SECTION 3.0 EXECUTIVE SUMMARY

Hazardous materials identified at the equipment building during the March 2013 HBMS and the current demolition HMBA are summarized in Table E-3.

Table E-3: Hazardous Material Description

Hazardous Material	Regulatory Guidelines	Location	Quantity (Approx.)	Disposal
Asbestos-Containing Drywall Joint Compound	NL Asbestos Abatement Regulations (Reg. 111/98)	Interior Walls and Ceilings	265 m^2	Asbestos-containing materials cannot be disposed of at a Construction & Demolition Site; however, these materials can be disposed of at a Regional Solid Waste Landfill, provided permission is obtained from the facility.
Leachable Lead-Based White Paint on Wooden Siding	Federal Hazardous Products Act (R.S.1985, c. H-3); NL Department of Environment 2003 Guidance Document for Leachable Toxic Waste and Disposal (GD-PPD-26.1); Federal Transportation of Dangerous Goods Act (1992, c. 34)	Site Building Exterior	100 m^2	These materials (painted wooden siding) are considered hazardous wastes and must be disposed according to NL policy and the Solid Waste Management Authority by an approved hazardous waste disposal company and transported under the federal Transportation of Dangerous Goods (TDG) Act.
Lead and Mercury-Based Paint		All Other Paint Finishes (Sampled for Lead and Mercury in Paint)	-	All painted materials that were sampled and analyzed for lead and mercury, with the exception of the painted wooden siding on the Site building exterior, may be disposed of at a Regional Solid Waste Landfill, provided permission is obtained from the facility.
Mould	Mould Guidelines for the Canadian Construction Industry, Canadian Construction Industry, 2004; Mould Abatement Guidelines, Environmental Abatement Council of Ontario (EACO), 2010.	Site Building Interior	Large Amount of Suspected Mould (>10 m^2)	All mould impacted materials may be disposed of at a Regional Solid Waste Landfill, provided permission is obtained from the facility.
Mercury-Containing Fluorescent Light Tubes	Federal Hazardous Products Act (R.S.1985, c. H-3)	Site Building Interior	Five (5) fluorescent light fixtures. It is assumed that there are two (2) light tubes for each fixture.	These materials can be disposed of at a recycling facility.

Hazardous Material	Regulatory Guidelines	Location	Quantity (Approx.)	Disposal
Potential PCB-Containing Fluorescent Light Ballasts	Canadian Environmental Protection Act (CEPA) regulations and interim orders under the Act that pertain to commercial chemicals; Federal Transportation of Dangerous Goods Act (1992, c. 34)	Site Building Interior	Five (5) fluorescent light fixtures. It is assumed that there is one (1) ballast for each fixture.	Prior to disposal, all ballasts should be checked to determine if they contain PCBs (if possible). Ballasts containing PCBs should be transported, as per the TDG regulations, by a hazardous materials waste company approved to handle PCBs.
Petroleum Hydrocarbons	Federal Hazardous Products Act (R.S.1985, c. H-3); Federal Transportation of Dangerous Goods Act (1992, c. 34)	Site Building Interior	Unknown (<1710 L)	These materials are considered hazardous wastes and must be disposed according to NL policy and the Solid Waste Management Authority by an approved hazardous waste disposal company and transported under the federal TDG Act.
Silica Dust	American Conference of Governmental Industrial Hygienists (ACGIH), Threshold Limit Values (TLVs) and Biological Exposure Indices (BEIs), 2010	Concrete Building Materials	-	All concrete can be disposed of at a Construction & Demolition Site or at a Regional Solid Waste Disposal Facility.
Solid Waste	NL Asbestos Abatement Regulations (Reg. 111/98); Federal Hazardous Products Act (R.S.1985, c. H-3); NL Department of Environment 2003 Guidance Document for Leachable Toxic Waste and Disposal (GD-PPD-26.1); Federal Transportation of Dangerous Goods Act (1992, c. 34)	Site Building Interior	Various types of old electrical and mechanical equipment (generators), cables, pipes and building material debris, including but not limited to wood and drywall. A rusted 205-litre metal drum (labeled Shell Jet A-1 47) and several bags (labeled oil absorbent).	Some of these materials may be considered hazardous wastes and must be disposed according to NL policy and the Solid Waste Management Authority by an approved hazardous waste disposal company and transported under the federal Transportation of Dangerous Goods Act. Asbestos-containing materials cannot be disposed of at a Construction & Demolition Site; however, these materials can be disposed of at a Regional Solid Waste Landfill, provided permission is obtained from the facility. Metal parts that are not contaminated with petroleum hydrocarbons can be sent to a recycling facility.
Bird and Animal Feces	Federal Hazardous Products Act (R.S.1985, c. H-3)	Site Building Interior	-	These materials may be disposed of at a Regional Solid Waste Landfill, provided permission is obtained from the facility.

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APPENDICES

3.0 EQUIPMENT BUILDING

The equipment building is located on the main site area of the Bacalhao Island Lightstation (refer to Figures 1.1 and 1.2, Appendix A1 and Photos 1 and 2, Appendix B1). Based on the Directory of Federal Real Property, the equipment building (Building No. 106587) on Bacalhao Island was constructed in 1980.

3.1 BUILDING DESCRIPTION

A description of the Site building is outlined in Table 3-1. Photographs of the equipment building are provided in Appendix B3.

Table 3-1: Site Building Description

Building Name	Equipment Building	Photo (Appendix B3)
Number of Stories	One	Photo 1
Basement	No	Not Applicable
Attic	No	Not Applicable
Type of Structure	Wooden Frame	Photo 7
Type of Foundation	Painted Concrete	Photo 3
Exterior	Painted Wooden Siding/Plywood	Photos 2 and 4
Window/Door Frames	Painted Wooden Frames	Photos 1 and 3
Exterior Doors	None (Plywood)	Photo 1
Roofing Materials	Asphalt Shingles	Photo 1
Interior Walls Finishes	Painted Drywall	Photos 5 and 7
Ceiling Finishes	Painted Drywall	Photo 7
Floor Finishes	Painted Concrete	Photo 21
Interior Doors	None	Not Applicable
Interior Lighting	Incandescent/Fluorescent	Photos 7 and 9
Exterior Lighting	None	Not Applicable
Heating	None	Not Applicable
Chimney	None	Not Applicable
Aboveground Storage Tank(s)	500 L (approx.) Storage Contents Unknown; 1,000 L (approx.) Storage Contents Unknown	Photos 8 and 9
Plumbing	None	Not Applicable

3.2 FINDINGS

The findings documented in this section are based on observations made by AMEC personnel at the time of the Site visits and laboratory analyses of samples collected from the equipment building.

3.2.1 Asbestos-Containing Materials (ACMs)

There are over 3,000 ACMs that are commercially available, which can be divided into two broad categories: friable and non-friable. Friable ACMs are defined as materials that can be crumbled, pulverized and reduced to powder when dry using hand pressure. Typical friable materials include acoustical or decorative spray applications, fireproofing and thermal insulation. Non-friable ACMs are hard or manufactured products such as floor tiles, fire blankets, pre-

formed manufactured cementitious insulation and wallboards, pipes, and siding, wherein the asbestos fibres are bound to the substrate.

Note that although a product may be considered non-friable when new, the product may release fine dust when disturbed (e.g., deterioration, removal, renovations) and the free dust is considered friable.

ACMs were discontinued from use in Canada in the late 1970s/early 1980s, although non-friable asbestos is still found in many more recent buildings.

A total of nine (9) building material samples (BAC-AS-11 to BAC-AS-16, BAC-AS-12A, BAC-AS-14A and BAC-AS-36) were collected from the equipment building and analyzed for asbestos content (refer to Photos 10 to 18, Appendix B3). Sample descriptions and analytical results are summarized in Table C3-1, Appendix C3. Sample locations and analytical results are graphically illustrated in Figure 3.1, Appendix A3.

3.2.1.1 Friable Materials

3.2.1.1.1 Spray-Applied Fireproofing, Insulation and Texture Finishes

No spray-applied fireproofing, insulation or texture finishes were observed within the equipment building during the Site visits; therefore no samples were collected for analysis during the March 2013 HBMS and the current demolition HMBA.

3.2.1.2 Non-Friable and Potentially Friable Materials

3.2.1.2.1 Ceiling Tile

There were no ceiling tiles observed in the equipment building during the Site visits; therefore, no samples of ceiling tile were collected for analysis during the March 2013 HBMS and the current demolition HMBA.

3.2.1.2.2 Drywall Joint Compound

Painted drywall was observed on the walls and ceilings in the equipment building. Two (2) samples of drywall joint compound (BAC-AS-13 and BAC-AS-15) were collected from exterior walls in the equipment building porch and room 2 and analyzed for asbestos content (refer to Photos 12 and 14, Appendix B3). Chrysotile asbestos (3% to 6%) was detected in samples BAC-AS-13 and BAC-AS-15 at levels above the applicable *NL Asbestos Abatement Regulations (111/98)* (i.e., >1%) and therefore this material (i.e., drywall joint compound collected from the equipment building porch and room 2) is considered to be an ACM.

It should be noted that it is common for the asbestos content in troweled on materials, such as drywall joint compound within older buildings, to vary in concentration depending on the

methods used to mix and place these materials. Due to this variability in asbestos content, the drywall joint compound throughout the equipment building should be treated as an ACM.

The condition of the drywall and associated joint compound visible throughout the equipment building (covering an area of approximately 265 m^2) varied from fair to poor condition. The northwest exterior wall and some of the interior walls of the equipment building were reportedly damaged by waves (refer to Photos 7 and 9, Appendix B3).

3.2.1.2.3 Vinyl Flooring Products and Mastics

There was no vinyl sheet flooring observed in the equipment building during the Site visits; therefore, no samples were collected for analysis during the March 2013 HBMS and the current demolition HMBA.

3.2.1.2.4 Baseboard, Carpet and Stair Tread Adhesives/Mastics

There were no baseboard, carpet or stair tread adhesives/mastics observed in the equipment building during the Site visits; therefore, no samples of these types of adhesives/mastics were collected for analysis during the March 2013 HBMS and the current demolition HMBA.

3.2.1.2.5 Roofing Products

Two (2) samples of asphalt shingle roofing material (BAC-AS-12 and BAC-AS-12A) were collected from the roof of the equipment building and analyzed for asbestos content (refer to Photos 11 and 16, Appendix B3). Asbestos was not detected in the asphalt shingle samples collected from the equipment building.

3.2.1.2.6 Thermal System Insulation

One sample of pink fiberglass insulation with black paper backing (BAC-AS-16) was collected from equipment building room 2 and analyzed for asbestos content (refer to Photo 15, Appendix B3). One sample of yellow fibreglass insulation with black paper backing (BAC-AS-36) was also collected from equipment building room 2 and analyzed for asbestos content (refer to Photo 18, Appendix B3). Asbestos was not detected in the pink and yellow fiberglass insulation with black paper backing samples collected and submitted for analysis.

3.2.1.2.7 Weather Stripping and Caulking

No samples of weather stripping were collected from the equipment building during the March 2013 HBMS or the current demolition HMBA.

One (1) sample of caulking (BAC-AS-11) was collected from the exterior of the equipment building and analyzed for asbestos content (refer to Photo 10, Appendix B3). Asbestos was not detected in the caulking sample collected and submitted for analysis.

3.2.1.2.8 Mortar, Grout and Other Cementitious Materials

No samples of mortar, grout or other cementitious materials were collected from the equipment building during the March 2013 HBMS or the current demolition HMBA.

3.2.1.2.9 Other Potential ACMs

Two (2) samples of felt tar paper (BAC-AS-14 and BAC-AS-14A) were collected from the exterior of the equipment building and analyzed for asbestos content (refer to Photos 13 and 17, Appendix B3). Chrysotile asbestos (<0.25%) was detected in sample BAC-AS-14 at a level below the applicable *NL Asbestos Abatement Regulations (111/98)* (i.e., >1%). Asbestos was not detected in the other felt tar paper sample collected and submitted for analysis.

Other potential ACMs were observed and were not sampled due to the nature of the materials and/or hazards associated with sampling these materials. These materials included, but are not limited to, electrical and mechanical components and insulators such as wiring and gaskets inside electrical panels, electronic and/or mechanical equipment. Other possible hidden and inaccessible ACMs have the potential to be present at the Site but were not identified during the Site visits. These possible ACMs could include fire rated structures or building materials and underground infrastructure and piping.

3.2.2 Paint Finishes

The condition of the paint visible throughout the equipment building varied from good to poor condition. Peeling and flaking paint was observed on interior surfaces and on the exterior siding and foundation of the equipment building (refer to Photos 2, 7, 10, 21 and 24, Appendix B3).

A total of six (6) samples (BAC-PS-10 to BAC-PS-15) plus one (1) field duplicate (BAC-PS-DUP-2; duplicate of BAC-PS-12) were collected from painted surfaces of the equipment building and analyzed for lead and mercury content (refer to Photos 19 to 24, Appendix B3). One (1) paint sample (BAC-PS-12) was also analyzed for PCB content. Sample descriptions and analytical results are summarized in Tables C3-2 to C3-4, Appendix C3. Sample locations and analytical results are graphically illustrated in Figure 3.1, Appendix A3.

Since, based on the results of the March 2013 HBMS, the concentration of lead detected in one (1) paint sample (BAC-PS-11) exceeded the former Federal HPA criterion of 5,000 mg/kg, paint sample BAC-PS-11 was also tested for lead leachate using the TCLP to determine whether or not the paint would be considered hazardous waste upon removal from the Site. During the current demolition HMBA, one (1) supplemental paint sample (BAC-PS-11A), including the substrate, was collected from the same painted surface of the equipment building that originally exceeded the former Federal HPA criterion of 5,000 mg/kg (refer to Photo 25, Appendix B3). This supplemental paint sample was also tested for lead leachate using the TCLP to determine

whether or not the paint would be considered hazardous waste upon removal from the Site. The laboratory results for lead leachate in paint are presented in Table C3-5, Appendix C3.

The concentration of mercury detected in one (1) paint sample (BAC-PS-11) exceeded the CCME CSQG of 24 mg/kg for mercury in soil at a commercial site. This paint sample was also tested for mercury leachate using the TCLP to determine whether or not the paint would be considered hazardous waste upon removal from the Site. The laboratory results for mercury leachate in paint are presented in Table C3-6, Appendix C3.

3.2.2.1 Lead in Paint

The concentrations of lead in the paint samples ranged from 910 mg/kg to 9,600 mg/kg (refer to Table C3-2, Appendix C3). Five (5) of the six (6) paint samples (BAC-PS-10 and BAC-PS-12 to BAC-PS-15) plus one (1) field duplicate sample (BAC-PS-DUP-2; duplicate of BAC-PS-12) contained lead at concentrations above the Federal HPA criterion of 90 mg/kg but below the former Federal HPA criterion of 5,000 mg/kg (refer to Photos 19 and 21 to 24, Appendix B3). One (1) paint sample (BAC-PS-11) contained lead at a concentration above the former Federal HPA criterion of 5,000 mg/kg (refer to Photo 20, Appendix B3).

3.2.2.2 Leachable Lead in Paint

The concentrations of leachable lead in paint sample BAC-PS-11 (13 mg/L) and supplemental paint and wood substrate sample BAC-PS-11A (10 mg/L) were above the Schedule II leachate criterion for lead (5.00 mg/L) provided in the provincial guidance document for leachable toxic waste (GD-PPD-26.1) (refer to Table C3-5, Appendix C2). Paint sample BAC-PS-11 (white paint) and supplemental paint and wood substrate sample BAC-PS-11A were collected from siding on the exterior of the equipment building. The paint on the exterior wood siding (covering an area of approximately 100 m^2) was generally in poor condition and flaking. Since the concentrations of leachable lead in the paint sample and the paint and wood substrate sample are at levels considered to be hazardous, these materials (painted wooden siding), if removed from the Site, must be disposed of at a hazardous waste treatment facility.

3.2.2.3 Mercury in Paint

The concentrations of mercury in the paint samples ranged from non-detect (<1.0 mg/kg) to 28 mg/kg (refer to Table C3-3, Appendix C3). One (1) paint sample (BAC-PS-11) contained mercury at a concentration above the Federal HPA criterion of 10 mg/kg and the CCME CSQG of 24 mg/kg for mercury in soil at a commercial site (refer to Photo 10, Appendix B3). The other five (5) paint samples analyzed, plus one (1) field duplicate sample (BAC-PS-DUP-2; duplicate of BAC-PS-12), were either non-detect for mercury (i.e. <1.0 mg/kg) or contained mercury at concentrations below the applicable Federal HPA criterion (i.e. 10 mg/kg).

3.2.2.4 Leachable Mercury in Paint

The concentration of leachable mercury in paint sample BAC-PS-11 (0.0011 mg/L) was below the Schedule II leachate criterion for mercury (0.10 mg/L) provided in the provincial guidance document for leachable toxic waste (GD-PPD-26.1) (refer to Table C3-6, Appendix C3). The paint sample (white paint) was collected from siding on the exterior of the equipment building. The paint on the exterior wood siding was generally in poor condition and flaking. The concentration of leachable mercury in this paint is not at a level considered to be hazardous; however, this paint (including the wood substrate) was leachable for lead. Therefore, if removed from the Site, these materials (painted wooden siding) must be disposed of at a hazardous waste treatment facility.

3.2.2.5 PCBs in Paint

The paint sample analyzed for PCBs was non-detect (<5.0 mg/kg) and therefore did not exceed the CCME CSQG of 33 mg/kg for PCBs in soil at a commercial site or the criterion of 50 mg/kg for PCB solid provided in the provincial guidance document for leachable toxic waste (GD-PPD-26.1) (refer to Table C3-4, Appendix C3).

3.2.3 Urea Formaldehyde Foam Insulation (UFFI)

Visual indicators suggesting the potential presence of UFFI were not observed in the equipment building. The nature of the insulation in the walls and ceilings throughout the equipment building could not be confirmed at the time of the Site inspections. However, fibreglass insulation was observed in two (2) of the exterior walls and in the ceiling of equipment building room 2 (refer to Photos 15, 18 and 24, Appendix B3). Since the equipment building was constructed in 1980, it is possible that UFFI may be present in some areas of the equipment building that were not investigated during the intrusive wall cavity inspections.

The CMHC state that “tests show that UFFI is not a source of over-exposure to formaldehyde after the initial curing and release of excess gas”. The general view based on studies concerning formaldehyde emissions is that as a product ages, the amount of formaldehyde off-gassed from the product decreases over time. The amount of formaldehyde released is reportedly dependant on temperature, humidity and whether or not the product is exposed to excessive moisture or water. According to the USEPA, increases in temperature, humidity and moisture conditions can cause increases in the amount of formaldehyde released from newer products that are considered to be sources of formaldehyde emissions. The USEPA report that “studies show that formaldehyde emissions from UFFI decline with time; therefore, homes in which UFFI was installed many years ago are unlikely to have high levels of formaldehyde now”.

3.2.4 Suspected Visible Mould Growth (SVG)

AMEC inspected the interior areas of the equipment building for visual or olfactory evidence of suspected mould. Peeling and flaking paint that can be a result of building materials

compromised by moisture was observed on walls and ceilings of the equipment building (refer to Photos 7, 21 and 23, Appendix B3). Areas of SVG and/or water damage were observed in several areas on the interior surfaces of the equipment building (refer to Photo 24, Appendix B3). The northwest exterior wall and some of the interior walls of the equipment building were reportedly damaged by waves. As a result, the interior of the equipment building was in a state of disrepair at the time of the March 2013 HBMS and the current demolition HMBA. One (1) sample (BAC-MD-02) was collected from the equipment building room 2 (ceiling) and analyzed for mould growth (refer to Figures 3.1, Appendix A3 and Photo 26, Appendix B3). The laboratory results confirmed that abundant mould growth was present in the sample collected and submitted for analysis (refer to Table C3-7, Appendix C3). The types of mould identified in the samples were *Stachybotrys* and *Penicillium*.

3.2.5 Mercury-Containing Thermostats

There were no thermostats observed in the equipment building during the March 2013 HBMS and the current demolition HMBA Site visits.

3.2.6 PCB-Containing Light Ballasts

One (1) type of fluorescent light ballast was observed within the equipment building during the Site inspections (refer to Photo 27, Appendix B3). Results of the light ballast inspection are summarized in Table 3-2:

Table 3-2: Fluorescent Light Ballast Description

Manufacturer	Cat./Serial No.	Location Observed	No. Inspected	Condition	Potential PCBs (Yes/No)
Phillips Advance	RQM-2S40-TPC	Equipment Building Room 1	1	Poor	Yes

Note: Date code not visible on ballast.

Five (5) fluorescent light fixtures were observed in the equipment building. The light ballasts in four (4) of the five (5) light fixtures at the equipment building could not be inspected for the presence or absence of PCB-containing dielectric fluid due to height restrictions and safety concerns. Due to reported wave damage, the interior of the equipment building was in a state of disrepair at the time of the Site inspections; as a result, access to some of the light fixtures was obstructed by equipment and building material debris. The light fixtures appeared to be in poor condition (refer to Photo 28, Appendix B3). Since it could not be determined from the inspection if the ballasts are either non-PCB or potential-PCB, all light ballasts within the equipment building should be treated as PCB-containing ballasts.

3.2.7 Potential Sources of ODSs and Halocarbons

No potential sources of ODSs were identified in the equipment building during the March 2013 HBMS and the current demolition HMBA Site visits.

3.2.8 Petroleum Storage Tanks

One (1) petroleum aboveground storage tank (AST) was identified inside the equipment building during the March 2013 HBMS and the current demolition HMBA (refer to Photo 9, Appendix B3). The AST and the results of the inspection are summarized in Table 3-3.

Table 3-3: Storage Tank Description

Name	Location	Storage Capacity	Type	Date Installed	Date on ULC Placard	Comments
AST 1: Unknown Storage Tank (Red)	Equipment Building Room 1	1,000 L (Approx.)	Steel, horizontal.	Unknown.	Not visible.	Tank appears to be in good condition; however, tank was only partially visible due to debris in building from wave damage.

Another AST (approx. 500 L) was identified on a metal frame near three (3) generators inside the equipment building during the March 2013 HBMS and the current demolition HMBA (refer to Photo 8, Appendix B3); however, the current and/or former use of this tank is not known.

3.2.9 Other Potentially Hazardous Building Materials or Substances

Other potentially hazardous building materials or substances identified during the March 2013 HBMS and the current demolition HMBA are presented in the following sections.

3.2.9.1 Mercury

Mercury may be present in the fluorescent light tubes in the equipment building. The light tubes in these light fixtures often contain limited quantities of mercury in a powder or vapour form.

3.2.9.2 Lead

Lead is typically associated with plumbing solder and older pipe materials, as well as products such as radiation protective shielding and lead-acid batteries.

No potential sources of lead were identified in the equipment building during the March 2013 HBMS and the current demolition HMBA Site visits.

3.2.9.3 Silica

Silica is expected to be present in the concrete used to construct the foundation for the equipment building. Precaution should be taken to prevent/reduce exposure to silica dust during any disturbance/demolition of silica-containing products.

3.2.9.4 Solid Waste

Various types of old electrical and mechanical equipment (generators), cables, pipes and building material debris, including but not limited to wood and drywall, were observed inside the equipment building (refer to Photos 6, 9 and 29 to 31, Appendix B3). A rusted 205-litre metal drum (labeled Shell Jet A-1 47) and several bags (labeled oil absorbent) were observed inside the equipment building (refer to Photos 32 and 33, Appendix B3).

3.2.9.5 Ash

Solid wastes such as ash from chimneys or furnaces were not observed within the equipment building during the March 2013 HBMS and the current demolition HMBA Site visits.

3.2.9.6 Bird and Animal Feces

Bird and/or animal droppings/feces were not observed within the interior of the equipment building. However, visual observations were limited inside the building due to poor lighting conditions (i.e. no electrical power and boarded up windows and doors) and the state of disrepair and accumulation of debris within the building. Precautions should be taken to prevent/reduce exposure to potential microbiological contaminants (e.g. bacteria, viruses, etc.) often associated with bird or animal droppings/feces while working within the equipment building or during any disturbance/demolition of building materials that may be impacted by the bird or animal droppings/feces.

3.3 CONCLUSIONS AND RECOMMENDATIONS

Based on observations made and information gathered during the March 2013 HBMS and the current demolition HMBA, the following conclusions and recommendations are made with respect to the potential and actual presence of hazardous building materials at the equipment building:

Asbestos-Containing Materials (ACMs)

- Results of the asbestos sampling and analytical program revealed that there are building materials containing greater than 1% asbestos by dry weight, which are considered to be ACMs. Potentially friable asbestos is present in the form of drywall joint compound. It should be noted that the drywall and associated joint compound visible throughout the equipment building varied from good to poor condition; therefore, priority should be given to the removal of the deteriorated joint compound inside the equipment building.
- Results of the asbestos sampling and analytical program also revealed that there are building materials containing less than 1% asbestos by dry weight. These materials include felt tar paper.
- Other potential ACMs were observed and were not sampled due to the nature of the materials and/or hazards associated with sampling these materials. These materials included, but are not limited to, electrical and mechanical components and insulators such

as wiring and gaskets inside electrical panels, electronic and/or mechanical equipment.

- Other possible hidden and inaccessible ACMs have the potential to be present at the Site but were not identified during the Site visits. These possible ACMs could include fire rated structures or building materials, and underground infrastructure and piping.
- If other potential ACMs that could not be sampled as part of these assessments due to access issues are encountered in the future, these materials should be treated as ACMs or samples should be collected and tested to verify asbestos content. This should be done as soon as these materials are encountered and before these materials are disturbed. This includes materials that are currently concealed by walls and ceiling systems.
- In accordance with the NL Asbestos Abatement Regulations (Reg. 111/98), which provide the legislative requirements for safe handling of ACMs in workplaces in the Province of NL, the following is recommended:
    - Safe work procedures shall be established;
    - All buildings constructed during the period when asbestos was readily used in construction must have a written assessment and management plan (where applicable) for potential ACMs; and
    - Prior to general disturbance activity (e.g., demolition, renovation or removal), all ACMs must be safely removed from the equipment building and disposed of in accordance with appropriate environmental guidelines by an asbestos abatement contractor registered with the Department of Labour, Occupational Health and Safety Branch.
- Prior to demolition, ACMs in good condition should be inspected on an annual basis. ACMs in poor condition should be removed from the equipment building and transported off-site for proper disposal in accordance with the Asbestos Abatement Regulations (111/98).

Lead, Mercury and PCBs in Paint

- Results of the paint sampling and analytical program revealed lead and mercury-based paint finishes on the interior and exterior of the equipment building (i.e., the concentrations of lead and mercury in some paint finishes were above the applicable Federal HPA criteria of 90 mg/kg for lead and 10 mg/kg for mercury).
    - The concentrations of lead in the paint samples ranged from 910 mg/kg to 9,600 mg/kg and the concentrations of mercury in the paint samples ranged from non-detect (<1.0 mg/kg) to 28 mg/kg.
    - One (1) paint sample contained lead at a concentration above the former Federal HPA criterion of 5,000 mg/kg; therefore, one (1) supplemental paint sample, including the wooden substrate, was collected from the same painted surface of the equipment building that exceeded the former Federal HPA criterion. This supplemental paint sample was tested for lead leachate using the TCLP to determine whether or not the paint would be considered hazardous waste upon removal from the Site.

  - One (1) paint sample contained mercury at a concentration above the CCME CSQG of 24 mg/kg for mercury in soil at a commercial site. This paint sample was also tested for mercury leachate using the TCLP to determine whether or not the paint would be considered hazardous waste upon removal from the Site.

- Paint finishes with a lead concentration of less than 5,000 mg/kg or a mercury concentration of less than 24 mg/kg are not likely to be leachable and therefore may be disposed of at an approved landfill facility, pending landfill and regulatory approval.
  - Based on the results from the paint samples analyzed during the March 2013 HBMS and the current demolition HMBA, five (5) of the six (6) paint finishes that were sampled for lead and mercury in paint are not considered hazardous waste and can be disposed of at an approved landfill facility, pending regulatory and landfill operator approval.
  - The concentrations of leachable lead in one (1) paint sample and one (1) supplemental paint and wood substrate sample collected from siding on the exterior of the equipment building were above the Schedule II leachate criterion for lead (5.00 mg/L) provided in the provincial guidance document for leachable toxic waste (GD-PPD-26.1). Since the concentrations of leachable lead in the paint sample and the paint and wood substrate sample are at levels considered to be hazardous, these materials (painted wooden siding), if removed from the Site, must be disposed of at a hazardous waste treatment facility.
  - The white paint exceeding the lead leachate criterion is deteriorated (i.e. peeling and flaking) therefore in order to help prevent impacts to the environment, priority should be given to the removal of this deteriorated paint.
- If potential lead or mercury containing paint finishes that were not sampled during the March 2013 HBMS and the current demolition HMBA are encountered, samples should be obtained and tested to verify lead and mercury content. This should be done as soon as the paint is encountered and before it is disturbed. This includes materials that are currently concealed by walls and ceiling systems.
- The paint sample analyzed for PCBs was non-detect (<5.0 mg/kg) and therefore did not exceed the CCME CSQG of 33 mg/kg for PCBs in soil at a commercial site or the criterion of 50 mg/kg for PCB solid provided in the provincial guidance document for leachable toxic waste (GD-PPD-26.1).
- There are potential adverse human health impacts associated with disturbing (e.g., scraping) lead and mercury-based paint finishes. As a precautionary measure, AMEC recommends handling lead and mercury-based paint finishes during demolition, as follows:
  - In areas of minor peeling or flaking the paint should be removed using wet scraping techniques.
  - In areas of extensive peeling and flaking the paint should be removed and more extensive particulate control measures may be required.
  - In areas where lead or mercury-based paint finishes are present and in poor condition, an experienced contractor should be utilized for decommissioning/ demolition activities.

- Steps should be taken to ensure that workers and anyone present in and around areas being dismantled or demolished are protected. The contractor should also ensure that dust generation and migration is minimized.

Urea Formaldehyde Foam Insulation (UFFI)

- Visual indicators suggesting the potential presence of UFFI were not observed in the equipment building. The nature of the insulation in the walls and ceilings throughout the equipment building could not be confirmed at the time of the Site inspections. However, fibreglass insulation was observed in two (2) of the exterior walls and in the ceiling of equipment building room 2. Since the equipment building was constructed in 1980, it is possible that UFFI may be present in some areas of the equipment building that were not investigated during the intrusive wall cavity inspections.
- Based on a visual intrusive inspection, there was no evidence that UFFI is present in this structure. However, the inferred age of the equipment building suggests that UFFI could be present in some areas of the equipment building that were not investigated during the intrusive wall cavity inspections. Based on the sources of information reviewed by AMEC to assess whether UFFI is considered to be a potential environmental concern at the Site (refer to Sections 1.5.3 and 3.2.3), it can be inferred that any UFFI present within the equipment building is unlikely to affect the indoor air quality due to the amount of time that has passed since the insulation was likely installed (i.e. 1980) along with the likelihood that formaldehyde has off-gassed over this period of time. It should be noted that, the presence and concentration of formaldehyde cannot be determined or quantified without conducting Site-specific testing for formaldehyde.

Mould

- AMEC inspected the interior areas of the equipment building for visual or olfactory evidence of suspected mould. Peeling and flaking paint that can be a result of building materials compromised by moisture was observed on walls and ceilings of the equipment building. Areas of SVG and/or water damage were observed in several areas on the interior surfaces of the equipment building. The northwest exterior wall and some of the interior walls of the equipment building were reportedly damaged by waves. As a result, the interior of the equipment building was in a state of disrepair at the time of the Site inspections.
- One (1) sample was collected from the equipment building room 2 (ceiling) and analyzed for mould growth. Results of the mould sampling program revealed that abundant mould growth was present in the sample collected from the interior of the equipment building. Existing conditions in the equipment building (e.g., roof and window leaks, improper ventilation, inadequate building heating, prolonged periods of increased moisture, wave damage, areas open to the environment) may potentially contribute to or enhance mould growth inside the equipment building.
- Workers should don proper PPE to prevent/reduce exposure to mould while working within the equipment building or during any disturbance/demolition of building materials that may be impacted by mould growth.

- Should the structure not be demolished, prior to occupancy and based on the estimated areas of mould impacted materials observed in the equipment building, the mould impacted materials should be remediated using Level 3 abatement procedures (i.e. more than 10 m^2), as outlined in the 2010 Environmental Abatement Council of Ontario (EACO) Mould Abatement Guidelines.
- It should be noted that asbestos may be present in drywall joint compound in areas where mould is present on drywall.

Mercury-Containing Materials/Equipment

- Suspected mercury-containing fluorescent light tubes were observed in the equipment building.
- The disturbance, control or disposal of mercury-containing material/equipment (e.g., light tubes) should be carried out in accordance with applicable criteria/regulations (refer to Section 1.4). The presence/absence of mercury in these materials should be confirmed through a contractor or consultant prior to disturbance or disposal of these materials. Typically these materials are sent to a recycling or hazardous waste disposal facility and not a landfill.
- Mercury-containing fluorescent light tubes should be removed intact and returned to the manufacturer for recycling, or disposed of at an approved hazardous waste disposal facility.

PCB-Containing Equipment

- Five (5) fluorescent light fixtures were observed in the equipment building. It could not be determined from the inspection if the ballasts are either non-PCB or potential-PCB; therefore, all ballasts should be treated as PCB-containing ballasts.
- The PCB content in all light ballasts should be confirmed prior to disposal. All ballasts that are removed should be placed in a proper storage container(s). Leaks or stained areas should be cleaned and/or removed in accordance with applicable regulations or industry standards.
- All PCB-containing equipment should be handled, decontaminated, transported and disposed of as per current Federal and Provincial acts and regulations. Any PCB-containing equipment requiring removal from the equipment building should be transported and disposed of by a registered hazardous waste transporter in accordance with applicable regulations.

Petroleum Storage Tanks

- One (1) steel, horizontal, AST (approx. 1,000 L) was observed inside the equipment building during the March 2013 HBMS and the current demolition HMBA.
- Another AST (approx. 500 L) was identified on a metal frame near three (3) generators inside the equipment building during the March 2013 HBMS and the current demolition HMBA; however, the current and/or former use of this tank is not known
- The requirements for regulatory compliance of the AST located inside the equipment building have not been determined by this assessment. The tank appeared to be in good

condition; however, the condition and status of the AST can only be confirmed through test methods, such as magnetic testing, pressure testing or visual inspection.

- If the petroleum storage tank is no longer in use or connected to a heating appliance, it should be decommissioned in accordance with applicable regulations (refer to Section 1.4).

Silica Dust

- Silica is expected to be present in concrete used to construct the foundation of the equipment building. Precautions should be taken to prevent/reduce exposure to silica dust during any disturbance/demolition of silica-containing products, such as wetting the surface of the materials to prevent dust emissions, donning respiratory protection, and cleaning tools and clothing prior to exiting the work area.

Solid Waste

- Various types of old electrical and mechanical equipment (generators), cables, pipes and building material debris, including but not limited to wood and drywall, were observed inside the equipment building.
- A rusted 205-litre metal drum (labeled Shell Jet A-1 47) and several bags (labeled oil absorbent) were observed inside the equipment building.
- The old electrical and mechanical equipment and solid waste inside the equipment building should be properly disposed of in accordance with applicable regulations.

Bird and Animal Feces

- Bird and/or animal droppings/feces were not observed within the interior of the equipment building. However, visual observations were limited inside the building due to poor lighting conditions and the state of disrepair and accumulation of debris within the building. Workers should don proper PPE to prevent/reduce exposure to potential microbiological contaminants (e.g. bacteria, viruses, etc.) often associated with bird or animal droppings/ feces while working within the immediate area of the droppings/feces or during any disturbance/demolition of building materials that may be impacted by the bird or animal droppings/feces.

Hazardous materials identified at the equipment building during the March 2013 HBMS and the current demolition HMBA are summarized in Table 3-4.

Table 3-4: Hazardous Material Description

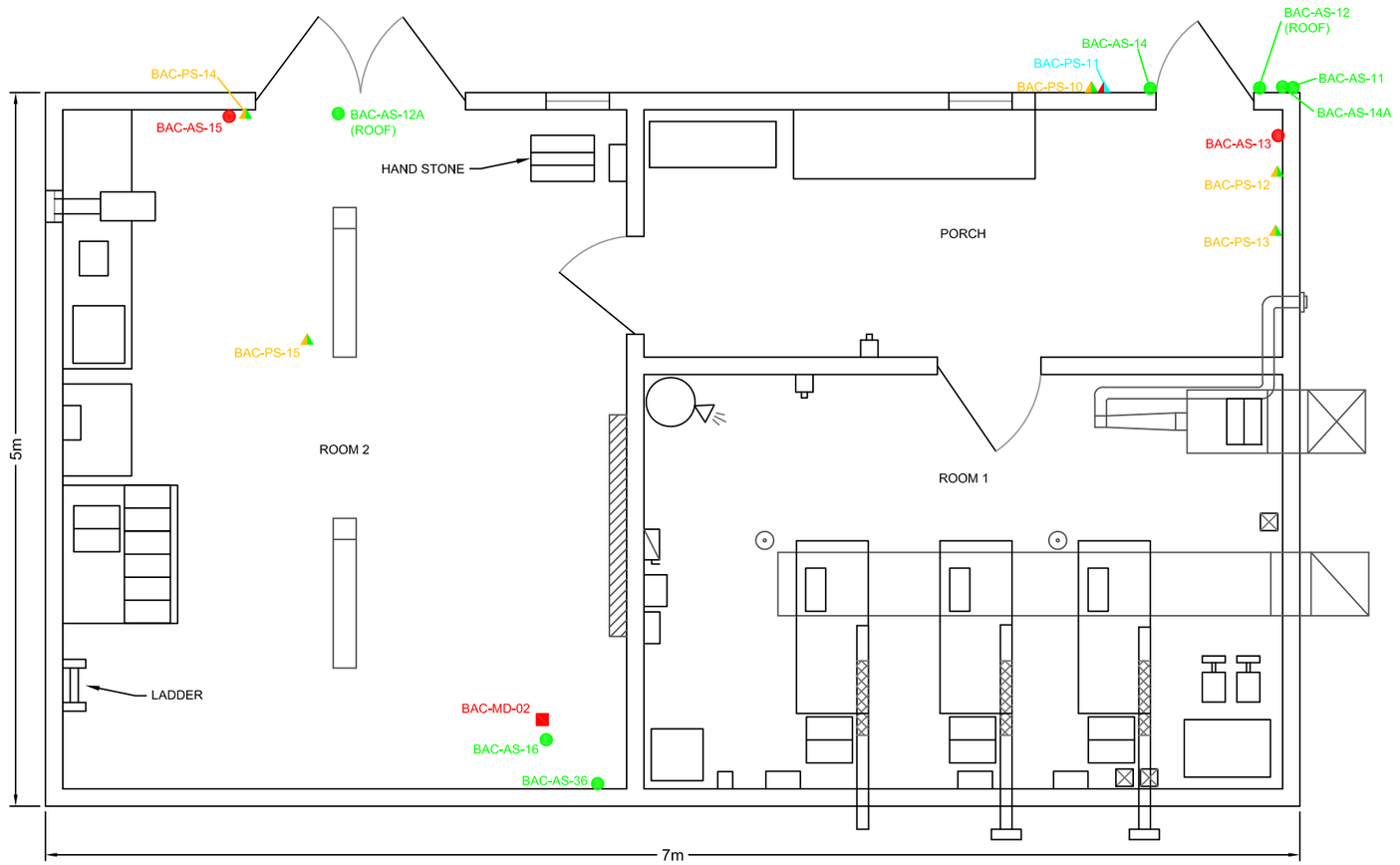
Hazardous Material	Regulatory Guidelines	Location	Quantity (Approx.)	Disposal
Asbestos-Containing Drywall Joint Compound	NL Asbestos Abatement Regulations (Reg. 111/98)	Interior Walls and Ceilings	265 m^2	Asbestos-containing materials cannot be disposed of at a Construction & Demolition Site; however, these materials can be disposed of at a Regional Solid Waste Landfill, provided permission is obtained from the facility.

Hazardous Material	Regulatory Guidelines	Location	Quantity (Approx.)	Disposal
Leachable Lead-Based White Paint on Wooden Siding	Federal Hazardous Products Act (R.S.1985, c. H-3); NL Department of Environment 2003 Guidance Document for Leachable Toxic Waste and Disposal (GD-PPD-26.1); Federal Transportation of Dangerous Goods Act (1992, c. 34)	Site Building Exterior	100 m^2	These materials (painted wooden siding) are considered hazardous wastes and must be disposed according to NL policy and the Solid Waste Management Authority by an approved hazardous waste disposal company and transported under the federal Transportation of Dangerous Goods (TDG) Act.
Lead and Mercury-Based Paint		All Other Paint Finishes (Sampled for Lead and Mercury in Paint)	-	All painted materials that were sampled and analyzed for lead and mercury, with the exception of the painted wooden siding on the Site building exterior, may be disposed of at a Regional Solid Waste Landfill, provided permission is obtained from the facility.
Mould	Mould Guidelines for the Canadian Construction Industry, Canadian Construction Industry, 2004; Mould Abatement Guidelines, Environmental Abatement Council of Ontario (EACO), 2010	Site Building Interior	Large Amount of Suspected Mould (>10 m^2)	All mould impacted materials may be disposed of at a Regional Solid Waste Landfill, provided permission is obtained from the facility.
Mercury-Containing Fluorescent Light Tubes	Federal Hazardous Products Act (R.S.1985, c. H-3)	Site Building Interior	Five (5) fluorescent light fixtures. It is assumed that there are two (2) light tubes for each fixture.	These materials can be disposed of at a recycling facility.
Potential PCB-Containing Fluorescent Light Ballasts	Canadian Environmental Protection Act (CEPA) regulations and interim orders under the Act that pertain to commercial chemicals; Federal Transportation of Dangerous Goods Act (1992, c. 34)	Site Building Interior	Five (5) fluorescent light fixtures. It is assumed that there is one (1) ballast for each fixture.	Prior to disposal, all ballasts should be checked to determine if they contain PCBs (if possible). Ballasts containing PCBs should be transported, as per the TDG regulations, by a hazardous materials waste company approved to handle PCBs.
Petroleum Hydrocarbons	Federal Hazardous Products Act (R.S.1985, c. H-3); Federal Transportation of Dangerous Goods Act (1992, c. 34)	Site Building Interior	Unknown (<1710 L)	These materials are considered hazardous wastes and must be disposed according to NL policy and the Solid Waste Management Authority by an approved hazardous waste disposal company and transported under the federal TDG Act.

Hazardous Material	Regulatory Guidelines	Location	Quantity (Approx.)	Disposal
Silica Dust	American Conference of Governmental Industrial Hygienists (ACGIH), Threshold Limit Values (TLVs) and Biological Exposure Indices (BEIs), 2010	Concrete Building Materials	-	All concrete can be disposed of at a Construction & Demolition Site or at a Regional Solid Waste Disposal Facility.
Solid Waste	NL Asbestos Abatement Regulations (Reg. 111/98); Federal Hazardous Products Act (R.S.1985, c. H-3); NL Department of Environment 2003 Guidance Document for Leachable Toxic Waste and Disposal (GD-PPD-26.1); Federal Transportation of Dangerous Goods Act (1992, c. 34)	Site Building Interior	Various types of old electrical and mechanical equipment (generators), cables, pipes and building material debris, including but not limited to wood and drywall. A rusted 205-litre metal drum (labeled Shell Jet A-1 47) and several bags (labeled oil absorbent).	Some of these materials may be considered hazardous wastes and must be disposed according to NL policy and the Solid Waste Management Authority by an approved hazardous waste disposal company and transported under the federal Transportation of Dangerous Goods Act. Asbestos-containing materials cannot be disposed of at a Construction & Demolition Site; however, these materials can be disposed of at a Regional Solid Waste Landfill, provided permission is obtained from the facility. Metal parts that are not contaminated with petroleum hydrocarbons can be sent to a recycling facility.
Bird and Animal Feces	Federal Hazardous Products Act (R.S.1985, c. H-3)	Site Building Interior	-	These materials may be disposed of at a Regional Solid Waste Landfill, provided permission is obtained from the facility.

APPENDIX A3

FIGURES



LEGEND:

- PAINT SAMPLE LOCATION - RESULTS EXCEED 90 mg/kg AND LESS THAN 5000 mg/kg FOR LEAD AND NO CRITERIA EXCEEDANCES FOR MERCURY
- PAINT SAMPLE LOCATION - RESULTS EXCEED 5000 mg/kg FOR LEAD AND EXCEED 24 mg/kg FOR MERCURY
- ASBESTOS SAMPLE LOCATION - ASBESTOS NOT DETECTED OR RESULTS < 1% FOR ASBESTOS
- ASBESTOS SAMPLE LOCATION - RESULTS > 1% FOR ASBESTOS
- MOULD SAMPLE LOCATION - MOULD GROWTH IDENTIFIED

NOTE:

1. ALL DIMENSIONS ARE IN METRES.
2. DO NOT SCALE FROM FIGURE.
3. THIS FIGURE IS INTENDED TO SHOW RELATIVE LOCATIONS AND CONFIGURATION OF THE STUDY AREA IN SUPPORT OF THIS REPORT.
4. ALL LOCATIONS, DIMENSIONS, AND ORIENTATIONS ARE APPROXIMATE.
5. THIS FIGURE SHOULD NOT BE USED FOR PURPOSES OTHER THAN THOSE OUTLINED ABOVE.
6. THIS FIGURE CONTAINS INTELLECTUAL PROPERTY OF PUBLIC WORKS AND GOVERNMENT SERVICES CANADA AND MAY NOT BE REPRODUCED OR COPIED WITHOUT THEIR WRITTEN CONSENT.
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PROJECT: DEMOLITION HAZARDOUS BUILDING MATERIALS ASSESSMENT AND INVENTORY, BACALHAO ISLAND LIGHTSTATION BACALHAO ISLAND, NL

DATE: February 2014

PROJECT No.: TF13076513

TITLE: EQUIPMENT BUILDING SAMPLE LOCATION PLAN

REV. No.: 0

FIGURE No.: 3.1

APPENDIX B3

PHOTOGRAPHIC RECORD

Photo 1: View of the northeast and southeast sides of the equipment building.

Photo 2: View of the southeast side of the equipment building.

Photo 3: View of the southwest side of the equipment building.

Photo 4: View of the northwest side of the equipment building.

Photo 5: View of porch in equipment building.

Photo 6: View of room 1 in equipment building (generators).

Photo 7: View of room 2 in equipment building.

Photo 8: View of AST (approx. 500 L) in room 1 of equipment building.

Photo 9: View of AST (approx. 1,000 L) in room 1 of equipment building.

Photo 10: View of caulking sample BAC-AS-11.

Photo 11: View of asphalt shingle sample BAC-AS-12.

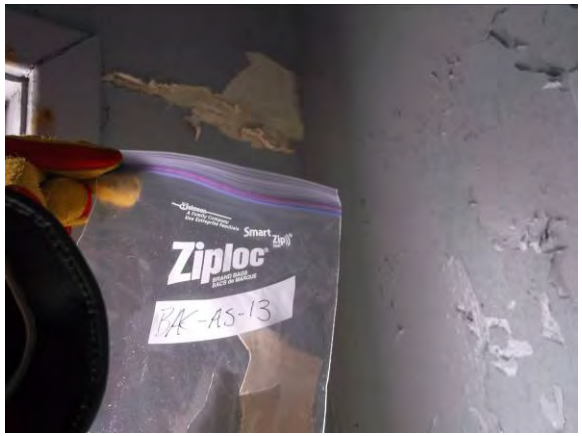

Photo 12: View of drywall joint compound sample BAC-AS-13.

Photo 13: View of felt tar paper sample BAC-AS-14.

Photo 14: View of drywall joint compound sample BAC-AS-15.

Photo 15: View of insulation and paper backing sample BAC-AS-16.

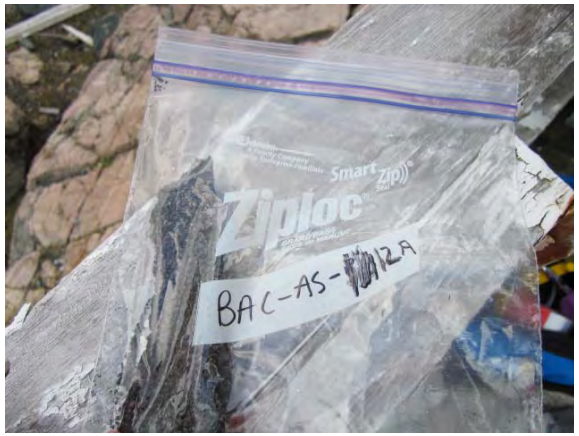

Photo 16: View of black asphalt shingle sample BAC-AS-12A.

Photo 17: View of felt tar paper sample BAC-AS-14A.

Photo 18: View of yellow insulation sample BAC-AS-36.

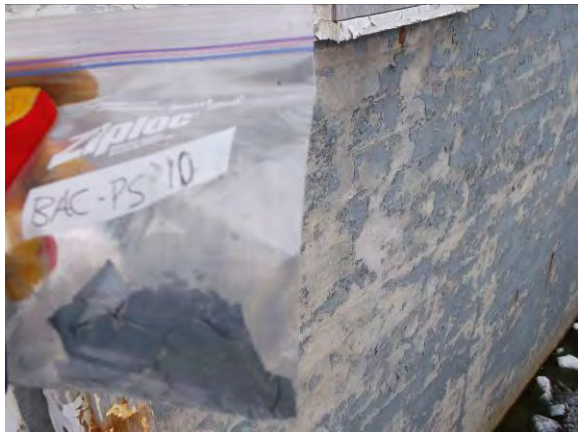

Photo 19: View of paint sample BAC-PS-10.

Photo 20: View of paint sample BAC-PS-11.


Photo 21: View of paint sample BAC-PS-12.

Photo 22: View of paint sample BAC-PS-13.

Photo 23: View of paint sample BAC-PS-14.


Photo 24: View of paint sample BAC-PS-15.

Photo 25: View of paint sample BAC-PS-11A.

Photo 26: View of mould sample BAC-MD-02.

Photo 27: View of Phillips light ballast in equipment building room 1.


Photo 28: View of fluorescent light fixture in equipment building.


Photo 29: View of miscellaneous equipment inside equipment building.


Photo 30: View of miscellaneous equipment inside equipment building.

Photo 31: View of miscellaneous equipment inside equipment building.

Photo 32: View of 205 litre metal drum inside equipment building.

Photo 33: View of bags of oil absorbent material inside equipment building.

APPENDIX C3

SAMPLE AND ANALYTICAL SUMMARY TABLES

Table C3-1: Asbestos Sample Descriptions and Analytical Results

Sample ID	Material (Layer) Analyzed	Detailed Material Description	Room	Analytical Result
BAC-AS-11	Caulking	Grey/White fibrous caulking around siding.	Equipment Building Exterior	ND
BAC-AS-12	Asphalt Shingle	Red/Black asphalt shingles.	Equipment Building Exterior	ND
BAC-AS-13	Drywall Joint Compound	Grey painted drywall and drywall joint compound.	Equipment Building Porch	3.0% Chrysotile
BAC-AS-14	Felt Tar Paper	Black felt tar paper.	Equipment Building Exterior	<0.25% Chrysotile
BAC-AS-15	Drywall Joint Compound	Grey painted drywall and drywall joint compound.	Equipment Building Room 2	6.0% Chrysotile
BAC-AS-16	Insulation	Pink fibreglass with black paper backing.	Equipment Building Room 2	ND
BAC-AS-12A	Asphalt Shingle	Black asphalt shingles with small grey and red stones.	Equipment Building Exterior	ND
BAC-AS-14A	Felt Tar Paper	Black felt tar paper.	Equipment Building Exterior	ND
BAC-AS-36	Insulation	Yellow fiberglass with black paper backing.	Equipment Building Room 2	ND

Notes:
ND: non-detect
ND = <1% asbestos
Shaded results greater than 1% asbestos by dry weight are considered to be asbestos-containing materials (ACMs) as outlined in the Newfoundland and Labrador Asbestos Abatement Regulations (Reg. 111/98)

Table C3-2: Paint Sample Descriptions and Lead Analytical Results

Sample ID	Colour Description	Substrate	Sample Location (Room No.)	RDL (mg/kg)	Total Lead (mg/kg)
BAC-PS-10	Grey	Concrete	Equipment Building Exterior	5.0	**4,600**
BAC-PS-11	White	Wood	Equipment Building Exterior	5.0	**9,600**
BAC-PS-12	Multiple layers of grey	Concrete	Equipment Building Porch	5.0	**2,500**
BAC-PS-13	Multiple layers of grey	Drywall/Concrete	Equipment Building Porch	5.0	**1,000**
BAC-PS-14	Multiple layers of grey	Drywall/Concrete/Wood	Equipment Building Room 2	5.0	**970**
BAC-PS-15	White	Drywall	Equipment Building Room 2	5.0	**1,900**
BAC-PS-DUP-2	Multiple layers of grey	Concrete	Equipment Building Porch	5.0	**910**

Notes:
RDL: Reportable detection limit
<X: Non Detect
HPA: Hazardous Products Act
BAC-PS-DUP-2 is a duplicate of BAC-PS-12
Bold and shaded results indicate that lead concentration is above the relevant Federal HPA criterion of 90 mg/kg
Shaded results indicate that lead concentration is above the former Federal HPA criterion of 5000 mg/kg

Table C3-3: Paint Sample Descriptions and Mercury Analytical Results

Sample ID	Colour Description	Substrate	Sample Location (Room No.)	RDL (mg/kg)	Total Mercury (mg/kg)
BAC-PS-10	Grey	Concrete	Equipment Building Exterior	1.0	1.4
BAC-PS-11	White	Wood	Equipment Building Exterior	1.0	**28**
BAC-PS-12	Multiple layers of grey	Concrete	Equipment Building Porch	1.0	2.1
BAC-PS-13	Multiple layers of grey	Drywall/Concrete	Equipment Building Porch	1.0	<1.0
BAC-PS-14	Multiple layers of grey	Drywall/Concrete/Wood	Equipment Building Room 2	1.0	2.5
BAC-PS-15	White	Drywall	Equipment Building Room 2	1.0	1.7
BAC-PS-DUP-2	Multiple layers of grey	Concrete	Equipment Building Porch	1.0	<1.0

Notes:
RDL: Reportable detection limit
<X: Non Detect
HPA: Hazardous Products Act
BAC-PS-DUP-2 is a duplicate of BAC-PS-12
Bolded, italicized and underlined results indicate that mercury concentration is above the Federal HPA criterion of 10 mg/kg
Bolded, and shaded results indicate that mercury concentration is above the Canadian Council of Ministers of the Environment Canadian Soil Quality Guidelines for mercury in soil at a commercial site (24 mg/kg)

Table C3-4: Paint Sample Descriptions and PCB Analytical Results

Sample ID	Colour Description	Substrate	Sample Location (Room No.)	RDL (mg/kg)	Total PCB (mg/kg)
BAC-PS-12	Multiple layers of grey	Concrete	Equipment Building Porch	5.0	<5.0

Notes:
RDL: Reportable detection limit
<X: Non Detect
Bold and shaded results indicate that PCB concentration is above the Canadian Council of Ministers of the Environment Canadian Soil Quality Guidelines for PCBs in soil at a commercial site (33 mg/kg)

Table C3-5: Paint Sample Descriptions and Lead Leachate Analytical Results

Sample ID	Colour Description	Substrate	Sample Location (Room No.)	RDL (mg/L)	Lead Leachate (mg/L)
BAC-PS-11	White	Wood	Equipment Building Exterior	0.005	13
BAC-PS-11A	White	Wood	Equipment Building Exterior	0.005	10

Notes:
RDL: Reportable detection limit
Shaded results indicate that lead leachate concentration is above the provincial guidance document for leachable toxic waste criterion for lead (5.00 mg/L)

Table C3-6: Paint Sample Descriptions and Mercury Leachate Analytical Results

Sample ID	Colour Description	Substrate	Sample Location (Room No.)	RDL (mg/L)	Mercury Leachate (mg/L)
BAC-PS-11	White	Wood	Equipment Building Exterior	0.0002	0.0011 (1)

Notes:
RDL: Reportable detection limit
Shaded results indicate that mercury leachate concentration is above the provincial guidance document for leachable toxic waste criterion for mercury (0.10 mg/L)
(1): Elevated RDL due to sample matrix.

Table C3-7: Mould Sample Descriptions and Direct Microscopic Examination Results

Sample ID	Sample Description	Sample Location (Room No.)	Mould Identified, in Rank Order	Mould Growth
BAC-MD-02	Paper backing of insulation	Equipment Building Room 2	*Stachybotrys* *Penicillium*	Abundant

Notes:
1. Mould growth is subjectively assessed with description terms sparse, moderate and abundant.
2. The presence of spores (lacking other fungal structures associated) is assessed as following:
   a few spores (< 10 spores average per microscopic field at 400X), some spores (10 - 100 spores average per microscopic field at 400X), many spores (> 100 spores average per microscopic field at 400X).
3. The presence of a few spores generally represents settled spores on the surface of the sample rather than indicating mould growth.
4. The results are only related to the samples analyzed.