

SECTION 9.0 EXECUTIVE SUMMARY

Hazardous materials identified at the Site exterior structures during the March 2013 HBMS and the current demolition HMBA are summarized in Table E-9.

Table E-9: Hazardous Material Description

| Hazardous Material | Regulatory Guidelines | Location | Quantity (Approx.) | Disposal |
|--|--|--|----------------------------------|--|
| Leachable Lead-Based White Paint on Wooden Fence | 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) | Main Site Area | 100 linear m or 2 m ³ | These materials (painted wooden fence) 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-Based Paint | 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) | 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 fence on the main site area, may be disposed of at a Regional Solid Waste Landfill, provided permission is obtained from the facility. |
| Silica Dust | American Conference of Governmental Industrial Hygienists (ACGIH), Threshold Limit Values (TLVs) and Biological Exposure Indices (BEIs), 2010 | Concrete Structures, Brick and Mortar | - | All concrete, brick and mortar can be disposed of at a Construction & Demolition Site or at a Regional Solid Waste Disposal Facility. |
| Creosote Treated Timber Cribwork | 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) | South of Dwelling, Main Site Area | 0.5 m ³ | These materials (creosote timber cribwork) 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. |



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9.0 SITE EXTERIOR

Site exterior structures identified 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) are listed below:

- Helicopter Pad;
- Walkways and Stairs;
- Tank Pad;
- Ramps;
- Tramway;
- Fog Horn;
- Solar Array (64 Panel);
- Former Winch House Foundation;
- Crate;
- Cribwork Foundation;
- Satellite Dish;
- Septic Vent;
- Tank Cradle;
- Fence;
- Videograph Equipment Pole;
- Antenna; and
- Post.

Site exterior structures identified on the light tower area of the Bacalhao Island Lightstation (refer to Figures 1.1 and 1.2, Appendix A1 and Photos 3 and 4, Appendix B1) are listed below:

- Tower;
- Solar Array (7 Panel); and
- Former Dwelling Foundation Ruins.

Site exterior structures identified on the satellite solar array area of the Bacalhao Island Lightstation (refer to Figures 1.1 and 1.2, Appendix A1 and Photo 5, Appendix B1) are listed below:

- Solar Array (30 Panel).

Due to inclement weather conditions (i.e. fog bank) encountered at the time of the investigation and limited access (i.e. trail overgrown with vegetation) to the lower landing site, this area of the Bacalhao Island Lightstation was not accessed by AMEC (refer to Figures 1.1 and 1.2, Appendix A1 and Photo 6, Appendix B1).

9.1 SITE EXTERIOR DESCRIPTION

A description of the Site exterior structures is outlined in Table 9-1. Photographs of the Site exterior structures are provided in Appendix B9.

Table 9-1: Site Exterior Structure Description

| Structure Name | Helicopter Pad | Photo (Appendix B9) |
|-----------------------|--|----------------------------|
| Type of Structure | Pressure Treated Wood and Metal | Photos 1 and 2 |
| Type of Foundation | Concrete Posts | Photos 1 and 2 |
| Structure Name | Walkways and Stairs | Photo (Appendix B9) |
| Type of Structure | Pressure Treated Wood | Photos 2, 3, 4 and 5 |
| Type of Foundation | Concrete and Wood Posts | Photos 2, 3, 4 and 5 |
| Structure Name | Tank Pad | Photo (Appendix B9) |
| Type of Foundation | Concrete Slab | Photos 2, 3 and 4 |
| Structure Name | Stairs | Photo (Appendix B9) |
| Type of Structure | Painted Wood | Photos 4, 5 and 6 |
| Structure Name | Ramps | Photo (Appendix B9) |
| Type of Structure | Painted Wood | Photos 4, 5 and 7 |
| Type of Foundation | Concrete and Wood Posts | Photos 4, 5 and 7 |
| Structure Name | Tramway | Photo (Appendix B9) |
| Type of Structure | Painted Wood and Painted Metal | Photo 7 and 24 |
| Type of Foundation | Concrete Pillars | Photo 7 |
| Structure Name | Fog Horn | Photo (Appendix B9) |
| Type of Structure | Metal | Photo 8 |
| Type of Foundation | Concrete Block | Photo 8 |
| Structure Name | Solar Arrays | Photo (Appendix B9) |
| Type of Structure | Metal | Photos 9, 10, 11 and 12 |
| Type of Foundation | Concrete | Photos 9, 10, 11 and 12 |
| Structure Name | Former Winch House Foundation | Photo (Appendix B9) |
| Type of Foundation | Concrete Block | Photo 9 |
| Structure Name | Crate | Photo (Appendix B9) |
| Type of Structure | Unpainted Wood | Photos 13 and 14 |
| Structure Name | Former Utility Pole Cribwork Foundation | Photo (Appendix B9) |
| Type of Foundation | Creosote Treated Wood and Rock Ballast | Photos 13 and 15 |
| Structure Name | Satellite Dish | Photo (Appendix B9) |
| Type of Structure | Metal | Photos 13 and 15 |
| Structure Name | Septic Vent | Photo (Appendix B9) |
| Type of Structure | Metal Pipe | Photos 15 and 16 |
| Structure Name | Tank Cradle | Photo (Appendix B9) |
| Type of Structure | Painted Wood | Photos 17 and 26 |
| Type of Foundation | Rock | Photo 17 |
| Structure Name | Fence | Photo (Appendix B9) |
| Type of Structure | Painted Wood | Photos 13, 18 and 23 |
| Type of Foundation | Painted Wood Posts | Photos 13, 18 and 23 |
| Structure Name | Videograph Equipment Pole | Photo (Appendix B9) |
| Type of Structure | Metal Pole | Photo 18 |
| Type of Foundation | Concrete Block | Photo 18 |

| | | |
|-----------------------|---|----------------------------|
| Structure Name | Antenna | Photo (Appendix B9) |
| Type of Structure | Metal Rod | Photo 19 |
| Type of Foundation | Concrete Post | Photo 19 |
| Structure Name | Post | Photo (Appendix B9) |
| Type of Structure | Painted Wood | Photos 20 and 25 |
| Type of Foundation | Concrete Post | Photo 20 |
| Structure Name | Tower | Photo (Appendix B9) |
| Type of Structure | Metal Frame | Photo 11 |
| Type of Foundation | Concrete Block | Photo 11 |
| Structure Name | Former Dwelling Foundation Ruins | Photo (Appendix B9) |
| Type of Foundation | Concrete Foundation | Photos 21 and 22 |

It is important to note that some of the wooden structures located throughout the Site exterior are in a state of disrepair.

9.2 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 Site exterior structures.

9.2.1 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.

No building material samples were collected from the Site exterior structures and analyzed for asbestos content during the March 2013 HBMS and the current demolition HMBA. Potential ACMs were observed and these materials included, but are not limited to, remnants of mortar on brick debris in the area of the former dwelling foundation ruins and in other smaller areas of brick debris located throughout the Site, and electrical components and insulators such as wiring, gaskets and cables associated with the solar arrays, fog horn and videograph equipment at the Site (refer to Photos 8 to 12, 18, 21 and 22, Appendix B9). 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.

9.2.2 Paint Finishes

The condition of the paint visible on the Site exterior structures was generally in poor condition. Peeling and flaking paint was observed on the stairs, ramps, tramway, tank cradle, fence and posts (refer to Photos 4 to 7, 17 to 20 and 23 to 26, Appendix B9).

A total of four (4) paint samples (BAC-PS-29, BAC-PS-30, BAC-PS-32 and BAC-PS-33), including substrates, were collected from the Site exterior structures and analyzed for lead and mercury content (refer to Photos 23 to 26, Appendix B9). One (1) paint sample (BAC-PS-30) was also analyzed for PCB content (refer to Photo 24, Appendix B9). Sample descriptions and analytical results are summarized in Tables C9-1 to C9-3, Appendix C9. Sample locations and analytical results are graphically illustrated in Figure 9.1, Appendix A9.

All four (4) paint samples (BAC-PS-29, BAC-PS-30, BAC-PS-32 and BAC-PS-33), including substrates, were 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 C9-4, Appendix C9.

9.2.2.1 Lead in Paint

The concentrations of lead in the paint and wood substrate samples ranged from 1,100 mg/kg to 8,400 mg/kg (refer to Table C9-1, Appendix C9). Three (3) of the four (4) paint and wood substrate samples (BAC-PS-29, BAC-PS-30, and BAC-PS-32) 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 23, 24 and 25, Appendix B9). One (1) paint and wood substrate sample (BAC-PS-33) contained lead at a concentration above the former Federal HPA criterion of 5,000 mg/kg (refer to Photo 26, Appendix B9). Sample BAC-PS-33 (multiple layers of red paint) was collected from a wooden tank cradle located on the northeast side of the dwelling on the main site area.

9.2.2.2 Leachable Lead in Paint

The concentration of leachable lead in paint and wood substrate sample BAC-PS-29 (6.2 mg/L) was 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 C9-4, Appendix C9). Paint (white paint) and wood substrate sample BAC-PS-29 was collected from the fence between the dwelling and equipment building. The paint on the fence (approximately 100 m long) was generally in poor condition and flaking. Since the concentration of leachable lead in the paint and wood substrate sample is at a level considered to be hazardous, these materials (painted wooden fence), if removed from the Site, must be disposed of at a hazardous waste treatment facility.

The concentrations of leachable lead in paint and wood substrate samples BAC-PS-30 (0.920 mg/L), BAC-PS-32 (2.0 mg/L) and BAC-PS-33 (2.5 mg/L) were below 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 C9-4, Appendix C9). Paint (weathered red paint and red paint) and wood substrate samples BAC-PS-30, BAC-PS-32 and BAC-PS-33 were collected from the tramway, a pole located southeast of the tramway storage shed and a tank cradle located northeast of the dwelling on the main site area. Since the concentrations of leachable lead in the paint and wood substrate samples are at levels that are not considered to be hazardous, these materials (painted wooden/metal tramway, painted wooden pole and painted wooden tank cradle), if removed from the Site, can be disposed of at an approved landfill facility, pending regulatory and landfill operator approval.

9.2.2.3 Mercury in Paint

The concentrations of mercury in the paint samples ranged from non-detect (<1.0 mg/kg) to 7.1 mg/kg (refer to Table C9-2, Appendix C9). The paint samples analyzed were either non-detect for mercury (i.e. <1.0 mg/kg) or contained mercury at a concentration below the applicable Federal HPA criterion (i.e. 10 mg/kg).

9.2.2.4 PCBs in Paint

The paint sample (BAC-PS-30) 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 C9-3, Appendix C9).

9.2.3 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.

9.2.3.1 Silica

Silica is expected to be present in concrete structures, brick and mortar at the Site. Precautions should be taken to prevent/reduce exposure to silica dust during any disturbance/demolition of silica-containing products.

9.2.3.2 Creosote

Creosote appears to have been used as a wood preservative on the timber used to construct the cribwork foundation for a former utility pole located on the south side of the dwelling on the main site area.

9.3 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 Site exterior structures:

Asbestos-Containing Materials (ACMs)

- No building material samples were collected from the Site exterior structures and analyzed for asbestos content during the March 2013 HBMS and the current demolition HMBA.
- Potential ACMs were observed and these materials included, but are not limited to, remnants of mortar on brick debris in the area of the former dwelling foundation ruins and in other smaller areas of brick debris throughout the Site, and electrical components and insulators such as wiring, gaskets and cables associated with the solar arrays, fog horn and videograph equipment at the Site.
- 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.

Lead, Mercury and PCBs in Paint

- Results of the paint sampling and analytical program revealed lead-based paint finishes on the Site exterior structures (i.e., the concentrations of lead in the paint finishes were above the applicable Federal HPA criteria of 90 mg/kg for lead).
 - The concentrations of lead in the paint and wood substrate samples ranged from 1,100 mg/kg to 8,400 mg/kg and the concentrations of mercury in the paint and wood substrate samples ranged from non-detect (<1.0 mg/kg) to 7.1 mg/kg.
 - One (1) paint and wood substrate sample contained lead at a concentration above the former Federal HPA criterion of 5,000 mg/kg.
 - Four (4) paint samples, including substrates, were tested for lead 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 and wood substrate samples analyzed during the current demolition HMBA, three (3) of the four (4) 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 concentration of leachable lead in one (1) paint and wood substrate sample collected from the fence on the main site area was 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 concentration of leachable lead in the paint and wood substrate sample is at a level considered to be hazardous, these materials (painted wooden fence), 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 in the future, 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.
 - 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-based paint finishes. As a precautionary measure, AMEC recommends handling lead-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-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.

Silica Dust

- Silica is expected to be present in concrete structures, brick and mortar at the Site. 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.

Creosote

- Creosote wood preservative is expected to be present in the timber used to construct the cribwork foundation of a former utility pole located south of the dwelling on the main site area. These materials (creosote timber cribwork), if removed from the Site, must be disposed of at a hazardous waste treatment facility.

Hazardous materials identified at the Site exterior structures during the March 2013 HBMS and the current demolition HMBA are summarized in Table 9-2.

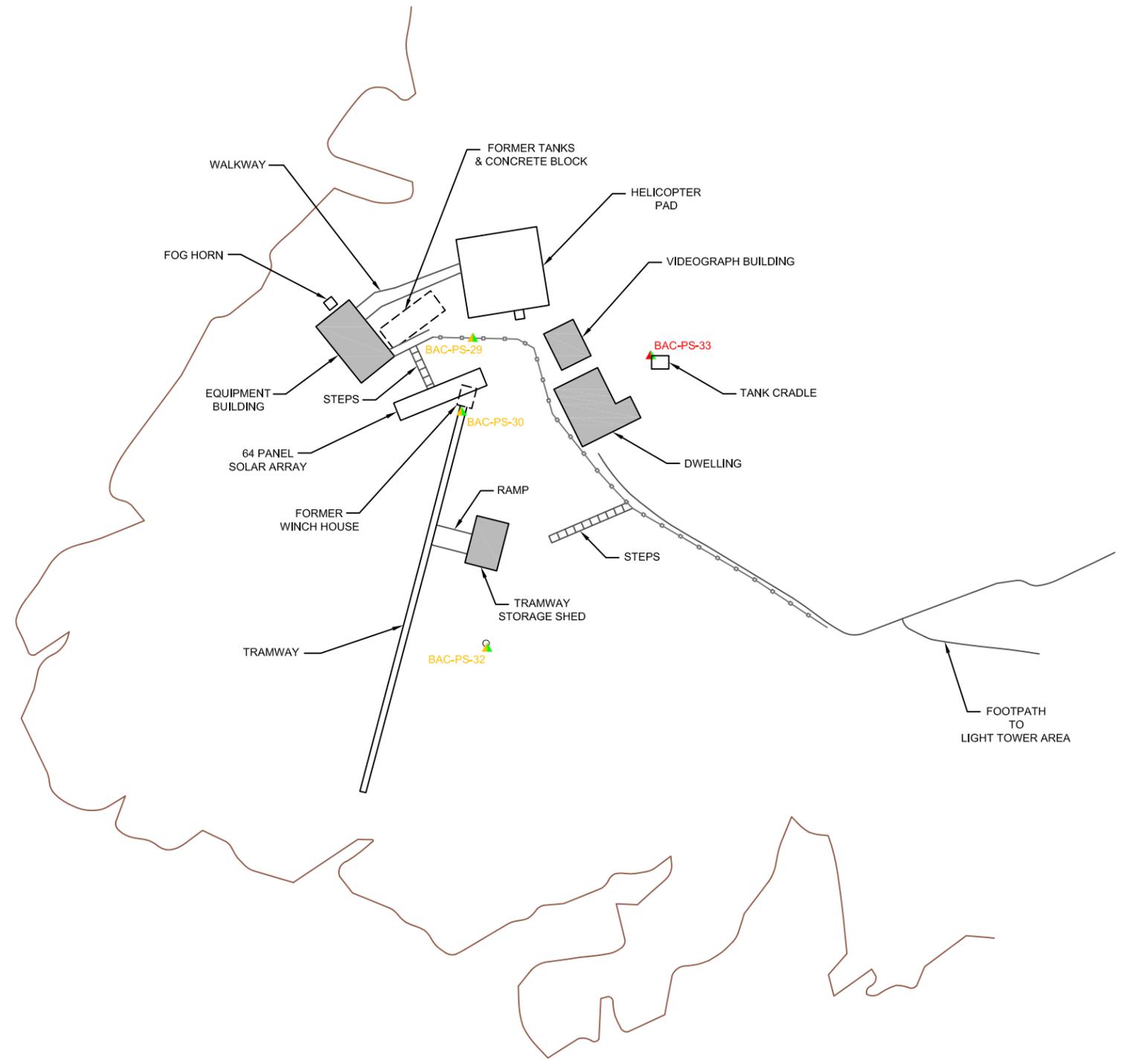
Table 9-2: Hazardous Material Description

| Hazardous Material | Regulatory Guidelines | Location | Quantity (Approx.) | Disposal |
|--|--|--|----------------------------------|--|
| Leachable Lead-Based White Paint on Wooden Fence | 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); | Main Site Area | 100 linear m or 2 m ³ | These materials (painted wooden fence) 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-Based Paint | Federal Transportation of Dangerous Goods Act (1992, c. 34) | 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 fence on the main site area, may be disposed of at a Regional Solid Waste Landfill, provided permission is obtained from the facility. |
| Silica Dust | American Conference of Governmental Industrial Hygienists (ACGIH), Threshold Limit Values (TLVs) and Biological Exposure Indices (BEIs), 2010 | Concrete Structures, Brick and Mortar | - | All concrete, brick and mortar can be disposed of at a Construction & Demolition Site or at a Regional Solid Waste Disposal Facility. |
| Creosote Treated Timber Cribwork | 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) | South of Dwelling, Main Site Area | 0.5 m ³ | These materials (creosote timber cribwork) 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. |

APPENDIX A9
FIGURES



ATLANTIC OCEAN



LEGEND:

- APPROXIMATE SHORELINE
- FENCE
- BUILDING
- FORMER BUILDING OR STRUCTURE
- 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 NO CRITERIA EXCEEDANCES FOR MERCURY

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.
7. THIS FIGURE WAS PRODUCED FROM FIGURES SUPPLIED BY PUBLIC WORKS AND GOVERNMENT SERVICES CANADA.

| | | | | |
|--|---|--------------------|--|-------------------------|
| | Public Works and Government Services Canada Travaux publics et Services gouvernementaux Canada | DWN BY: H. Ryan | PROJECT DEMOLITION HAZARDOUS BUILDING MATERIALS ASSESSMENT AND INVENTORY, BACALHAO ISLAND LIGHTSTATION BACALHAO ISLAND, NL | DATE February 2014 |
| | AMEC Environment & Infrastructure 133 Crosbie Road St. John's, NL A1B 4A5 709-722-7023 | | | CHK'D BY: L. Wiseman |
| | | SCALE: NTS | TITLE SITE EXTERIOR SAMPLE LOCATION PLAN | REV. No. 0 |
| | | | | FIGURE No. 9.1 |

APPENDIX B9
PHOTOGRAPHIC RECORD



Photo 1: View of helicopter pad.



Photo 2: View of helicopter pad, walkway and tank pad.



Photo 3: View of walkway to equipment building and tank pad.



Photo 4: View of walkways, stairs, tank pad and ramp to equipment building.



Photo 5: View of ramp and walkway to equipment building.



Photo 6: View of stairs to tramway storage shed.



Photo 7: View of tramway and ramp to tramway from storage shed.



Photo 8: View of fog horn.



Photo 9: View of 64 panel solar array and former winch house foundation.



Photo 10: View of 64 panel solar array.



Photo 11: View of 7 panel solar array and tower.



Photo 12: View of 30 panel solar array.



Photo 13: View of crate, cribwork foundation, satellite dish and fence.



Photo 14: View of debris and waste inside crate.



Photo 15: View of septic vent, cribwork foundation and satellite dish.



Photo 16: View of septic vent.



Photo 17: View of tank cradle.



Photo 18: View of fence and videograph equipment pole.



Photo 19: View of antenna.



Photo 20: View of post near end of tramway.



Photo 21: View of former dwelling foundation ruins.



Photo 22: View of brick debris in former dwelling foundation ruins.



Photo 23: View of paint sample BAC-PS-29.



Photo 24: View of paint sample BAC-PS-30.



Photo 25: View of paint sample
BAC-PS-32.



Photo 26: View of paint sample
BAC-PS-33.

APPENDIX C9
SAMPLE AND ANALYTICAL SUMMARY TABLES

Table C9-1: 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-29 | White | Wood | Fence between Dwelling and Equipment Building | 5.0 | 1,100 |
| BAC-PS-30 | Weathered red | Wood | Tramway | 5.0 | 1,300 |
| BAC-PS-32 | Weathered red | Wood | Pole southeast of Tramway Storage Shed | 5.0 | 1,700 |
| BAC-PS-33 | Multiple layers of red | Wood | Tank Cradle northeast of Dwelling | 5.0 | 8,400 |

Notes:

RDL: Reportable detection limit

<X: Non Detect

HPA: Hazardous Products Act



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 C9-2: 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-29 | White | Wood | Fence between Dwelling and Equipment Building | 1.0 | 7.1 |
| BAC-PS-30 | Weathered red | Wood | Tramway | 1.0 | <1.0 |
| BAC-PS-32 | Weathered red | Wood | Pole southeast of Tramway Storage Shed | 1.0 | <1.0 |
| BAC-PS-33 | Multiple layers of red | Wood | Tank Cradle northeast of Dwelling | 1.0 | <1.0 |

Notes:

RDL: Reportable detection limit

<X: Non Detect

HPA: Hazardous Products Act

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 C9-3: 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-30 | Weathered red | Wood | Tramway | 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 C9-4: 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-29 | White | Wood | Fence between Dwelling and Equipment Building | 5 | 6.2 |
| BAC-PS-30 | Weathered red | Wood | Tramway | 5 | 0.920 |
| BAC-PS-32 | Weathered red | Wood | Pole southeast of Tramway Storage Shed | 5.0 | 2.0 |
| BAC-PS-33 | Multiple layers of red | Wood | Tank Cradle northeast of Dwelling | 5.0 | 2.5 |

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)

