of five hundred and twenty-three (523) samples of materials suspected of containing asbestos. The sampling was conducted per Table 1 of the Regulation, which requires the following sample quantities unless the material was assumed, or proven, to contain asbestos:

- 7 samples of surfacing materials applied by spraying, towelling or otherwise over an area of 450 square metres or more;
- 3 samples of thermal insulation of any size;
- 1 sample of thermal insulation patch for an area of 2 linear metres or 0.5 square metres; and
- 3 samples of other materials of any size.

The results are presented in the following sections***.***

3.2 Thermal Insulation (Material Code 11)

3.2.1 Observations

- Friable, chrysotile mud on fittings, elbows, ductwork and tanks are present within the Stormont, Dundas and Glengarry Halls and Newcourt House.
- Rooms containing friable asbestos insulation are denoted with the boxed numeral 11 on the site plans.
- Rooms containing damaged friable insulation in need of abatement or repair are denoted with triangulated numeral 1 on the site plans.
- Fibreglass and beige non-ACM sweat-wrap were also observed on most mechanical piping and on many elbow/fittings.
- The old boilers and the vast majority asbestos insulation in Dundas Hall's Boiler Room 00040 was removed in 2007, however sporadic asbestos fittings remain.

3.2.2 Results

- The results of the forty-two (42) samples of pipe and fitting insulation are presented in Table 3.2A below.

- Asbestos insulation may also be present in concealed pipe chases throughout the college.

TABLE 3.2A
ASBESTOS SAMPLE RESULTS – THERMAL INSULATION

SAMPLE #	MATERIAL	FLOOR & LOCATION	ASBESTOS CONTENT AND TYPE	FRIABLE
D-00040-11A	BREACHING INSULATION - PIPE	DUNDAS BOILER ROOM 00040, GROUND FLOOR	25-50% CHRYSOTILE	YES
D-00040-11B	BREACHING INSULATION - PIPE	DUNDAS BOILER ROOM 00040, GROUND FLOOR	25-50% CHRYSOTILE (not analyzed)	YES
D-00040-11C	BREACHING INSULATION - PIPE	DUNDAS BOILER ROOM 00040, GROUND FLOOR	25-50% CHRYSOTILE (not analyzed)	YES
D-00040-11D	BREACHING INSULATION - FITTING	DUNDAS BOILER ROOM 00040, GROUND FLOOR	25-50% CHRYSOTILE	YES
D-00040-11E	FITTING MUD ON STEAM (ORANGE)	DUNDAS BOILER ROOM 00040, GROUND FLOOR	25-50% CHRYSOTILE	YES
D-00040-11F	ELBOW MUD - HEATING SUPPLY (BLUE)	DUNDAS BOILER ROOM 00040, GROUND FLOOR	25-50% CHRYSOTILE	YES
D-00040-11G	ELBOW MUD - HEATING SUPPLY (BLUE)	DUNDAS BOILER ROOM 00040, GROUND FLOOR	25-50% CHRYSOTILE (not analyzed)	YES
D-00040-11H	ELBOW MUD - HEATING SUPPLY (BLUE)	DUNDAS BOILER ROOM 00040, GROUND FLOOR	25-50% CHRYSOTILE (not analyzed)	YES
D-00040-11I	TANK MUD - CONDENSATE RETURN	DUNDAS BOILER ROOM 00040, GROUND FLOOR	25-50% CHRYSOTILE	YES
D-00040-11J	TANK MUD - DOMESTIC HOT WATER	DUNDAS BOILER ROOM 00040, GROUND FLOOR	25-50% CHRYSOTILE	YES
D-00040-11K	TANK MUD - HEATING STEAM	DUNDAS BOILER ROOM 00040, GROUND FLOOR	25-50% CHRYSOTILE	YES
D-00110-11A	FITTING INSULATION - COLD WATER METER VALVE	DUNDAS PUMP ROOM 00110, GROUND FLOOR	25-50% CHRYSOTILE	YES
D-00240-11A	FITTING MUD - CONDENSATE RETURN LINE	DUNDAS MECH. ROOM 00240, GROUND FLOOR	25-50% CHRYSOTILE	YES
D-00240-11B	TANK MUD - CONDENSATE RETURN TANK	DUNDAS MECH. ROOM 00240, GROUND FLOOR	25-50% CHRYSOTILE	YES
D-E34G-11	FITTING MUD - RADIATOR STEAM LINE	DUNDAS EXIT 34, GROUND FLOOR	5-25% CHRYSOTILE	YES
DNAH1-11A	ELBOW MUD - STEAM SUPPLY	DUNDAS SOUTH PENTHOUSE AHU	5-25% CHRYSOTILE	YES
DNAH1-11B	LARGE ELBOW MUD COVER OVER FIBREGLASS	DUNDAS SOUTH PENTHOUSE AHU	5-25% CHRYSOTILE	YES
DNAH1-11C	DUCT MUD	DUNDAS SOUTH PENTHOUSE AHU	5-25% CHRYSOTILE	YES
DNAH1-11D	ELBOW MUD - CHILLED WATER SUPPLY INSIDE AHU	DUNDAS SOUTH PENTHOUSE AHU	0.5-5% CHRYSOTILE	YES
TUNNEL-11A	ELBOW MUD - CONDENSATE RETURN LINE	DUNDAS/STORMONT TUNNEL	25-50% CHRYSOTILE	YES
TUNNEL-11B	PIPE SWEAT WRAP WITH TAR	DUNDAS/STORMONT TUNNEL	AND	YES
S-00593-11A	ELBOW MUD - OVER FIBREGLASS	STORMONT MECHANICAL ROOM 00593, GROUND FLOOR	25-50% CHRYSOTILE	YES

TABLE 3.2A
ASBESTOS SAMPLE RESULTS – THERMAL INSULATION

SAMPLE #	MATERIAL	FLOOR & LOCATION	ASBESTOS CONTENT AND TYPE	FRIABLE
S-00593-11B	ELBOW MUD - ON DEAD PIPE	STORMONT MECHANICAL ROOM 00593, GROUND FLOOR	25-50% CHRYSOTILE	YES
S-00593-11C	TANK MUD - CONDENSATE RETURN TANK	STORMONT MECHANICAL ROOM 00593, GROUND FLOOR	25-50% CHRYSOTILE	YES
S-00593-11D	ELBOW MUD - ON STEAM LINE	STORMONT MECHANICAL ROOM 00593, GROUND FLOOR	25-50% CHRYSOTILE	YES
STAH1-11A	ELBOW MUD - ON STEAM LINE	STORMONT SOUTH PENTHOUSE AHU	25-50% CHRYSOTILE	YES
STAH1-11B	ELBOW MUD - ON STEAM LINE	STORMONT SOUTH PENTHOUSE AHU	50-75% CHRYSOTILE	YES
STAH1-11C	JOINT MUD/CANVAS - ON DUCT	STORMONT SOUTH PENTHOUSE AHU	25-50% CHRYSOTILE	YES
STAH1-11D	DUCT MUD	STORMONT SOUTH PENTHOUSE AHU	25-50% CHRYSOTILE (not analyzed)	YES
STAH2-11E	DUCT MUD	STORMONT NORTH PENTHOUSE AHU	25-50% CHRYSOTILE (not analyzed)	YES
STAH1-11X	ELBOW MUD - CHILLED WATER SUPPLY INSIDE AHU	STORMONT SOUTH PENTHOUSE AHU	0.5-5% CHRYSOTILE	YES
G-11090-11	FITTING MUD	GLENGARRY MECHANICAL ROOM 11090, FIRST FLOOR	25-50% CHRYSOTILE	YES
G-33050-11	FITTING MUD	GLENGARRY ROOM 33050, THIRD FLOOR	25-50% CHRYSOTILE	YES
G-33374-11	FITTING MUD	GLENGARRY ROOM 33374, THIRD FLOOR	25-50% CHRYSOTILE	YES
G-44230-11A	FITTING MUD - CHILLER PIPE	GLENGARRY MECHANICAL ROOM 44230, FORTH FLOOR	25-50% CHRYSOTILE	YES
G-44231-11	FITTING MUD	GLENGARRY MECHANICAL ROOM 44231, FORTH FLOOR	25-50% CHRYSOTILE	YES
G-E4-2-11	FITTING MUD	GLENGARRY EXIT 4, 2ND FLOOR	25-50% CHRYSOTILE	YES
G-E35-2-11A	FITTING MUD	GLENGARRY EXIT 35, 2ND FLOOR	25-50% CHRYSOTILE	YES
G-E35-2-11B	FITTING MUD	GLENGARRY EXIT 35, 2ND FLOOR	25-50% CHRYSOTILE	YES
NH-114-11A	FIREDOOR INSULATION	NEWCOURT HOUSE, ROOM 114, BASEMENT FURNACE ROOM	>75% CHRYSOTILE	YES
NH-114-11B	FIREDOOR INSULATION	NEWCOURT HOUSE, ROOM 114, BASEMENT FURNACE ROOM	>75% CHRYSOTILE (not analyzed)	YES
NH-114-11C	FIREDOOR INSULATION	NEWCOURT HOUSE, ROOM 114, BASEMENT FURNACE ROOM	>75% CHRYSOTILE (not analyzed)	YES

Legend: AND – **A**sbestos **N**ot **D**etected

Prior to a scheduled refitting of the Dundas Hall boiler room 00040 and subsequent to TRG's June 2007 survey, St. Lawrence College administration retained TRG to complete a detailed survey of the hot water and steam boilers located in this room. This work was undertaken in late July 2007 and the results of the eighteen (18) samples of materials (door muds, gaskets,

residuals) are presented in Table 3.2B below. The asbestos denoted below was abated when the boilers were removed.

TABLE 3.2B
ASBESTOS SAMPLE RESULTS –THERMAL INSULATION, DUNDAS HALL BOILERS

SAMPLE #	MATERIAL	FLOOR & LOCATION	ASBESTOS CONTENT AND TYPE	FRIABLE
D-00040-11 R	INTERIOR DOOR MUD INSULATION	STEAM BOILER, NORTH END DUNDAS BOILER ROOM 00040	0.5-5 % CHRYSOTILE	YES
D-00040-11 S	INTERIOR DOOR MUD INSULATION	STEAM BOILER, NORTH END DUNDAS BOILER ROOM 00040	0.5-5 % CHRYSOTILE (not analyzed)	YES
D-00040-11 T	INTERIOR DOOR MUD INSULATION	STEAM BOILER, NORTH END DUNDAS BOILER ROOM 00040	0.5-5 % CHRYSOTILE (not analyzed)	YES
D-00040-11 O	INTERIOR DOOR MUD INSULATION	HOT WATER BOILER, NORTH END DUNDAS BOILER ROOM 00040	AND	YES
D-00040-11 P	INTERIOR DOOR MUD INSULATION	HOT WATER BOILER, NORTH END DUNDAS BOILER ROOM 00040	AND	YES
D-00040-11 Q	INTERIOR DOOR MUD INSULATION	HOT WATER BOILER, NORTH END DUNDAS BOILER ROOM 00040	AND	YES
D-00040-11 L	INTERIOR DOOR MUD INSULATION	HOT WATER BOILER, SOUTH END DUNDAS BOILER ROOM 00040	AND	YES
D-00040-11 M	INTERIOR DOOR MUD INSULATION	HOT WATER BOILER, SOUTH END DUNDAS BOILER ROOM 00040	AND	YES
D-00040-11 N	INTERIOR DOOR MUD INSULATION	HOT WATER BOILER, SOUTH END DUNDAS BOILER ROOM 00040	AND	YES
D-00040-22 C	WHITE FIBROUS GASKET, INNER SIDE OF DOOR	HOT WATER BOILER, SOUTH END DUNDAS BOILER ROOM 00040	AND	YES
D-00040-22 D	WHITE FIBROUS GASKET, INNER RING	HOT WATER BOILER, SOUTH END DUNDAS BOILER ROOM 00040	AND	YES
D-00040-22 E	WHITE FIBROUS GASKET, HORIZONTAL FLANGE	HOT WATER BOILER, SOUTH END DUNDAS BOILER ROOM 00040	AND	YES
D-00040-22 F	GREEN FLAT GASKET, GREEN EXTERIOR, WHITE INTERIOR, TAB GASKET	HOT WATER BOILER, SOUTH END DUNDAS BOILER ROOM 00040	AND	YES
D-00040-22 G	GREEN, FLAT, KLINGER THERMOSEAL 440 GASKET	HOT WATER BOILER, BURNER PLATE, SOUTH END, DUNDAS BOILER ROOM 00040	AND	YES
D-00040-22 H	ROPE GASKET	HOT WATER BOILER, NORTH END DUNDAS BOILER ROOM 00040	AND	YES
D-00040-22 I	WHITE, FLAT DOOR GASKET	HOT WATER BOILER, NORTH END DUNDAS BOILER ROOM 00040	AND	YES
D-00040-22 J	BEIGE FLAT GASKET	STEAM BOILER, SOUTH END DUNDAS BOILER ROOM 00040	AND	YES
D-00040-47 D	INTERIOR RESIDUE	STEAM BOILER, SOUTH END DUNDAS BOILER ROOM 00040	AND	YES

Legend: AND – **A**sbestos **N**ot **D**etected

3.3 Spray-On Insulation (Material Code 12)

3.3.1 Observations

- Spray-on insulation was observed in Dundas, Stormont and Glengarry Halls, where it is employed as thermal insulation on structural members and on interior roof decks.

3.3.2 Results

- The results of the twenty (20) samples of spray-on insulation are presented below.
- The spray-on insulation samples do not contain asbestos.

TABLE 3.3
ASBESTOS SAMPLE RESULTS – SPRAY-ON INSULATION

SAMPLE #	MATERIAL	FLOOR & LOCATION	ASBESTOS CONTENT AND TYPE	FRIABLE
D-00010-12D	SPRAY-ON INSULATION (GREY)	DUNDAS JANITOR'S ROOM 00010, GROUND FLOOR	AND	YES
D-00040-12A	SPRAY-ON INSULATION (GREY)	DUNDAS BOILER ROOM 00040, GROUND FLOOR	AND	YES
D-00040-12B	SPRAY-ON INSULATION (GREY)	DUNDAS BOILER ROOM 00040, GROUND FLOOR	AND	YES
D-00040-12C	SPRAY-ON INSULATION (GREY)	DUNDAS BOILER ROOM 00040, GROUND FLOOR	AND	YES
D-00141-12A	SPRAY-ON INSULATION (GREY)	DUNDAS NUSING ROOM 00141, GROUND FLOOR	AND	YES
D-00230-12	SPRAY-ON INSULATION (GREY)	DUNDAS CLASS ROOM 00230, 1ST FLOOR	AND	YES
D-00270-12	SPRAY-ON INSULATION (GREY)	DUNDAS BROWN's RECEIVING 00270, 1ST FLOOR	AND	YES
D-00010-12H	SPRAY-ON INSULATION (GREEN)	DUNDAS JANITOR'S ROOM 00010, GROUND FLOOR	AND	YES
D-00010-12I	SPRAY-ON INSULATION (GREEN)	DUNDAS JANITOR'S ROOM 00010, GROUND FLOOR	AND	YES
D-00010-12J	SPRAY-ON INSULATION (GREEN)	DUNDAS JANITOR'S ROOM 00010, GROUND FLOOR	AND	YES
D-11841-12D	SPRAY-ON INSULATION (GREY)	STORMONT LAB 11841, 1ST FLOOR	AND	YES
D-11841-12E	SPRAY-ON INSULATION (GREY)	STORMONT LAB 11841, 1ST FLOOR	AND	YES
D-11850-12A	SPRAY-ON INSULATION (GREY)	STORMONT BOARDROOM 11850, 1ST FLOOR	AND	YES
D-11850-12B	SPRAY-ON INSULATION (GREY)	STORMONT BOARDROOM 11850, 1ST FLOOR	AND	YES
D-11850-12C	SPRAY-ON INSULATION (GREY)	STORMONT BOARDROOM 11850, 1ST FLOOR	AND	YES
G-C201-12	SPRAY-ON INSULATION	GLENGARRY CORRIDOR 201, 2ND FLOOR	AND	YES
G-C205-12B	SPRAY-ON INSULATION	GLENGARRY CORRIDOR 205, 2ND FLOOR	AND	YES
G-11041-12	SPRAY-ON INSULATION	GLENGARRY READING ROOM 11041, 1ST FLOOR	AND	YES
G-00594-12F	SPRAY-ON INSULATION	GLENGARRY READING ROOM 00594, GROUND FLOOR	AND	YES
G-00594-12G	SPRAY-ON INSULATION	GLENGARRY READING ROOM 00594, GROUND FLOOR	AND	YES

3.4 Asbestos Cement (Material Code 13)

3.4.1 Observations

- Non-friable transite asbestos cement board (fume hood liner) was observed in Glengarry Hall laboratory 44210, as described in Table 3.4 below.
- Non-friable transite cement pipe and board is also present in STAH1 & STAH2, DNAH1 and DNAH2 (roof leaders), Stormont Hall rooms 00660, 11830, 11835, (laboratory fume hoods) and in Dundas Hall pump room 00110 (a sheet used by maintenance).
- Rooms containing friable asbestos insulation are denoted with the boxed numeral 13 on the site plans
- The transite is in good condition and is accessible to students and staff.
- NOTE the sheet of transite within the Dundas Hall Pump Room was removed prior to the 2010 survey.

3.4.2 Results

- The result of the transite cement sample is presented below.
- All transite asbestos cement panels, shingles and piping contain asbestos.

TABLE 3.4
ASBESTOS SAMPLE RESULTS – TRANSITE

SAMPLE #	MATERIAL	FLOOR & LOCATION	ASBESTOS CONTENT AND TYPE	FRIABLE
G-44210-13	TRANSITE (FUME HOOD LINER)	GLENGARRY LAB 44210, 4TH FLOOR	5-25% CHRYSOTILE	NO

Legend: AND – **A**sbestos **N**ot **D**etected

3.5 Cellulose Insulation (Material Code 16)

3.5.1 Observations

- Cellulose fibre insulation was observed in the attic of Newcourt House.

3.5.2 Results

- The result of the cellulose insulation sample is presented below.
- The cellulose insulation sample does not contain asbestos.

TABLE 3.5
ASBESTOS SAMPLE RESULTS – CELLULOSE INSULATION

SAMPLE #	MATERIAL	FLOOR & LOCATION	ASBESTOS CONTENT AND TYPE	FRIABLE
NH-ATTIC-16	CELLULOSE INSULATION	NEWCOURT HOUSE, ATTIC	AND	YES

Legend: AND – **A**sbestos **N**ot **D**etected

3.6 Caulking (Material Code 21)

3.6.1 Observations

- Calking was observed in the interior and exterior throughout the campus.
- Calking is utilized to maintain a hermetic seal around windows and door jams.
- The caulking is in good condition and accessible to staff and students.

3.6.2 Results

- The results of the nineteen (19) calking samples are presented below.
- Three of the 19 calking samples contained trace amounts of non-friable asbestos (i.e. less than 0.5%). This caulking was observed and sampled in the Stormont Hall's AHU penthouse STAH1.
- All other calking samples do not contain asbestos.

TABLE 3.6
ASBESTOS SAMPLE RESULTS – CAULKING

SAMPLE #	MATERIAL	FLOOR & LOCATION	ASBESTOS CONTENT AND TYPE	FRIABLE
D-EXT-21	BROWN CAULKING	EXTERIOR OF DUNDAS HALL, PROXIMATE TO BOILER ROOM 00040	AND	NO
R-EXT-21A	CALKING	EXTERIOR OF ROOTCELLAR	AND	NO
R-EXT-21B	CALKING	EXTERIOR OF ROOTCELLAR	AND	NO
R-EXT-21C	CALKING	EXTERIOR OF ROOTCELLAR	AND	NO
S-EXT-21	GREY CAULKING	EXTERIOR OF STORMONT HALL, PROXIMATE TO EXIT E11	AND	NO
STAH1-21A	CAULKING – ON CINDER BLOCK	INTERIOR OF STORMONT SOUTH AHU PENTHOUSE	<0.5% CHRYSOTILE	NO
STAH1-21B	CAULKING – ON CINDER BLOCK	INTERIOR OF STORMONT SOUTH AHU PENTHOUSE	<0.5% CHRYSOTILE	NO
STAH1-21C	CAULKING – ON CINDER BLOCK	INTERIOR OF STORMONT SOUTH AHU PENTHOUSE	<0.5% CHRYSOTILE	NO
G-22130-21	BLACK AND RUBBERY CAULKING	EXTERIOR OF GLENGARRY HALL	AND	NO
T-EXT-21A	CAULKING	EXTERIOR OF TECHNOLOGY BUILDING	AND	NO
T-EXT-21B	CAULKING	EXTERIOR OF TECHNOLOGY BUILDING	AND	NO
T-EXT-21C	CAULKING	EXTERIOR OF TECHNOLOGY BUILDING	AND	NO
NH-EXT-21A	CAULKING	EXTERIOR OF NEWCOURT HOUSE	AND	NO
NH-EXT-21B	CAULKING	EXTERIOR OF NEWCOURT HOUSE	AND	NO
NH-EXT-21C	CAULKING	EXTERIOR OF NEWCOURT HOUSE	AND	NO
NH-EXT-21D	CAULKING	EXTERIOR OF NEWCOURT HOUSE	AND	NO
NH-EXT-21E	CAULKING	EXTERIOR OF NEWCOURT HOUSE	AND	NO

TABLE 3.6
ASBESTOS SAMPLE RESULTS – CAULKING

SAMPLE #	MATERIAL	FLOOR & LOCATION	ASBESTOS CONTENT AND TYPE	FRIABLE
NH-EXT-21F	CAULKING	EXTERIOR OF NEWCOURT HOUSE	AND	NO
NH-EXT-21G	CAULKING	EXTERIOR OF NEWCOURT HOUSE	AND	NO

Legend: AND – **A**sbestos **N**ot **D**etected

3.7 Gaskets (Material Code 22)

3.7.1 Observations

- Gaskets were observed in various areas of the campus.
- Gaskets are utilized to maintain a mechanical pipe seal or physically connect two independent ducts.
- All gaskets should be assumed to contain asbestos until proven otherwise or replaced since 1980.
- Friable asbestos gaskets were present within the abandoned boiler in basement furnace room 114 of Newcourt House, as described below in Table 3.7. These gaskets are in poor condition and accessible to staff.
- Rooms containing asbestos gaskets are denoted with the boxed numeral 22 on the site plans.

3.7.2 Results

- The results of the fourteen (14) gasket samples are presented below.
- The results indicate that the gaskets in the Dundas Hall boiler and generator room 00040, DNAH1, and STAH1 are not asbestos, as described below.
- The Newcourt House gaskets contain asbestos.
- All other gasket samples do not contain asbestos.

TABLE 3.7
ASBESTOS SAMPLE RESULTS – GASKETS

SAMPLE #	MATERIAL	FLOOR & LOCATION	ASBESTOS CONTENT AND TYPE	FRIABLE
D-00040-22A	GASKET (HOT WATER BOILER)	DUNDAS BOILER ROOM 00040, GROUND FLOOR	AND	YES
D-00040-22B	GASKET (STEAM BOILER)	DUNDAS BOILER ROOM 00040, GROUND FLOOR	AND	YES
DNAH1-22A	FLEX GASKET (BEIGE, ON FAN18)	DUNDAS NORTH AHU PENTHOUSE, ROOF	AND	YES
DNAH1-22B	FLEX GASKET (INSIDE AHU)	DUNDAS NORTH AHU PENTHOUSE, ROOF	AND	YES
STAH1-22A	LIGHT FIXTURE GASKET (INSIDE AHU)	STORMONT SOUTH AHU PENTHOUSE, ROOF	AND	YES
STAH1-22B	LIGHT FIXTURE GASKET (INSIDE AHU)	STORMONT SOUTH AHU PENTHOUSE, ROOF	AND	YES

TABLE 3.7
ASBESTOS SAMPLE RESULTS – GASKETS

SAMPLE #	MATERIAL	FLOOR & LOCATION	ASBESTOS CONTENT AND TYPE	FRIABLE
STAH1-22C	LIGHT FIXTURE GASKET (INSIDE AHU)	STORMONT SOUTH AHU PENTHOUSE, ROOF	AND	YES
STAH1-22X	FLEX GASKET (INSIDE AHU)	STORMONT SOUTH AHU PENTHOUSE, ROOF	AND	YES
NH-114-22A	BOILER GASKET 1	NEWCOURT HOUSE, ROOM 114, BASEMENT FURNACE ROOM	>75% CHRYSOTILE	YES
NH-114-22B	BOILER GASKET 1	NEWCOURT HOUSE, ROOM 114, BASEMENT FURNACE ROOM	>75% CHRYSOTILE (not analyzed)	YES
NH-114-22C	BOILER GASKET 1	NEWCOURT HOUSE, ROOM 114, BASEMENT FURNACE ROOM	>75% CHRYSOTILE (not analyzed)	YES
NH-114-22D	BOILER GASKET 2	NEWCOURT HOUSE, ROOM 114, BASEMENT FURNACE ROOM	25-50% CHRYSOTILE	YES
NH-114-22E	BOILER GASKET 2	NEWCOURT HOUSE, ROOM 114, BASEMENT FURNACE ROOM	25-50% CHRYSOTILE (not analyzed)	YES
NH-114-22F	BOILER GASKET 2	NEWCOURT HOUSE, ROOM 114, BASEMENT FURNACE ROOM	25-50% CHRYSOTILE (not analyzed)	YES

Legend: AND – **A**sbestos **N**ot **D**etected

3.8 Ceiling Tiles, 12" (Material Codes 31)

3.8.1 Observations

- Ceiling tiles are present throughout the college.
- 12 inch by 12 inch tiles (i.e. 12"x12") were observed in Energy House 2.

3.8.2 Results

- The results of the three (3) ceiling tile samples are presented below.
- The ceiling tiles sampled do not contain asbestos.

TABLE 3.8
ASBESTOS SAMPLE RESULTS – 12" CEILING TILE

SAMPLE #	MATERIAL	FLOOR & LOCATION	ASBESTOS CONTENT AND TYPE	FRIABLE
EH2-31A	12" CEILING TILE	ENERGY HOUSE 2, ABOVE 2 x 2 CEILING TILES	AND	YES
EH2-31B	12" CEILING TILE	ENERGY HOUSE 2, ABOVE 2 x 2 CEILING TILES	AND	YES
EH2-31C	12" CEILING TILE	ENERGY HOUSE 2, ABOVE 2 x 2 CEILING TILES	AND	YES

Legend: AND – **A**sbestos **N**ot **D**etected

3.9 Ceiling Tiles, 2'x2' (Material Code 32)

3.9.1 Observations

- Ceiling tiles measuring 2'x2' were observed in Glengarry Hall corridor C202 and Energy House 2, as described below.

3.9.2 Results

- The results of the six (6) ceiling tile samples are presented below in Table 3.9.
- The ceiling tiles sampled do not contain asbestos.

TABLE 3.9
ASBESTOS SAMPLE RESULTS – 2 X 2 CEILING TILE

SAMPLE #	MATERIAL	FLOOR & LOCATION	ASBESTOS CONTENT AND TYPE	FRIABLE
G-C202-32G-A	2 x 2 CEILING TILE, PATTERN TYPE G, (PINHOLE SERRATION)	GLENGARRY CORRIDOR C202, 2ND FLOOR	AND	YES
G-C202-32G-B	2 x 2 CEILING TILE, PATTERN TYPE G, (PINHOLE SERRATION)	GLENGARRY CORRIDOR C202, 2ND FLOOR	AND	YES
G-C202-32G-C	2 x 2 CEILING TILE, PATTERN TYPE G, (PINHOLE SERRATION)	GLENGARRY CORRIDOR C202, 2ND FLOOR	AND	YES
EH2-32A	2 x 2 CEILING TILE	ENERGY HOUSE 2, MAIN FLOOR	AND	YES
EH2-32B	2 x 2 CEILING TILE	ENERGY HOUSE 2, ABOVE MAIN FLOOR	AND	YES
EH2-32C	2 x 2 CEILING TILE	ENERGY HOUSE 2, ABOVE MAIN FLOOR	AND	YES

Legend: AND – **A**sbestos **N**ot **D**etected

3.10 Ceiling Tiles, 2'x4' (Material Code 33)

3.10.1 Observations

- The vast majority of lay-in ceiling tiles are 2 feet by 4 feet (i.e. 2'x4'), of varying pattern, material, texture, age and colour. These were observed throughout the campus.
- These tiles are non-friable when handled intact, however they may become friable when disturbed.
- The tiles are in good condition and accessible to staff and students.
- Rooms containing asbestos ceiling tiles are denoted with the boxed numeral 33 on the site plans.

3.10.2 Results

- The results of the eighty-one (81) ceiling tile samples are presented below in Table 3.10.
- Ceiling tile samples "Type O" obtained from the Technology wing contain asbestos. (Pinhole pattern)

- It has been assumed that the “Type O” ceiling tiles in all other rooms of the Technology Hall contain asbestos.
- The other ceiling tiles sampled do not contain asbestos.

TABLE 3.10
ASBESTOS SAMPLE RESULTS – 2 X 4 CEILING TILE

SAMPLE #	MATERIAL	FLOOR & LOCATION	ASBESTOS CONTENT AND TYPE	FRIABLE
D-C001-33A-A	2 x 4 CEILING TILE, PATTERN TYPE A	DUNDAS CORRIDOR C001, GROUND FLOOR	AND	YES
D-C001-33A-B	2 x 4 CEILING TILE, PATTERN TYPE A	DUNDAS CORRIDOR C001, GROUND FLOOR	AND	YES
D-C001-33A-C	2 x 4 CEILING TILE, PATTERN TYPE A	DUNDAS CORRIDOR C001, GROUND FLOOR	AND	YES
D-C004-33D-A	2 x 4 CEILING TILE, PATTERN TYPE D	DUNDAS CORRIDOR C004, GROUND FLOOR	AND	YES
D-C004-33D-B	2 x 4 CEILING TILE, PATTERN TYPE D	DUNDAS CORRIDOR C004, GROUND FLOOR	AND	YES
D-C004-33D-C	2 x 4 CEILING TILE, PATTERN TYPE D	DUNDAS CORRIDOR C004, GROUND FLOOR	AND	YES
R-RC101-33Q-A	2 x 4 CEILING TILE, PATTERN TYPE D	ROOT CELLAR ENTRANCE CORRIDOR RC101, FIRST FLOOR	AND	YES
R-RC101-33Q-B	2 x 4 CEILING TILE, PATTERN TYPE D	ROOT CELLAR ENTRANCE CORRIDOR RC101, FIRST FLOOR	AND	YES
R-RC101-33Q-C	2 x 4 CEILING TILE, PATTERN TYPE D	ROOT CELLAR ENTRANCE CORRIDOR RC101, FIRST FLOOR	AND	YES
EH1-33F-A	2 x 4 CEILING TILE, PATTERN F	ENERGY HOUSE 1, MAIN FLOOR	AND	YES
EH1-33F-B	2 x 4 CEILING TILE, PATTERN F	ENERGY HOUSE 1, MAIN FLOOR	AND	YES
EH1-33F-C	2 x 4 CEILING TILE, PATTERN F	ENERGY HOUSE 1, MAIN FLOOR	AND	YES
D-00060-33B-A	2 x 4 CEILING TILE, PATTERN TYPE B	DUNDAS DRAFTING ROOM 00060, GROUND FLOOR	AND	YES
D-00060-33B-B	2 x 4 CEILING TILE, PATTERN TYPE B	DUNDAS DRAFTING ROOM 00060, GROUND FLOOR	AND	YES
D-00060-33B-C	2 x 4 CEILING TILE, PATTERN TYPE B	DUNDAS DRAFTING ROOM 00060, GROUND FLOOR	AND	YES
D-00060-33C-A	2 x 4 CEILING TILE, PATTERN TYPE C	DUNDAS DRAFTING ROOM 00060, GROUND FLOOR	AND	YES
D-00070-33C-B	2 x 4 CEILING TILE, PATTERN TYPE C	DUNDAS NURSING LAB 00070, GROUND FLOOR	AND	YES
D-00270-33C-C	2 x 4 CEILING TILE, PATTERN TYPE C	DUNDAS BROWN’s RECEIVING 00270, GROUND FLOOR	AND	YES
D-11250-33E-A	2 x 4 CEILING TILE, PATTERN TYPE E	DUNDAS RECEPTION 11250, 1ST FLOOR	AND	YES
D-11250-33E-B	2 x 4 CEILING TILE, PATTERN TYPE E	DUNDAS RECEPTION 11250, 1ST FLOOR	AND	YES
D-11250-33E-C	2 x 4 CEILING TILE, PATTERN TYPE E	DUNDAS RECEPTION 11250, 1ST FLOOR	AND	YES
S-00580-33F-A	2 x 4 CEILING TILE, PATTERN TYPE F	STORMONT WELDING SHOP 00580, GROUND FLOOR	AND	YES
S-00580-33F-B	2 x 4 CEILING TILE, PATTERN TYPE F	STORMONT WELDING SHOP 00580, GROUND FLOOR	AND	YES
S-00580-33F-C	2 x 4 CEILING TILE, PATTERN TYPE F	STORMONT WELDING SHOP 00580, GROUND FLOOR	AND	YES

TABLE 3.10
ASBESTOS SAMPLE RESULTS – 2 X 4 CEILING TILE

SAMPLE #	MATERIAL	FLOOR & LOCATION	ASBESTOS CONTENT AND TYPE	FRIABLE
S-11850-33F-A	2 x 4 CEILING TILE, PATTERN TYPE F	STORMONT BOARDROOM 11850, 1ST FLOOR	AND	YES
S-11850-33F-B	2 x 4 CEILING TILE, PATTERN TYPE F	STORMONT BOARDROOM 11850, 1ST FLOOR	AND	YES
S-11850-33F-C	2 x 4 CEILING TILE, PATTERN TYPE F	STORMONT BOARDROOM 11850, 1ST FLOOR	AND	YES
G-C202-33H-A	2 x 4 CEILING TILE, PATTERN TYPE H (PINHOLE SERRATION)	GLENGARRY CORRIDOR 202, 2ND FLOOR	AND	YES
G-C202-33H-B	2 x 4 CEILING TILE, PATTERN TYPE H (PINHOLE SERRATION)	GLENGARRY CORRIDOR 202, 2ND FLOOR	AND	YES
G-C202-33H-C	2 x 4 CEILING TILE, PATTERN TYPE H (PINHOLE SERRATION)	GLENGARRY CORRIDOR 202, 2ND FLOOR	AND	YES
G-11000-33C-D	2 x 4 CEILING TILE, PATTERN TYPE C	GLENGARRY STUDENT SERVICE CENTRE 11000, 1ST FLOOR	AND	YES
G-11041-33C-A	2 x 4 CEILING TILE, PATTERN TYPE C	GLENGARRY READING ROOM 11041, 1ST FLOOR	AND	YES
G-11041-33C-B	2 x 4 CEILING TILE, PATTERN TYPE C	GLENGARRY READING ROOM 11041, 1ST FLOOR	AND	YES
G-11041-33C-C	2 x 4 CEILING TILE, PATTERN TYPE C	GLENGARRY READING ROOM 11041, 1ST FLOOR	AND	YES
G-11012-33D-A	2 x 4 CEILING TILE, PATTERN TYPE D	GLENGARRY OFFICE 11012, 1ST FLOOR	AND	YES
G-11012-33D-B	2 x 4 CEILING TILE, PATTERN TYPE D	GLENGARRY OFFICE 11012, 1ST FLOOR	AND	YES
G-11012-33D-C	2 x 4 CEILING TILE, PATTERN TYPE D	GLENGARRY OFFICE 11012, 1ST FLOOR	AND	YES
G-11030-33A-A	2 x 4 CEILING TILE, PATTERN TYPE A	GLENGARRY RESOURCE CENTRE 11030, 1ST FLOOR	AND	YES
G-11030-33A-B	2 x 4 CEILING TILE, PATTERN TYPE A	GLENGARRY RESOURCE CENTRE 11030, 1ST FLOOR	AND	YES
G-11130-33A-C	2 x 4 CEILING TILE, PATTERN TYPE A	GLENGARRY 11030, 1ST FLOOR	AND	YES
G-11031-33B-A	2 x 4 CEILING TILE, PATTERN TYPE B (PINHOLE, SMALL PUNCTURE)	GLENGARRY OFFICE 11031, 1ST FLOOR	AND	YES
G-11031-33B-B	2 x 4 CEILING TILE, PATTERN TYPE B (PINHOLE, SMALL PUNCTURE)	GLENGARRY OFFICE 11031, 1ST FLOOR	AND	YES
G-11031-33B-C	2 x 4 CEILING TILE, PATTERN TYPE B (PINHOLE, SMALL PUNCTURE)	GLENGARRY OFFICE 11031, 1ST FLOOR	AND	YES
G-22155-33F-A	2 x 4 CEILING TILE, PATTERN TYPE F (GREY INTERIOR)	GLENGARRY OFFICE 22155, 2ND FLOOR	AND	YES
G-22155-33F-B	2 x 4 CEILING TILE, PATTERN TYPE F (GREY INTERIOR)	GLENGARRY OFFICE 22155, 2ND FLOOR	AND	YES
G-22155-33F-C	2 x 4 CEILING TILE, PATTERN TYPE F (GREY INTERIOR)	GLENGARRY OFFICE 22155, 2ND FLOOR	AND	YES
G-22340-33E-A	2 x 4 CEILING TILE, PATTERN TYPE E	GLENGARRY OFFICE 22340, 2ND FLOOR	AND	YES

TABLE 3.10
ASBESTOS SAMPLE RESULTS – 2 X 4 CEILING TILE

SAMPLE #	MATERIAL	FLOOR & LOCATION	ASBESTOS CONTENT AND TYPE	FRIABLE
	(BROWN INTERIOR)			
G-22340-33E-B	2 x 4 CEILING TILE, PATTERN TYPE E (BROWN INTERIOR)	GLENGARRY OFFICE 22340, 2ND FLOOR	AND	YES
G-22340-33E-C	2 x 4 CEILING TILE, PATTERN TYPE E (BROWN INTERIOR)	GLENGARRY OFFICE 22340, 2ND FLOOR	AND	YES
G-33370-33I-A	2 x 4 CEILING TILE, PATTERN TYPE I (ARMSTRONG)	GLENGARRY 33370, 3RD FLOOR	AND	YES
G-33370-33I-B	2 x 4 CEILING TILE, PATTERN TYPE I (ARMSTRONG)	GLENGARRY 33370, 3RD FLOOR	AND	YES
G-33370-33I-C	2 x 4 CEILING TILE, PATTERN TYPE I (ARMSTRONG)	GLENGARRY 33370, 3RD FLOOR	AND	YES
G-33370-33J-A	2 x 4 CEILING TILE, PATTERN TYPE J	GLENGARRY STUDIO 33370, 3RD FLOOR	AND	YES
G-33370-33J-B	2 x 4 CEILING TILE, PATTERN TYPE J	GLENGARRY STUDIO 33370, 3RD FLOOR	AND	YES
G-33370-33J-C	2 x 4 CEILING TILE, PATTERN TYPE J	GLENGARRY STUDIO 33370, 3RD FLOOR	AND	YES
G-33375-33K-A	2 x 4 CEILING TILE, PATTERN TYPE K	GLENGARRY STUDIO 33375, 3RD FLOOR	AND	YES
G-33375-33K-B	2 x 4 CEILING TILE, PATTERN TYPE K	GLENGARRY STUDIO 33375, 3RD FLOOR	AND	YES
G-33375-33K-C	2 x 4 CEILING TILE, PATTERN TYPE K	GLENGARRY STUDIO 33375, 3RD FLOOR	AND	YES
G-44200-33L-A	2 x 4 CEILING TILE, PATTERN TYPE L	GLENGARRY 44200, 4TH FLOOR	AND	YES
G-44200-33L-B	2 x 4 CEILING TILE, PATTERN TYPE L	GLENGARRY 44200, 4TH FLOOR	AND	YES
G-44200-33L-C	2 x 4 CEILING TILE, PATTERN TYPE L	GLENGARRY 44200, 4TH FLOOR	AND	YES
T-C033-33H-A	2 x 4 CEILING TILE, PATTERN TYPE H	TECHNOLOGY CORRIDOR C033, GROUND FLOOR	AND	YES
T-02370-33M	2 x 4 CEILING TILE, PATTERN TYPE M	TECHNOLOGY 02370, GROUND FLOOR	AND	YES
T-02370-33M-B	2 x 4 CEILING TILE, PATTERN TYPE M	TECHNOLOGY 02370, GROUND FLOOR	AND	YES
T-02370-33M-C	2 x 4 CEILING TILE, PATTERN TYPE M	TECHNOLOGY 02370, GROUND FLOOR	AND	YES
T-02390-33N-A	2 x 4 CEILING TILE, PATTERN TYPE N	TECHNOLOGY 02390, GROUND FLOOR	AND	YES
T-02390-33N-B	2 x 4 CEILING TILE, PATTERN TYPE N	TECHNOLOGY 02390, GROUND FLOOR	AND	YES
T-02390-33N-C	2 x 4 CEILING TILE, PATTERN TYPE N	TECHNOLOGY 02390, GROUND FLOOR	AND	YES
T-02390-33O-A	2 x 4 CEILING TILE, PATTERN TYPE O	TECHNOLOGY 02390, GROUND FLOOR	0.5-5% AMOSITE	YES
T-02390-33O-B	2 x 4 CEILING TILE, PATTERN TYPE O	TECHNOLOGY 02390, GROUND FLOOR	0.5-5% AMOSITE (not analysed)	YES
T-02390-33O-C	2 x 4 CEILING TILE, PATTERN TYPE O	TECHNOLOGY 02390, GROUND FLOOR	0.5-5% AMOSITE	YES

TABLE 3.10
ASBESTOS SAMPLE RESULTS – 2 X 4 CEILING TILE

SAMPLE #	MATERIAL	FLOOR & LOCATION	ASBESTOS CONTENT AND TYPE	FRIABLE
			(not analyzed)	
T-02370-33M	2 x 4 CEILING TILE, PATTERN TYPE M	TECHNOLOGY 02370, GROUND FLOOR	AND	YES
T-02012-33P-A	2 x 4 CEILING TILE, PATTERN TYPE P	TECHNOLOGY 02012, GROUND FLOOR	AND	YES
T-02012-33P-B	2 x 4 CEILING TILE, PATTERN TYPE P	TECHNOLOGY 02012, GROUND FLOOR	AND	YES
T-02012-33P-C	2 x 4 CEILING TILE, PATTERN TYPE P	TECHNOLOGY 02012, GROUND FLOOR	AND	YES
T-02280-33P-D	2 x 4 CEILING TILE, PATTERN TYPE P	TECHNOLOGY 02280, GROUND FLOOR	AND	YES
T-02300-33Q-A	2 x 4 CEILING TILE, PATTERN TYPE Q	TECHNOLOGY 02300, GROUND FLOOR	AND	YES
T-02300-33Q-B	2 x 4 CEILING TILE, PATTERN TYPE Q	TECHNOLOGY 02300, GROUND FLOOR	AND	YES
T-02300-33Q-C	2 x 4 CEILING TILE, PATTERN TYPE Q	TECHNOLOGY 02300, GROUND FLOOR	AND	YES
NH-C100-33O-A	2 x 4 CEILING TILE, PATTERN TYPE O	NEWCOURT HOUSE, CORRIDOR C100, GROUND FLOOR	AND	YES
NH-C100-33O-B	2 x 4 CEILING TILE, PATTERN TYPE O	NEWCOURT HOUSE, ROOM 100, GROUND FLOOR	AND	YES

Legend: AND – **A**sbestos **N**ot **D**etected

3.11 Brick (Material Code 46)

3.11.1 Observations

- Fire brick was used as a liner within the abandoned boiler observed in the basement of Newcourt House (room 114).

3.11.2 Results

- The results of the three (3) brick samples are presented below in Table 3.12.
- These items do not contain asbestos.

TABLE 3.11
ASBESTOS SAMPLE RESULTS – BRICK

SAMPLE #	MATERIAL	FLOOR & LOCATION	ASBESTOS CONTENT AND TYPE	FRIABLE
NH-114-46A	FIRE BRICK (FROM ABANDONED BOILER)	NEWCOURT HOUSE, ROOM 114, BASEMENT BOILER ROOM	AND	NO
NH-114-46B	FIRE BRICK (FROM ABANDONED BOILER)	NEWCOURT HOUSE, ROOM 114, BASEMENT BOILER ROOM	AND	NO
NH-114-46C	FIRE BRICK (FROM ABANDONED BOILER)	NEWCOURT HOUSE, ROOM 114, BASEMENT BOILER ROOM	AND	NO

Legend: AND – **A**sbestos **N**ot **D**etected

3.12 Mortar (Material Code 47)

3.12.1 Observations

- Non-friable mortar is present between the cinder block throughout the Kingston campus, although the vast majority of it is concealed behind plaster or drywall.
- The mortar is in good condition and is accessible to staff and students.

3.12.2 Results

- The results of the thirty-two (32) mortar samples are presented below in Table 3.12.
- The mortar in Stormont Hall corridor C017 contains non-friable asbestos.
- Ten of the 32 mortar samples contained trace amounts of asbestos (i.e. less than 0.5 %).
- The other mortar samples do not contain asbestos.

TABLE 3.12
ASBESTOS SAMPLE RESULTS – MORTAR

SAMPLE #	MATERIAL	FLOOR & LOCATION	ASBESTOS CONTENT AND TYPE	FRIABLE
R-RCE1-47A	MORTAR - INTERIOR WALL	ROOT CELLAR ENTERANCE, CORRIDOR RC10, GROUND FLOOR	AND	NO
R-RCE1-47B	MORTAR - INTERIOR WALL	ROOT CELLAR ENTERANCE, CORRIDOR RC10, GROUND FLOOR	AND	NO
R-RCE1-47C	MORTAR - INTERIOR WALL	ROOT CELLAR ENTERANCE, CORRIDOR RC10, GROUND FLOOR	AND	NO
D-C104-47	MORTAR - INTERIOR WALL	DUNDAS CORRIDOR C104, 1ST FLOOR	<0.5% CHRYSOTILE	NO
D-00040-47A	MORTAR - INTERIOR WALL	DUNDAS BOILER ROOM 00040, GROUND FLOOR	AND	NO
D-00040-47B	MORTAR - INTERIOR WALL	DUNDAS BOILER ROOM 00040, GROUND FLOOR	AND	NO
D-00040-47C	MORTAR - INTERIOR WALL	DUNDAS BOILER ROOM 00040, GROUND FLOOR	AND	NO
D-11290-47	MORTAR	DUNDAS COMPUTER LAB11290, 1ST FLOOR	AND	NO
D-11312-47	MORTAR	DUNDAS OFFICE 11312, 1ST FLOOR	AND	NO
D-11440-47	MORTAR	DUNDAS OFFICE 11440 (BOTTING), 1ST FLOOR	AND	NO
S-C017-47D	MORTAR	STORMONT CORRIDOR C017, GROUND FLOOR	<0.5% CHRYSOTILE	NO
S-C017-47E	MORTAR	STORMONT CORRIDOR C017, GROUND FLOOR	0.5-5% CHRYSOTILE	NO
S-C017-47F	MORTAR	STORMONT CORRIDOR C017, GROUND FLOOR	0.5-5% CHRYSOTILE (not analyzed)	NO
S-C017-47G	MORTAR	STORMONT CORRIDOR C017, GROUND FLOOR	0.5-5% CHRYSOTILE (not analyzed)	NO
S-C113-47A (LAB REPORT IS S-C103-47A)	MORTAR	STORMONT CORRIDOR C113, 1ST FLOOR	<0.5% CHRYSOTILE	NO
S-C113-47B (LAB REPORT IS	MORTAR	STORMONT CORRIDOR C113, 1ST FLOOR	AND	NO

TABLE 3.12
ASBESTOS SAMPLE RESULTS – MORTAR

SAMPLE #	MATERIAL	FLOOR & LOCATION	ASBESTOS CONTENT AND TYPE	FRIABLE
S-C103-47A)				
S-C113-47C (LAB REPORT IS S-C103-47A)	MORTAR	STORMONT CORRIDOR C113, 1ST FLOOR	AND	NO
G-E4-2-47B	MORTAR	GLENGARRY EXIT E4, 2ND FLOOR	AND	NO
G-11041-47A	MORTAR	GLENGARRY READING ROOM 11041, 1ST FLOOR	AND	NO
G-44230-47A	MORTAR	GLENGARRY MECHANICAL ROOM 44230, 4TH FLOOR	AND	NO
G-44230-47B	MORTAR	GLENGARRY MECHANICAL ROOM 44230, 4TH FLOOR	AND	NO
T-02122-47	MORTAR	TECHNOLOGY 02122, GROUND FLOOR	AND	NO
T-02530-47A	MORTAR	TECHNOLOGY 02530, GROUND FLOOR	AND	NO
T-02530-47B	MORTAR	TECHNOLOGY 02530, GROUND FLOOR	AND	NO
T-02530-47C	MORTAR	TECHNOLOGY 02530, GROUND FLOOR	AND	NO
NH-EXT-47A	MORTAR	EXTERIOR OF NEWCOURT HOUSE	<0.5% CHRYSOTILE	NO
NH-EXT-47B	MORTAR	EXTERIOR OF NEWCOURT HOUSE	<0.5% CHRYSOTILE	NO
NH-EXT-47C	MORTAR	EXTERIOR OF NEWCOURT HOUSE	<0.5% CHRYSOTILE	NO
NH-EXT-47D	MORTAR	EXTERIOR OF NEWCOURT HOUSE	<0.5% CHRYSOTILE	NO
NH-EXT-47E	MORTAR	EXTERIOR OF NEWCOURT HOUSE	<0.5% CHRYSOTILE	NO
NH-EXT-47F	MORTAR	EXTERIOR OF NEWCOURT HOUSE	<0.5% CHRYSOTILE	NO
NH-EXT-47G	MORTAR	EXTERIOR OF NEWCOURT HOUSE	<0.5% CHRYSOTILE	NO

Legend: AND – **A**sbestos **N**ot **D**etected

3.13 Drywall and Drywall Joint Compound (Material Codes 51 and 59)

3.13.1 Observations

- Drywall walls/ceilings are present in select classrooms, offices, laboratories, in the basement of Newcourt House and in the Native Resource Centre.
- The drywall joint compound is non-friable, but will become friable when disturbed. It is in good condition and is accessible to staff and students.
- Rooms containing asbestos joint compound are denoted with the boxed numeral 59 on the site plans.
-

3.13.2 Results

- The results of the four drywall and forty-four (44) joint compound samples are presented in Table 3.13.
- All drywall samples do not contain asbestos.
- Joint compound samples obtained from Newcourt House basement (room 114) contained non-friable asbestos.
- Four of the 44 joint compound samples contained trace amounts of asbestos (i.e. less than 0.5 %).
- All other drywall/joint compound samples do not contain asbestos.

TABLE 3.13
ASBESTOS SAMPLE RESULTS – DRYWALL/JOINT COMPOUND

SAMPLE #	MATERIAL	FLOOR & LOCATION	ASBESTOS CONTENT AND TYPE	FRIABLE
EH1-51A	DRYWALL	ENERGY HOUSE 1, MAIN FLOOR	AND	YES
EH1-51B	DRYWALL	ENERGY HOUSE 1, MAIN FLOOR	AND	YES
EH1-51C	DRYWALL	ENERGY HOUSE 1, MAIN FLOOR	AND	YES
NH-114-51	DRYWALL	NEWCOURT HOUSE, ROOM 114, BASEMENT FURNACE ROOM	AND	YES
R-RC103-59A	JOINT COMPOUND	ROOT CELLAR ROOM RC-103, GROUND FLOOR	AND	NO
R-RC103-59B	JOINT COMPOUND	ROOT CELLAR ROOM RC-103, GROUND FLOOR	AND	NO
R-RC103-59C	JOINT COMPOUND	ROOT CELLAR ROOM RC-103, GROUND FLOOR	AND	NO
EH2-59A	JOINT COMPOUND	ENERGY HOUSE, GROUND FLOOR	AND	NO
EH2-59B	JOINT COMPOUND	ENERGY HOUSE, GROUND FLOOR	AND	NO
EH2-59C	JOINT COMPOUND	ENERGY HOUSE, GROUND FLOOR	AND	NO
D-00043-59A	JOINT COMPOUND	DUNDAS GENERATOR ROOM 00043 GROUND FLOOR	AND	NO
D-00043-59B	JOINT COMPOUND	DUNDAS GENERATOR ROOM 00043 GROUND FLOOR	AND	NO
D-00043-59C	JOINT COMPOUND	DUNDAS GENERATOR ROOM 00043 GROUND FLOOR	AND	NO
D-00100-59A	JOINT COMPOUND	DUNDAS OFFICE 00100 (DISBURY) GROUND FLOOR	<0.5% CHRYSOTILE	NO
D-00100-59B	JOINT COMPOUND	DUNDAS OFFICE 00100 (DISBURY) GROUND FLOOR	<0.5% CHRYSOTILE	NO
D-00120-59A	JOINT COMPOUND	DUNDAS MAINTENANCE 00120, GROUND FLOOR	<0.5% CHRYSOTILE	NO
D-00130-59A	JOINT COMPOUND	DUNDAS RESCUE ROOM 00130, GROUND FLOOR	<0.5% CHRYSOTILE	NO
S-11710-59B (LAB REPORT IS S-11470-59B)	JOINT COMPOUND	STORMONT LECTURE HALL 11710, 1ST FLOOR	AND	NO
S-11740-59F	JOINT COMPOUND	STORMONT MEN's WASHROOM 11740, 1ST FLOOR	AND	NO
S-11740-59G	JOINT COMPOUND	STORMONT MEN's WASHROOM 11740, 1ST FLOOR	AND	NO

TABLE 3.13
ASBESTOS SAMPLE RESULTS – DRYWALL/JOINT COMPOUND

SAMPLE #	MATERIAL	FLOOR & LOCATION	ASBESTOS CONTENT AND TYPE	FRIABLE
S-11830-59C	JOINT COMPOUND	STORMONT CHEMISTRY LAB 11830, 1ST FLOOR	AND	NO
S-11830-59D	JOINT COMPOUND	STORMONT CHEMISTRY LAB 11830, 1ST FLOOR	AND	NO
S-11830-59E	JOINT COMPOUND	STORMONT CHEMISTRY LAB 11830, 1ST FLOOR	AND	NO
S-11851-59	JOINT COMPOUND	STORMONT STORAGE ROOM 11851, 1ST FLOOR	AND	NO
G-11130-59A	JOINT COMPOUND	GLENGARRY 11130, 1ST FLOOR	AND	NO
G-11032-59B	JOINT COMPOUND	GLENGARRY 11032, 1ST FLOOR	AND	NO
G-11045-59C	JOINT COMPOUND	GLENGARRY 11045, 1ST FLOOR	AND	NO
G-11000-59D	JOINT COMPOUND	GLENGARRY 11000, 1ST FLOOR	AND	NO
G-22170-59E	JOINT COMPOUND	GLENGARRY 22170, 2ND FLOOR	AND	NO
G-C202-59F	JOINT COMPOUND	GLENGARRY CORRIDOR 202, 2ND FLOOR	AND	NO
G-33090-59G	JOINT COMPOUND	GLENGARRY 33090, 3RD FLOOR	AND	NO
G-44220-59H	JOINT COMPOUND	GLENGARRY 44220, 4TH FLOOR	AND	NO
G-44070-59I	JOINT COMPOUND	GLENGARRY 44070, 4TH FLOOR	AND	NO
T-12500-59A	JOINT COMPOUND	TECHNOLOGY GYM 12500, MEZZANINE	AND	NO
T-12520-59B	JOINT COMPOUND	TECHNOLOGY 12520, MEZZANINE	AND	NO
T-02370-59C	JOINT COMPOUND	TECHNOLOGY 02370, GROUND FLOOR	AND	NO
T-C034-59D	JOINT COMPOUND	TECHNOLOGY CORRIDOR C034, GROUND FLOOR	AND	NO
T-02225-59E	JOINT COMPOUND	TECHNOLOGY 02225, GROUND FLOOR	AND	NO
T-C033-59F	JOINT COMPOUND	TECHNOLOGY CORRIDOR C033, GROUND FLOOR	AND	NO
T-C034-59G	JOINT COMPOUND	TECHNOLOGY CORRIDOR C034, GROUND FLOOR	AND	NO
NH-100-59A	JOINT COMPOUND	NEWCOURT HOUSE, ENTRANCE, GROUND FLOOR	AND	NO
NH-C101-59B	JOINT COMPOUND	NEWCOURT HOUSE, MAIN CORRIDOR, GROUND FLOOR	AND	NO
NH-114-59B	JOINT COMPOUND	NEWCOURT HOUSE, ROOM 114, BASEMENT FURNACE ROOM	AND	NO
NH-114-59C	JOINT COMPOUND	NEWCOURT HOUSE, ROOM 114, BASEMENT FURNACE ROOM	AND	NO
NH-114-59D	JOINT COMPOUND	NEWCOURT HOUSE, ROOM 114, BASEMENT FURNACE ROOM	AND	NO
NH-114-59E	JOINT COMPOUND	NEWCOURT HOUSE, ROOM 114, BASEMENT FURNACE ROOM	0.5-5% CHRYSOTILE	NO

TABLE 3.13
ASBESTOS SAMPLE RESULTS – DRYWALL/JOINT COMPOUND

SAMPLE #	MATERIAL	FLOOR & LOCATION	ASBESTOS CONTENT AND TYPE	FRIABLE
NH-114-59F	JOINT COMPOUND	NEWCOURT HOUSE, ROOM 114, BASEMENT FURNACE ROOM	AND	NO
NH-114-59G	JOINT COMPOUND	NEWCOURT HOUSE, ROOM 114, BASEMENT FURNACE ROOM	0.5-5% CHRYSOTILE	NO

Legend: AND – **A**sbestos **N**ot **D**etected

3.14 Plaster, Texture Coat and Stucco (Material Code 52, 54, and 60)

3.14.1 Observations

- Plaster walls and plaster / stucco ceilings are present throughout the college and adjacent buildings.
- The plaster material observed was 2-phase, typically white over grey.
- The plaster, texture coat and stucco are generally non-friable, but can readily become friable when disturbed. It is in good condition and is accessible to staff and students.
- Rooms containing asbestos plaster and texture coat are denoted with the boxed numeral 52 and 60 on the site plans.

3.14.2 Results

- The results of the forty-eight (48) ceiling/wall plaster, texture coat, and stucco samples are presented below in Table 3.14.
- Texture coat samples obtained from the ceiling of Glengarry Hall corridors C-304, C-403, and room 33312 contain asbestos. Texture coat is also present in C-404 and E-35-1.
- The stucco samples obtained from the Native Resource Centre main entrance RCE1 contain asbestos.
- The other plaster, texture coat, and stucco samples do not contain asbestos.

TABLE 3.14
ASBESTOS SAMPLE RESULTS – PLASTER, TEXTURE COATS, AND STUCCO

SAMPLE #	MATERIAL	FLOOR & LOCATION	ASBESTOS CONTENT AND TYPE	FRIABLE
D-00190-52A	CEILING PLASTER – 2 PHASE WHITE OVER GREY	DUNDAS ELECTRICAL VAULT 00190 GROUND FLOOR	AND	NO
D-00190-52B	CEILING PLASTER – 2 PHASE WHITE OVER GREY	DUNDAS ELECTRICAL VAULT 00190 GROUND FLOOR	AND	NO
D-00190-52C	CEILING PLASTER – 2 PHASE WHITE OVER GREY	DUNDAS ELECTRICAL VAULT 00190 GROUND FLOOR	AND	NO
D-00190-52D	CEILING PLASTER – 2 PHASE WHITE OVER GREY	DUNDAS ELECTRICAL VAULT 00190 GROUND FLOOR	AND	NO
D-00190-52E	CEILING PLASTER – 2 PHASE WHITE OVER GREY	DUNDAS ELECTRICAL VAULT 00190 GROUND FLOOR	AND	NO
D-11390-52A	CEILING PLASTER – 2 PHASE WHITE OVER GREY	DUNDAS JANITOR's ROOM 11390 1ST FLOOR	AND	NO
D-11390-52B	CEILING PLASTER – 2 PHASE WHITE OVER GREY	DUNDAS JANITOR's ROOM 11390 1ST FLOOR	AND	NO

TABLE 3.14
ASBESTOS SAMPLE RESULTS – PLASTER, TEXTURE COATS, AND STUCCO

SAMPLE #	MATERIAL	FLOOR & LOCATION	ASBESTOS CONTENT AND TYPE	FRIABLE
D-11390-52C	CEILING PLASTER – 2 PHASE WHITE OVER GREY	DUNDAS JANITOR's ROOM 11390 1ST FLOOR	AND	NO
S-11802-52A	WALL PLASTER	STORMONT COLD STORAGE 11802, 1ST FLOOR	AND	NO
S-11802-52B	WALL PLASTER	STORMONT COLD STORAGE 11802, 1ST FLOOR	AND	NO
S-11802-52C	WALL PLASTER	STORMONT COLD STORAGE 11802, 1ST FLOOR	AND	NO
D-11520-54A	TEXTURE COAT (WHITE)	DUNDAS IT OFFICE 11520 1ST FLOOR	AND	NO
D-11520-54B	TEXTURE COAT (WHITE)	DUNDAS IT OFFICE 11520 1ST FLOOR	AND	NO
D-11520-54C	TEXTURE COAT (WHITE)	DUNDAS IT OFFICE 11520 1ST FLOOR	AND	NO
G-C304-54A	TEXTURE COAT (CEILING)	GLENGARRY CORRIDOR C304 3RD FLOOR	0.5-5% CHRYSOTILE	NO
G-33312-54B	TEXTURE COAT	GLENGARRY 33312, 3RD FLOOR	0.5 – 5 % CHRYSOTILE	NO
G-33312-54C	TEXTURE COAT	GLENGARRY 33312, 3RD FLOOR	0.5 – 5 % CHRYSOTILE	NO
G-C403-54D	TEXTURE COAT (CEILING)	GLENGARRY CORRIDOR C403 4TH FLOOR	0.5 – 5 % CHRYSOTILE	NO
G-C403-54E	TEXTURE COAT (CEILING)	GLENGARRY CORRIDOR C403 4TH FLOOR	0.5 – 5 % CHRYSOTILE	NO
T-02520-52A	COLUMN PLASTER – 2 PHASE WHITE OVER GREY	TECHNOLOGY 02520, GROUND FLOOR	AND	NO
T-02530-52B	COLUMN PLASTER – 2 PHASE WHITE OVER GREY	TECHNOLOGY 02530, GROUND FLOOR	AND	NO
T-02360-52C	COLUMN PLASTER – 2 PHASE WHITE OVER GREY	TECHNOLOGY 02360, GROUND FLOOR	AND	NO
T-02350-52D	COLUMN PLASTER – 2 PHASE WHITE OVER GREY	TECHNOLOGY 02350, GROUND FLOOR	AND	NO
T-C038-52E	COLUMN PLASTER – 2 PHASE WHITE OVER GREY	TECHNOLOGY CORRIDOR C038, GROUND FLOOR	AND	NO
T-02350-52F	COLUMN PLASTER – 2 PHASE WHITE OVER GREY	TECHNOLOGY 02350, GROUND FLOOR	AND	NO
T-02520-52G	COLUMN PLASTER – 2 PHASE WHITE OVER GREY	TECHNOLOGY 02520, GROUND FLOOR	AND	NO
NH-100-52A	CEILING PLASTER	NEWCOURT HOUSE, R00M 100, GROUND FLOOR	AND	NO
NH-110-52B	CEILING PLASTER	NEWCOURT HOUSE, R00M 110, GROUND FLOOR	AND	NO
NH-113-52C	WALL PLASTER	NEWCOURT HOUSE, R00M 113, GROUND FLOOR	AND	NO
NH-C101-52D	CEILING PLASTER	NEWCOURT HOUSE, CORRIDOR C101, GROUND FLOOR	AND	NO
NH-141-52E	WALL PLASTER	NEWCOURT HOUSE, R00M 141, GROUND FLOOR	AND	NO
NH-135-52F	WALL PLASTER	NEWCOURT HOUSE, R00M 135, GROUND FLOOR	AND	NO
NH-120-52G	WALL PLASTER	NEWCOURT HOUSE, R00M 120, GROUND FLOOR	AND	NO

TABLE 3.14
ASBESTOS SAMPLE RESULTS – PLASTER, TEXTURE COATS, AND STUCCO

SAMPLE #	MATERIAL	FLOOR & LOCATION	ASBESTOS CONTENT AND TYPE	FRIABLE
NH-114-52A	WALL PLASTER (BASEMENT WALLS)	NEWCOURT HOUSE, ROOM 114, BASEMENT FURNACE ROOM	AND	NO
NH-114-52B	WALL PLASTER (BASEMENT WALLS)	NEWCOURT HOUSE, ROOM 114, BASEMENT FURNACE ROOM	AND	NO
NH-114-52C	WALL PLASTER (BASEMENT WALLS)	NEWCOURT HOUSE, ROOM 114, BASEMENT FURNACE ROOM	AND	NO
NH-114-52D	WALL PLASTER (BASEMENT WALLS)	NEWCOURT HOUSE, ROOM 114, BASEMENT FURNACE ROOM	AND	NO
NH-114-52E	PLASTER (ON FIELDSTONE COLUMNS)	NEWCOURT HOUSE, ROOM 114, BASEMENT FURNACE ROOM	AND	NO
NH-114-52F	PLASTER (ON FIELDSTONE COLUMNS)	NEWCOURT HOUSE, ROOM 114, BASEMENT FURNACE ROOM	AND	NO
NH-114-52G	PLASTER (ON FIELDSTONE COLUMNS)	NEWCOURT HOUSE, ROOM 114, BASEMENT FURNACE ROOM	AND	NO
NH-112-54	PLASTER (CEILING)	NEWCOURT HOUSE, ROOM 112, GROUND FLOOR	AND	NO
R-RCE1-60A	CEILING STUCCO	ROOT CELLAR, RCE-1 ENTRANCE FIRST FLOOR	0.5-5% CHRYSOTILE	NO
R-RCE1-60B	CEILING STUCCO	ROOT CELLAR, RCE-1 ENTRANCE FIRST FLOOR	0.5-5% CHRYSOTILE (not analyzed)	NO
R-RCE1-60C	CEILING STUCCO	ROOT CELLAR, RCE-1 ENTRANCE FIRST FLOOR	0.5-5% CHRYSOTILE (not analyzed)	NO
T-EXT-60A	STUCCO	TECHNOLOGY EXTERIOR	AND	NO
T-EXT-60B	STUCCO	TECHNOLOGY EXTERIOR	AND	NO
T-EXT-60C	STUCCO	TECHNOLOGY EXTERIOR	AND	NO
T-EXT-60D	STUCCO	TECHNOLOGY EXTERIOR	AND	NO

Legend: AND – **A**sbestos **N**ot **D**etected

3.15 Vinyl Flooring, 12” Tiles (Material Code 63)

3.15.1 Observations

- Vinyl floor covering was observed throughout the college and in adjacent buildings.
- Carpet and ceramic tile flooring was also identified in offices, classrooms, entrances, corridors and washrooms respectively.
- Vinyl floor coverings are considered to be non-friable. They are in good condition and accessible to staff and students.
- Rooms containing asbestos floor tiles are denoted with the boxed numeral 63 on the site plans.

3.15.2 Results

- The results of the one hundred-forty (140) vinyl floor finishes are presented in Table 3.15.
- 12 inch floor tiles containing asbestos are present in Dundas corridor C003.

- 12 inch floor tiles containing asbestos are present in Glengarry Hall rooms 22340 and 33080, and as further illustrated on Figures 4, 5 and 6 accompanying this report.
- Six of the (140) 12" vinyl floor tile samples contained trace amounts of asbestos (i.e. less than 0.5 %).
- The other 12 inch floor tile samples do not contain asbestos.

TABLE 3.15
ASBESTOS SAMPLE RESULTS – 12" VINYL FLOOR TILE

SAMPLE #	MATERIAL	FLOOR & LOCATION	ASBESTOS CONTENT AND TYPE	FRIABLE
D-C001-63A	12" FLOOR TILE (GREY WITH BLACK FLECK)	DUNDAS CORRIDOR C001 GROUND FLOOR	AND	NO
D-C001-63A	12" FLOOR TILE (GREY WITH BLACK FLECK)	DUNDAS CORRIDOR C001 GROUND FLOOR	AND	NO
D-C001-63A	12" FLOOR TILE (GREY WITH BLACK FLECK)	DUNDAS CORRIDOR C001 GROUND FLOOR	AND	NO
D-C002-63A	12" FLOOR TILE (PINK WITH BEIGE FLECK)	DUNDAS CORRIDOR C002 GROUND FLOOR	AND	NO
D-C002-63B	12" FLOOR TILE (PINK WITH BEIGE FLECK)	DUNDAS CORRIDOR C002 GROUND FLOOR	AND	NO
D-C002-63C	12" FLOOR TILE (PINK WITH BEIGE FLECK)	DUNDAS CORRIDOR C002 GROUND FLOOR	AND	NO
D-C002-63D	12" FLOOR TILE (YELLOW WITH BLACK FLECK)	DUNDAS CORRIDOR C002 GROUND FLOOR	AND	NO
D-C002-63E	12" FLOOR TILE (YELLOW WITH BLACK FLECK)	DUNDAS CORRIDOR C002 GROUND FLOOR	AND	NO
D-C002-63F	12" FLOOR TILE (YELLOW WITH BLACK FLECK)	DUNDAS CORRIDOR C002 GROUND FLOOR	AND	NO
D-C003-63A	12" FLOOR TILE (BLUE WITH BLACK FLECK)	DUNDAS CORRIDOR C003 GROUND FLOOR	AND	NO
D-C003-63B	12" FLOOR TILE (BLUE WITH BLACK FLECK)	DUNDAS CORRIDOR C003 GROUND FLOOR	AND	NO
D-C003-63C	12" FLOOR TILE (BLUE WITH BLACK FLECK)	DUNDAS CORRIDOR C003 GROUND FLOOR	AND	NO
D-C003-63D	12" FLOOR TILE (GREEN WITH WHITE FLECK)	DUNDAS CORRIDOR C003 GROUND FLOOR	0.5-5% CHRYSOTILE	NO
D-C003-63E	12" FLOOR TILE (GREEN WITH WHITE FLECK)	DUNDAS CORRIDOR C003 GROUND FLOOR	0.5-5% CHRYSOTILE (not analyzed)	NO
D-C003-63F	12" FLOOR TILE (GREEN WITH WHITE FLECK)	DUNDAS CORRIDOR C003 GROUND FLOOR	0.5-5% CHRYSOTILE (not analyzed)	NO
D-C105-63A	12" FLOOR TILE (WHITE WITH BLACK DOTS)	DUNDAS CORRIDOR C105 1ST FLOOR	AND	NO
D-C105-63B	12" FLOOR TILE (WHITE WITH BLACK DOTS)	DUNDAS CORRIDOR C105 1ST FLOOR	AND	NO
D-C105-63C	12" FLOOR TILE (WHITE WITH BLACK DOTS)	DUNDAS CORRIDOR C105 1ST FLOOR	AND	NO
EH1-63A	12" FLOOR TILE (BEIGE WITH LIGHT BROWN STREAKS)	ENERGY HOUSE 1, MAIN FLOOR	AND	NO
EH1-63B	12" FLOOR TILE (BEIGE WITH LIGHT BROWN STREAKS)	ENERGY HOUSE 1, MAIN FLOOR	AND	NO
EH1-63C	12" FLOOR TILE (BEIGE WITH LIGHT BROWN STREAKS)	ENERGY HOUSE 1, MAIN FLOOR	AND	NO
EH2-63A	12" FLOOR TILE	ENERGY HOUSE 2, MAIN FLOOR	AND	NO

TABLE 3.15
ASBESTOS SAMPLE RESULTS – 12" VINYL FLOOR TILE

SAMPLE #	MATERIAL	FLOOR & LOCATION	ASBESTOS CONTENT AND TYPE	FRIABLE
EH2-63B	12" FLOOR TILE	ENERGY HOUSE 2, MAIN FLOOR	AND	NO
EH2-63C	12" FLOOR TILE	ENERGY HOUSE 2, MAIN FLOOR	AND	NO
D-00060-63A	12" FLOOR TILE - (WHITE WITH LARGE BLACK FLECK)	DUNDAS DRAFTING ROOM 00060, GROUND FLOOR	AND	NO
D-00060-63B	12" FLOOR TILE - (WHITE WITH LARGE BLACK FLECK)	DUNDAS DRAFTING ROOM 00060, GROUND FLOOR	AND	NO
D-00060-63C	12" FLOOR TILE - (WHITE WITH LARGE BLACK FLECK)	DUNDAS DRAFTING ROOM 00060, GROUND FLOOR	AND	NO
D-00070-63A	12" FLOOR TILE (ROSE WITH BEIGE FLECK)	DUNDAS NURSING ROOM 00070, GROUND FLOOR	AND	NO
D-00070-63B	12" FLOOR TILE (ROSE WITH BEIGE FLECK)	DUNDAS NURSING ROOM 00070, GROUND FLOOR	AND	NO
D-00070-63C	12" FLOOR TILE (ROSE WITH BEIGE FLECK)	DUNDAS NURSING ROOM 00070, GROUND FLOOR	AND	NO
D-00080-63A	12" FLOOR TILE - (OFF-WHITE WITH GREY FLECK)	DUNDAS NURSING LAB 00080, GROUND FLOOR	AND	NO
D-00080-63B	12" FLOOR TILE - (OFF-WHITE WITH GREY FLECK)	DUNDAS NURSING LAB 00080, GROUND FLOOR	AND	NO
D-00080-63C	12" FLOOR TILE - (OFF-WHITE WITH GREY FLECK)	DUNDAS NURSING LAB 00080, GROUND FLOOR	AND	NO
D-00140-63A	12" FLOOR TILE - (BEIGE WITH GREY/WHITE FLECK)	DUNDAS SUPPLY ROOM 00140, GROUND FLOOR	AND	NO
D-00140-63B	12" FLOOR TILE - (BEIGE WITH GREY/WHITE FLECK)	DUNDAS SUPPLY ROOM 00140, GROUND FLOOR	AND	NO
D-00140-63C	12" FLOOR TILE - (BEIGE WITH GREY/WHITE FLECK)	DUNDAS SUPPLY ROOM 00140, GROUND FLOOR	AND	NO
D-00141-63A	12" FLOOR TILE (GREY WITH BROWN FLECK)	DUNDAS NURSING LAB 00141, GROUND FLOOR	AND	NO
D-00141-63B	12" FLOOR TILE (GREY WITH BROWN FLECK)	DUNDAS NURSING LAB 00141, GROUND FLOOR	AND	NO
D-00141-63C	12" FLOOR TILE (GREY WITH BROWN FLECK)	DUNDAS NURSING LAB 00141, GROUND FLOOR	AND	NO
D-11280-63A	12" FLOOR TILE (BLUE)	DUNDAS SERVER LAB 11280, 1ST FLOOR	AND	NO
D-11280-63B	12" FLOOR TILE (BLUE)	DUNDAS SERVER LAB 11280, 1ST FLOOR	AND	NO
D-11280-63C	12" FLOOR TILE (BLUE)	DUNDAS SERVER LAB 11280, 1ST FLOOR	AND	NO
D-11315-63A	12" FLOOR TILE - (GREY WITH GREY/WHITE FLECK)	DUNDAS STORAGE ROOM 11315, 1ST FLOOR	AND	NO
D-11315-63B	12" FLOOR TILE - (GREY WITH GREY/WHITE FLECK)	DUNDAS STORAGE ROOM 11315, 1ST FLOOR	AND	NO
D-11315-63C	12" FLOOR TILE - (GREY WITH GREY/WHITE FLECK)	DUNDAS STORAGE ROOM 11315, 1ST FLOOR	AND	NO
D-11410-63A	12" FLOOR TILE - (BEIGE WITH BROWN/WHITE FLECK)	DUNDAS MICRO LAB 11410, 1ST FLOOR	AND	NO
D-11410-63B	12" FLOOR TILE - (BEIGE WITH BROWN/WHITE FLECK)	DUNDAS MICRO LAB 11410, 1ST FLOOR	AND	NO
D-11410-63C	12" FLOOR TILE - (BEIGE WITH BROWN/WHITE FLECK)	DUNDAS MICRO LAB 11410, 1ST FLOOR	AND	NO

TABLE 3.15
ASBESTOS SAMPLE RESULTS – 12" VINYL FLOOR TILE

SAMPLE #	MATERIAL	FLOOR & LOCATION	ASBESTOS CONTENT AND TYPE	FRIABLE
D-11440-63A	12" FLOOR TILE (BLACK WITH WHITE FLECK)	DUNDAS OFFICE 11440 (BOTTING), 1ST FLOOR	AND	NO
D-11440-63B	12" FLOOR TILE (BLACK WITH WHITE FLECK)	DUNDAS OFFICE 11440 (BOTTING), 1ST FLOOR	AND	NO
D-11440-63C	12" FLOOR TILE (BLACK WITH WHITE FLECK)	DUNDAS OFFICE 11440 (BOTTING), 1ST FLOOR	AND	NO
D-11540-63A	12" FLOOR TILE - (CORAL WITH RED AND GREY FLECK)	DUNDAS CAFETERIA OFFICE 11540, 1ST FLOOR	AND	NO
D-11540-63B	12" FLOOR TILE - (CORAL WITH RED AND GREY FLECK)	DUNDAS CAFETERIA OFFICE 11540, 1ST FLOOR	AND	NO
D-11540-63C	12" FLOOR TILE - (CORAL WITH RED AND GREY FLECK)	DUNDAS CAFETERIA OFFICE 11540, 1ST FLOOR	AND	NO
S-00440-63A	12" FLOOR TILE (BROWN WITH BEIGE AND CREAM FLECK)	STORMONT VET STORAGE 00440, GROUND FLOOR	AND	NO
S-00440-63B	12" FLOOR TILE (BROWN WITH BEIGE AND CREAM FLECK)	STORMONT VET STORAGE 00440, GROUND FLOOR	AND	NO
S-00440-63C	12" FLOOR TILE (BROWN WITH BEIGE AND CREAM FLECK)	STORMONT VET STORAGE 00440, GROUND FLOOR	AND	NO
S-11825-63A	12" FLOOR TILE (BEIGE WITH BLACK DOT)	STORMONT COLD LAB 11825, 1ST FLOOR	AND	NO
S-11825-63B	12" FLOOR TILE (BEIGE WITH BLACK DOT)	STORMONT COLD LAB 11825, 1ST FLOOR	AND	NO
S-11825-63C	12" FLOOR TILE (BEIGE WITH BLACK DOT)	STORMONT COLD LAB 11825, 1ST FLOOR	AND	NO
S-11831-63A	12" FLOOR TILE (ROSE WITH WHITE AND BLUE FLECK)	STORMONT LAB STORAGE 11831, 1ST FLOOR	<0.5% CHRYSOTILE	NO
S-11831-63B	12" FLOOR TILE (ROSE WITH WHITE AND BLUE FLECK)	STORMONT LAB STORAGE 11831, 1ST FLOOR	<0.5% CHRYSOTILE	NO
S-11831-63C	12" FLOOR TILE (ROSE WITH WHITE AND BLUE FLECK)	STORMONT LAB STORAGE 11831, 1ST FLOOR	<0.5% CHRYSOTILE	NO
S-11831-63D	12" FLOOR TILE (BEIGE WITH GREY FLECK)	STORMONT LAB STORAGE 11831, 1ST FLOOR	AND	NO
S-11831-63E	12" FLOOR TILE (BEIGE WITH GREY FLECK)	STORMONT LAB STORAGE 11831, 1ST FLOOR	AND	NO
S-11831-63F	12" FLOOR TILE (BEIGE WITH GREY FLECK)	STORMONT LAB STORAGE 11831, 1ST FLOOR	AND	NO
G-E35-1-63A	12" FLOOR TILE	GLENGARRY EXIT 35, 1ST FLOOR	AND	NO
G-E35-1-63B	12" FLOOR TILE	GLENGARRY EXIT 35, 1ST FLOOR	AND	NO
G-E35-1-63C	12" FLOOR TILE	GLENGARRY EXIT 35, 1ST FLOOR	AND	NO
G-C201-63A	12" FLOOR TILE (GREY WITH PURPLE, BLACK, PINK AND YELLOW FLECK)	GLENGARRY CORRIDOR 201, 2ND FLOOR	AND	NO
G-C201-63B	12" FLOOR TILE (GREY WITH PURPLE, BLACK, PINK AND YELLOW FLECK)	GLENGARRY CORRIDOR 201, 2ND FLOOR	AND	NO
G-C201-63C	12" FLOOR TILE (GREY WITH PURPLE, BLACK, PINK AND YELLOW FLECK)	GLENGARRY CORRIDOR 201, 2ND FLOOR	AND	NO
G-11031-63A	12" FLOOR TILE – (GREY WITH BEIGE AND BLUE FLECK)	GLENGARRY IT OFFICE 11031, 1ST FLOOR	AND	NO

TABLE 3.15
ASBESTOS SAMPLE RESULTS – 12" VINYL FLOOR TILE

SAMPLE #	MATERIAL	FLOOR & LOCATION	ASBESTOS CONTENT AND TYPE	FRIABLE
G-11031-63B	12" FLOOR TILE – (GREY WITH BEIGE AND BLUE FLECK)	GLENGARRY IT OFFICE 11031, 1ST FLOOR	AND	NO
G-11031-63C	12" FLOOR TILE – (GREY WITH BEIGE AND BLUE FLECK)	GLENGARRY IT OFFICE 11031, 1ST FLOOR	AND	NO
G-11132-63	12" FLOOR TILE – (GREY WITH BLACK PINHOLES)	GLENGARRY 11132, 1ST FLOOR	AND	NO
G-11034-63B	12" FLOOR TILE – (GREY WITH BLACK PINHOLES)	GLENGARRY 11132, 1ST FLOOR	AND	NO
G-11034-63C	12" FLOOR TILE – (GREY WITH BLACK PINHOLES)	GLENGARRY 11132, 1ST FLOOR	AND	NO
G-11055-63A	12" FLOOR TILE – (TAN WITH BLACK PINHOLES)	GLENGARRY WASHROOM 11055, 1ST FLOOR	AND	NO
G-11055-63B	12" FLOOR TILE – (TAN WITH BLACK PINHOLES)	GLENGARRY WASHROOM 11055, 1ST FLOOR	AND	NO
G-11055-63C	12" FLOOR TILE – (TAN WITH BLACK PINHOLES)	GLENGARRY WASHROOM 11055, 1ST FLOOR	AND	NO
G-22340-63A	12" FLOOR TILE (GREEN WITH WHITE STREAK)	GLENGARRY 22340, 2ND FLOOR	0.5 – 5 % CHRYSOTILE	NO
G-22340-63B	12" FLOOR TILE – (GREEN WITH WHITE STREAK))	GLENGARRY 22340, 2ND FLOOR	0.5 – 5 % CHRYSOTILE (not analyzed)	NO
G-22340-63C	12" FLOOR TILE – (GREEN WITH WHITE STREAK)	GLENGARRY 22340, 2ND FLOOR	0.5 – 5 % CHRYSOTILE (not analyzed)	NO
G-33080-63A	12" FLOOR TILE - (GREEN WITH WHITE STREAK)	GLENGARRY 33080, 3RD FLOOR	0.5 – 5 % CHRYSOTILE	NO
G-33370-63A	12" FLOOR TILE – (LIGHT AND DARK BLUE)	GLENGARRY 33370, 3RD FLOOR	AND	NO
G-33370-63B	12" FLOOR TILE – (LIGHT AND DARK BLUE)	GLENGARRY 33370, 3RD FLOOR	AND	NO
G-33370-63C	12" FLOOR TILE – (LIGHT AND DARK BLUE)	GLENGARRY 33370, 3RD FLOOR	AND	NO
G-33376-63A	12" FLOOR TILE – (GREEN)	GLENGARRY 33376, 3RD FLOOR	AND	NO
G-33376-63B	12" FLOOR TILE – (GREEN)	GLENGARRY 33376, 3RD FLOOR	AND	NO
G-33376-63C	12" FLOOR TILE – (GREEN)	GLENGARRY 33376, 3RD FLOOR	AND	NO
G-44160-63A	12" FLOOR TILE – (GREEN)	GLENGARRY 44160, 4TH FLOOR	AND	NO
G-44160-63B	12" FLOOR TILE – (GREEN)	GLENGARRY 44160, 4TH FLOOR	AND	NO
G-44160-63C	12" FLOOR TILE – (GREEN)	GLENGARRY 44160, 4TH FLOOR	AND	NO
T-C034-63A	12" FLOOR TILE (WHITE WITH BLACK FLECK)	TECHNOLOGY CORRIDOR C050, GROUND FLOOR	AND	NO
T-C034-63B	12" FLOOR TILE (WHITE WITH BLACK FLECK)	TECHNOLOGY CORRIDOR C050, GROUND FLOOR	AND	NO
T-C034-63C	12" FLOOR TILE (WHITE WITH BLACK FLECK)	TECHNOLOGY CORRIDOR C050, GROUND FLOOR	AND	NO
T-C037-63A (LAB REPORT IS T-C307-63A)	12" FLOOR TILE - (BLACK)	TECHNOLOGY CORRIDOR C037, GROUND FLOOR	AND	NO

TABLE 3.15
ASBESTOS SAMPLE RESULTS – 12" VINYL FLOOR TILE

SAMPLE #	MATERIAL	FLOOR & LOCATION	ASBESTOS CONTENT AND TYPE	FRIABLE
T-C037-63B (LAB REPORT IS T-C307-63B)	12" FLOOR TILE - (BLACK)	TECHNOLOGY CORRIDOR C037, GROUND FLOOR	AND	NO
T-C037-63C (LAB REPORT IS T-C307-63C)	12" FLOOR TILE - (BLACK)	TECHNOLOGY CORRIDOR C037, GROUND FLOOR	AND	NO
T-C041-63A	12" FLOOR TILE	TECHNOLOGY CORRIDOR C041, GROUND FLOOR	AND	NO
T-C041-63B	12" FLOOR TILE	TECHNOLOGY CORRIDOR C041, GROUND FLOOR	AND	NO
T-C041-63C	12" FLOOR TILE	TECHNOLOGY CORRIDOR C041, GROUND FLOOR	AND	NO
T-C050-63A	12" FLOOR TILE – (GREEN)	TECHNOLOGY CORRIDOR C050, GROUND FLOOR	AND	NO
T-C050-63B	12" FLOOR TILE – (GREEN)	TECHNOLOGY CORRIDOR C050, GROUND FLOOR	AND	NO
T-C050-63C	12" FLOOR TILE – (GREEN)	TECHNOLOGY CORRIDOR C050, GROUND FLOOR	AND	NO
T-E26-G-63A	12" FLOOR TILE (WHITE AND GREY)	TECHNOLOGY EXIT 26, GROUND FLOOR	AND	NO
T-E26-G-63B	12" FLOOR TILE (WHITE AND GREY)	TECHNOLOGY EXIT 26, GROUND FLOOR	AND	NO
T-E26-G-63C	12" FLOOR TILE (WHITE AND GREY)	TECHNOLOGY EXIT 26, GROUND FLOOR	AND	NO
T-02010-63	12" FLOOR TILE (BLUE WITH BLACK DOT)	TECHNOLOGY 02310, GROUND FLOOR	AND	NO
T-02013-63	12" FLOOR TILE (BEIGE)	TECHNOLOGY OFFICE 02013, GROUND FLOOR	AND	NO
T-02150-63A	12" FLOOR TILE (WHITE WITH GREY FLECK)	TECHNOLOGY 02150, GROUND FLOOR	AND	NO
T-02150-63B	12" FLOOR TILE (WHITE WITH GREY FLECK)	TECHNOLOGY 02150, GROUND FLOOR	AND	NO
T-02150-63C	12" FLOOR TILE (WHITE WITH GREY FLECK)	TECHNOLOGY 02150, GROUND FLOOR	AND	NO
T-02150-63D	12" FLOOR TILE (BEIGE WITH BROWN FLECK)	TECHNOLOGY 02150, GROUND FLOOR	AND	NO
T-02150-63E	12" FLOOR TILE (BEIGE WITH BROWN FLECK)	TECHNOLOGY 02150, GROUND FLOOR	AND	NO
T-02150-63F	12" FLOOR TILE (BEIGE WITH BROWN FLECK)	TECHNOLOGY 02150, GROUND FLOOR	AND	NO
T-02155-63A	12" FLOOR TILE (GREY WITH BLACK FLECK)	TECHNOLOGY 02215, GROUND FLOOR	AND	NO
T-02155-63B	12" FLOOR TILE (GREY WITH BLACK FLECK)	TECHNOLOGY 02215, GROUND FLOOR	AND	NO
T-02155-63C	12" FLOOR TILE (GREY WITH BLACK FLECK)	TECHNOLOGY 02215, GROUND FLOOR	AND	NO
T-02226-63A	12" FLOOR TILE (BROWN WITH WHITE FLECK)	TECHNOLOGY 02226, GROUND FLOOR	AND	NO
T-02226-63B	12" FLOOR TILE (BROWN WITH WHITE FLECK)	TECHNOLOGY 02226, GROUND FLOOR	AND	NO
T-02226-63C	12" FLOOR TILE (BROWN WITH WHITE FLECK)	TECHNOLOGY 02226, GROUND FLOOR	AND	NO
T-02265-63	12" FLOOR TILE	TECHNOLOGY 02265, GROUND FLOOR	AND	NO

TABLE 3.15
ASBESTOS SAMPLE RESULTS – 12" VINYL FLOOR TILE

SAMPLE #	MATERIAL	FLOOR & LOCATION	ASBESTOS CONTENT AND TYPE	FRIABLE
T-02270-63	12" FLOOR TILE	TECHNOLOGY 02270, GROUND FLOOR	AND	NO
T-02290-63A	12" FLOOR TILE (BROWN)	TECHNOLOGY 02290, GROUND FLOOR	AND	NO
T-02290-63B	12" FLOOR TILE (BROWN)	TECHNOLOGY 02290, GROUND FLOOR	AND	NO
T-02290-63C	12" FLOOR TILE (BROWN)	TECHNOLOGY 02290, GROUND FLOOR	AND	NO
T-02310-63A	12" FLOOR TILE	TECHNOLOGY 02310, GROUND FLOOR	AND	NO
T-02310-63B	12" FLOOR TILE	TECHNOLOGY 02310, GROUND FLOOR	AND	NO
T-02310-63C	12" FLOOR TILE	TECHNOLOGY 02310, GROUND FLOOR	AND	NO
T-02350-63A (LAB REPORT IS T-02360-63A)	12" FLOOR TILE (BROWN WITH BEIGE FLECK)	TECHNOLOGY 02350, GROUND FLOOR	AND	NO
T-02350-63B (LAB REPORT IS T-02360-63B)	12" FLOOR TILE (BROWN WITH BEIGE FLECK)	TECHNOLOGY 02350, GROUND FLOOR	AND	NO
T-02350-63C (LAB REPORT IS T-02360-63C)	12" FLOOR TILE (BROWN WITH BEIGE FLECK)	TECHNOLOGY 02350, GROUND FLOOR	AND	NO
T-02370-63A	12" FLOOR TILE	TECHNOLOGY 02370, GROUND FLOOR	AND	NO
T-02370-63B	12" FLOOR TILE	TECHNOLOGY 02370, GROUND FLOOR	AND	NO
T-02370-63C	12" FLOOR TILE	TECHNOLOGY 02370, GROUND FLOOR	AND	NO
T-02402-63A	12" FLOOR TILE (CREAM WITH GREY FLECK)	TECHNOLOGY 02402, GROUND FLOOR	AND	NO
T-02402-63B	12" FLOOR TILE (CREAM WITH GREY FLECK)	TECHNOLOGY 02402, GROUND FLOOR	AND	NO
T-02402-63C	12" FLOOR TILE (CREAM WITH GREY FLECK)	TECHNOLOGY 02402, GROUND FLOOR	AND	NO

Legend: AND – **A**sbestos **N**ot **D**etected

3.16 Vinyl Flooring, Linoleum (Material Code 66)

3.16.1 Observations

- Linoleum was observed in classrooms, entrances, janitor's closets and locker rooms throughout the college and an adjacent building. Linoleum is non-friable.
- It is in good condition and is accessible to the staff and students.
- Rooms containing asbestos joint compound are denoted with the boxed numeral 66 on the site plans.

3.16.2 Results

- The results of the twenty-one (21) samples are presented below in Table 3.16.

- The linoleum samples in the Root Cellar contain non-friable asbestos.

TABLE 3.16
ASBESTOS SAMPLE RESULTS – LINOLEUM

SAMPLE #	MATERIAL	FLOOR & LOCATION	ASBESTOS CONTENT AND TYPE	FRIABLE
R-RCE1-66A	LINOLEUM	ROOT CELLAR ENTRANCE FIRST FLOOR	AND	NO
R-RCE1-66B	LINOLEUM	ROOT CELLAR ENTRANCE FIRST FLOOR	AND	NO
R-RCE1-66C	LINOLEUM	ROOT CELLAR ENTRANCE FIRST FLOOR	AND	NO
R-RC104-66B-A,B,C	LINOLEUM	ROOT CELLAR (previously under carpet)	5-25% Chrysotile	NO
R0rc100-66C-A,B,C	LINOLEUM	ROOT CELLAR (previously under carpet)	5-25% Chrysotile	NO
D-00010-66A	LINOLEUM - (GREY WITH BROWN AND WHITE SPECKLE)	DUNDAS JANITOR's ROOM 00010 GROUND FLOOR	AND	NO
D-00010-66B	LINOLEUM - (GREY WITH BROWN AND WHITE SPECKLE)	DUNDAS JANITOR's ROOM 00010 GROUND FLOOR	AND	NO
D-00010-66C	LINOLEUM - (GREY WITH BROWN AND WHITE SPECKLE)	DUNDAS JANITOR's ROOM 00010 GROUND FLOOR	AND	NO
S-00420-66A	LINOLEUM (GREY/WHITE/BLACK PEBBLE ROLL SHEET)	STORMONT PET GROOMING SALON 00420 1ST FLOOR	AND	NO
S-00420-66B	LINOLEUM (GREY/WHITE/BLACK PEBBLE ROLL SHEET)	STORMONT PET GROOMING SALON 00420 1ST FLOOR	AND	NO
S-00420-66C	LINOLEUM (GREY/WHITE/BLACK PEBBLE ROLL SHEET)	STORMONT PET GROOMING SALON 00420 1ST FLOOR	AND	NO
S-11802-66A	LINOLEUM (GREY ROLL SHEET)	STORMONT COLD ROOM 11802 1ST FLOOR	AND	NO
S-11802-66B	LINOLEUM (GREY ROLL SHEET)	STORMONT COLD ROOM 11802 1ST FLOOR	AND	NO
S-11802-66C	LINOLEUM (GREY ROLL SHEET)	STORMONT COLD ROOM 11802 1ST FLOOR	AND	NO
T-02530-66A	RUBBERIZED LINOLEUM	TECHNOLOGY WOMEN's LOCKER ROOM 02530, GROUND FLOOR	AND	NO
T-02530-66B	RUBBERIZED LINOLEUM	TECHNOLOGY WOMEN's LOCKER ROOM 02530, GROUND FLOOR	AND	NO
T-02520-66C	RUBBERIZED LINOLEUM	TECHNOLOGY MEN's LOCKER ROOM 02520, GROUND FLOOR	AND	NO

Legend: AND – **A**sbestos **N**ot **D**etected

3.17 Mastic/Glue (Material Code 67)

3.17.1 Observations

- Mastic was observed on the concrete above floating ceiling in Technology Wing room 02060. Mastic is typically a hard, brittle and opaque resin that has historically been employed to secure 12 by 12 inch ceiling tiles to the permanent ceiling surface (i.e. concrete).
- Mastic is non-friable.
- The mastic is in good condition and is concealed behind the drywall.

3.17.2 Results

- The results of the sample are presented below.
- The mastic sample does not contain asbestos.

TABLE 3.17
ASBESTOS SAMPLE RESULTS – MASTIC

SAMPLE #	MATERIAL	FLOOR & LOCATION	ASBESTOS CONTENT AND TYPE	FRIABLE
T-02060-67	MASTIC (USED TO ADHERE DRYWALL TO CINDER BLOCK)	TECHNOLOGY 02060, GROUND FLOOR	AND	NO

Legend: AND – **A**sbestos **N**ot **D**etected

3.18 Floor Parging/Levelling Cement (Material Code 69)

3.18.1 Observations

- Several rooms in the college are improved with floor-levelling parge cement.
- The compound is non-friable.
- It is in good condition and is generally concealed beneath floor tiles.

3.18.2 Results

- The results of the twenty-seven (27) samples are presented below.
- The floor parging/levelling samples do not contain asbestos.

TABLE 3.18
ASBESTOS SAMPLE RESULTS – LEVELLING CEMENT/COAT

SAMPLE #	MATERIAL	FLOOR & LOCATION	ASBESTOS CONTENT AND TYPE	FRIABLE
R-RCE1-69A	FLOOR LEVELING COMPOUND	ROOT CELLAR ENTRANCE RCE1 FIRST FLOOR	AND	NO
R-RCE1-69A	FLOOR LEVELING COMPOUND	ROOT CELLAR ENTRANCE RCE1 FIRST FLOOR	AND	NO
R-RCE1-69A	FLOOR LEVELING COMPOUND	ROOT CELLAR ENTRANCE RCE1 FIRST FLOOR	AND	NO
D-00120-69	LEVELLING COAT (GOLD, UNDER CARPETING)	DUNDAS MAINTENANCE ROOM 00120, GROUND FLOOR	AND	NO
D-11120-69A	LEVELLING CEMENT (WHITE)	DUNDAS BOOK STORE 11120, GROUND FLOOR	AND	NO
D-11120-69B	LEVELLING CEMENT (WHITE)	DUNDAS BOOK STORE 11120, GROUND FLOOR	AND	NO
D-11120-69C	LEVELLING CEMENT (WHITE)	DUNDAS BOOK STORE 11120, GROUND FLOOR	AND	NO
D-11390-69A	LEVELLING CEMENT (GOLD, UNDER CARPET)	DUNDAS JANITOR's ROOM 11390, 1ST FLOOR	AND	NO
D-11390-69B	LEVELLING CEMENT (GOLD, UNDER CARPET)	DUNDAS JANITOR's ROOM 11390, 1ST FLOOR	AND	NO
D-11390-69C	LEVELLING CEMENT (GOLD, UNDER CARPET)	DUNDAS JANITOR's ROOM 11390, 1ST FLOOR	AND	NO

TABLE 3.18
ASBESTOS SAMPLE RESULTS – LEVELLING CEMENT/COAT

SAMPLE #	MATERIAL	FLOOR & LOCATION	ASBESTOS CONTENT AND TYPE	FRIABLE
D-11390-69D	LEVELLING CEMENT (GOLD, UNDER CARPET)	DUNDAS JANITOR's ROOM 11390, 1ST FLOOR	AND	NO
D-11390-69E	LEVELLING CEMENT (GOLD, UNDER CARPET)	DUNDAS JANITOR's ROOM 11390, 1ST FLOOR	AND	NO
D-11390-69F	LEVELLING CEMENT (GOLD, UNDER CARPET)	DUNDAS JANITOR's ROOM 11390, 1ST FLOOR	AND	NO
S-11852-69A	LEVELLING CEMENT (GOLD)	STORMONT BELL CLOSET 11852, 1ST FLOOR	AND	NO
S-11852-69B	LEVELLING CEMENT (GOLD)	STORMONT BELL CLOSET 11852, 1ST FLOOR	AND	NO
S-11852-69C	LEVELLING CEMENT (GOLD)	STORMONT BELL CLOSET 11852, 1ST FLOOR	AND	NO
S-11820-69D	LEVELLING CEMENT (GOLD)	STORMONT CHEMISTRY LAB 11820, 1ST FLOOR	AND	NO
S-11820-69E	LEVELLING CEMENT (GOLD)	STORMONT CHEMISTRY LAB 11820, 1ST FLOOR	AND	NO
S-11820-69F	LEVELLING CEMENT (GOLD)	STORMONT CHEMISTRY LAB 11820, 1ST FLOOR	AND	NO
S-11820-69G	LEVELLING CEMENT (GOLD)	STORMONT CHEMISTRY LAB 11820, 1ST FLOOR	AND	NO
S-11820-69X	LEVELLING CEMENT (BROWN)	STORMONT CHEMISTRY LAB 11820, 1ST FLOOR	AND	NO
S-11820-69Y	LEVELLING CEMENT (BROWN)	STORMONT CHEMISTRY LAB 11820, 1ST FLOOR	AND	NO
S-11820-69Z	LEVELLING CEMENT (BROWN)	STORMONT CHEMISTRY LAB 11820, 1ST FLOOR	AND	NO
STAH1-69A	FLOOR LEVELLING COMPOUND, IN FRONT OF AHU	STORMONT SOUTH PENTHOUSE	AND	NO
STAH1-69B	FLOOR LEVELLING COMPOUND, IN FRONT OF AHU	STORMONT SOUTH PENTHOUSE	AND	NO
STAH1-69C	FLOOR LEVELLING COMPOUND, IN FRONT OF AHU	STORMONT SOUTH PENTHOUSE	AND	NO
STAH2-69D	FLOOR LEVELLING COMPOUND	STORMONT NORTH PENTHOUSE	AND	NO

Legend: AND – **A**sbestos **N**ot **D**etected

3.19 Asphalt Roof Shingle (Material Code 71)

3.19.1 Observations

- Asphalt shingle roofing was observed as roofing material at the Native Resource Centre (Root Cellar).
- The shingles are non-friable, in good condition and accessible to staff.

3.19.2 Results

- The results of the three (3) samples are presented below in Table 3.19.
- The asphalt roof shingles do not contain asbestos.
-

TABLE 3.19
ASBESTOS SAMPLE RESULTS – ROOF SHINGLE

SAMPLE #	MATERIAL	FLOOR & LOCATION	ASBESTOS CONTENT AND TYPE	FRIABLE
R-EXT-71A	ASHPHALT ROOF SHINGLE	ROOT CELLAR, EXTERIOR, ROOF	AND	NO
R- EXT-71B	ASHPHALT ROOF SHINGLE	ROOT CELLAR, EXTERIOR, ROOF	AND	NO
R- EXT-71C	ASHPHALT ROOF SHINGLE	ROOT CELLAR, EXTERIOR, ROOF	AND	NO

3.20 Tar, Tar Paper, Tar and Gravel (Material Code 72)

3.20.1 Observations

- Fibreglass insulation located in the ceiling (of Dundas Hall room 11370) is improved with tar-impregnated paper.
- Additionally, the chilled water pump chemical tank in Dundas Boiler Room 00040 is coated with a tar-based insulation (may have been removed in 2007).
- The tar materials are non-friable, in good condition and are accessible to staff only.
- Rooms containing asbestos floor tiles are denoted with the boxed numeral 72 on the site plans.

3.20.2 Results

- The results of the three (3) tar samples are presented below.
- The tar sample acquired from the chemical tank in Dundas Boiler Room 00040 contains asbestos as described below in Table 3.20.
- The other tar samples do not contain asbestos.

TABLE 3.20
ASBESTOS SAMPLE RESULTS – TAR

SAMPLE #	MATERIAL	FLOOR & LOCATION	ASBESTOS CONTENT AND TYPE	FRIABLE
D-00040-72	TAR (ON CHEMICAL TANK FOR CHILLED WATER PUMP)	DUNDAS BOILER ROOM 00040, GROUND FLOOR	5-25% CHRYSOTILE	NO
D-11370-72A	TAR (ON FIBREGLASS INSULATION)	DUNDAS I.T. OFFICE 11370, 1ST FLOOR	AND	NO
D-11370-72B	TAR (ON FIBREGLASS INSULATION)	DUNDAS I.T. OFFICE 11370, 1ST FLOOR	AND	NO
D-11370-72C	TAR (ON FIBREGLASS INSULATION)	DUNDAS I.T. OFFICE 11370, 1ST FLOOR	AND	NO

Legend: AND – **A**sbestos **N**ot **D**etected

3.21 Roof Felt (Material Code 74)

3.21.1 Observations

- Roof felt was observed beneath the exterior siding of Energy House 1.
- The felt is non-friable, in good condition and concealed from staff and students.

3.21.2 Results

- The results of the three (3) roof felt samples are presented below in Table 3.21.
- The samples do not contain asbestos.

TABLE 3.21
ASBESTOS SAMPLE RESULTS – ROOF FELT

SAMPLE #	MATERIAL	FLOOR & LOCATION	ASBESTOS CONTENT AND TYPE	FRIABLE
EH1-74A	ROOF FELT	ENERGY HOUSE 1, BEHIND EXTERIOR WALL SIDING	AND	NO
EH1-74B	ROOF FELT	ENERGY HOUSE 1, BEHIND EXTERIOR WALL SIDING	AND	NO
EH1-74C	ROOF FELT	ENERGY HOUSE 1, BEHIND EXTERIOR WALL SIDING	AND	NO

Legend: AND – **A**sbestos **N**ot **D**etected

3.22 Roofing Materials

3.22.1 Observations

- The college is improved with multiple flat roofs.
- Staff did not collect any samples of the roofing materials, as this was not included in the scope of work.

3.22.2 Results

- The roof materials (felts, EPDM, tar, etc. installed prior to 1986) should be assumed to contain asbestos, until proven otherwise by destructive testing (i.e. roof cores).

3.23 Chalkboards

Chalkboard colourlith (which is commonly spruce green in colour) is listed as an asbestos-containing material that has a tough monolithic construction.

3.23.1 Results

Black and green chalkboards were observed in multiple classrooms and labs throughout the college (see Section 4.1). The college should manage chalkboards as non-friable asbestos-containing materials until proven otherwise by analysis.

3.24 Hidden Asbestos

3.24.1 Observations

- Asbestos containing materials may be hidden from view and as such not described in this report.
- All concealed insulation should be assumed to contain asbestos and be managed/abated accordingly.

3.25 Lead (Pb) Findings

3.25.1 Observations

- Interior and exterior surfaces are painted. Pipe-packing and solder will also contain lead.
- The Hazardous Products Act designates paint with a lead concentration in excess of 90 ug/g as “lead paint”. Disturbance of lead-containing products may result in excessive exposure to airborne lead, especially if the work is performed indoors and under dry conditions.

3.25.2 Results

- The results of the 21 paint/ceramic tile samples are presented below in Table 3.24.
- Many of the paint samples exceed the regulated lead levels.

TABLE 3.25
LEAD PAINT & CERAMIC SAMPLE RESULTS

SAMPLE #	MATERIAL	FLOOR & LOCATION	LEAD CONCENTRATION (ug/g)
G-11140-P1	WALL PAINT	GLENGARRY- 11140, 1ST FLOOR	2
G-22130-P2	WALL PAINT	GLENGARRY- 22130, 2ND FLOOR	**189**
G-22140-62	CERAMIC TILE	GLENGARRY- 22140, 2ND FLOOR	**2,180**
G-33390-P4	WALL PAINT	GLENGARRY- 33390, 3RD FLOOR	3
EH2-P1	WALL PAINT	ENERGY HOUSE 2, GROUND FLOOR	<2
RC-103-P1	WALL PAINT	ROOT CELLAR, GROUND FLOOR	2
RC-EXT-P2	EXTERIOR WINDOW PAINT	ROOT CELLAR, GROUND FLOOR	24
NH-C100-P1	WINDOW PAINT	NEWCOURT HOUSE, NORTH ENTRANCE CORRIDOR	**20,400**
NH-C100-P2	WALL PAINT	NEWCOURT HOUSE, NORTH ENTRANCE CORRIDOR	**17,500**
NH-141-P1	WALL PAINT	NEWCOURT HOUSE, OFFICE	**25,000**
NH-113-P3	WALL PAINT	NEWCOURT HOUSE, PORCH	**17,400**
T-02290-P1	WALL PAINT	TECHNOLOGY BLDG.	2
T-C046-P2	WALL PAINT	TECHNOLOGY BLDG., CORRIDOR 46	74

TABLE 3.25
LEAD PAINT & CERAMIC SAMPLE RESULTS

SAMPLE #	MATERIAL	FLOOR & LOCATION	LEAD CONCENTRATION (ug/g)
T-02040-P3	WALL PAINT	TECHNOLOGY BLDG.	23
DNAH1-301	FIRE PROTECTION STANDPIPE PAINT, RED	DUNDAS SOUTH AHU PENTHOUSE	**10,100**
DNAH2-301	FLOOR PAINT, GREY	DUNDAS NORTH AHU PENTHOUSE	**381**
D-00241-301	WALL PAINT, PALE YELLOW	DUNDAS, 00241, GROUND FLOOR	**93**
D-00100-301	CEILING PAINT, WHITE	DUNDAS, OFFICE 00100, GROUND FLOOR	8
S-E10-301	CEILING PAINT	DUNDAS, EXIT E10, PENTHOUSE LEVEL	**4,870**
S-11781-301	WALL PAINT, BLACK	DUNDAS, STORAGE/PROJECTION ROOM 11781, 1ST FLOOR	5
S-11810-301	DOOR PAINT, ORANGE	DUNDAS, LAB 11810, 1ST FLOOR	2

Legend: ug/g – micrograms of Lead per gram of paint solid

3.26 Mercury Findings

3.26.1 Observations

- Mercury is present within thermostats in the following rooms:
  - Dundas Hall room 11340; and
  - Glengarry Hall room 33135
- The Tunnel connecting Stormont and Dundas Halls, and the chemistry lab storage rooms (00661, 11840) may contain mercury (and/or other designated substances) for educational purposes.
- Mercury vapour is present in the fluorescent light tubes located throughout the college. The mercury content of GE Ecolux® lamps has been reduced by over 80% versus older traditional fluorescent lamp designs. Nevertheless, they still contain mercury.
- Mercury vapour is present in the halide lighting located in Stormont lecture hall 11710.
- Disturbance of mercury-containing products may result in excessive exposure to airborne mercury, especially if the work is performed indoors and under dry conditions.
- Mercury-containing devices should not be disposed of as regular solid waste.

3.26.2 Results

- No samples were collected.

3.27 Silica Findings

3.27.1 Observations

- Silica is present in the masonry and plaster located throughout the college.
- Silica may be present in the welding shop 00580 (sand-blasting equipment).
- Disturbance of silica-containing products may result in excessive exposure to airborne silica, especially if the work is performed indoors and under dry conditions.

3.27.2 Results

- No samples were collected.

3.28 Isocyanates, Vinyl Chloride Monomer, Benzene, Acrylonitrile, Coke Oven Emissions, Arsenic, Ethylene Oxide Findings

3.28.1 Observations

- These designated substances were not observed in the college.

3.28.2 Results

- No samples were collected.

3.29 Mould Findings

3.29.1 Observations

- Mould and or water damage was observed in:
    - Dundas Hall room 00130 (maintenance office);
    - Stormont and Dundas penthouses,
    - Corridor C001, proximate to 00070;
    - Technology Hall room 02390;
    - Glengarry Hall rooms 33390, 44230 and 44180; and
    - Energy House 1.
    - Several additional water damaged ceiling tiles were observed throughout the college.

3.29.2 Results

- No samples were collected.

3.30 PCB Findings

3.30.1 Observations

- Polychlorinated biphenyls (PCBs) are mixtures of up to 209 individual chlorinated compounds that are not classified as designated substances. PCBs are either oily liquids or solids that are colourless to light yellow. PCBs have been used as coolants and lubricants in transformers, capacitors, and other electrical equipment because they don't burn easily and are good insulators. Products that may contain PCBs include old fluorescent lighting fixtures, electrical devices containing PCB capacitors, and hydraulic oils.
- PCBs are not suspected within the fluorescent light ballasts (verbal, William Peairs).
- PCB concentrations in transformers or capacitors should be verified prior to replacement.
- PCB-containing materials may not be disposed of as regular solid waste.

3.30.2 Results

- No samples were collected.

4.0 CONCLUSIONS AND RECOMMENDATIONS

4.1 Conclusions

- Bulk sampling has confirmed that **friable** asbestos is present within the following materials:
    - Thermal insulation in Dundas Hall rooms 00040, 00110, 00240, E34-G, DNAH1, and the Stormont-Dundas tunnel;
    - Thermal insulation in Stormont Hall rooms 00593, STAH1, and STAH2;
    - Thermal insulation in Glengarry Hall rooms 11090, 33050, 33374, 44230, 44231, E4-2, and E35-2;
    - Gaskets within the abandoned boiler located in the basement furnace room of Newcourt House;
    - Fire door in the basement of Newcourt House; and
    - 2’ x 4’ ceiling tiles (Type “O”) in Technology Hall.

- Bulk sampling has confirmed that **non-friable** asbestos is present within the following materials:
    - Transite asbestos cement panels in Stormont Hall rooms 00660, 11830, 11835;
    - Transite asbestos cement rainwater leaders in the Dundas Hall penthouses DNAH1 and Stormont Hall penthouses STAH1, and STAH2;
    - Mortar in Stormont Hall
    - Joint compound in the basement level ceiling of Newcourt House;
    - Ceiling texture coat of Glengarry Hall corridors C-304, C-403, and room 33312;
    - Ceiling stucco in the Native Resource Centre main entrance RCE1;
    - 12” vinyl floor tiles on multiple floors of Glengarry Hall, and in corridor C003 of Dundas Hall; and
    - Tar tank insulation in Dundas Hall Boiler room 00040.
    - Linoleum in the Root Cellar

- Bulk sampling confirms that the following materials contain asbestos **concentrations of less than 0.5 % or below detection limits** (AND):
    - Spray-on insulation;
    - Cellulose insulation;
    - Caulking;
    - Wall and ceiling plaster (note the texture coat in Glengarry Hall and ceiling stucco in the Native Resource Centre entrance);
    - 2’ x 2’ ceiling tiles;
    - 2’ x 4’ ceiling tiles, in all Halls except Technology;
    - Joint compound except in Newcourt House;
    - Fire brick;
    - Linoleum;
    - Mastic;
    - Floor levelling compound/cement;
    - Asphalt roof shingles and felts; and
    - Tar paper.

- Chalkboards (black and/or green) may contain asbestos.

- The fire door in the basement of Newcourt House was confirmed to contain friable asbestos. Other fire doors may also contain asbestos. Fire doors were observed in rooms 00311, 00580, 00583, 00593, 11370, 11540, 11802, 11815.

- Bulk sampling indicates that the painted surfaces sampled throughout the College exceed the regulated lead limit.

- Mercury was observed in thermostats found in rooms 11340 and 33135 and may be present in other rooms of the college.

- Mercury vapour is present in the fluorescent light tubes located throughout the college and in the mercury vapour houselights in 11710.

- The Tunnel connecting Stormont and Dundas Halls, and the chemistry lab storage rooms (00661, 11840) may contain mercury (and/or other designated substances) for educational purposes.

- Silica is present in the masonry, drywall and plaster. Silica may be present in the Stormont Hall welding shop 00580 (sand-blasting equipment).

- PCBs are not suspected within the fluorescent light ballasts (verbal, William Peairs).

- Mould and or water damage was observed in:
    - Dundas Hall room 00130 (maintenance office);
    - Dundas and Stormont penthouses (water supply piping),
    - Corridor C001, proximate to 00070;
    - Technology Hall room 02390;
    - Glengarry Hall rooms 33390, 44230 and 44180;
    - Energy House 1; and
    - Numerous ceiling tiles throughout the college.

- The remaining designated substances were not observed in the College.

4.2 Recommendations

- Provide a copy of this report and drawings to contractors, or to staff that may disturb designated substances in the college.

4.2.1 Asbestos - General

- Prepare an asbestos management plan per the Regulations.
- Prepare and maintain on premises a record of location of all friable and non-friable asbestos-containing material (ACM).
- Notify in writing the tenant or lessees of the buildings.
- Advise all workers who may disturb ACM of the presence of asbestos.
- Provide asbestos training to all workers who may disturb or work in close proximity to asbestos.
- Cleanup, seal, enclose or remove all fallen or deteriorated ACM, as per the Regulations.
- Notify the Ministry of Labour prior to undertaking Type 2 or 3 asbestos abatement work.
- Remove all ACM that may be disturbed prior to renovation or demolition.
- Analyze all materials (previously untested) for asbestos content prior to renovation or demolition.

4.2.2 Friable Thermal Insulation

- Repair, enclose or abate the damaged thermal insulation, as denoted on Figures 1 to 6 by a numbered triangular blue symbol.
- Follow Type 2 procedures when repairing/disturbing the damaged thermal insulation with and area of <1 sq.m.
- Follow Type 3 procedures when repairing/disturbing thermal insulation with an area of >1 sq.m.

4.2.3 Friable Gaskets

- Abate the damaged boiler gaskets and the boiler in Newcourt House basement, as denoted on Figure 6 by a numbered triangular blue symbol.
- Follow Type 2 procedures when repairing/disturbing the damaged thermal insulation with and area of <1 sq.m.
- Follow Type 3 procedures when repairing/disturbing thermal insulation with an area of >1 sq.m.

4.2.4 Friable 2’ x 4’ (Type “O”) Ceiling Tiles

- Manage all asbestos containing ceiling tiles (Type “O”, 2’x4’ lay-in) identified in Technology Hall.
- Follow Type 1 procedures when removing ceiling tiles that cover an area of less than 7.5 sq. m. and are removed without being broken, cut, drilled, abraded, ground, sanded or vibrated.
- Follow Type 2 procedures when removing ceiling tiles that cover an area of greater than 7.5 sq. m. and are removed without being broken, cut, drilled, abraded, ground, sanded or vibrated.

4.2.5 Non-Friable Floor Tiles, Linoleum Transite Asbestos Cement and Tar Insulation

- Manage all 12" asbestos containing floor tiles identified in Glengarry Hall.
- Manage all transite asbestos cement roof leaders, fume hoods, sheets and wallboard identified in Stormont, Dundas and Glengarry Halls.
- Manage all asbestos containing tar (tank insulation) in Dundas Hall 00040.
- Manage all linoleum within the Root Cellar.
- Follow Type 1 procedures when:
    - Removing non-friable ACM, if the material is removed without being broken, cut, drilled, abraded, ground, sanded, or vibrated.
- Follow Type 1 procedures when :
    - Breaking, cutting, drilling, abrading, grinding, sanding or vibrating non-friable ACM if:
        - The material is wetted to control the spread of dust or fibres; and
        - The work is done by means of hand-powered tools.
- Follow Type 2 procedures when:
    - Breaking, cutting, drilling, abrading, grinding, sanding or vibrating non-friable ACM if the work is done by means of power tools that are attached to dust-collecting devices equipped with a HEPA filter.
- Follow Type 3 procedures when:
    - Breaking, cutting, drilling, abrading, grinding, sanding or vibrating non-friable ACM if the work is done by means of power tools that are not attached to dust-collecting devices equipped with a HEPA filters.

4.2.6 Non-Friable Mortar, joint compound, texture coat and stucco

- Non-friable mortar, joint compound, texture coat and stucco will become friable during renovations, repairs or demolition.
- Follow Type 1 procedures when :
    - Breaking, cutting, drilling, abrading, grinding, sanding or vibrating non-friable ACM if:
        - The material is wetted to control the spread of dust or fibres; and
        - The work is done by means of hand-powered tools.
- Follow Type 2 procedures when:
    - Breaking, cutting, drilling, abrading, grinding, sanding or vibrating non-friable ACM if the work is done by means of power tools that are attached to dust-collecting devices equipped with a HEPA filter.
- Follow Type 3 procedures when:
    - Breaking, cutting, drilling, abrading, grinding, sanding or vibrating non-friable ACM if the work is done by means of power tools that are not attached to dust-collecting devices equipped with a HEPA filters.

4.2.7 Roof

- Collect and analyze roof materials (felts, EPDM, tar, etc. installed prior to 1986) for the presence of asbestos (i.e. roof cores) prior to renovation/replacement.

4.2.8 Hidden or Concealed Asbestos

- Complete destructive testing and sampling prior to renovating or demolishing areas that may contain concealed ACM such as in walls, ceilings and mechanical equipment.

4.2.9 Spray-on insulation, cellulose insulation, caulking, wall and ceiling plaster, floor parging, mastic, tar paper, 2'x2' ceiling tiles, 2'x4' ceiling tiles, fire brick, asphalt roof shingles and felts

- No special procedures are required for these materials, except as noted in Section 4.1.

4.2.10 Lead

- Given that the week-day use of Newcourt House is a day-care facility, consideration should be given to painting over the lead-based paints in this facility.
- Although select paint samples contain less than 90 µg/g of lead, studies have shown that excessive levels of lead may still be released during the renovation/demolition of such surfaces.
- Given the age of buildings, lead-based solder may also have been used on some or all of the water piping and in the pipe-packing.
- Follow the Type 1, Type 2, or Type 3 procedures listed in the Ministry of Labour Lead Guidelines, when disturbing lead-containing materials.
- Dispose of all lead-containing materials as per Ontario Regulation 347 of the Environmental Protection Act.

4.2.11 Silica

- Studies have shown that excessive levels of silica may still be released during the renovation/demolition of such surfaces.
- Follow the Type 1, Type 2, or Type 3 procedures listed in the Ministry of Labour Silica Guidelines, when disturbing silica -containing materials.
- Dispose of all silica-containing materials as per Ontario Regulation 347 of the Environmental Protection Act.

4.2.12 Mercury

- Mercury-containing devices should not be disposed of as regular solid waste.
- Separate the mercury-containing materials prior to renovation or disturbance.
- Remove the mercury-containing thermostats and fluorescent light tubes from service without breaking them, as they expire.
- Register the waste within HWIN on the Ministry of Environment web site.
- Retain a waste management contractor to dispose of the mercury waste as per Ontario Regulation 347 of the Environmental Protection Act.

4.2.13 Mould

- Remove and dispose of the water damaged materials present in the college.
- Identify and stop the source of water infiltration.
- Follow the procedures listed in the following documents if mould is encountered during renovation or demolition:
    - Guidelines on Assessment and Remediation of Fungi in Indoor Environments, New York City, April 2000.
    - CCA Mould Guildelines for the Canadian Construction Industry.
    - Fungal Contamination in Public Buildings: A guide to Recognition and Management, Health Canada, Environmental Health Directorate, June 1995.

4.2.14 PCBs

- PCB concentrations in transformers or capacitors should be verified and managed as per SOR 2008\247-290 Federal PCB Regulations.
- Inspect date codes on fluorescent light ballasts and segregate any PCB-containing equipment.
- PCB-containing materials may not be disposed of as regular solid waste.
- Register the waste within HWIN on the Ministry of Environment web site.
- Retain a waste management contractor to dispose of the PCB waste as per Ontario Regulation 347 and 362 of the Environmental Protection Act.

5.0 LIMITATIONS

- The assessment includes designated substances observed within the building envelope including the structure, finishes and permanent mechanical equipment.

- The assessment does not assess designated substances:

    - Within sealed wall or ceiling cavities (i.e. no destructive testing);
    - Within the soil, groundwater or air; and
    - Within column enclosures and inaccessible shafts/tunnels.

- The field observations and laboratory analyses presented herein are considered sufficient in detail and scope to form a general inventory of designated substances present in the buildings.

- GENIVAR staff prepared the survey in accordance with generally accepted environmental survey methods in place at the time the work was undertaken.

- GENIVAR staff did not assess every mechanical and architectural detail of the building. Designated substances may exist which could not be reasonably identified within the scope of the assessment or which were not apparent during the site visit. In these instances TRG generally assumed the materials contained asbestos.

- GENIVAR cannot warrant or guarantee that the information provided herein is absolutely complete or accurate beyond current environmental consulting standards.

- GENIVAR neither expresses nor implies any warrantee with respect to the findings or report.

- The client acknowledges that conditions may vary from those which are identified within this report.

- The observations apply only to the dates they were made.

- The report is limited only to those areas of concern identified by the client or described in our proposal. Other areas of concern may exist that were not investigated.

- GENIVAR makes no other recommendations, including those concerning the legal significance of the findings, or other legal matters described in this report.

- Regulatory statutes are subject to interpretation and these interpretations may change.

- GENIVAR accepts no responsibility for consequential financial effects or transactions or property values or requirements for follow-up actions or costs.

- GENIVAR will not be responsible for consequential or indirect damages.

- GENIVAR is only responsible for damages resulting from the negligence of our staff.

- GENIVAR will not provide results or information to any party unless required by law.

- GENIVAR accepts no responsibility for damages suffered by any third party that relies on the contents of this report.

- Contractors bidding on renovations or demolition of these buildings must verify dimensions, asbestos quantities and unforeseen conditions.

- The data presented herein is for general purposes only. No other warranties are implied or expressed.

A copy of our Standard Terms and Conditions of Retainer are enclosed within ***Appendix F.***

6.0 CLOSING COMMENTS AND SIGNATURE

It has been a pleasure working with St. Lawrence College on this project. Should you have any questions or require assistance in managing the designated substances during future renovations, please contact the undersigned.

Sincerely,

GENIVAR

Lyle Casselman

Lyle Casselman, B.Eng., C.E.T., C.Chem.
Manager, Environmental Site Assessment
Associate Director

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St. Lawrence College – Kingston Campus
Kingston, Ontario

DESIGNATED SUBSTANCES SURVEY REPORT

November, 2010

Prepared by
GENIVAR