SPECIFICATION

REMOVAL OF VARIOUS SURPLUS INFRASTRUCTURE AT BELLE ISLE SOUTH LIGHT STATION

BELLE ISLE, NL

PROJECT NUMBER: F6879-171006

REGISTERED PROFESSIONAL ENGINEER
NEIL C. HUNT
SIGNATURE
DATE
NEWFOUNDLAND & LABRADOR

PREPARED FOR

Fisheries and Oceans Canada

DATE

June 24, 2017
Revision 1

PROVINCE OF NEWFOUNDLAND
PERMIT HOLDER
This Permit Allows
APN ENGINEERING INC.
To practice Professional Engineering
in Newfoundland and Labrador.
Permit No. as issued by APEGN 02912
which is valid for the year 2017

LIST OF DRAWINGS

Removal of Various Surplus Infrastructure
at the Belle Isle South Light station
P/N: F6879-171006 2017-06-24

DRAWING NO	TITLE
02M1401B008C01	Site Plan
02M1401B008C02	Plans – Dwelling
02M1401B008C03	Elevations - Dwelling
02M1401B008C04	Plan – Storage Shed #1
02M1401B008C05	Plan – Stand-by Diesel Building
02M1401B008C06	Plan – Winch House
02M1401B008C07	Plan – Storage Shed #2
02M1401B008C08	Plan – Powerhouse and Old Storage Shed
02M1401B008C09	Plan – Old Fog Alarm Building

1.1 SCOPE

.1 The work consists of the furnishing of all plant, labour, equipment and material for demolition and removal of various infrastructure and hazardous materials at the Belle Isle South Light station, NL, in strict accordance with specifications and accompanying drawings and subject to all terms and conditions of the Contract.

.2 Under this contract, all material that cannot be burned on site is to be packaged into UN approved 1.6 cubic yard waste bags and will remain on site. The bags are to be placed in one (1) central location, to be determined by the Departmental Representative. Further details to be provided at the pre-tender site visit. Waste bags to be manufactured from heavy duty coated woven material with double wall corrugated inserts and a 6 mil polyethylene liner such that the bag can be self-standing. Waste bag to be rated for 1,134kg. Waste bag to be equipped with 6 mil heavy duty clear outdoor cover.

.3 Under this contract, DFO will provide helicopter services for Contractor mobilization and demobilization activities. The services will only be provided between the work site and a designated location near the St. Anthony airport. Mobilization is limited to four (4) return trips between the designated location and the work site. Similarly, demobilization is limited to four (4) return trips between the designated location and the work site. The maximum number of personnel to be accommodated during mobilization and demobilization activities is five (5). The maximum amount of weight during slinging operations for mobilizing/demobilizing equipment and materials is 1,200 pounds. During all mobilization activities DFO

will not be held responsible for any lost or damaged equipment and materials. Contractor responsible to fully secure and contain all materials/equipment/fuels/etc. If in the opinion of the Departmental Representative (or the coast guard pilot), the materials are not properly secured and contained, the chopper will not provide the services to the Contractor. Note that chopper services are variable due to inclement weather and other coast guard operations and in this regard downtime is to be expected (there will be no additional contract costs if chopper services are unavailable when requested by the Contractor to mobilize/demobilize).

1.2 DESCRIPTION OF WORK

.1 In general, work under this contract consists of, but will not necessarily be limited to, the following:

.1 Demolition, removal and disposal of the dwelling. Note that the concrete foundation, including above grade concrete foundation walls associated with the dwellings can remain. Contractor to be prepared to core 150mm diameter core holes in the cistern of the dwelling to prevent future water ponding. For Bidding, assume that 12 core holes through 200mm thick reinforced concrete will be required. The Departmental Representative will provide direction related to the core holes (including specific locations), while in the field. Reference 1.1.3 as it relates to the demolition waste.

.2 Demolition, removal and disposal of the old fog alarm building, main power building, stand by diesel generator building, storage sheds, winch house and hoist, as noted on

the drawings. Reference 1.1.3 as it relates to the demolition waste.
.3 For all concrete foundations to remain, remove flaking/peeling paint down to the bare concrete and dispose of paint chips as hazardous lead waste. This includes exterior foundation walls, interior floor slabs and basement slabs. Reference 1.1.3 as it relates to the demolition waste.
.4 Removal and packaging (in UN approved waste bags) of all furniture, equipment, loose materials and debris on both the inside and outside of the building infrastructure, including materials scattered around the site.

Do not proceed with any portion of the demolition work until the Departmental Representative has approved the Contractor's written demolition work plan.

1.3 SITE OF WORK

.1 Work will be carried out at Belle Isle South, NL. The Site is a remote site, only accessible by boat or helicopter. Note that there may be no safe landing areas for a boat at this site.

1.4 DATUM

.1 Datum used for this project is Lowest Normal Tides (LNT). If requested by the Contractor, the Departmental Representative will establish a benchmark prior to the start of deconstruction activities.

.2 Bidders are advised to consult the Tide Tables issued by Fisheries and Oceans in order to make sure of the tidal conditions affecting work.

1.5 FAMILIARIZATION WITH SITE

.1 Before submitting a bid, it is recommended that bidders visit the site and its surroundings at their own cost to review and verify the form, nature and extent of the work, materials needed for the completion of the work, the means of access to the site, severity, exposure and uncertainty of weather, soil conditions, any accommodations they may require, and in general shall obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their bid or costs to do the work. No allowance shall be made subsequently in this connection on account of error or negligence to properly observe and determine the conditions that will apply.

.2 Contractors, bidders or those they invite to site are to review specification Section 01 35 29 - Health and Safety Requirements before visiting site. Take all appropriate safety measures for any visit to site, either before or after acceptance of bid.

.3 Obtain prior permission from the Departmental Representative before carrying out such site inspection.

1.6 CODES AND STANDARDS

.1 Perform work in accordance with the latest edition of the National Building Code of Canada, and any other code of provincial or local application including all amendments up to project bid closing date provided that in any case of conflict or discrepancy, the more stringent requirements shall apply.

.2 Materials and workmanship must meet or exceed requirements of specified standards, codes and referenced documents.

1.7 TERM ENGINEER

.1 Unless specifically stated otherwise, the term Engineer where used in the Specifications and on the Drawings shall mean the Departmental Representative.

1.8 SETTING OUT WORK

.1 Set grades and layout work in detail from control points and grades established by Departmental Representative.

.2 Assume full responsibility for and execute complete layout of work to locations, lines and elevations indicated or as directed by Departmental Representative.

.3 Provide devices needed to layout and construct work.

.4 Supply such devices required to facilitate Departmental Representative's inspection of work.

.5 Supply stakes and other survey markers required for laying out work.

1.9 COST BREAKDOWN

.1 Before submitting first progress claim submit breakdown of Contract price in detail as directed by Departmental Representative and aggregating contract price.

.2 Provide cost breakdown in same format as the numerical and subject title system used in this specification project manual and thereafter sub-divided into major work components as directed by Departmental Representative.

.3 Upon approval by Departmental Representative, cost breakdown will be used as basis for progress payment.

.4 This will be a lump sum project. Individual work items will not be measured separately for payment.

1.10 WORK SCHEDULE

.1 Submit within 7 work days of notification of acceptance of bid, a construction schedule showing commencement and completion of all work within the time stated on the Bid and Acceptance Form and the date stated in the bid acceptance letter.

.2 Provide sufficient details in schedule to clearly illustrate entire implementation plan, depicting efficient coordination of tasks and resources, to achieve completion of work on time and permit effective monitoring of work progress in relation to established milestones.

.3 As a minimum, work schedule to be prepared and submitted in the form of Bar (GANTT) Charts, indicating work activities, tasks and other project elements, their anticipated durations and planned dates for achieving key activities and major project milestones provided in sufficient details and supported by narratives to demonstrate a reasonable plan for completion of project within designated time. Generally Bar Charts derived from commercially available computerized project management system are preferred but not mandatory.

.4 Submit schedule updates on a minimum bi-weekly basis and more often, when requested by Departmental Representative, due to frequent changing project conditions. Provide a narrative explanation of necessary changes and schedule revisions at each update.

.5 The schedule, including all updates, shall be to Departmental Representative's approval. Take necessary measures to complete work within approved time. Do not change schedule without Departmental Representative's approval.

.6 All work on the project will be completed within the time indicated on the Bid and Acceptance Form.

1.11 ABBREVIATIONS

.1 Following abbreviations of standard specifications have been used in this specification and on the drawings:

CGSB - Canadian Government Specifications Board
CSA - Canadian Standards Association
NLGA - National Lumber Grades Authority
ASTM - American Society for Testing and Materials

.2 Where these abbreviations and standards are used in this project, latest edition in effect on date of bid call will be considered applicable.

1.12 SITE OPERATIONS

.1 Arrange for sufficient space adjacent to project site for conduct of operations, storage of materials and so on. Exercise care so as not to obstruct or damage public or private property in area. All arrangements for space and access will be made by Contractor.

1.13 PROJECT MEETINGS

.1 Departmental Representative will arrange project meetings and assume responsibility for setting times and recording minutes.

.2 Project meetings will take place on site of work unless so directed by the Departmental Representative.

.3 Departmental Representative will assume responsibility for recording minutes of meetings and forwarding copies to all parties present at the meetings.

.4 Have a responsible member of firm present at all project meetings.

1.14 PROTECTION

.1 Store all materials and equipment to be incorporated into work to prevent damage by any means.

.2 Repair or replace all materials damaged in transit or storage to the satisfaction of Departmental Representative and at no cost to Canada.

1.15 EXISTING SERVICES

.1 Where work involves breaking into or connecting to existing services, carry out work at times directed by governing authorities, with minimum of disturbance to site operations, and tenant operations.

.2 Before commencing work, establish location and extent of service lines in area of work and notify Departmental Representative of findings.

.3 Submit schedule to and obtain approval from Departmental Representative for any shut-down or closure of active service or facility.

.4 Provide temporary services when directed by Departmental Representative to maintain critical facility systems.

.5 Provide adequate bridging over trenches which cross walkways or roads to permit normal traffic.

.6 Where unknown services are encountered, immediately advise Departmental

Representative and confirm findings in writing.

.7 When inactive services are encountered, cap off in manner approved by authorities having jurisdiction over service. Record locations of maintained, re-routed and abandoned service lines.

1.16 DOCUMENTS REQUIRED

.1 Maintain at job site, one copy each of the following:
.1 Contract Drawings
.2 Specifications
.3 Addenda
.4 Contract and any resulting amendments signed by contracting authority.
.5 Test Reports
.6 Copy of Approved Work Schedule
.7 Site specific Health and Safety Plan and other safety related documents

1.17 PERMITS

.1 Obtain and pay for all permits, certificates and licenses as required by Municipal, Provincial, Federal and other Authorities.

.2 Provide appropriate notifications of project to municipal and provincial inspection authorities.

.3 Obtain compliance certificates as prescribed by legislative and regulatory provisions of municipal, provincial and federal authorities as applicable to the performance of work.

.4 Submit to Departmental Representative, copy of application submissions and approval documents received for above referenced authorities.

.5 Comply with all requirements,

recommendations and advice by all regulatory authorities unless otherwise agreed in writing by Departmental Representative. Make requests for such deviations to these requirements sufficiently in advance of related work.

1.18 CUTTING, FITTING AND PATCHING

.1 Execute cutting, including excavation, fitting and patching required to make work fit properly.

1.19 ACCEPTANCE

.1 Prior to the issuance of the Certificate of Substantial Performance, in company with Departmental Representative, make a check of all work. Correct all discrepancies before final inspection and acceptance.

1.20 WORKS COORDINATION

.1 Responsible for coordinating the work of the various trades, where the work of such trades interfaces with each other.

.2 Convene meetings between trades whose work interfaces and ensure that they are fully aware of the areas and the extent of where interfacing is required. Provide each trade with the plans and specifications of the interfacing trade, as required, to assist them in planning and carrying out their respective work.

.3 Canada will not be responsible for or held accountable for any extra costs incurred as a result of the failure to carry out coordination work. Disputes between the various trades as a result of their not being informed of the areas and extent of interface work shall be the sole responsibility of the General Contractor and shall be resolved at no extra cost to Canada.

1.21 CONTRACTOR'S USE OF SITE

.1 Responsible for arranging the storage of materials on or off site, and any materials stored at the site which interfere with any of the day to day activities at or near the site will be moved promptly at the Contractor's expense, upon request by Departmental Representative.

.2 Exercise care so as not to obstruct or damage public or private property in the area.

.3 At completion of work, restore area to its original condition. Damage to ground and property will be repaired by Contractor. Remove all construction materials, residue, excess, etc., and leave site in a condition acceptable to Departmental Representative.

.4 Provide secure laydown area, as required, to accommodate temporary storage of hazardous materials pending removal from Island.

1.22 WORK COMMENCEMENT

.1 Mobilization to project site is to commence immediately after acceptance of bid and submission of Site Specific Safety Plan and insurance and bonding documentation, unless otherwise agreed by Departmental Representative.

.2 Project work on site is to commence as soon as possible, with a continuous reasonable work force, unless otherwise agreed by Departmental Representative.

.3 Weather conditions, short construction season, delivery challenges and the location of the work site may require the use of longer working days and additional

work force to complete the project within the specified completion time.

.4 Make every effort to ensure that sufficient material and equipment is delivered to site at the earliest possible date after acceptance of bid and replenished as required.

PART 1 - GENERAL

1.1 SECTION INCLUDES

.1 Product data.

.2 Samples.

.3 Certificates.

1.2 SUBMITTAL GENERAL REQUIREMENTS

.1 Submit to Departmental Representative for review submittals listed, including samples, certificates and other data, as specified in other sections of the Specifications. Note that any and all changes to the contract will have to be approved in writing by the Contracting Authority.

.2 Submit with reasonable promptness and in orderly sequence so as to allow for Departmental Representative's review and not cause delay in Work. Failure to submit in ample time will not be considered sufficient reason for an extension of Contract time and no claim for extension by reason of such default will be allowed.

.3 Do not proceed with work until relevant submissions are reviewed by Departmental Representative.

.4 Present product data, samples and mock-ups in SI Metric units.

.5 Where items or information is not produced in SI Metric units, provide soft converted values.

.6 Review submittals prior to submission to

Departmental Representative. Ensure during review that necessary requirements have been determined and verified, required field measurements or data have been taken, and that each submittal has been checked and co-ordinated with requirements of Work and Contract Documents.

.1 Submittals not stamped, signed, dated and identified as to specific project will be returned unexamined by Departmental Representative and considered rejected.

.7 Notify Departmental Representative, in writing at time of submission, identifying deviations from requirements of Contract Documents stating reasons for deviations.

.8 Verify field measurements and affected adjacent work and coordinate.

.9 Contractor's responsibility for errors and omissions in submission is not relieved by Departmental Representative's review of submittals.

.10 Contractor's responsibility for deviations in submission from requirements of Contract Documents is not relieved by Departmental Representative's review.

.11 Submittal format: paper originals, or alternatively clear and fully legible photocopies of originals. Facsimiles are not acceptable, except in special circumstances pre-approved by Departmental Representative. Poorly printed non-legible photocopies or facsimiles will not be accepted and be returned for resubmission.

.12 Make changes or revision to submissions which Departmental Representative may require,

consistent with Contract Documents and resubmit as directed by Departmental Representative. When resubmitting, notify Departmental Representative in writing of any revisions other than those requested.

.13 Keep one reviewed copy of each submittal document on site for duration of Work.

1.3 PRODUCT DATA

.1 Product data includes drawings, diagrams, illustrations, schedules, performance charts, brochures and other data which are to be provided by Contractor to illustrate details of a portion of Work.

.2 Submit sufficient copies of product data which are required by the General Contractor and sub-contractors plus 2 copies which will be retained by Departmental Representative. Ensure sufficient numbers are submitted to enable one complete set to be included in each of the maintenance manuals specified, if applicable.

.3 Allow 10 calendar days for Departmental Representative's review of each submission.

.4 Adjustments or corrections made on product data by Departmental Representative are not intended to change Contract Price. If adjustments affect value of Work, advise Departmental Representative in writing prior to proceeding with Work.

.5 If upon review by Departmental Representative, no errors or omissions are discovered or if only minor corrections and comments are made, fabrication and installation may proceed upon receipt of shop drawings. If product data are rejected and noted to be Resubmitted, do not proceed with

that portion of work until resubmission and review of corrected product data, through same submission procedures indicated above.

.6 Accompany each submission with transmittal letter, containing:
.1 Date.
.2 Project title and project number.
.3 Contractor's name and address.
.4 Identification and quantity of each product data and sample.
.5 Other pertinent data.

.7 Submissions shall include:
.1 Date and revision dates.
.2 Project title and project number.
.3 Name and address of:
.1 Subcontractor.
.2 Supplier.
.3 Manufacturer.
.4 Contractor's stamp, signed by Contractor's authorized representative certifying approval of submissions, verification of field measurements and compliance with Contract Documents.
.5 Cross references to particular details of contract drawings and specifications section number for which product data submission addresses.
.6 Details of appropriate portions of Work.

.8 After Departmental Representative's review, distribute copies.

.9 The review of product data by the Departmental Representative or their delegated representative is for sole purpose of ascertaining conformance with general concept. This review shall not mean that Public Works and Government Services Canada approves the detail design inherent in the product data, responsibility for which shall remain with Contractor submitting same, and

such review shall not relieve Contractor of responsibility for errors or omissions in product data or of responsibility for meeting all requirements of the construction and Contract Documents. Without restricting generality of foregoing, Contractor is responsible for dimensions to be confirmed and correlated at job site, for information that pertains solely to fabrication processes or to techniques of construction and installation and for co-ordination of Work of all sub-trades.

1.4 SCHEDULES, PERMITS AND CERTIFICATES

.1 Upon acceptance of bid, submit to Departmental Representative copy of Work Schedule and various other schedules, permits, certification documents and project management plans as specified in other sections of the Specifications.

.2 Submit copy of permits, notices, compliance Certificates received by Regulatory Agencies having jurisdiction and as applicable to the Work.

.3 Submission of above documents to be in accordance with Submittal General Requirements procedures specified in this section.

1.1 SECTION INCLUDES

.1 Fire Safety Requirements.

.2 Hot Work Permit.

1.2 RELATED WORK

.1 Section 01 35 29 - Health and Safety Requirements.

1.3 REFERENCES

.1 Fire Protection Standards issued by Fire Protection Services of Human Resources Development Canada as follows:
.1 National Fire Code - Standard for Construction Operations – latest edition (http://www.hrsdc.gc.ca/eng/labour/fire_protection/policies_standards/commissioner/301/page00.shtml).
.2 National Fire Code - Standard for Welding and Cutting – latest edition (http://www.hrsdc.gc.ca/eng/labour/fire_protection/policies_standards/commissioner/302/page00.shtml).
.3 FCC standards, may also be viewed at the Regional Labour Canada Office located at Baine Johnson Centre, 10 Fort William Place, St. John’s, NL, A1C 1K4; Telephone 1-800-641-4049; fax 1-709-772-5985.

1.4 DEFINITIONS

.1 Hot Work defined as:
.1 Welding work.
.2 Cutting of materials by use of torch or other open flame devices.
.3 Grinding with equipment which produces sparks.

1.5 SUBMITTALS

.1 Submit copy of Hot Work Procedures and sample of Hot Work permit to Departmental Representative for review, within five (5) calendar days after notification of acceptance of bid.

.2 Submit in accordance with the Submittal General Requirements specified in Section 01 33 00.

1.6 FIRE SAFETY REQUIREMENTS

.1 Implement and follow fire safety measures during Work. Comply with following:
.1 National Fire Code, latest edition.
.2 Fire Protection Standards FCC 301 and FCC 302 – latest edition.
.3 Federal and Provincial Occupational Health and Safety Acts and Regulations as specified in Section 01 35 29 – Health and Safety Requirements.

.2 In event of conflict between any provisions of above authorities the most stringent provision will apply. Should a dispute arise in determining the most stringent requirement, Departmental Representative will advise on the course of action to be followed.

1.7 HOT WORK AUTHORIZATION

.1 Obtain Departmental Representative's written "Authorization to Proceed" before conducting any form of Hot work on site.

.2 To obtain authorization submit to Departmental Representative:
.1 Contractor's typewritten Hot Work Procedures to be followed on site as specified below.

.2 Description of the type and frequency of Hot Work required.
.3 Sample Hot Work Permit to be used.

.3 Upon review and confirmation that effective fire safety measures will be implemented during performance of hot work, Departmental Representative will provide authorization to proceed as follows:
.1 Issue one written "Authorization to Proceed" covering the entire project for duration of work or;
.2 Separate work, or segregate certain parts of work, into individual entities. Each entity requiring a separately written "Authorization to Proceed" from Departmental Representative. Follow Departmental Representative's directives in this regard.

.4 Requirement for individual authorization based on:
.1 Nature or phasing of work;
.2 Risk to Facility operations;
.3 Quantity of various trades needing to perform hot work on project or;
.4 Other situation deemed necessary by Departmental Representative to ensure fire safety on premises.

.5 Do not perform any Hot Work until receipt of Departmental Representative's written "Authorization to Proceed" for that portion of work.

1.8 HOT WORK PROCEDURES

.1 Develop and implement safety procedures and work practices to be followed during the performance of Hot Work.

.2 Procedures to include:

.1 Requirement to perform hazard assessment of site and immediate hot work area for each hot work event in accordance with Hazard Assessment and Safety Plan requirements of Section 01 35 29.
.2 Use of a Hot Work Permit system for each hot work event.
.3 The step by step process of how to prepare and issue permit.
.4 Permit shall be issued by Contractor's site Superintendent, or other authorized person designated by Contractor, granting permission to worker or subcontractor to proceed with hot work.
.5 Provision of a designated person to carryout a Fire Safety Watch for a minimum of 60 minutes immediately upon completion of the hot work.
.6 Compliance with fire safety codes and standards specified herein and occupational health and safety regulations specified in Section 01 35 29.

.3 Generic procedures, if used, must be edited and supplemented with pertinent information tailored to reflect specific project conditions. Clearly label as being the Hot Work Procedures applicable to this contract.

.4 Hot Work Procedures shall clearly establish worker instructions and allocate responsibilities of:
.1 Worker(s),
.2 Authorized person issuing the Hot Work Permit,
.3 Fire Safety Watcher,
.4 Subcontractors and Contractor.

.5 Brief all workers and subcontractors on Hot Work Procedures and Permit system established for project. Stringently enforce compliance.

.1 Failure to comply with the established procedures may result in the issuance of a Non-Compliance Notification at Departmental Representative's discretion with possible disciplinary measures imposed as specified in Section 01 35 29.

1.9 HOT WORK PERMIT

.1 Hot Work Permit to include, as a minimum, the following data:
.1 Project name and project number.
.2 Building name, address and specific room or area where hot work will be performed.
.3 Date when permit issued.
.4 Description of hot work type to be performed.
.5 Special precautions required, including type of fire extinguisher needed.
.6 Name and signature of person authorized to issue the permit.
.7 Name of worker (clearly printed) to which the permit is being issued.
.8 Time Duration that permit is valid (not to exceed 8 hours). Indicate start time and date, and completion time and date.
.9 Worker signature with date and time upon hot work termination.
.10 Specified time period requiring safety watch.
.11 Name and signature of designated Fire Safety Watcher, complete with time and date when safety watch terminated, certifying that surrounding area was under continual surveillance and inspection during the full watch time period specified in Permit and commenced immediately upon completion of Hot Work.

.2 Permit to be typewritten form. Industry Standard forms shall only be used if all data

specified above is included on form.

.3 Each Hot Work Permit to be completed in full and signed as follows:
.1 Authorized person issuing Permit before hot work commences.
.2 Worker upon completion of Hot Work.
.3 Fire Safety Watcher upon termination of safety watch.
.4 Returned to Contractor's Site Superintendent for safe keeping.

1.10 DOCUMENTS ON SITE

.1 Keep Hot Work Permits and Hazard assessment documentation on site for duration of Work.

.2 Upon request, make available to Departmental Representative or to authorized safety representative for inspection.

1.1 RELATED WORK

.1 Section 01 35 24 - Special Procedures on Fire Safety Requirements.

1.2 DEFINITIONS

.1 COSH: Canada Occupational Health and Safety Regulations made under Part II of the Canada Labour Code.

.2 Competent Person: means a person who is:
- .1 Qualified by virtue of personal knowledge, training and experience to perform assigned work in a manner that will ensure the health and safety of persons in the workplace, and;
- .2 Knowledgeable about the provisions of occupational health and safety statutes and regulations that apply to the Work and;
- .3 Knowledgeable about potential or actual danger to health or safety associated with the Work.

.3 Medical Aid Injury: any minor injury for which medical treatment was provided and the cost of which is covered by Workers' Compensation Board of the province in which the injury was incurred.

.4 PPE: personal protective equipment.

.5 Work Site: where used in this section shall mean areas, located at the premises where Work is undertaken, used by Contractor to perform all of the activities associated with the performance of the Work.

1.3 SUBMITTALS

.1 Make submittals in accordance with Section 01 33 00.

.2 Submit to Departmental Representative,

copies of the following documents including updates.

.1 Site specific Health and Safety Plan.

.2 Building permit, compliance certification and other permits obtained.

.3 Reports or directives issued by Federal and Provincial Inspectors and other Authorities having jurisdiction.

.4 Accident or incident reports.

.5 WHMIS – MSDS data sheets.

.6 Name of Contractor’s Representative designated to perform health and safety supervision in site.

.7 Certificate of clearance from Workplace Health Safety and Compensation Commission (Assessment Services Department) of Newfoundland and Labrador.

.3 Submit within five (5) work days of notification of Bid Acceptance. Provide one (1) copy.

.4 Departmental Representative will review Health and Safety Plan and provide comments.

.5 The Contractor will revise the Plan as appropriate and resubmit within five (5) work days after receipt of comments.

.6 Departmental Representative's review and comments made of the Plan shall not be construed as an endorsement, approval or implied warranty of any kind by Canada and does not reduce Contractor's overall responsibility for Occupational Health and Safety of the Work.

.7 Submit revisions and updates made to the Plan during the course of Work.

1.4 COMPLIANCE REQUIREMENTS

.1 Comply with the Occupational Health and Safety Act for the Province of Newfoundland and Labrador, and the Occupational Health and Safety Regulations made pursuant to the Act.

.2 Comply with Canada Labour Code Part II, (entitled Occupational Health and Safety) and the Canada Occupational Health and Safety Regulations (COSH) as well as any other regulations made pursuant to the Act.

.1 The Canada Labour Code can be viewed at: www.http://laws.justice.gc.ca/en/L-2/

.2 COSH can be viewed at: www.http://laws.justice.gc.ca/eng/SOR-86-304/ne.html.

.3 A copy may be obtained at: Canadian Government Publishing Public Works & Government Services Canada Ottawa, Ontario, K1A 0S9 Tel: (819) 956-4800 (1-800-635-7943) Publication No. L31-85/2000 E or F).

.3 Observe construction safety measures of:

.1 Part 8 of National Building Code.

.2 Municipal by-laws and ordinances.

.4 In case of conflict or discrepancy between any specified requirements, the more stringent shall apply.

.6 Maintain Workers Compensation Coverage in good standing for duration of Contract. Provide proof through submission of Certificate of Clearance from Workplace Health, Safety and Compensation Commission (Assessment Services Department) of Newfoundland and Labrador.

.7 Obtain and maintain worker medical

surveillance documentation where prescribed by legislation or regulation.

1.5 RESPONSIBILITY

.1 Be responsible for health and safety of persons on site, safety of property and for protection of persons and environment adjacent to the site to extent that they may be affected by conduct of Work.

.2 Comply with and enforce compliance by all workers, sub-contractors and other persons granted access to work site with safety requirements of Contract Documents, applicable Federal, Provincial, and local by-laws, regulations, and ordinances, and with site specific Health and Safety Plan.

1.6 SITE CONTROL AND ACCESS

.1 Control the Work and entry points to Work Site. Approve and grant access only to workers and authorized persons. Immediately stop and remove non-authorized persons.

.1 Departmental Representative will provide names of those persons authorized by Departmental Representative to enter onto Work Site and will ensure that such authorized persons have the required knowledge and training on Health and Safety pertinent to their reason for being at the site, however, Contractor remains responsible for the health and safety of authorized persons while at the Work Site.

.2 Isolate Work Site from other areas of the premises by use of appropriate means.

.1 Erect fences, hoarding, barricades and temporary lighting as required to effectively delineate the Work Site, stop non-authorized entry, and to

protect pedestrians and vehicular traffic around and adjacent to the Work and create a safe environment.

.2 Post signage at entry points and other strategic locations indicating restricted access and conditions for access.

.3 Use professionally made signs with bilingual message in the 2 official languages or international known graphic symbols.

.3 Provide safety orientation session to persons granted access to Work Site. Advise of hazards and safety rules to be observed while on site.

.4 Ensure persons granted site access wear appropriate PPE. Supply PPE to inspection authorities who require access to conduct tests or perform inspections.

.5 Secure Work Site against entry when inactive or unoccupied and to protect persons against harm. Provide security guard where adequate protection cannot be achieved by other means.

1.7 PROTECTION

.1 Give precedence to safety and health of persons and protection of environment over cost and schedule considerations for Work.

.2 Should unforeseen or peculiar safety related hazard or condition become evident during performance of Work, immediately take measures to rectify situation and prevent damage or harm. Advise Departmental Representative verbally and in writing.

1.8 FILING OF NOTICE

.1 File Notice of Project with pertinent provincial health and safety authorities prior to beginning of Work.

1.9 PERMITS

.1 Post permits, licenses and compliance certificates, specified in section 01 10 10, at Work Site.

.2 Where a particular permit or compliance certificate cannot be obtained, notify Departmental Representative in writing and obtain approval to proceed before carrying out applicable portion of work.

1.10 HAZARD ASSESSMENTS

.1 Perform site specific health and safety hazard assessment of the Work and its site.

.2 Carryout initial assessment prior to commencement of Work with further assessments as needed during progress of work, including when new trades and subcontractors arrive on site.

.3 Record results and address in Health and Safety Plan.

.4 Keep documentation on site for entire duration of the Work.

1.11 PROJECT/SITE CONDITIONS

.1 The following are known or potential project related safety hazards at site:

.1 Working in close proximity of water.
.2 Remote site location.
.3 Wet and slippery conditions.
.4 Inclement weather conditions.
.5 Tidal influences.
.6 Potential structural weakness of

existing structures.
.7 Heavy lifting.
.8 Bird droppings.
.9 Mould.
.10 Working at heights.
.11 Cutting tools and other construction power tools.
.12 Hazardous materials.
.13 Sharp objects (construction debris).
.14 Steep terrain/cliffs/risk of falling.
.15 Use of boats/vessels.
.16 Helicopter usage.

.2 Above items shall not be construed as being complete and inclusive of potential health, and safety hazards encountered during work.

.3 Include above items into hazard assessment process.

.4 Review the Hazardous Building Material Survey in Appendix A of this specification.

1.12 MEETINGS

.1 Contractor to hold pre-construction health and safety meeting prior to commencement of Work. Ensure attendance of:
.1 Superintendent of Work.
.2 Contractor’s designated Health & Safety Site Representative.
.3 Subcontractor’s Health and Safety Site Representative.
.4 Health and Safety Site Coordinator.

.2 Conduct regularly scheduled tool box and safety meetings during the Work in conformance with Occupational Health and Safety regulations.

.3 Keep documents on site.

1.13 HEALTH AND SAFETY PLAN

.1 Prior to commencement of Work, develop written Health and Safety Plan specific to the work. Implement, maintain, and enforce Plan for entire duration of Work and until final demobilization from site.

.2 Health and Safety Plan shall include the following components:

.1 List of health risks and safety hazards identified by hazard assessment.

.2 Control measures used to mitigate risks and hazards identified.

.3 On-site Contingency and Emergency Response Plan as specified below.

.4 On-site Communication Plan as specified below.

.5 Name of Contractor's designated Health & Safety Site Representative and information showing proof of his/her competence and reporting relationship in Contractor's company.

.6 Names, competence and reporting relationship of other supervisory personnel used in the Work for occupational health and safety purposes.

.3 On-site Contingency and Emergency Response Plan shall include:

.1 Operational procedures, evacuation measures and communication process to be implemented in the event of an emergency.

.2 Evacuation Plan: site and floor plan layouts showing escape routes, marshaling areas. Details on alarm notification methods, fire drills, location of fire fighting equipment and

other related data.

.3 Name, duties and responsibilities of persons designated as Emergency Warden(s) and deputies.

.4 Emergency Contacts: name and telephone number of officials from:

.1 General Contractor and subcontractors.

.2 Pertinent Federal and Provincial Departments and Authorities having jurisdiction.

.3 Local emergency resource organizations.

.4 On-site Communication Plan:

.1 Procedures for sharing of work related safety information to workers and subcontractors, including emergency and evacuation measures.

.5 Address all activities of the Work including those of subcontractors.

.6 Review Health and Safety Plan regularly during the Work. Update as conditions warrant to address emerging risks and hazards, such as whenever new trade or subcontractor arrive at Work Site.

.7 Departmental Representative will respond in writing, where deficiencies or concerns are noted and may request re-submission of the Plan with correction of deficiencies or concerns.

.8 Post copy of the Plan, and updates, prominently on Work Site.

1.14 SAFETY SUPERVISION

.1 Employ Health & Safety Site Representative responsible for daily supervision of health and safety of the Work.

.2 Health & Safety Site Representative may be the Superintendent of the Work or other person designated by Contractor and shall be assigned the responsibility and authority to:

- .1 Implement, monitor and enforce daily compliance with health and safety requirements of the Work
- .2 Monitor and enforce Contractor's site-specific Health and Safety Plan.
- .3 Conduct site safety orientation session to persons granted access to Work Site.
- .4 Ensure that persons allowed site access are knowledgeable and trained in health and safety pertinent to their activities at the site or are escorted by a competent person while on the Work Site.
- .5 Stop the Work as deemed necessary for reasons of health and safety.

.3 Health & Safety Site Representative must:

- .1 Be qualified and competent person in occupational health and safety.
- .2 Have site-related working experience specific to activities of the Work.
- .3 Be on Work Site at all times during execution of the Work.
- .4 All supervisory personnel assigned to the Work shall also be competent persons.
- .5 Inspections:
  - .1 Conduct regularly scheduled safety inspections of the Work on a minimum daily basis. Record deficiencies and remedial action taken.
  - .2 Conduct Formal Inspections on a minimum monthly basis. Use standardized safety inspection forms. Distribute to subcontractors.
  - .3 Follow-up and ensure corrective

measures are taken.

.6 Keep inspection reports and supervision related documentation on site.

1.15 TRAINING

.1 Use only skilled workers on Work Site who are effectively trained in occupational health and safety procedures and practices pertinent to their assigned task.

.2 Maintain employee records and evidence of training received. Make data available to Departmental Representative upon request.

.3 When unforeseen or peculiar safety-related hazard, or condition occur during performance of Work, follow procedures in place for Employee's Right to Refuse Work in accordance with Acts and Regulations of Province having jurisdiction and advise Departmental Representative verbally and in writing.

.4 All workers dealing with hazardous materials are required to provide evidence of training, in accordance with Provincial regulations.

1.16 MINIMUM SITE SAFETY RULES

.1 Notwithstanding requirement to abide by federal and provincial health and safety regulations; ensure the following minimum safety rules are obeyed by persons granted access to Work Site:

.1 Wear appropriate PPE pertinent to the Work or assigned task; minimum being hard hat, safety footwear, safety glasses safety vest and hearing protection.

.2 Immediately report unsafe condition at site, near-miss accident, injury and

damage.
.3 Maintain site and storage areas in a tidy condition free of hazards causing injury.
.4 Obey warning signs and safety tags.

.2 Brief persons of disciplinary protocols to be taken for non compliance. Post rules on site.

1.17 CORRECTION OF NON-COMPLIANCE

.1 Immediately address health and safety non-compliance issues identified by authority having jurisdiction or by Departmental Representative.

.2 Provide Departmental Representative with written report of action taken to correct non-compliance of health and safety issues identified.

.3 Departmental Representative will stop Work if non-compliance of health and safety regulations is not corrected in a timely manner.

1.18 INCIDENT REPORTING

.1 Investigate and report the following incidents to Departmental Representative:
.1 Incidents requiring notification to Provincial Department of Occupational Safety and Health, Workers Compensation Board or to other regulatory Agency.
.2 Medical aid injuries.
.3 Property damage in excess of $10,000.00.

.2 Submit report in writing.

1.19 HAZARDOUS PRODUCTS

.1 Comply with requirements of Workplace Hazardous Materials Information System

WHMIS).

.2 Keep MSDS data sheets for all products delivered to site.
.1 Post on site.
.2 Submit copy to Departmental Representative.

1.20 SITE RECORDS

.1 Maintain on Work Site copy of safety related documentation and reports stipulated to be produced in compliance with Acts and Regulations of authorities having jurisdiction and of those documents specified herein.

.2 Upon request, make available to Departmental Representative or authorized Safety Officer for inspection.

1.21 POSTING OF DOCUMENTS

.1 Ensure applicable items, articles, notices and orders are posted in conspicuous location on Work Site in accordance with Acts and Regulations of Province having jurisdiction.

.2 Post other documents as specified herein, including:
.1 Site specific Health and Safety Plan.
.2 WHMIS data sheets.

1.1 RELATED WORK .1 Section 02 41 16 – Sitework, Demolition and Removal.

1.2 DEFINITIONS .1 Hazardous Material: Product, substance, or organism that is used for its original purpose; and that is either dangerous goods or a material that may cause adverse impact to the environment or adversely affect health of persons, animals, or plant life when released into the environment.

1.3 FIRES .1 Burning will be permitted only n the cistern area of the Dwelling.

.2 Fires for the purpose of burning non-hazardous waste on site are permitted (see part 1.3.3 for only permitted burn location). The following materials are not permitted to be burned on site and must be removed for off-site disposal to an approved waste site: (a) tires; (b) plastics; (c) treated lumber; (d) asphalt and asphalt products; (e) drywall; (f) demolition waste; (g) hazardous waste; (h) biomedical waste; (i) domestic waste; (j) trash, garbage, or other waste from commercial, industrial or municipal operations; (k) manure; (l) rubber; (m) tar paper; (n) railway ties; (o) paint and paint products; (p) fuel and lubricant containers; (q)used oil; (r)animal cadavers; (s) hazardous substances; and (t) materials disposed of as part of the removal or decontamination of equipment, buildings or other structures.

Note that should the Contractor choose to burn materials on site, the burn must be in accordance with the Provincial Air Pollution Control Regulations, 2004, under the Environmental Protection Act (O.C. 2004-232). Obtaining burn permits, if required by the Provincial Authorities, will

be the responsibility of the Contractor.

.2 Notify the municipality of the scheduled burn, and obtain (and pay for) all required municipal permits.

.3 The only permitted burn location is the footprint area of the double dwelling. Coordinate exact location with the Departmental Representative.

.4 Submit a detailed work plan for the Departmental Representative's review with respect to any burns that are planned. The plan is to include as a minimum:

- Sufficient fire fighting equipment on-site to control the fire during the burn and to extinguish the fire when the burn is complete.
- The fire is to take place within daylight hours between 2 hours after sunrise to 2 hours before sunset.
- Names of supervisors/watchers to attend the burn. The fire must be extinguished before the supervisor of the burn leaves the site.
- At no time should the fire be ignited under windy conditions. Should windy conditions occur during the burn, it is to be extinguished and covered with fill.
- At no time should the fire be ignited when the prevailing winds will carry smoke smoke/odours towards occupied residences.

1.4 DISPOSAL OF WASTES AND HAZARDOUS MATERIALS

.1 Do not bury rubbish and waste materials on site.

.2 Do not dispose of hazardous waste or volatile materials, such as mineral spirits, paints, thinners, oil or fuel into waterways, storm or sanitary sewers or waste landfill sites.

.3 Store, handle and dispose of hazardous

materials and hazardous waste in accordance with applicable federal and provincial laws, regulations, codes and guidelines.

.4 Reference Specification Section 01 10 10 part 1.1.3 as it relates to the demolition waste.

1.5 DRAINAGE

.1 Provide temporary drainage and pumping as necessary to keep excavations and site free from water.

.2 Do not pump water containing suspended materials into waterways, sewer or drainage systems.

.3 Control disposal or runoff of water containing suspended materials or other harmful substances in accordance with governing regulations and requirements.

.4 Pumped water must meet applicable federal, provincial, and municipal standards before it can be discharged to a surface water body. If regulatory guidelines exceedences are noted, the Departmental Representative has the right to issue stop pumping instructions to the Contractor. Contractor will not be compensated for any delays associated with retrofitting equipment to meet guidelines.

1.6 PERMITS

.1 All guidelines and instructions stated on permits must be strictly adhered to.

1.7 WORK ADJACENT TO WATERWAYS

.1 Do not operate construction equipment in waterways.

.2 Do not use waterway beds for borrow material.

.3 Do not dump excavated fill, waste material or debris in waterways.

.4 At borrow sites, design and construct temporary crossings to minimize erosion to waterways in strict conformance with provincial and federal environmental regulations.

.5 Do not skid logs or construction materials across waterways.

.6 Ensure refueling of any type of equipment does not, either directly or indirectly, create pollution by causing or permitting any leaks or spills.

.7 Maintain equipment in good working condition with no fluid leaks, loose hoses or fittings.

1.8 POLLUTION CONTROL

.1 Maintain temporary erosion and pollution control features installed under this contract.

.2 Control emissions from equipment and plant to local authorities emission requirements.

.3 Cover or wet down dry materials and rubbish to prevent blowing dust and debris.

.4 Have emergency spill response equipment and rapid clean-up kit, appropriate to work, at site. Locate adjacent to work and where hazardous materials are stored. Provide personal protective equipment as required for clean-up.

.5 Report, to Federal and Provincial Department of the Environment, spills of petroleum and other hazardous materials as well as accidents having potential of polluting the environment. Also notify Departmental Representative and submit a written spill report to Departmental Representative within 24 hours of occurrence.

1.9 WILDLIFE PROTECTION

.1 Should sea bird nests be encountered during work, immediately notify Departmental Representative for directives to be followed.

.1 Do not disturb nest site and neighbouring vegetation until nesting is completed.

.2 Minimize work immediately adjacent to such areas until nesting is completed.

1.1 SANITARY FACILITIES

.1 Provide sanitary facilities for work force in accordance with governing regulations and ordinances.

.2 Post notices and take such precautions as required by local health authorities. Keep area and premises in sanitary condition.

1.2 WATER SUPPLY

.1 Arrange, pay for and maintain temporary water supply in accordance with governing regulations and ordinances.

1.3 SCAFFOLDING

.1 Design, construct and maintain scaffolding in rigid, secure and safe manner in accordance with CSA797-09.

.2 Erect scaffolding independent of walls. Remove when no longer required.

1.4 CONSTRUCTION SIGN AND NOTICES

.1 Contractor or subcontractor advertisement signboards are not permitted on site.

.2 Only notices of safety or instructions are permitted on site.

.3 Safety and Instruction Signs and Notices:
.1 Signs and notices for safety and instruction shall be in both official languages.

.4 Maintenance and Disposal of Site Signs:
.1 Maintain approved signs and notices in good condition for duration of project and dispose of off site on completion of project or earlier if directed by Departmental Representative.

1.5 REMOVAL OF TEMPORARY FACILITIES

.1 Remove temporary facilities from site when directed by Departmental Representative.

PART 1 - GENERAL

1.1 SECTION INCLUDES

.1 Barriers.

1.2 INSTALLATION AND REMOVAL

.1 Provide temporary controls in order to execute work expeditiously.

.2 Remove from site all such work after use.

1.3 HOARDING

.1 Erect temporary site enclosure if required by governing authorities, using new 1.2 m high snow fence wired to rolled steel "T" bar fence posts spaced at 2.4 m centres. Provide one lockable truck gate. Maintain fence in good repair.

1.4 GUARD RAILS AND BARRICADES

.1 Provide secure, rigid guard rails and barricades around open excavations and as required to protect against falls. Note steep cliffs around work area and construct barricades where work is expected in these areas.

.2 Provide as required by governing authorities.

PART 1 - GENERAL

1.1 GENERAL

.1 Conduct cleaning and disposal operations to comply with local ordinances and anti-pollution laws.

.2 Store volatile waste in covered metal containers, and remove from premises at end of each working day.

.3 Prevent accumulation of wastes which create hazardous conditions.

.4 Provide adequate ventilation during use of volatile or noxious substances.

1.2 CLEANING DURING CONSTRUCTION

.1 Maintain project grounds and public properties in a tidy condition, free from accumulations of waste material and debris. Clean areas on a daily basis.

.2 Provide on-site garbage containers for collection of waste materials and debris.

.3 Remove waste materials and debris from site on a daily basis.

1.3 FINAL CLEANING

.1 In preparation for acceptance of the Work perform final cleaning. The expectation for final cleaning will be a rake cleaning, removing all debris, wood chips, nails, paint chips, etc.

1.1 SECTION INCLUDES

.1 Project Record Documents as follows:
.1 Inventory of all materials demolished and stored on site in UN approved waste bags.

1.2 PROJECT RECORD DOCUMENTS

.1 Departmental Representative will provide two white print sets of contract drawings and two copies of Specifications.

.2 Maintain at site one set of the contract drawings and specifications to record actual “As-Built” site conditions.

PART 1 - GENERAL

1.1 DESCRIPTION

.1 This section specifies requirements for demolishing and removing wholly or in part various items designated to be removed or partially removed.

.2 Demolition and removal will consist of, but not necessarily be limited to, the following:

.1 Demolition, removal and disposal of the dwelling. Note that the concrete foundation, including above grade concrete foundation walls associated with the dwellings can remain. Contractor to be prepared to core 150mm diameter core holes in the cistern of the dwelling to prevent future water ponding. For Bidding, assume that 12 core holes through 200mm thick reinforced concrete will be required. The Departmental Representative will provide direction related to the core holes (including specific locations), while in the field. Reference Specification Section 01 10 10 part 1.1.3 as it relates to the demolition waste.

.2 Demolition, removal and disposal of the old fog alarm building, main power building, stand by diesel generator building, storage sheds, winch house and hoist, as noted on the drawings. Reference Specification Section 01 10 10 part 1.1.3 as it relates to the demolition waste.

.3 For all concrete foundations to remain, remove flaking/peeling paint down to the bare concrete and dispose of paint chips as hazardous lead waste. This includes exterior foundation

walls, interior floor slabs and basement slabs. Reference Specification Section 01 10 10 part 1.1.3 as it relates to the demolition waste.

.4 All materials present on the interior of the buildings are to be removed and stored in UN approved waste bags – refer to pictures in appended environmental report showing typical materials inside the buildings.

Refer to Section 15 49 10 for specific requirements related to demolition, removal and disposal of hazardous building materials. Reference Specification Section 01 10 10 part 1.1.3 as it relates to the demolition waste.

PART 2 - PRODUCTS

NOT APPLICABLE

PART 3 - EXECUTION

3.1 EXECUTION

.1 Inspect site and verify with Departmental Representative objects designated for removal.

.2 Locate and protect utility lines. Preserve in operating condition active utilities traversing site.

3.2 REMOVAL

.1 Remove in their entirety all materials and objects specified for removal.

.2 Do not disturb adjacent work designated to remain in place.

3.3 DISPOSAL OF MATERIAL

.1 All demolished materials are to be stored on site in UN approved waste bags.

3.4 RESTORATION

.1 Upon completion of work, remove debris, trim surfaces and leave work site in clean condition.

.2 Reinstate areas and existing works outside areas of demolition to conditions that existed prior to commencement of work.

PART 1 - GENERAL

1.1 SCOPE

.1 This specification identifies the hazardous materials that are present in the infrastructure to be removed, and the measures required for handling and packaging of the materials. Removal and storage (in UN approved waste bags) of the hazardous building materials are the sole responsibility of the Contractor.

.2 A Hazardous Buildings Materials Assessment for the Site is appended to these specifications.

1.2 GENERAL

.1 Refer to the hazardous material sampling report (appended to the specifications), for quantities of known or suspected hazardous building materials. For the purposes of this contract, the following hazardous materials are to be removed as part of the demolition activities:

- Drywall including joint compound on the interior walls and ceilings contains asbestos. Roofing shingles, underlying tar material, mastic material at roofing penetrations, air cell attic insulation, heat shields on furnaces/stoves, and vinyl flooring on the interior is also to be considered asbestos. Contractors to provide evidence that they are registered with Service NL as an asbestos abatement contractor.
- Leachable lead based paint is present on all interior and exterior surfaces. Leachable lead based paint is considered hazardous for the purposes of transportation and disposal. Loose, flaking paint from surfaces is to be drummed-up and disposed of as hazardous waste. With respect to the exterior wood siding, the paint and substrate (i.e. siding with the paint adhered to it), is to be

considered hazardous lead waste. With respect to concrete foundations and floor slabs which are to remain, the paint is to be removed from the concrete surfaces.

- All thermostats and fluorescent light tubes potentially contain mercury and are to be placed in UN approved waste bags separately from other waste material, for future recycling or disposed at an approved facility by the Owner.
- Fluorescent light ballasts are to placed in steel containers or UN supplied waste bags separately from other waste material and marked as PCBs.
- Mould is present throughout the interior surfaces of the infrastructure. Workers to don PPE when working on the building interior.
- Water pipes potentially contain lead solder and are to be stored separately from other waste material in UN approved waste bags for future disposal at a metal recycling facility by the Owner.
- Residential type refrigerators, freezers and fire extinguishers are to be broken down into manageable sizes suitable for storage in UN approved waste bags, and are to be kept separate from other waste.
- Small amounts of ash in the chimney to be drummed up separately from other waste for future disposal at one of the Regional Solid Waste Disposal sites, by the Owner.
- Smoke alarms potentially containing radioactive materials, are to be placed in UN approved waste bags, separate from other waste.
- All treated timber (creosote and CCA timber) which cannot be burned is to be placed in UN approved waste bags for future disposal as hazardous waste, by the Owner.

1.3 PROTECTIVE EQUIPMENT/PROCEDURES

.1 Protective equipment and clothing to be worn by workers and visitors in work area include as a minimum:

.1 Respirator - NIOSH approved and equipped with replaceable P100 HEPA filter cartridges, acceptable to NL Labour Relations and NL OSHA. Respirator must be suitable for the type and level of lead dust and mould spore exposure in the work area. Provide sufficient filters so workers can install new filters following disposal of used filters and before re-entering contaminated areas. Workers must not have facial hair that affects the seal between the respirator and face.

.2 Gloves and eye protection.

.3 Disposable protective clothing that does not readily retain or permit skin contamination, consisting of full body covering including head covering with snug fitting cuffs at wrists, ankles, and neck.

.4 Remove gross contamination from clothing before leaving work area. Place contaminated work suits in receptacles for disposal with other lead/mould contaminated materials. Upon completion of lead/mould abatement, dispose of footwear as contaminated waste or clean thoroughly inside and out using soap and water before removing from work area.

.5 Eating, drinking, chewing and smoking must not be permitted in the work area. Workers must wash hands and face when leaving the work area.

.6 Workers must be trained in hazards of lead/mercury and mould exposure, personal hygiene, work procedures and the proper use of respirators. Provide proof to Departmental Representative prior to work.

1.4 SUBMITTALS

.1 Submit proof satisfactory to Departmental Representative that all employees have had instruction on all hazardous material exposure, respirator use, dress, entry and exit from work areas, and all aspects of work procedures and protective measures.

.2 Submit proof satisfactory to the

Departmental Representative that all employees have respirator fitting and testing. Workers must be fit tested (irritant smoke test) with the respirator that is personally issued.

.3 Submit Workplace Health, Safety and Compensation Commission status and transcription of insurance.

.4 Use procedures and equipment required to limit occupational and environmental exposure to lead when lead- containing paint is removed.

1.5 INSURANCE

.1 Provide proof of Contractor’s General and Environmental Liability Insurance, specific to cover the hazardous materials known to exist on this site.

Appendix A: Hazardous Buildings Material Survey

-FINAL-

HAZARDOUS BUILDING MATERIALS SURVEY
BELLE ISLE SOUTH LIGHTSTATION
BELLE ISLE, NEWFOUNDLAND AND LABRADOR

Submitted to:
Public Works and Government Services Canada
Environmental Services
The John Cabot Building
10 Barters Hill, PO Box 4600
St. John's, NL
A1C 5T2

Submitted by:
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March 2013

AMEC Project No. TF12076461

IMPORTANT NOTICE

This report was prepared exclusively for Public Works and Government Services Canada (PWGSC), Fisheries and Oceans Canada (DFO) and the Canadian Coast Guard (CCG) by AMEC Environment & Infrastructure, a Division of AMEC Americas Limited (AMEC). The quality of information, conclusions and estimates contained herein is consistent with the level of effort involved in AMEC's services and based on: i) information available at the time of preparation, ii) data supplied by outside sources and iii) the assumptions, conditions and qualifications set forth in this report. This report is for use by PWGSC and DFO only, subject to the terms and conditions of its contract with AMEC. Any other use of, or reliance on, this report by any third party is at that party's sole risk.

EXECUTIVE SUMMARY

AMEC Environment & Infrastructure, a division of AMEC Americas Limited (AMEC), was retained by Public Works and Government Services Canada (PWGSC), on behalf of the Canadian Coast Guard (CCG), Fisheries and Oceans Canada (DFO), to conduct a Hazardous Building Materials Survey (HBMS) for the Belle Isle South Lightstation located on Belle Isle, Newfoundland and Labrador (NL), herein referred to as the "Site". The HBMS was requested to provide PWGSC and DFO/CCG with an evaluation of known and potential hazardous building materials at the Site buildings.

The Site is a DFO Lightstation located on the southwest end of Belle Isle, off the coast of the Northern Peninsula of Newfoundland. The Site is accessible by boat or helicopter. The Site is currently used as an active Lightstation with an automated light and fog horn. The Belle Isle South Lightstation was established in the mid-1850s.

The Site buildings are currently located on three separate areas of the Site: the main site area, the lower landing area and the lower light area. The main site area contains a light tower / duplex dwelling, a single dwelling, a storage shed, a main power building, a stand-by diesel building, a videograph building, a skeleton light and a helicopter landing pad. The lower landing area contains a winch house, a storage shed and a powerhouse. The lower light area contains an old equipment building and a skeleton light. Several concrete pads for former infrastructure such as aboveground storage tanks (ASTs) and small buildings are also present throughout the Site.

The objective of the HBMS was to identify the type and location of potential and confirmed hazardous building materials within the Site buildings. The scope of work included:

- Conducting a walk-through inspection of the Site buildings to identify the potential and/or actual presence of hazardous building materials.
- Inspecting the Site buildings for evidence of areas that are impacted by suspected visible mould growth (SVG). If suspected mould is present, sampling and laboratory testing of the suspected mould growth to confirm the presence of mould.
- Sampling and laboratory testing of suspected asbestos-containing materials (ACMs) to confirm the presence or absence of asbestos fibres.
- Sampling and laboratory testing of paint to determine the concentrations of lead, mercury and polychlorinated biphenyls (PCBs).
- Inspecting all thermostats to assess the presence/absence of mercury-containing switches.
- Inspecting all accessible fluorescent lights (if present) for PCB-containing light ballasts.
- Preparing a written report documenting the methodologies and findings of the HBMS.

Conclusions and recommendations made with respect to the potential and actual presence of hazardous building materials at the Site are summarized in Table E-1.

Table E-1: Summary of Findings

Findings	Conclusions	Recommendations
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: - Friable and potentially friable asbestos is present in the form of air cell insulation and drywall joint compound. - Non-friable asbestos is present in the form of vinyl floor tiles, asphalt shingles and caulking. • Results of the asbestos sampling and analytical program also revealed that there are building materials containing less than or equal to 1% asbestos by dry weight: - Drywall joint compound/plaster, asphalt shingles, caulking and felt tar paper. • Other potential ACMs were observed and were not sampled due to the nature of the 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 incandescent light heat shields, interior components of furnaces and/or stoves, fire rated structures or building materials, and underground infrastructure and piping.	• It should be noted that the air cell insulation located in the duplex dwelling attic was observed to be in poor condition and the drywall and associated joint compound visible throughout the Site buildings varied in condition from good to poor; therefore, priority should be given to the removal of the deteriorated insulation and the deteriorated joint compound inside the single dwelling, old equipment building and main power building. • No samples of roofing materials (asphalt shingles) were collected from the old equipment building during this assessment. These materials should be treated as suspect ACMs until samples are collected and tested to verify asbestos content. • If other potential ACMs that could not be sampled as part of this assessment 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 Site buildings and disposed of in accordance with appropriate environmental guidelines by a asbestos abatement contractor registered with the Department of Labour, Occupational Health and Safety Branch.

Findings	Conclusions	Recommendations
Asbestos-Containing Materials (ACMs)		• ACMs in good condition should be inspected on an annual basis. ACMs in poor condition should be removed from the Site buildings 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 within the Site buildings (i.e., the concentrations of lead and mercury in some paint finishes were above the applicable Federal Hazardous Products Act [HPA] criteria of 90 mg/kg for lead and 10 mg/kg for mercury). - The concentrations of lead in the paint samples ranged 19 mg/kg to 75,000 mg/kg - The concentrations of mercury in the paint samples ranged from non-detect (<1.0 mg/kg) to 110 mg/kg. - Fifty-six (56) paint samples, plus six (6) field duplicate samples, contained lead at concentrations above the former Federal HPA criterion of 5,000 mg/kg. - Twenty-two (22) paint samples, plus two (2) field duplicate samples contained mercury at concentrations above or equal to the CCME CSQG of 24 mg/kg for mercury in soil at a commercial 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 this assessment, 46 of the 94 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 46 paint samples 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 these paint samples are at levels considered to be hazardous, these paints, if removed from the Site, must be disposed of at a hazardous waste treatment facility. - Since the concentration of lead detected in the paint samples collected from a wood door on the exterior of the old equipment building and a metal winch in the winch house exceeded the former federal HPA criterion of 5,000 mg/kg for lead in paint, these paints should be re-sampled and tested for lead leachate using the TCLP to determine whether or not the paints would be considered hazardous waste upon removal from the Site. The paint samples collected were not tested for lead leachate due to low sample volume remaining after initial analysis. - The paint collected at the Site was generally in poor condition and flaking; therefore, if any paint exceeding the lead leachate

Findings	Conclusions	Recommendations
Lead, Mercury and PCBs in Paint	• All of the paint samples analyzed for PCBs were 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 for PCB solid (50 mg/kg) provided in the provincial guidance document for leachable toxic waste (GD-PPD-26.1).	criterion is deteriorated (i.e. peeling and flaking) then in order to help prevent impacts to the environment, priority should be given to the removal of these deteriorated areas. • If potential lead or mercury containing paint finishes that were not sampled during this assessment 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. • 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 proper maintenance of lead and mercury-based paint finishes, as follows: - Where lead and mercury-based paint finishes are in good condition (i.e., intact and not peeling or flaking) the surfaces can be covered by painting with non lead or non mercury-containing paint. - In areas of minor peeling or flaking the paint should be removed using wet scraping techniques and the surface should then be repainted with non lead or non mercury-containing paint. - 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 painting, renovation or decommissioning/demolition activities. - Steps should be taken to ensure that workers and anyone present in and around areas being renovated, dismantled or demolished are protected. The contractor should also ensure that dust generation and migration is minimized.

Findings	Conclusions	Recommendations
Urea formaldehyde foam insulation (UFFI)	• Visual indicators suggesting the potential presence of UFFI were not observed at the Site. • The nature of the insulation in the walls and ceilings throughout the Site buildings could not be confirmed at the time of the Site inspections. However, fibreglass insulation was observed in various rooms in the duplex dwelling, single dwelling and old equipment building. • Since the history of the original Lightstation dates back to the mid-1850s, with various upgrades since that time, it is possible that UFFI may be present in some areas of the Site buildings.	• Based on a visual nonintrusive inspection, there was no evidence that UFFI is present in these structures. However, the inferred age of some of the Site buildings suggests that UFFI could be present within the walls which could not be visually inspected. 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 3.3 and 4.3), it can be inferred that any UFFI present within the Site buildings 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. prior to 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	• Areas of water damage and SVG were observed in several areas on the interior surfaces of the duplex and single dwellings. • Results of the mould sampling program revealed that moderate to abundant mould growth was present in the samples collected from the interior of the duplex and single dwellings. • Existing conditions in the Site buildings (e.g., roof and window leaks, improper ventilation, inadequate building heating, prolonged periods of increased moisture) may potentially contribute to or enhance mould growth inside the Site buildings.	• Based on the estimated areas of mould impacted materials observed at the Site, both the duplex and single dwellings 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.
Lead and Mercury-Containing Equipment	• Mercury-containing thermostats were observed in the duplex and single dwellings and suspected mercury-containing fluorescent light tubes were observed in the single dwelling. • Mercury may also be present in possible high intensity discharge (HID) lights at the top of the light tower.	• Mercury-containing fluorescent light tubes or HID bulbs should be removed intact and returned to the manufacturer for recycling, or disposed of at an approved facility. • The disturbance, control or disposal of lead-containing material/equipment (e.g., solder on copper piping, batteries, etc.) or mercury-containing material/equipment (e.g., thermostats, light tubes and bulbs) should be carried out in accordance with applicable criteria/regulations (refer to Section 2.0). The presence/absence of lead or mercury in these materials should be confirmed through a mechanical contractor or consultant prior to disturbance or disposal of these materials. Typically these materials are sent to a recycling facility and not a landfill.

Findings	Conclusions	Recommendations
Lead and Mercury-Containing Equipment	• Samples of the drinking water at the Site buildings were not collected or analyzed during this assessment for the presence of lead. • The history of the original Lightstation dates back to the mid-1850s, with various upgrades since that time; therefore, lead in drinking water may be a potential issue since the lead content in solders and fluxes was not limited to 0.2% in potable water systems until 1990 (National Plumbing Code of Canada). • Several potential lead-acid batteries (i.e., solar batteries) were noted inside the videograph building at the time of the Site inspection.	• The Health Canada Guidelines for Canadian Drinking Water Quality includes maximum acceptable concentrations of various chemical parameters in drinking water, including lead. If lead solder is present in the potable water systems, lead concentrations in drinking water can typically be reduced to acceptable levels by running the cold water tap for five to ten minutes prior to use. It is important to note that at the time of the Site investigation it was not known if potable water was supplied to the Site.
PCB-Containing Equipment	• Based on the manufacturer's code on the fluorescent light ballasts that were inspected during this assessment, the light ballasts in the kitchen of the single dwelling likely contain PCBs.	• The PCB content in all light ballasts should be confirmed prior to disposal. Any leaking light ballasts identified, whether PCB containing or not, should be removed and replaced to avoid potential concerns with electrical equipment in the future. 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 (if present) 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 Site buildings should be transported and disposed of by a registered hazardous waste transporter in accordance with applicable regulations.
Ozone Depleting Substances (ODSs)	• Potential sources of ODSs identified during this assessment included two refrigerators and a freezer in the duplex dwelling, a refrigerator in the single dwelling and a freezer in storage shed 1. The types of refrigerant(s) were not confirmed for the refrigerators and freezers at the time of this assessment.	• All ODSs should be removed by an approved contractor prior to disposing of the freezers and/or fire extinguisher from the Site buildings. • The use, storage, operation, maintenance, decommissioning, and disposal of ODS containing equipment in general is regulated at both a Provincial and Federal level and must comply with the most recent NL Halocarbon Regulations and the Federal Halocarbon Regulations. The status of the potential ODS containing equipment should be confirmed through a mechanical contractor or consultant.

Findings	Conclusions	Recommendations
Ozone Depleting Substances (ODSs)	• Eight (8) fire extinguishers were identified throughout the Site buildings. The labels on these units did not indicate the presence of halon or other ODS ingredients; however the label on one (1) fire extinguisher was absent. Therefore, it could not be determined from the inspection if the fire extinguisher contained halon or other ODS ingredients.	
Silica Dust	• Silica is expected to be present in concrete structures, brick and mortar at the Site.	• Precaution 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.
Coal	• A pile of coal was observed in the basement of the duplex dwelling. Solid wastes such as coal may contain heavy metals, polycyclic aromatic hydrocarbons (PAHs) and/or fuel oil components.	• According to the Leachable Toxic Waste, Testing and Disposal guidance document, regulatory approval from the NL Department of Environment and Conservation (ENVC) for landfill disposal of solid wastes is dependent upon the following conditions: 1) results of sample analysis by a Canadian Association for Laboratory Accreditation Inc. (CALA) certified laboratory either meet the CCME CSQG for industrial land use; or 2) results of sample analysis by a CALA certified laboratory pass the TCLP test for leachability for the parameters listed in Schedule II Leachate Test. Consideration should be given to the proper testing and disposal of coal at the Site.

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APPENDICES

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1.0 INTRODUCTION

AMEC Environment & Infrastructure, a division of AMEC Americas Limited (AMEC), was retained by Public Works and Government Services Canada (PWGSC), on behalf of the Canadian Coast Guard (CCG), Fisheries and Oceans Canada (DFO), to conduct a Hazardous Building Materials Survey (HBMS) for the Belle Isle South Lightstation located on Belle Isle, Newfoundland and Labrador (NL), herein referred to as the "Site" (refer to Figure 1, Appendix A and Photos 1, 2 and 3, Appendix B). The HBMS was requested to provide PWGSC and DFO with an evaluation of known and potential hazardous building materials at the Site buildings.

1.1 SITE DESCRIPTION

The Site is a DFO Lightstation located on the southwest end of Belle Isle, off the coast of the Northern Peninsula of Newfoundland (refer to Figure 1, Appendix A). The Site is accessible by boat or helicopter. The Site is currently used as an active Lightstation with an automated light and fog horn. The Site is not staffed by DFO/CCG on a fulltime basis; DFO/CCG employees visit the Site on a regular basis for inspections and maintenance.

The Belle Isle South Lightstation was established in the mid-1850s and was also the site for the CCG Radio Communications Station. The Site buildings are currently located in three separate areas of the Site: the main site area, the lower landing area and the lower light area (refer to Figure 2, Appendix A). The lower light was established in 1880 and is located southwest of the main light. The addition of a fog alarm building was completed in 1899.

The main site area contains a light tower attached to a duplex dwelling, a single dwelling, a storage shed (i.e. storage shed 1), a main power building, a stand-by diesel building, a videograph building, a skeleton light and a helicopter landing pad (refer Photo 1, Appendix B). The lower landing area contains a winch house, a storage shed (i.e. storage shed 2) and a powerhouse (refer to Photo 2, Appendix B). The lower light area contains an old equipment building and a skeleton light (refer to Photo 3, Appendix B). Structures no longer present at the Site include a former light tower in the lower light area and a former small storage shed in the lower landing area. A fourth area of the Site, known as the lake area (i.e. Upper Lake), does not contain any buildings; however, the concrete foundations of several former buildings are still present (i.e. ruins). Several concrete pads for former infrastructure such as aboveground storage tanks (ASTs) and small buildings are also present throughout the Site.

1.2 SITE BUILDING DESCRIPTIONS

Main Site Area

<u>Light Tower</u>

The light tower is a five-storey, concrete block and concrete frame structure. The exterior of the light tower consists of wooden siding and wooden framed windows and doors. The roofing materials consist of painted metal panels.

The interior walls and wall finishes consist of painted concrete blocks and concrete, painted metal panels, painted wooden door frames and painted wooden trim around windows and doors. The ceilings and ceiling finishes consist of painted metal panels. The floors and floor finishes consist of painted concrete, painted wood boards and painted metal panels.

Interior and exterior lighting consists of incandescent lights. The main lighting system in the light tower is unknown. The light tower is not heated.

Duplex Dwelling

The duplex dwelling is a two-storey, wood frame structure with concrete block/concrete basement. The exterior of the duplex consists of wooden siding and wooden framed windows and doors. The roofing materials consist of asphalt shingles.

The interior walls and wall finishes consist of painted and unpainted concrete blocks, painted concrete, painted drywall, painted plywood and fibreboard, wooden door frames, painted wooden trim around windows and doors and painted wooden baseboards. The ceilings and ceiling finishes consist of painted plywood and drywall. The floors and floor finishes consist of painted concrete, hardwood, vinyl floor tile and rolled sheet flooring.

Interior and exterior lighting consists of incandescent lights. The duplex dwelling appears to have been formerly heated by a forced air oil-fired furnace. In addition to the furnace, an electrical baseboard was observed in the second floor hallway and a fireplace was observed in the living room (refer to Figures 3 and 4, Appendix A). A pile of coal was also observed in the basement; therefore, prior to furnace oil, coal was likely burned as a source of heat (refer to Photo 184, Appendix B).

It should be noted that the east side of the duplex dwelling appeared to have been converted to storage space/additional living space.

Single Dwelling

The single dwelling is a one-storey, wood frame structure with a poured concrete basement. The exterior of the dwelling consists of painted wooden siding and wooden framed windows and doors. The roofing materials consist of asphalt shingles.

The interior walls and wall finishes consist of painted concrete, painted drywall, painted fibreboard, barker tile panel board, painted wooden door frames, painted wooden trim around windows and doors and painted wooden baseboards. The ceilings and ceiling finishes consist of painted drywall. The floors and floor finishes consist of painted concrete, hardwood and rolled sheet flooring.

Exterior lighting consists of incandescent lights. Interior lighting consists of incandescent and fluorescent lights. The single dwelling appears to have been formerly heated by a forced air oil-fired furnace.

Storage Shed 1

Storage shed 1 is a one-storey, wood frame structure with concrete pier foundation. The exterior of the shed consists of painted wooden siding and wooden framed windows and door. The roofing materials consist of asphalt shingles. The interior walls, ceiling and floor consist of unfinished wooden boards. Interior lighting consists of an incandescent light and the shed is not heated.

Main Power Building

The main power building is a one-storey, wooden frame structure with a poured concrete slab-on-grade foundation. The exterior of the main power building consists of painted wooden siding and a wooden framed door. The roofing materials consist of asphalt shingles. The interior walls and ceiling consist of unfinished wood boards and painted plywood panels and drywall. The floor consists of unfinished wood boards and concrete. Interior lighting consists of incandescent lights and the main power building is not heated.

Stand-by Diesel Building

The stand-by diesel building is a one-storey, wooden frame structure with a poured concrete slab-on-grade foundation. The exterior of the stand-by diesel building consists of painted wooden siding and a wooden doorframe (no door). The roofing materials consist of asphalt shingles. The interior walls and ceiling consist of painted plywood panels. The floor consists of painted plywood panels over concrete. The stand by diesel building is not heated and there are no light fixtures present on the exterior or interior of the building.

Videograph Building

The videograph building is a one-storey, wood frame structure with a poured concrete slab-on-grade foundation. The exterior of the videograph building consists of painted wooden siding and wooden framed vinyl windows and wooden doors. The roofing materials consist of asphalt shingles. The interior walls and ceiling consist of painted plywood. The floor consists of painted concrete. Interior lighting consists of incandescent lights. The videograph building is heated by electrical baseboard heaters.

Lower Landing Area

Winch House

The winch house is a one-storey, wooden frame structure with a poured concrete slab-on-grade foundation. The exterior of the winch house consists of painted wooden siding and a wooden framed door. The roofing materials consist of asphalt shingles. The interior walls and ceiling consist of unfinished wood boards. The floor consists of painted concrete. Interior lighting consists of one incandescent light and the winch house is not heated.

Storage Shed 2

Storage shed 2 is a one-storey, wood frame structure with a poured concrete slab-on-grade foundation. The exterior of storage shed 2 consists of painted wooden siding and wooden framed windows and doors. The roofing materials consist of cedar shingles. The interior walls and ceiling consist of painted wood boards. The floor consists of painted concrete. There are no light fixtures present on the exterior or interior of the shed. A brick chimney was observed in the shed; therefore, the storage shed appears to have been formerly heated by possibly a stove or a furnace (no longer present).

Powerhouse

The powerhouse is a one-storey, wood frame structure with a poured concrete slab-on-grade foundation. The exterior of the powerhouse consists of painted wooden siding and a wooden framed window and door. The roofing materials consist of cedar shingles. The interior walls and ceiling consist of unfinished wood boards. The floor consists of unpainted concrete. The powerhouse is not heated and there are no light fixtures present on the exterior or interior of the building.

Lower Light Area

Old Equipment Building

The old equipment building is a one-storey, wood frame structure with a poured concrete foundation. The exterior of the old equipment building consists of painted wooden siding and wooden framed windows and a door. The roofing materials consist of asphalt shingles. The interior walls and ceiling consist of painted concrete, painted drywall and wood panels. The floor consists of unpainted and painted concrete. Interior lighting consists of incandescent lights. A brick chimney was observed in the building; therefore, the old equipment building appears to have been formerly heated by possibly a stove or a furnace (no longer present).

1.3 OBJECTIVES AND SCOPE OF WORK

The objective of the HBMS was to identify the type and location of potential and confirmed hazardous building materials within the Site buildings. The scope of work, as per AMEC Proposal Number P3884 (*Proposal for Professional Consulting Services, Hazardous Building Materials Survey, Seven Remote Light Station Properties, Belle Isle South, NL*), included:

- Conducting a walk-through inspection of the Site buildings to identify the potential and/or actual presence of hazardous building materials including:
    - Asbestos-Containing Materials (ACMs)
    - Lead-based paint (LBP);
    - Mercury-based paint (MBP);
    - Polychlorinated Biphenyls (PCB) based paint;
    - Urea formaldehyde foam insulation (UFFI);

  - Sources of ozone depleting substances (ODSs); and
  - Other potentially hazardous building materials.

- Inspecting the Site buildings for evidence of areas that are impacted by suspected visible mould growth (SVG). If suspected mould is present, sampling and laboratory testing of the suspected mould growth to confirm the presence of mould.
- Sampling and laboratory testing of suspected ACMs to confirm the presence or absence of asbestos fibres.
- Sampling and laboratory testing of paint to determine the concentrations of lead, mercury and PCBs.
- Inspecting all thermostats to assess the presence/absence of mercury-containing switches.
- Inspecting all accessible fluorescent lights (if present) for PCB-containing light ballasts.
- Preparing a written report documenting the methodologies and findings of the HBMS.

The findings of the investigation were based on the interpretation of data from the areas investigated and analytical results pertaining to specific samples collected and tested. It is possible that materials exist that could not be reasonably identified within the scope of the work or which were not apparent or accessible during the Site visits. The interior of the upper levels of the light tower were not accessible at the time of the Site visits due to safety concerns (i.e. the stairs beyond the second floor were unstable). Intrusive cavity inspections to investigate the presence or absence of hazardous buildings materials were not performed.

2.0 ENVIRONMENTAL REGULATORY FRAMEWORK

The federal and provincial governments in Canada have prepared and/or adopted numerous acts (and amendments), regulations (and amendments), guidelines, policies, and procedures related to the protection of the environment and the investigation of sites containing hazardous building materials including the following:

- Canadian Council of Ministers of the Environment (CCME) Canadian Environmental Quality Guidelines
  - Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health
- Canadian Environmental Protection Act (1999, C. 33)
  - PCB Waste Export Regulations (SOR/97-109)
  - PCB Regulations (SOR/2008-273)
  - Regulations Amending the PCB Regulations (SOR/2010-57)
  - Interprovincial Movement of Hazardous Waste Regulations (SOR/2002-301)
  - Federal Halocarbon Regulations (SOR/2003-289)
  - Export and Import of Hazardous Waste and Hazardous Recyclable Material Regulations (SOR/2005-149)

- Federal Hazardous Products Act (R.S., 1985, c. H-3)
  - Surface Coating Materials Regulations (SOR/2005-109)
  - Regulations Amending the Surface Coating Materials Regulations (SOR/2010-224)
- Federal Transportation of Dangerous Goods Act (1992, c. 34)
  - Transportation of Dangerous Goods Regulations (SOR/2012-245)
- Health Canada Guidelines for Canadian Drinking Water Quality (Summary Table, 2012)
- National Plumbing Code of Canada (National Research Council Canada)
- NL Environmental Protection Act (SNL2002 cE-14.2)
  - Storage of PCB Wastes Regulations (61/03)
  - Halocarbon Regulations (41/05)
- NL Dangerous Goods Transportation Act (RSNL1990 Chapter D-1)
  - Dangerous Goods Transportation Regulations (5/96)
- NL Department of Environment, Pollution Prevention Division, Guidance Document: Leachable Toxic Waste, Testing and Disposal (2003, GD-PPD-26.1)
- NL Department of Environment and Conservation, Guidance Document for the Management of Impacted Sites (2005, Version 1.01)
- NL Occupational Health and Safety Act (RSNL1990 Chapter O-3)
  - Occupational Health and Safety Regulations (5/12)
  - Asbestos Abatement Regulations (111/98)

AMEC has considered the above documents in conducting this HBMS.

2.1 SELECTION OF GUIDELINES/STANDARDS

Based on the past and projected future Site use activities, the Site is considered to be zoned commercial.

2.1.1 Asbestos-Containing Materials

Analytical results for asbestos in building materials were compared to the NL Asbestos Abatement Regulations (111/98) under the Occupational Health and Safety Act. Under these regulations, materials containing greater than 1% asbestos by dry weight are considered to be ACMs and should be managed in accordance with the applicable regulations.

2.1.2 Lead in Paint

Analytical results for lead in paint were compared to the current and former Federal Hazardous Products Act (HPA) criteria of 90 mg/kg and 5,000 mg/kg, respectively. Under the Act, the lead content limit was reduced from 5,000 mg/kg to 600 mg/kg in 2005 for surface coating materials used in or around the home or other premises where children may become exposed. In 2010,

the lead content limit was further reduced from 600 mg/kg to 90 mg/kg.

In order to determine disposal options, should disposal be required, the former Federal HPA criterion of 5,000 mg/kg lead in paint is typically used as a Provincial disposal guideline to determine whether or not the paint chip samples would be submitted for leachate analysis. Paint chip samples that contain less than 5,000 mg/kg are not likely to be leachable and therefore may be disposed of at an approved landfill facility, pending landfill and regulatory approval. Paint samples with lead concentrations in excess of 5,000 mg/kg should be subjected to leachability testing. The NL Department of Environment, 2003 Guidance Document for Leachable Toxic Waste, Testing and Disposal (GD-PPD-26.1) guideline of 5.00 mg/L lead should be used to assess the results of the leachability testing to determine disposal options for any lead-containing paint to be removed during any disturbance, demolition or renovation activities at the Site buildings.

2.1.3 Mercury in Paint

Analytical results for mercury in paint were compared to the Federal HPA criterion. The maximum acceptable concentration of mercury in paint, under the HPA, is 0.001 percent (equivalent to 10 mg/kg) in or around the home or other premises where children or pregnant women may become exposed.

In order to determine disposal options, should disposal be required, concentrations of mercury in paint were also compared to the CCME Canadian Soil Quality Guidelines (CSQG) for mercury in soil at a commercial site (24 mg/kg). The CCME CSGQ for mercury in soil is typically used as a Provincial disposal guideline to determine whether or not the paint chip samples would be submitted for leachate analysis. Paint samples with 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. Paint samples with a mercury concentration exceeding 24 mg/kg should be subjected to leachability testing. The NL Department of Environment, 2003 Guidance Document for Leachable Toxic Waste, Testing and Disposal (GD-PPD-26.1) guideline of 0.10 mg/L mercury should be used to assess the results of the leachability testing to determine disposal options for any mercury-containing paint to be removed during any disturbance, demolition or renovation activities at the Site buildings.

2.1.4 PCBs in Paint

Analytical results for PCBs in paint were compared to the CCME CSQG of 33 mg/kg for PCBs in soil at a commercial site. The Federal HPA does not include any assessment criteria for PCBs in paint.

In order to determine disposal options, concentrations of PCBs in paint were also compared to the criterion for PCB solid (50 mg/kg) provided in the provincial guidance document for leachable toxic waste (GD-PPD-26.1) and the Federal Transportation of Dangerous Goods Regulations.

2.1.5 Mould

There are currently no regulations specifically covering exposure to mould and/or mould remediation practices in Canada. In addition, there are no occupational exposure limits that define acceptable levels of mould exposure without adverse health effects. However, Sections 4 and 42 of the NL Occupational Health and Safety Act and Regulations, respectively, states that an employer shall ensure, where it is reasonably practicable, the health, safety and welfare of his or her workers and that an employer shall monitor the use or presence of substances at the workplace that may be hazardous to the health and safety of workers. This includes exposure to moulds and other biological matter. Two Canadian guidelines have recently been published that outline mould abatement. These documents were published by the Canadian Construction Association (CCA) and the Environmental Abatement Council of Ontario (EACO). Since there are no clear regulatory limits for determining an acceptable exposure limit to moulds, there is no numerical guideline for determining safe or unsafe concentrations of surface mould growth. Therefore, interpretation of sampling results is subjective. The guidelines listed below were used to evaluate the visual assessment and sampling results for mould:

- *"Mould Guidelines for the Canadian Construction Industry."* Canadian Construction Association, 2004.
- *"Mould Abatement Guidelines."* Environmental Abatement Council of Ontario (EACO), 2010.

3.0 METHODOLOGY

Site inspections and sampling for the investigation were conducted by AMEC personnel on November 16 to 18, 2012. Room-by-room inspection sheets are presented in Appendix E.

3.1 ASBESTOS SAMPLING AND LABORATORY ANALYTICAL PROGRAM

Building materials suspected of containing asbestos were sampled by removing a 2.0 cm by 2.0 cm piece of material (where possible) and placing the sampled materials into Ziploc™ plastic bags.

Bulk building material samples were submitted to the EMSL Analytical, Inc. (EMSL) laboratory located in Mississauga, Ontario for the analysis of asbestos using Polarized Light Microscopy (PLM) with dispersion staining. The analysis was conducted in accordance with the United States Environmental Protection Agency (USEPA) Method *EPA 600/R-93/116 (Method for the Determination of Asbestos in Bulk Building Materials)*. EMSL is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) and the American Industrial Hygiene Association (AIHA) for bulk asbestos fibre analysis by PLM.

Findings of the asbestos sampling and analytical program are presented in Section 4.1. Sample locations and analytical results are graphically illustrated in Figures 3 to 15, Appendix A. Sample locations are also shown in Photos 4 to 68, Appendix B and sample descriptions and analytical results are also summarized in Table C-1, Appendix C. Laboratory certificates of analyses are provided in Appendix D.

3.2 PAINT SAMPLING AND LABORATORY ANALYTICAL PROGRAM

Paint samples were collected from painted surfaces by cutting and scraping areas of flaking paint using clean knives and scrapers. Samples were collected down to bare substrate (*e.g.,* drywall, concrete and wood). A minimum of five grams (where possible) of paint was obtained from each sampling location and stored in Ziploc™ plastic bags.

Paint samples were submitted to the Maxxam Analytics Inc. (Maxxam) laboratory located in Bedford, Nova Scotia for the analysis of lead, mercury and PCB content. The analysis was conducted in accordance with the EPA 6020A, method analysis for metals using inductively coupled plasma – mass spectrometry (ICP-MS). Based on the findings of the analytical program, 56 paint samples were analyzed for lead leachate and 23 paint samples were analyzed for mercury leachate using the Toxicity Characteristic Leaching Program (TCLP). Maxxam is accredited under the Standards Council of Canada (SCC) to perform analysis of lead and mercury in paint samples.

Findings of the paint sampling and analytical program are presented in Section 4.2. Sample locations and analytical results are graphically illustrated in Figures 3 to 15, Appendix A. Sample locations are also shown in Photos 69 to 162, Appendix B and sample descriptions and analytical results are also summarized in Tables C-2 to C-6, Appendix C. Laboratory certificates of analyses are provided in Appendix D.

3.3 INSPECTION FOR UREA FORMALDEHYDE FOAM INSULATION (UFFI)

According to the USEPA and the US Department of Health and Human Services, Agency for Toxic Substances and Disease Registry (ATSDR), formaldehyde is a colourless, pungent-smelling gas that is commonly used in some manufactured building materials and household products such as particleboard, medium density fiberboard, fiberglass, plywood, carpets, fabrics, urea-formaldehyde resins, paints, paper, fertilizer, food preservatives, antiseptics, medicines and cosmetics. These agencies also state, that as a by-product of combustion, formaldehyde may also be released to indoor air environments by means of un-vented wood and fuel-burning appliances and tobacco smoke. According to the Canada Mortgage and Housing Corporation (CMHC), new carpets and composite wood products used in the present-day construction of buildings have the potential to increase the levels of formaldehyde in indoor air and are deemed to be the most likely sources of high formaldehyde levels in these newer and well-sealed buildings.

UFFI is a thermal insulation material that is pumped into interstitial spaces between the walls of buildings where it hardens to form a solid layer of insulation. UFFI is comprised of a cured mixture of urea-formaldehyde resin and compressed air. The sale and installation of UFFI was banned for health-related reasons in 1980 because of the formation of formaldehyde gas which is released from the UFFI to the building interior. Findings of the visual inspection for UFFI are presented in Section 4.3.

3.4 INSPECTION FOR SUSPECTED VISIBLE MOULD GROWTH (SVG)

Mould spores are present in all indoor environments and cannot be completely eliminated. Cellulose based building materials provide a nutrient base for many mould species; however, mould cannot grow unless an adequate amount of excess moisture is present.

The focus of the visual inspection included, but was not limited to, searching for visible signs of water staining, water damage, excess moisture, and/or infiltration; and signs of SVG and/or staining. In this report, term SVG refers to a smearable discoloration of surfaces differing from that of the natural substrate with observable fungal characteristics based on our experience evaluating similar building types. Bulk material samples were collected from areas of SVG to confirm the presence of mould growth.

Mould samples were collected by removing a 2.0 cm by 2.0 cm piece of material (where possible) from the area of SVG. The samples were stored in Ziploc™ plastic bags and labelled.

Suspected mould samples were submitted to EMC Scientific (EMC) laboratory located in Mississauga, Ontario for direct microscopic examination of mould to the genus level. EMC is an American Industrial Hygiene Association Environmental Microbiology Proficiency Analytical Testing (AIHA EMPAT) program participant.

Findings of the visual inspection for SVG and the mould sampling and analytical program are presented in Section 4.4. Sample locations and analytical results are graphically illustrated in Figures 3 and 6, Appendix A. Sample locations are also shown in Photos 163 and 164, Appendix B and sample descriptions and analytical results are also summarized in Table C-7, Appendix C. Laboratory certificates of analyses are provided in Appendix D.

3.5 INSPECTION OF THERMOSTATS FOR MERCURY-CONTAINING SWITCHES

Thermostats identified within the Site buildings were visually inspected by removing the casings and checking for the presence of mercury-containing switches. Findings of the thermostat inspection are presented in Section 4.5.

3.6 INSPECTION OF LIGHT BALLASTS FOR PCBs

Light ballasts within accessible fluorescent light fixtures identified within the Site buildings were visually inspected for the presence or absence of PCB-containing dielectric fluid and condition by removing the light tubes and casings in the fixtures. The name of the manufacturer and manufacturer's code were recorded (where possible) and compared to Environment Canada's *Environmental Protection Series Report (EPS 2/CC/2, August 1991)*. The ballasts are classified as either non-PCB or potential-PCB. Findings of the light ballast inspection are presented in Section 4.6.

3.7 DOCUMENTATION OF POTENTIAL SOURCES OF ODSs

Ozone depleting substances (ODSs) include any substances containing chlorofluorocarbon (CFC), hydrochlorofluorocarbon (HCFC), halon or any other material capable of destroying ozone in the atmosphere. ODSs have been used in rigid polyurethane foam and insulation, laminates, aerosols, air conditioners, freezers, chillers, fire extinguishers, cleaning solvents and for the sterilization of medical equipment. Federal regulations introduced in 1995 required the elimination of production and import of CFCs by January 1, 1996 (subject to certain essential uses) and a freeze on the production and import of HCFC-22 by January 1, 1996. These regulations also require the complete elimination of HCFC-22 by the year 2020. The NL Halocarbon Regulations (dated May 2005) required the elimination of halon in portable fire extinguishers effective June 1, 2005 and the elimination of halon in fire extinguishing systems by January 1, 2010.

Potential sources of ODSs identified within the Site buildings were documented during the Site investigation and are summarized in Section 4.7 (if present).

3.8 DOCUMENTATION OF OTHER POTENTIALLY HAZARDOUS BUILDING MATERIALS

During the Site inspection, other potentially hazardous building materials were observed and are documented in Section 4.8.

3.9 QUALITY ASSURANCE/QUALITY CONTROL (QA/QC) PROGRAM

Laboratory blanks and Quality Control (QC) standard samples were analyzed to assess the reliability of the paint analyses. In order to minimize cross contamination during sampling, a field Quality Assurance/Quality Control (QA/QC) program was followed, which included the following measures:

- Latex or nitrile gloves were worn during all sampling (new pair of gloves for each sample);
- All sampling equipment was thoroughly cleaned prior to sampling to ensure that samples were unaffected by cross-contamination from previous samples; and
- Each sample was photographed, given a unique sample ID and logged onto a chain of custody form before shipment to the laboratory.

The laboratories utilized have extensive QA/QC programs in place to ensure that reliable results are consistently obtained. Specific laboratory QA/QC measures include:

- Chain of Custody and sample integrity inspection;
- Strict documentation control and files;
- Trained personnel prepare and analyze samples according to Standard Operating Procedures;

- All analytical methods are based on accepted procedures and are fully validated prior to use;
- Precision is monitored by performing replicate analysis of samples;
- Accuracy is verified by analyzing spiked samples and reference materials;
- Instrument calibration integrity is ensured by analyzing calibration check standards within each run sequence;
- Extensive use is made of reference material for routine procedure evaluation;
- Highest available purity analytical standards;
- Predefined analytical sequences ensure all results are traceable to calibration and QC data;
- Hard copy reports displaying all of the required data are generated for each instrument;
- Analytical results are determined only from instrument responses that fall within the calibration range;
- Acceptable QC performance must be demonstrated prior to data authorization;
- On-going method and instrument performance records are maintained for all analysis; and,
- A full-time QA Scientist evaluates the QA program on an on-going basis.

4.0 FINDINGS

4.1 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 65 building material samples (BS-ASB-01 to BS-ASB-65) plus four (4) field duplicate samples (BS-ASB-DUP1, BS-ASB-DUP2, BS-ASB-DUP3 and BS-ASB-DUP4, duplicates of BS-ASB-05, BS-ASB-21, BS-ASB-56 and BS-ASB-54, respectively) were collected from the Site buildings and analyzed for asbestos content (refer to Photos 4 to 68, Appendix B). Sample descriptions and analytical results are summarized in Table C-1, Appendix C. Sample locations

and analytical results are graphically illustrated in Figures 3 to 15, Appendix A.

4.1.1 Friable Materials

4.1.1.1 Spray-Applied Fireproofing, Insulation and Texture Finishes

No spray-applied fireproofing, insulation or texture finishes were observed within the Site buildings during the Site visits; therefore no samples were collected for analysis during this assessment.

4.1.2 Non-Friable and Potentially Friable Materials

4.1.2.1 Ceiling Tile

There were no ceiling tiles observed in the Site buildings during the Site visits. Therefore, no samples of ceiling tile were collected for analysis during this assessment.

4.1.2.2 Drywall Joint Compound

Painted drywall was observed on the walls and ceilings in various areas throughout the duplex dwelling, single dwelling, main power building and old equipment building. The following samples of drywall joint compound were collected:

- Two (2) samples of drywall joint compound (BS-ASB-03 and BS-ASB-05) plus one (1) field duplicate sample (BS-ASB-DUP1, duplicate of BS-ASB-05) were collected from interior walls of the duplex dwelling and analyzed for asbestos content (refer to Photos 6 and 8, Appendix B).
- One (1) sample of drywall joint compound (BS-ASB-25) was collected from an interior wall of the single dwelling and analyzed for asbestos content (refer to Photo 28, Appendix B).
- One (1) sample of drywall joint compound and plaster (BS-ASB-44) was collected from an interior wall of the main power building and analyzed for asbestos content (refer to Photo 47, Appendix B).
- One (1) sample of drywall joint compound (BS-ASB-59) was collected from an interior wall of the old equipment building and analyzed for asbestos content (refer to Photo 62, Appendix B).

Chrysotile asbestos (5%) was detected in samples BN-ASB-25 and BN-ASB-59 at levels above the applicable *NL Asbestos Abatement Regulations (111/98)* (i.e., <1%) and therefore these materials (i.e., drywall joint compound collected from the single dwelling basement and drywall joint compound collected from the interior of the old equipment building) are considered to be ACMs. Chrysotile asbestos (1%) was detected in sample BS-ASB-44 at a level below the applicable *NL Asbestos Abatement Regulations (111/98)* (i.e., <1%). However, due to the potentially friable nature of drywall joint compound and plaster, it is recommended that these materials be treated as asbestos containing. Asbestos was not detected in any of the other drywall joint compound samples collected and submitted for analysis.

It should be noted that it is common for the asbestos content in troweled on materials, such as drywall joint compound and plaster 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 and plaster throughout the main power building should be treated as an ACM.

The drywall and associated joint compound visible throughout the Site buildings varied in condition from good to poor.

4.1.2.3 Vinyl Flooring Products and Mastics

Two types of 12" x 12" vinyl floor tiles were observed in the duplex dwelling. Black mastic or yellow adhesive was adhered to the underside of the vinyl floor tiles. Two (2) samples of vinyl floor tiles and associated mastic/adhesive (BS-ASB-01 and BS-ASB-08) were collected from the duplex dwelling and analyzed for asbestos content (refer to Photos 4 and 11, Appendix B). Descriptions of the vinyl floor tiles and the results of the asbestos analysis are summarized in Table 1.

Table 1: Vinyl Floor Tile Descriptions

Sample ID	Description	Location Observed	Condition	Area (Approx.)	Analytical Result	ACM (Yes/No)
BS-ASB-01	Beige and grey stripe pattern (12" x 12"), yellow adhesive.	Duplex Dwelling Living Room and Kitchen	Fair	42 m^2	2.1% Chrysotile	Yes
BS-ASB-08	Beige and white stripe pattern (12" x 12"), black mastic.	Duplex Dwelling Second Floor Hallway, Washroom and Bedroom 1, 3 and 4	Poor	40 m^2	2.5% Chrysotile	Yes

It should be noted that other vinyl floor tiles or flooring materials and associated mastics may be present in other areas of the Site buildings which were not apparent or accessible during the Site visits.

4.1.2.4 Baseboard, Carpet and Stair Tread Adhesives/Mastics

A section of cushioned stair tread material was observed on the stairwell to the second floor of the duplex dwelling. One sample of the stair tread material and associated adhesive (BS-ASB-07) was collected from the stairwell and analyzed for asbestos content (refer to Photo 10, Appendix B). Asbestos was not detected in the stair tread and associated adhesive sample collected and submitted for analysis.

4.1.2.5 Roofing Products

Seven (7) samples of asphalt shingle roofing material (BS-ASB-23, BS-ASB-36, BS-ASB-38, BS-ASB-43, BS-ASB-47, BS-ASB-50 and BS-ASB-54) plus one (1) field duplicate sample (BS-ASB-DUP4, duplicate of BS-ASB-54) were collected from the roofs of the Site buildings (duplex

dwelling, single dwelling, storage shed #1, stand-by diesel building, main power building, videograph building and winch house) and analyzed for asbestos content (refer to Photos 26, 39, 41, 46, 50, 53 and 57, Appendix B). Chrysotile asbestos (1.5% and 2%) was detected in samples BS-ASB-38 and BS-ASB-43, respectively, at levels above the applicable *NL Asbestos Abatement Regulations (111/98)* (i.e., >1%) and therefore this material (i.e., black asphalt shingles collected from storage shed 1 and the stand-by diesel building) are considered to be ACMs. Chrysotile asbestos (0.52%) was detected in sample BS-ASB-36 (i.e. red/black asphalt shingle with tar paper collected from the single dwelling) at a level below the applicable *NL Asbestos Abatement Regulations (111/98)* (i.e., <1%). Asbestos was not detected in the black asphalt shingle samples collected from the duplex dwelling and winch house (i.e. BS-ASB-23, BS-ASB-54 and BS-ASB-DUP4) or the red/black asphalt shingle samples collected from the main power building and the videograph building (i.e. BS-ASB-47 and BS-ASB-50).

To access the lower light area, AMEC personnel were required to walk from the main site area carrying limited sampling equipment and supplies. The roof of the old equipment building was not accessible at the time of the Site visits, as a ladder was required to work at height; therefore, no samples of roofing materials were collected from the old equipment building during this assessment. The roofing materials consist of asphalt shingles. These materials should be treated as suspect ACMs until samples are collected and tested to verify asbestos content.

4.1.2.6 Thermal System Insulation

One (1) sample of yellow/orange foam insulation (BS-ASB-61) was collected from around wiring on the interior of the videograph building and analyzed for asbestos content (refer to Photo 64, Appendix B). Asbestos was not detected in the foam insulation sample collected and submitted for analysis.

One (1) sample of pink fibreglass insulation with a paper backing (BS-ASB-15) was collected from the duplex dwelling storage room 2 and one (1) sample of grey/black fibreglass insulation (BS-ASB-16) was collected from the duplex dwelling attic and analyzed for asbestos content (refer to Photos 18 and 19, Appendix B). One (1) sample of pink/beige fibreglass insulation with a paper backing (BS-ASB-27) was collected from the single dwelling front porch and analyzed for asbestos content (refer to Photo 30, Appendix B). One (1) sample of yellow fibreglass insulation with a paper backing (BS-ASB-55) was collected from the old equipment building room 1 and analyzed for asbestos content (refer to Photo 58, Appendix B). Asbestos was not detected in the insulation and paper backing samples collected and submitted for analysis.

Remnants of grey corrugated cardboard-type insulation were observed strapped to a metal tank (i.e. possible heating system expansion tank) located in the duplex dwelling attic. One (1) sample of the corrugated cardboard-type insulation (BS-ASB-17) was collected from the tank and analyzed for asbestos content (refer to Photo 20, Appendix B). Chrysotile asbestos (30%) was detected in sample BS-ASB-17 at a level above the applicable *NL Asbestos Abatement Regulations (111/98)* (i.e., >1%) and therefore this material (i.e., air cell insulation collected from the duplex dwelling attic) is considered to be an ACM. It is important to note that air cell insulation can become friable as it ages and deteriorates over time.

4.1.2.7 Weather Stripping and Caulking

No samples of weather stripping were collected during this assessment.

Two samples of white caulking (BS-ASB-09 and BS-ASB-32) were collected from around the bathtubs in the washrooms of the duplex dwelling and single dwelling and analyzed for asbestos content (refer to Photos 12 and 35, Appendix B). Asbestos was not detected in the caulking samples collected from the washrooms of the duplex and single dwellings.

Window caulking was observed on the exterior or interior of the duplex dwelling, single dwelling, storage shed 1, videograph building and old equipment building. The following samples of window caulking were collected:

- One (1) sample of beige caulking (BS-ASB-22) was collected from around a window on the exterior of the duplex dwelling and analyzed for asbestos content (refer to Photo 25, Appendix B).
- One (1) sample of white caulking (BS-ASB-37) was collected from around a window on the exterior of the single dwelling and analyzed for asbestos content (refer to Photo 40, Appendix B).
- One (1) sample of beige caulking (BS-ASB-39) was collected from around a window on the exterior of storage shed 1 and analyzed for asbestos content (refer to Photo 42, Appendix B).
- Two (2) samples of grey/black and white caulking (BS-ASB-49 and BS-ASB-51) were collected from around windows on the exterior of the videograph building and analyzed for asbestos content (refer to Photos 52 and 54, Appendix B).
- One (1) sample of grey caulking (BS-ASB-56) plus one (1) field duplicate sample (BS-ASB-DUP3, duplicate of BS-ASB-56) were collected from around a boarded up window on the interior of the old equipment building and analyzed for asbestos content (refer to Photo 59, Appendix B).

Asbestos was not detected in the window caulking samples collected from the duplex and single dwellings or the videograph building. Chrysotile asbestos (0.26%) was detected in sample BS-ASB-39 at a level below the applicable *NL Asbestos Abatement Regulations (111/98)* (i.e., <1%). Chrysotile asbestos (ranging from 2.6% to 3%) was detected in samples BS-ASB-56 and BS-ASB-DUP3 at levels above the applicable *NL Asbestos Abatement Regulations (111/98)* (i.e., >1%) and therefore this material (i.e., grey caulking collected from around a boarded up window in room 1 of the old equipment building) is considered to be an ACM.

Two (2) samples of grey and black caulking (BS-ASB-33 and BS-ASB-34) were collected from holes in the exterior of the single dwelling and analyzed for asbestos content (refer to Photos 36 and 37, Appendix B). Chrysotile asbestos (10% and 40%) was detected in samples BS-ASB-33 and BS-ASB-34 at levels above the applicable *NL Asbestos Abatement Regulations (111/98)* (i.e., >1%) and therefore these materials (i.e., grey and black caulking collected from holes in the single dwelling exterior) are considered to be ACMs.

Two (2) samples of grey caulking (BS-ASB-42 and BS-ASB-46) were collected from around electrical conduit on the exterior of the stand-by diesel and main power buildings and analyzed for asbestos content (refer to Photos 45 and 49, Appendix B). Chrysotile asbestos (0.32% and 0.56%) was detected in samples BS-ASB-42 and BS-ASB-46 at levels below the applicable *NL Asbestos Abatement Regulations (111/98)* (i.e., <1%).

One (1) sample of beige caulking (BS-ASB-41) was collected from the interior of the stand-by diesel building and analyzed for asbestos content (refer to Photo 44, Appendix B). Chrysotile asbestos (0.64%) was detected in sample BS-ASB-41 at a level below the applicable *NL Asbestos Abatement Regulations (111/98)* (i.e., <1%).

One (1) sample of beige caulking (BS-ASB-48) was collected from wooden siding on the exterior of the videograph building and analyzed for asbestos content (refer to Photo 51, Appendix B). One (1) sample of white caulking (BS-ASB-65) was collected from wooden siding on the exterior of storage shed 2 and analyzed for asbestos content (refer to Photo 68, Appendix B). Asbestos was not detected in the caulking samples collected from wooden siding on the exterior of the videograph building or storage shed 2.

4.1.2.8 Mortar, Grout and Other Cementitious Materials

Five (5) samples of brick mortar (BS-ASB-02, BS-ASB-13, BS-ASB-24, BS-ASB-58 and BS-ASB-63) and three (3) samples of brick (BS-ASB-14, BS-ASB-57 and BS-ASB-62) were collected from chimneys in the duplex dwelling, single dwelling, old equipment building and storage shed 2 and analyzed for asbestos content (refer to Photos 5, 16, 17, 27, 60, 61, 65 and 66, Appendix B). Asbestos was not detected in the brick or brick mortar samples collected and submitted for analysis.

One sample of grey concrete block mortar (BS-ASB-12) was collected from an interior wall in duplex dwelling storage room 2 and analyzed for asbestos content (refer to Photo 15, Appendix B). One sample of grey concrete block mortar (BS-ASB-18) was collected from around a furnace pipe connected to a chimney in duplex dwelling storage room 1 and analyzed for asbestos content (refer to Photo 21, Appendix B). Asbestos was not detected in the concrete block mortar samples collected and submitted for analysis.

Two (2) samples of a concrete parging (BS-ASB-20 and BS-ASB-52) were collected from an interior wall in duplex dwelling storage room 2 and from the floor of the powerhouse, respectively, and analyzed for asbestos content (refer to Photos 23 and 55, Appendix B). Asbestos was not detected in the concrete parging samples collected and submitted for analysis.

4.1.2.9 Other Potential ACMs

Various types of flooring materials were observed in the duplex and single dwellings. Five (5) samples of sheet flooring materials (BS-ASB-06, BS-ASB-10, BS-ASB-11, BS-ASB-19 and BS-ASB-21) plus one (1) field duplicate sample (BS-ASB-DUP2, duplicate of BS-ASB-21) were

collected from the duplex dwelling (pantry, bedroom 2 and storage rooms 2 and 3) and analyzed for asbestos content (refer to Photos 9, 13, 14, 22 and 24, Appendix B). One (1) sample of sheet flooring material (BS-ASB-26) was collected from the single dwelling (front porch) and analyzed for asbestos content (refer to Photo 29, Appendix B). Asbestos was not detected in the sheet flooring material samples collected and submitted for analysis.

Two (2) samples of fibreboard (BS-ASB-04 and BS-ASB-29) were collected from walls in the duplex dwelling living room and single dwelling kitchen and analyzed for asbestos content (refer to Photos 7 and 32, Appendix B). Asbestos was not detected in the fibreboard samples collected and submitted for analysis.

One (1) sample of barker tile panel board and adhesive (BAC-AS-31) was collected from a wall in the single dwelling washroom and analyzed for asbestos content (refer to Photo 34, Appendix B). Asbestos was not detected in the barker tile panel board and adhesive sample collected and submitted for analysis.

One (1) sample of yellow speckled countertop (BS-ASB-28) was collected from the kitchen in the single dwelling and analyzed for asbestos content (refer to Photo 31, Appendix B). Asbestos was not detected in the countertop sample collected and submitted for analysis.

Five (5) samples of felt tar paper (BS-ASB-35, BS-ASB-40, BS-ASB-53, BS-ASB-60 and BS-ASB-64) were collected from the exterior of the single dwelling, storage shed 1, winch house, old equipment building and storage shed 2 and analyzed for asbestos content (refer to Photos 38, 43, 56, 63 and 67, Appendix B). Chrysotile asbestos (<0.25%) was detected in sample BS-ASB-53 at a level below the applicable *NL Asbestos Abatement Regulations (111/98)* (i.e., <1%). Asbestos was not detected in any of the other felt tar paper samples collected and submitted for analysis.

One (1) sample of fabric/plastic-type material (BS-ASB-30) was collected from a closet door in bedroom 3 in the single dwelling and analyzed for asbestos content (refer to Photo 33, Appendix B). Asbestos was not detected in the fabric/plastic-type material sample collected and submitted for analysis.

One (1) sample of a black rubber coating (BS-ASB-45) was collected from a wire on the interior of the main power building and analyzed for asbestos content (refer to Photo 48, Appendix B). Asbestos was not detected in the rubber coating sample collected and submitted for analysis.

Other potential ACMs were observed and were not sampled due to the nature of the 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 incandescent light heat shields, interior components of furnaces and/or stoves, fire rated structures or building materials and underground infrastructure and piping.

4.2 PAINT FINISHES

The paint visible throughout the Site buildings varied in condition from fair to poor. Peeling and flaking paint was observed on the interior and exterior of the Site buildings (refer to Photos 69, 75, 100 and 152, Appendix B).

A total of 94 samples (BS-PS-01 to BS-PS-94) plus eight (8) field duplicate samples (BS-PS-DUP1 to BS-PS-DUP8) were collected from painted surfaces of the Site buildings and analyzed for lead and mercury content (refer to Photos 69 to 162, Appendix B). Nine (9) paint samples (BS-PS-01, BS-PS-12, BS-PS-22, BS-PS-39, BS-PS-42, BS-PS-51, BS-PS-68, BS-PS-84 and BS-PS-91) plus two (2) field duplicate samples (BS-PS-DUP1 and BS-PS-DUP6, duplicates of BS-PS-01 and BS-PS-68, respectively) were also analyzed for PCB content. Sample descriptions and analytical results are summarized in Tables C-2 to C-4, Appendix C. Sample locations and analytical results are graphically illustrated in Figures 3 to 15, Appendix A.

Since the concentrations of lead detected in 57 paint samples, plus six (6) field duplicate samples, exceeded the former Federal HPA criterion of 5,000 mg/kg (refer to table C-2, Appendix C), 52 paint samples, plus four (4) field duplicate samples, 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 samples BS-PS-78 and BS-PS-90 were not tested for lead leachate due to low sample volume remaining after initial analysis. It should be noted that the concentrations of lead detected in paint samples BS-PS-23, BS-PS-60 and BS-PS-93 were less than the concentrations detected in their corresponding field duplicate samples BS-PS-DUP2, BS-PS-DUP5 and BS-PS-DUP7, respectively; therefore, the field duplicate sample was submitted for leachate analysis instead of the original paint sample. The laboratory results for lead leachate in paint are presented in Table C-5, Appendix C.

The concentrations of mercury detected in 22 paint samples (BS-PS-19, BS-PS-26, BS-PS-29, BS-PS-32, BS-PS-34, BS-PS-36 to BS-PS-38, BS-PS-42, BS-PS-43, BS-PS-60 to BS-PS-63, BS-PS-65, BS-PS-66, BS-PS-70 to BS-PS-72, BS-PS-74, BS-PS-77 and BS-PS-79), plus two (2) field duplicate samples (BS-PS-DUP3 and BS-PS-DUP5, duplicates of BS-PS-31 and BS-PS-60) exceeded the CCME CSQG of 24 mg/kg for mercury in soil at a commercial site. These paint samples were also tested for mercury leachate using 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 C-6, Appendix C.

4.2.1 Lead in Paint

The concentrations of lead in the paint samples ranged from 19 mg/kg to 75,000 mg/kg (refer to table C-2, Appendix C). Thirty-four (34) of the 94 paint samples, plus two (2) field duplicate samples (BS-PS-DUP4 and BS-PS-DUP6, duplicates of BS-PS-41 and BS-PS-68, respectively), 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. Fifty-six (56) paint samples, plus six (6) field duplicate samples, contained lead at concentrations above the former Federal HPA criterion of 5,000 mg/kg (refer to table C-2, Appendix C). Four (4) paint samples (BS-PS-58,

BS-PS-59, BS-PS-76 and BS-PS-82) contained lead at concentrations below the applicable Federal HPA criterion (i.e. 90 mg/kg).

4.2.2 Leachable Lead in Paint

The concentrations of leachable lead in 46 of the 54 paint samples (ranging from 5.4 mg/L to 250 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 C-5, Appendix C).

The paint collected was generally in poor condition and flaking. Since the concentrations of leachable lead in these paint samples are at levels considered to be hazardous, these paints, if removed from the Site, must be disposed of at a hazardous waste treatment facility.

Paint samples BS-PS-78 and BS-PS-90 were not tested for lead leachate due to low sample volume remaining after initial analysis. Prior to disturbance/disposal, these samples should be re-collected and analyzed for lead leachate.

4.2.3 Mercury in Paint

The concentrations of mercury in the paint samples ranged from non-detect (<1.0 mg/kg) to 110 mg/kg (refer to Table C-3, Appendix C). Sixteen (16) of the 94 paint samples (BS-PS-01, BS-PS-07, BS-PS-23, BS-PS-24, BS-PS-27, BS-PS-28, BS-PS-30, BS-PS-33, BS-PS-39, BS-PS-40, BS-PS-44, BS-PS-57, BS-PS-64, BS-PS-69, BS-PS-78 and BS-PS-93), plus three (3) field duplicates (BS-PS-DUP1, BS-PS-DUP2 and BS-PS-DUP7, duplicates of BS-PS-01, BS-PS-23 and BS-PS-93, respectively) contained mercury at concentrations above the Federal HPA criterion of 10 mg/kg but below the CCME CSQG of 24 mg/kg. Twenty-two (22) paint samples (BS-PS-19, BS-PS-26, BS-PS-29, BS-PS-32, BS-PS-34, BS-PS-36 to BS-PS-38, BS-PS-42, BS-PS-43, BS-PS-60 to BS-PS-63, BS-PS-65, BS-PS-66, BS-PS-70 to BS-PS-72, BS-PS-74, BS-PS-77 and BS-PS-79), plus two (2) field duplicate samples (BS-PS-DUP3 and BS-PS-DUP5, duplicates of BS-PS-31 and BS-PS-60, respectively) contained mercury at concentrations above or equal to the CCME CSQG of 24 mg/kg for mercury in soil at a commercial site. All of the other paint samples analyzed 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).

4.2.4 Leachable Mercury in Paint

The concentrations of leachable mercury in all 23 of the paint samples tested were 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 C-6, Appendix C).

The paint collected was generally in poor condition and flaking. The concentrations of leachable mercury in these paints are not at levels considered to be hazardous; however, paint samples BS-PS-19, BS-PS-36, BS-PS-38, BS-PS-62, BS-PS-72, BS-PS-74, BS-PS-79 and BS-PS-DUP3 (duplicate of BS-PS-31) were leachable for lead. Therefore, if removed from the Site,

these lead leachable paints must be disposed of at a hazardous waste treatment facility. All other paints tested for mercury leachate, if removed from the Site, may be disposed of at an approved landfill facility, pending landfill and regulatory approval.

4.2.5 PCBs in Paint

All of the paint samples analyzed for PCBs were 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 for PCB solid (50 mg/kg) provided in the provincial guidance document for leachable toxic waste (GD-PPD-26.1) (refer to Table C-4, Appendix C).

4.3 UREA FORMALDEHYDE FOAM INSULATION (UFFI)

Visual indicators suggesting the potential presence of UFFI were not observed at the Site. The nature of the insulation in the walls and ceilings throughout the Site buildings could not be confirmed at the time of the Site inspections. However, fiberglass insulation was observed in various rooms in the duplex dwelling, single dwelling and old equipment building (refer to Photos 18, 19, 30 and 58, Appendix B). Since the original Belle Isle South Lightstation was established in the mid-1850s, with various upgrades since that time, it is possible that UFFI may be present in some areas of the Site buildings.

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”.

4.4 SUSPECTED VISIBLE MOULD GROWTH (SVG)

AMEC inspected the interior areas of the Site buildings 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/or ceilings in several of the Site buildings (refer to Photos 75 and 139, Appendix B). No building cavity inspections were performed by AMEC during this assessment. Areas of water damage and SVG were observed in several areas on the interior of the duplex dwelling and single dwelling (refer to Photos 163 and 164, Appendix B). A total of two (2) samples (BS-MD-01 and BS-MD-02) were collected from the duplex dwelling (kitchen ceiling) and the single dwelling (living room wall) and analyzed for mould growth (refer to Figures 3 and 6, Appendix A and Photos 165 and 166, Appendix B). The laboratory results confirmed that moderate to abundant mould growth was present in the samples collected and submitted for analysis (refer to Table C-7, Appendix C). The types of

mould identified in the samples were *Stachybotrys*, *Cladosporium, Ulocladium,* Fungal Hyphae *and Aspergillus.*

4.5 MERCURY-CONTAINING THERMOSTATS

Two (2) types of thermostats were identified inside the Site buildings during the investigation (refer to Photos 167 and 168, Appendix B). Results of the thermostat inspection are summarized in Table 2.

Table 2: Thermostat Descriptions

Description of Thermostat	Manufacturer	Location Observed	No. Observed	Thermostat Inspected (Yes/No)	Mercury Switch (Yes/No)
Beige, rectangular casing, wall-mounted	Honeywell	Duplex Living Room	1	Yes	Yes
Beige, rectangular casing, wall-mounted	White-Rodgers	Single Dwelling Hallway (next to Living Room)	1	Yes	Yes

4.6 PCB-CONTAINING LIGHT BALLASTS

One type of fluorescent light ballast was observed during the Site inspections (refer to Photo 169, Appendix B). A total of two (2) ballasts were inspected. Results of the light ballast inspection are summarized in Table 3.

Table 3: Fluorescent Light Ballast Descriptions

Manufacturer	Cat./Serial No.	Location Observed	No. Inspected	Condition	Potential PCBs (Yes/No)
Canadian General Electric	17A240N	Single Dwelling Kitchen	2	Poor	Yes

4.7 POTENTIAL SOURCES OF ODSs

Potential sources of ODSs identified during this assessment included two refrigerators and a freezer in the duplex dwelling, a refrigerator in the single dwelling and a freezer in storage shed 1 (refer to Photos 170 to 174, Appendix B). The types of refrigerant(s) were not confirmed for the refrigerators and freezers at the time of this assessment.

Eight (8) fire extinguishers were identified throughout the Site buildings. Four (4) fire extinguishers were observed in the duplex dwelling living room, kitchen, pantry and hallway (refer to Photos 175 to 178, Appendix B); three (3) fire extinguishers were observed in the single dwelling kitchen, pantry and hallway (refer to Photos 179 to 181, Appendix B); and one (1) fire extinguisher was observed in the stand-by diesel building (refer to Photo 182, Appendix B). The labels on these units did not indicate the presence of halon or other ODS ingredients; however the label on the fire extinguisher in the stand-by diesel building was absent. Therefore, it could not be determined from the inspection if the fire extinguisher contained halon or other ODS ingredients. Some of the fire extinguishers appeared to be in poor condition.

4.8 OTHER POTENTIALLY HAZARDOUS BUILDING MATERIALS OR PRODUCTS

Other potentially hazardous building materials or products identified during this assessment are presented in the following sections.

4.8.1 Mercury

The interior of the upper levels of the light tower were not accessible at the time of the Site visits due to safety concerns (i.e. the stairs beyond the second floor were unstable); therefore, the main lighting system in the light tower is unknown. Mercury may be present in the fluorescent light tubes identified in the single dwelling and in possible HID light bulbs (if present) in the light tower. The light tubes in these light fixtures often contain limited quantities of mercury in a powder or vapour form.

4.8.2 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.

Samples of the drinking water at the Site were not collected by AMEC during this assessment and analyzed for the presence of lead. Since the history of the original Lightstation dates back to the mid-1850s, with various upgrades since that time, AMEC expects that lead in drinking water may be an issue, since lead solder for use in potable water distribution pipes was not banned until the late 1980s. If lead solder is present at the Site, lead concentrations in drinking water can typically be reduced to acceptable levels by running the cold water tap for five to ten minutes prior to use. It is important to note that at the time of the Site investigation it was not known if potable water was supplied to the Site.

Several potential lead-acid batteries (i.e., solar batteries) were noted inside the videograph building at the time of the Site inspection (refer to Photo 183, Appendix B).

4.8.3 Silica

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

4.8.4 Coal

A coal pile was observed in the basement of the duplex dwelling (refer to Photo 184, Appendix B). Solid wastes such as coal may contain heavy metals, polycyclic aromatic hydrocarbons (PAHs) and/or fuel oil components (i.e. benzene, toluene, ethylbenzene, xylene [BTEX] and total petroleum hydrocarbons [TPH]).

4.9 QA/QC DISCUSSION

Details regarding the QC assessment of surrogate recoveries, field duplicate, laboratory duplicate and laboratory blank samples are presented in this section. The QA/QC results are reported on the Laboratory Certificates of Analyses included in Appendix D.

4.9.1 Surrogate Recoveries

The PCB surrogate recoveries for paint samples BS-PS-01, BS-PS-12, BS-PS-42, BS-PS-51, BS-PS-68, BS-PS-84, BS-PS-91, BS-PS-DUP1 and BS-PS-DUP6 were not within the acceptable QC limits. Unidentified (possibly halogenated) compounds were detected in paint samples BS-PS-22, BS-PS-42, BS-PS-68 and BS-PS-DUP6. The laboratory reported that the overall quality control for this analysis meets acceptability criteria.

4.9.2 Laboratory Blank Samples

Laboratory method blank samples were analyzed for lead, mercury, PCBs, leachable lead and leachable mercury. The purpose of the laboratory blank samples were to assess the quality of the laboratory results with respect to the presence/absence of instrument cross contamination at the laboratory.

Analysis of the laboratory blank samples indicated non-detectable concentrations; therefore, no evidence of cross contamination at the laboratory was identified during the laboratory analytical program.

4.9.3 Field Duplicate Samples

The analytical data for the field duplicate paint samples and the original paint samples analyzed for lead and mercury were compared as relative percent differences (RPDs). A review of the field duplicate data is summarized in Table 4.

Table 4: Field Duplicate RPDs

Duplicate Sample ID	Original Sample ID	RPD – Lead %	RPD - Mercury %
BS-PS-DUP1	BS-PS-01	7.6	7.4
BS-PS-DUP2	BS-PS-23	63.8	30.8
BS-PS-DUP3	BS-PS-31	168.5	173.2
BS-PS-DUP4	BS-PS-41	23.3	30.5
BS-PS-DUP5	BS-PS-60	46.2	15.9
BS-PS-DUP6	BS-PS-68	2.6	11.0
BS-PS-DUP7	BS-PS-93	24.4	11.8
BS-PS-DUP8	BS-PS-94	20.0	2.0

The poor RPDs for lead and mercury in sample BS-PS-DUP3 were likely due to sample inhomogeneity. All other RPDs were reported within 100% proof of equivalency.

4.9.4 Laboratory Duplicates

The analytical data for the laboratory duplicate paint samples and the original paint samples analyzed for lead and mercury were compared as RPDs. A review of the laboratory duplicate data is summarized in Table 5.

Table 5: Laboratory Duplicate RPDs

Laboratory Duplicate Sample ID	Original Sample ID	RPD – Lead %	RPD - Mercury %
BS-PS-08 Lab-Dup	BS-PS-08	17.6	60.9
BS-PS-30 Lab-Dup	BS-PS-30	1.6	28.6
BS-PS-57 Lab-Dup	BS-PS-57	30.8	115.2
BS-PS-76 Lab-Dup	BS-PS-76	2.8	7.7
BS-PS-DUP4 Lab Dup	BS-PS-DUP4	---	---
BS-PS-DUP7 Lab Dup	BS-PS-DUP7	9.1	6.5
BS-PS-08 Lab-Dup2	BS-PS-08	27.7	21.0
BS-PS-30 Lab-Dup2	BS-PS-30	59.8	13.3
BS-PS-57 Lab-Dup2	BS-PS-57	37.0	153.7
BS-PS-76 Lab-Dup2	BS-PS-76	5.4	---
BS-PS-DUP4 Lab Dup2	BS-PS-DUP4	5.1	8.3
BS-PS-DUP7 Lab Dup2	BS-PS-DUP7	4.3	6.5

Notes:
--- denotes sample results are identical (i.e. 0.0%).

The poor RPDs for mercury in samples BS-PS-57 Lab-Dup and BS-PS-57 Lab-Dup2 were likely due to sample inhomogeneity. All RPDs were reported within 100% proof of equivalency, with the exception of the RPDs for mercury in these laboratory duplicate samples.

4.9.5 Summary of QA/QC Discussion

Overall, based on these QC reviews, the analytical results are considered representative of the Site conditions in the immediate vicinity of the sample locations.

5.0 CONCLUSIONS AND RECOMMENDATIONS

Based on observations made and information gathered during this HBMS, the following conclusions and recommendations are made with respect to the potential and actual presence of hazardous building materials at the Site:

Asbestos-Containing Materials

- 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. Friable and potentially friable asbestos is present in the form of air cell insulation (i.e. grey corrugated cardboard-type insulation) and drywall joint compound. Non-friable asbestos is present in the form of vinyl floor tiles, asphalt shingles and caulking. It should be noted that the air cell insulation strapped to a metal tank (i.e. possible heating system expansion tank) located in the duplex dwelling attic was observed to be in poor condition; therefore, priority should be given to the removal of the deteriorated insulation. It should

also be noted that the drywall and associated joint compound visible throughout the Site buildings varied in condition from good to poor; therefore, priority should be given to the removal of the deteriorated joint compound inside the single dwelling and old equipment building.

- Results of the asbestos sampling and analytical program also revealed that there are building materials containing less than or equal to 1% asbestos by dry weight. These materials include drywall joint compound/plaster, asphalt shingles, caulking and felt tar paper. It should be noted that it is common for the asbestos content in troweled on materials, such as drywall joint compound and plaster 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 and the potentially friable nature of these materials, the drywall joint compound and plaster throughout the main power building should be treated as an ACM. It should be noted that the drywall and associated joint compound visible throughout the Site buildings varied in condition from good to poor; therefore, priority should be given to the removal of the deteriorated joint compound inside the main power building.
- Other potential ACMs were observed and were not sampled due to the nature of the 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 incandescent light heat shields, interior components of furnaces and/or stoves, fire rated structures or building materials and underground infrastructure and piping.
- No samples of roofing materials were collected from the old equipment building during this assessment. The roofing materials consist of asphalt shingles. These materials should be treated as suspect ACMs until samples are collected and tested to verify asbestos content.
- If other potential ACMs that could not be sampled as part of this assessment 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 Site buildings and disposed of in accordance with appropriate environmental guidelines by a asbestos abatement contractor registered with the Department of Labour, Occupational Health and Safety Branch.

- ACMs in good condition should be inspected on an annual basis. ACMs in poor condition should be removed from the Site buildings 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 within the Site buildings (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 19 mg/kg to 75,000 mg/kg and the concentrations of mercury in the paint samples ranged from non-detect (<1.0 mg/kg) to 110 mg/kg.
    - Fifty-six (56) paint samples, plus six (6) field duplicate samples, contained lead at concentrations above the former Federal HPA criterion of 5,000 mg/kg.
    - Twenty-two (22) paint samples, plus two (2) field duplicate samples, contained mercury at concentrations above or equal to the CCME CSQG of 24 mg/kg for mercury in soil at a commercial 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 this assessment, 46 of the 94 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 46 paint samples 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 these paint samples are at levels considered to be hazardous, these paints, if removed from the Site, must be disposed of at a hazardous waste treatment facility.
    - Since the concentrations of lead detected in the paint samples collected from a wood door on the exterior of the old equipment building (dark green over blue paint) and a metal winch inside the winch house (grey paint) exceeded the former Federal HPA criterion of 5,000 mg/kg for lead in paint, these paints should be re-sampled and tested for lead leachate using the TCLP to determine whether or not the paints would be considered hazardous waste upon removal from the Site. The paint samples collected were not tested for lead leachate due to low sample volume remaining after initial analysis.
    - The paint collected at the Site was generally in poor condition and flaking; therefore, if any paint exceeding the lead leachate criterion is deteriorated (i.e. peeling and flaking) then in order to help prevent impacts to the environment, priority should be given to the removal of these deteriorated areas.

- If potential lead or mercury containing paint finishes that were not sampled during this assessment 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.
- All of the paint samples analyzed for PCBs were 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 for PCB solid (50 mg/kg) 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 proper maintenance of lead and mercury-based paint finishes, as follows:
    - Where lead and mercury-based paint finishes are in good condition (i.e., intact and not peeling or flaking) the surfaces can be covered by painting with non lead or non mercury-containing paint.
    - In areas of minor peeling or flaking the paint should be removed using wet scraping techniques and the surface should then be repainted with non lead or non mercury-containing paint.
    - 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 painting, renovation or decommissioning/demolition activities.
    - Steps should be taken to ensure that workers and anyone present in and around areas being renovated, 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 at the Site. The nature of the insulation in the walls and ceilings throughout the Site buildings could not be confirmed at the time of the Site inspections. However, fibreglass insulation was observed in various rooms in the duplex/single dwellings and old equipment building. Since the history of the original Lightstation dates back to the mid-1850s, with various upgrades since that time, it is possible that UFFI may be present in some areas of the Site buildings.
- Based on a visual nonintrusive inspection, there was no evidence that UFFI is present in the structures. However, the inferred age of the Site buildings suggests that UFFI could be present within the walls which could not be visually inspected. 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 3.3 and 4.3), it can be inferred that any UFFI present within the Site buildings 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. prior to 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 Site buildings for visual or olfactory evidence of suspected mould. Areas of water damage and SVG were observed in several areas on the interior surfaces of the duplex and single dwellings. A total of two (2) samples were collected from the duplex dwelling (kitchen ceiling) and the single dwelling (living room wall) and analyzed for mould growth. Results of the mould sampling program revealed that moderate to abundant mould growth was present in the samples collected from the interior of the duplex and single dwellings. Existing conditions in the Site buildings (e.g. roof and window leaks, improper ventilation, inadequate building heating, prolonged periods of increased moisture) may potentially contribute to or enhance mould growth inside the Site buildings.
- Based on the estimated areas of mould impacted materials observed at the Site, both the duplex and single dwellings should be remediated using Level 3 abatement procedures (i.e. more than 10 m^2), as outlined in the 2010 EACO Mould Abatement Guidelines.

Lead and Mercury-Containing Materials/Equipment

- Samples of the drinking water at the Site buildings were not collected or analyzed during this assessment for the presence of lead. The history of the original Lightstation dates back to the mid-1850s, with various upgrades since that time; therefore, lead in drinking water may be a potential issue since the lead content in solders and fluxes was not limited to 0.2% in potable water systems until 1990 (*National Plumbing Code of Canada*). The Health Canada Guidelines for Canadian Drinking Water Quality includes maximum acceptable concentrations of various chemical parameters in drinking water, including lead. If lead solder is present in the potable water systems, lead concentrations in drinking water can typically be reduced to acceptable levels by running the cold water tap for five to ten minutes prior to use. It is important to note that at the time of the Site investigation it was not known if potable water was supplied to the Site.
- Several potential lead-acid batteries (i.e., solar batteries) were noted inside the videograph building at the time of the Site inspection.
- Mercury-containing thermostats were observed in the duplex and single dwellings and suspected mercury-containing fluorescent light tubes were observed in the single dwelling.
- Mercury may also be present in possible HID lights at the top of the light tower. The interior of the upper levels of the light tower were not accessible at the time of the Site visits due to safety concerns; therefore, the main lighting system in the light tower is unknown.
- The disturbance, control or disposal of lead-containing material / equipment (e.g., solder on copper piping, batteries, etc.) or mercury-containing material/equipment (e.g., thermostats, light tubes) should be carried out in accordance with applicable criteria/regulations (refer to Section 2.0). The presence / absence of lead or mercury in these materials should be confirmed through a mechanical contractor or consultant prior to disturbance or disposal of these materials. Typically these materials are sent to a recycling facility and not a landfill.
- Mercury-containing fluorescent light tubes and HID light bulbs should be removed intact and returned to the manufacturer for recycling, or disposed of at an approved facility.

PCB Containing Equipment

- Based on the manufacturer's code on the Canadian General Electric fluorescent light ballasts (i.e., 17A240N) that were inspected during this assessment, the light ballasts in the kitchen of the single dwelling likely contain PCBs.
- The PCB content in all light ballasts should be confirmed prior to disposal. Any leaking light ballasts identified, whether PCB containing or not, should be removed and replaced to avoid potential concerns with electrical equipment in the future. 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 Site building should be transported and disposed of by a registered hazardous waste transporter in accordance with applicable regulations.

Potential Sources of ODSs

- Potential sources of ODSs identified during this assessment included two refrigerators and a freezer in the duplex dwelling, a refrigerator in the single dwelling and a freezer in storage shed 1. The types of refrigerant(s) were not confirmed for the freezers or refrigerators at the time of this assessment. Eight (8) fire extinguishers were identified throughout the Site buildings. The labels on these units did not indicate the presence of halon or other ODS ingredients; however the label on the fire extinguisher in the stand-by diesel building was absent. Therefore, it could not be determined from the inspection if the fire extinguisher contained halon or other ODS ingredients. All ODSs should be removed by an approved contractor prior to disposing of the fire extinguishers, freezer and/or refrigerators from the Site buildings.
- The use, storage, operation, maintenance, decommissioning, and disposal of ODS containing equipment in general is regulated at both a Provincial and Federal level and must comply with the most recent NL Halocarbon Regulations and the Federal Halocarbon Regulations. The status of the potential ODS containing equipment should be confirmed through a mechanical contractor or consultant.

Silica Dust

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

Coal

- A coal pile was observed in the basement of the duplex dwelling. Solid wastes such as coal may contain heavy metals, PAHs and/or fuel oil components.

- According to the Leachable Toxic Waste, Testing and Disposal guidance document, regulatory approval from the NL Department of Environment and Conservation (ENVC) for landfill disposal of solid wastes is dependent upon the following conditions: 1) results of sample analysis by a Canadian Association for Laboratory Accreditation Inc. (CALA) certified laboratory either meet the CCME CSQG for industrial land use; or 2) results of sample analysis by a CALA certified laboratory pass the TCLP test for leachability for the parameters listed in Schedule II Leachate Test. Consideration should be given to the proper testing and disposal of coal at the Site.

6.0 CLOSURE

This report was prepared for the exclusive use of PWGSC and CCG/DFO. The findings of this report are based solely on the conditions of the Site buildings encountered at the time of the Site visits, and are limited by the availability of information at the time of the HBMS, lack of accessibility to areas within the buildings, project scope and budget. The findings of this assessment are based on the interpretation of data from a limited number of areas investigated and analytical results pertaining to specific samples. It is possible that materials exist which could not be reasonably identified within the scope of the HBMS or which were not apparent or accessible during the Site visits. This Report is also subject to the further limitations contained in Appendix F.

Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of the third party. Should additional parties require reliance on this report, written authorization from AMEC is required. With respect to third parties, AMEC has no liability or responsibility for losses of any kind whatsoever, including direct or consequential financial effects on transactions or property values, or requirements for follow-up actions and costs. This assessment has been carried out using commercially reasonable best efforts consistent with the level and skill ordinarily exercised by members of the profession currently practicing under similar conditions.

Except when otherwise specified, AMEC disclaims any obligation to update this report for events taking place, or with respect to information that becomes available to AMEC after the time during which AMEC conducted the hazardous building materials assessment.

In evaluating the property, AMEC has relied in good faith on information provided by other individuals noted in this report. AMEC has assumed that the information provided is factual and accurate. In addition, some of the findings in this report are based upon information provided by the current owner/occupant. AMEC accepts no responsibility for any deficiency, misstatement or inaccuracy contained in this report as a result of omissions, misinterpretations or fraudulent acts of persons interviewed or contacted.

AMEC makes no other representations whatsoever, including those concerning the legal significance of its findings, or as to other legal matters touched on in this report, including, but not limited to, ownership of any property, or the application of any law to the facts set forth herein. With respect to regulatory compliance issues, regulatory statutes are subject to

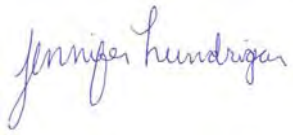
interpretation and change. Such interpretations and regulatory changes should be reviewed with legal counsel.

We trust that the information presented in this report meets your current requirements. Should you have any questions, or concerns, please do not hesitate to contact the undersigned.

Yours truly,

AMEC Environment & Infrastructure
A Division of AMEC Americas Limited

Prepared by:



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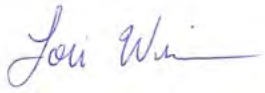

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APPENDIX A

Figures

NOTES:

THIS DRAWING BASED ON 1:50,000 TOPOGRAPHIC MAP 2 M & 3 D.

THIS DRAWING IS INTENDED TO SHOW RELATIVE LOCATIONS AND CONFIGURATION IN SUPPORT OF THIS REPORT.

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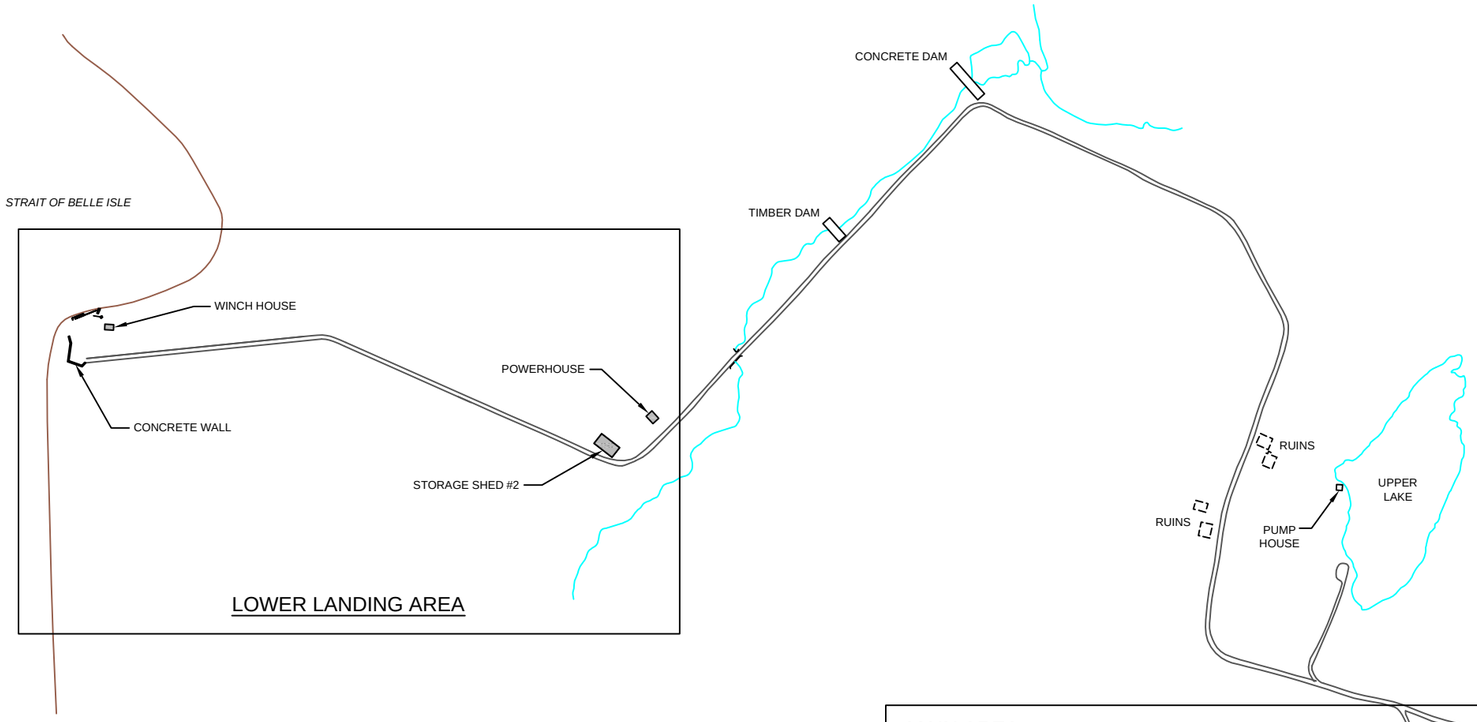
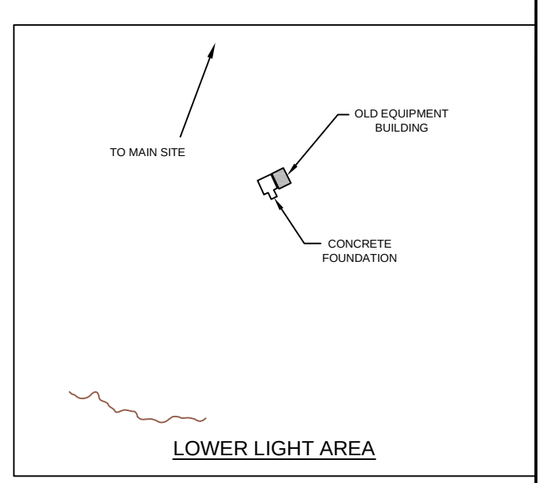
Travaux publics et Services gouvernementaux Canada

Date: March 2013	Project: HAZARDOUS BUILDING MATERIALS SURVEY BELLE ISLE SOUTH LIGHTSTATION BELLE ISLE, NL		
Drawn by: H. Ryan	Title: SITE LOCATION PLAN		
Approved by: J. Lundrigan	Scale: NTS	Project No.: TF12076461	Figure No.: 1





LEGEND:

- APPROXIMATE SHORELINE
- WATER BODY
- BUILDING
- FORMER BUILDING OR STRUCTURE

SCALE:

0 m 250 m

NOTE:

1. ALL DIMENSIONS ARE IN METRES.
2. DO NOT SCALE FROM FIGURE.
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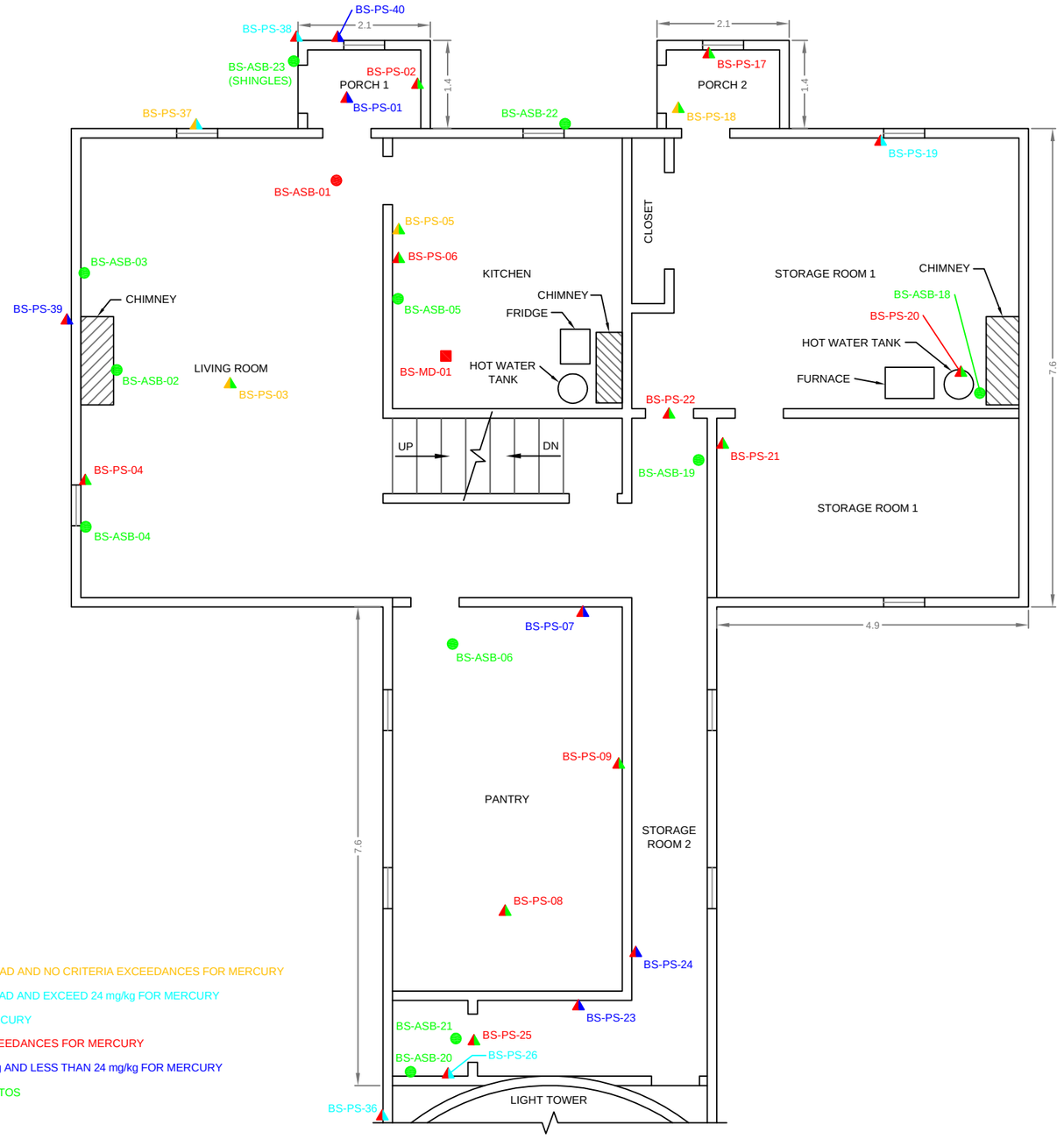
DWN BY: H. Ryan
CHK'D BY: J. Lundrigan
SCALE: As Shown

PROJECT: HAZARDOUS BUILDING MATERIALS SURVEY
BELLE ISLE SOUTH LIGHTSTATION
BELLE ISLE, NL

TITLE: SITE PLAN

DATE: March 2013
PROJECT No.: TF12076461
REV. No.: 0
FIGURE No.: 2



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 90 mg/kg AND LESS THAN 5000 mg/kg FOR LEAD AND EXCEED 24 mg/kg FOR MERCURY
- PAINT SAMPLE LOCATION - RESULTS EXCEED 5000 mg/kg FOR LEAD AND 24 mg/kg FOR MERCURY
- PAINT SAMPLE LOCATION - RESULTS EXCEED 5000 mg/kg FOR LEAD AND NO CRITERIA EXCEEDANCES FOR MERCURY
- PAINT SAMPLE LOCATION - RESULTS EXCEED 5000 mg/kg FOR LEAD AND EXCEED 10 mg/kg AND LESS THAN 24 mg/kg FOR MERCURY
- ASBESTOS SAMPLE LOCATION - ASBESTOS NOT DETECTED OR RESULTS < 1% FOR ASBESTOS
- ASBESTOS SAMPLE LOCATION - RESULTS EXCEED > 1% FOR ASBESTOS
- MOULD SAMPLE LOCATION - MOULD GROWTH DETECTED

SCALE:

0 m 5 m

NOTE:

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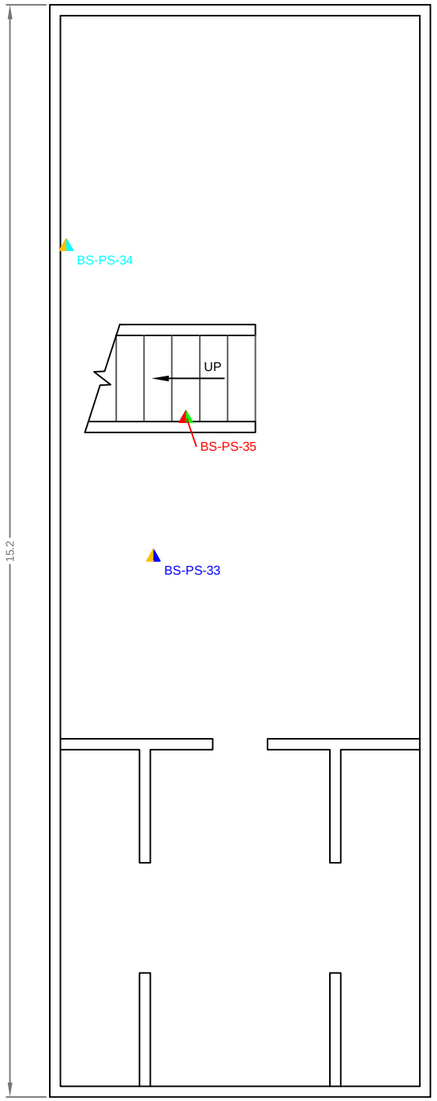
SCALE: As Shown

PROJECT: HAZARDOUS BUILDING MATERIALS SURVEY
BELLE ISLE SOUTH LIGHTSTATION
BELLE ISLE, NL

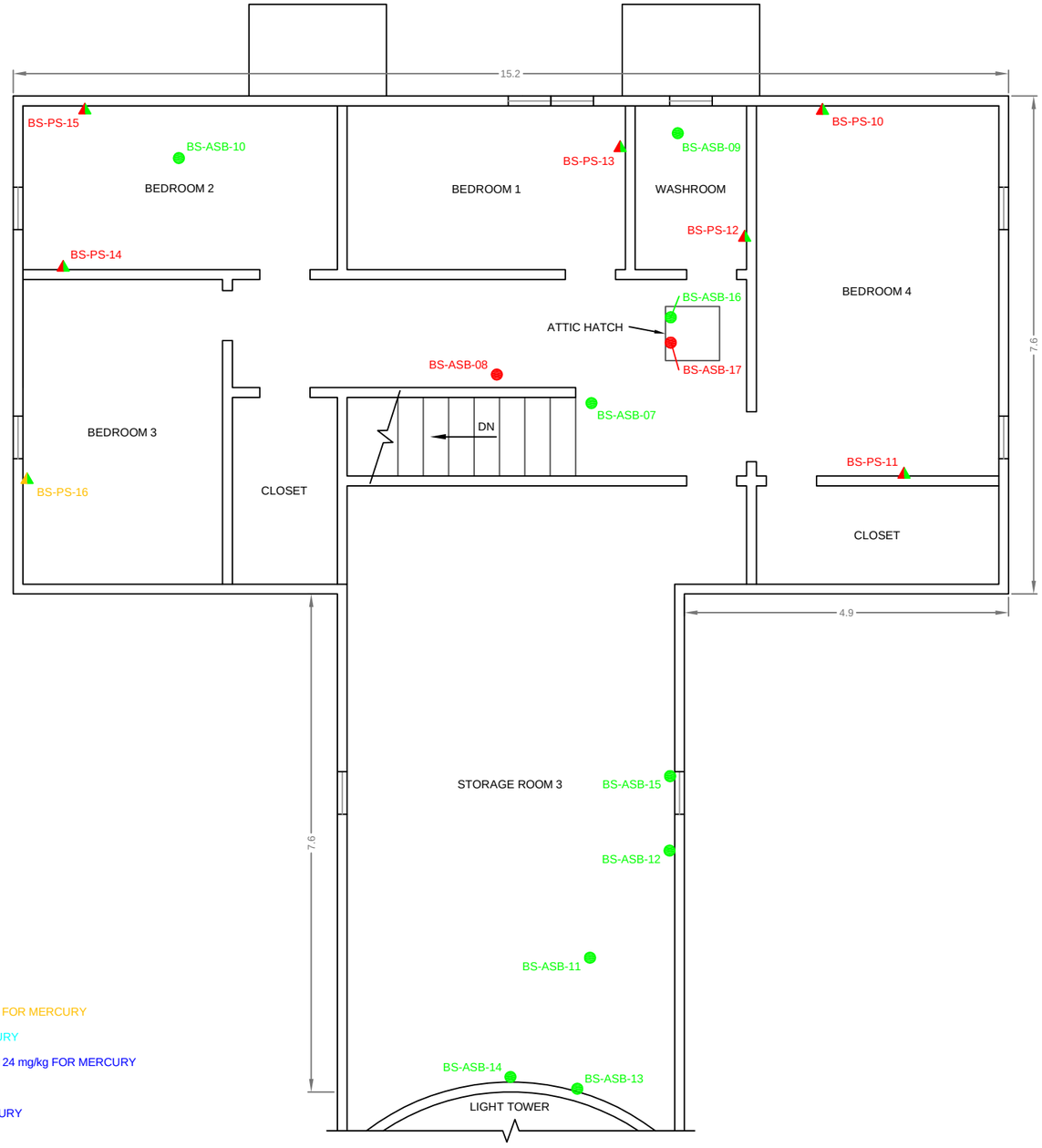
TITLE: DUPLEX DWELLING (MAIN FLOOR)
SAMPLE LOCATION PLAN

DATE: March 2013
PROJECT No.: TF12076461
REV. No.: 0
FIGURE No.: 3

DUPLEX BASEMENT



DUPLEX SECOND FLOOR



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 90 mg/kg AND LESS THAN 5000 mg/kg FOR LEAD AND EXCEED 24 mg/kg FOR MERCURY
- PAINT SAMPLE LOCATION - RESULTS EXCEED 90 mg/kg AND LESS THAN 5000 mg/kg FOR LEAD AND EXCEED 10 mg/kg LESS THAN 24 mg/kg FOR MERCURY
- PAINT SAMPLE LOCATION - RESULTS EXCEED 5000 mg/kg FOR LEAD AND NO CRITERIA EXCEEDANCES FOR MERCURY
- PAINT SAMPLE LOCATION - RESULTS EXCEED 5000 mg/kg FOR LEAD AND EXCEED 10 mg/kg AND LESS THAN 24 mg/kg FOR MERCURY
- ASBESTOS SAMPLE LOCATION - ASBESTOS NOT DETECTED OR RESULTS < 1% FOR ASBESTOS
- ASBESTOS SAMPLE LOCATION - RESULTS EXCEED > 1% FOR ASBESTOS

SCALE:

0 m 5 m

NOTE:

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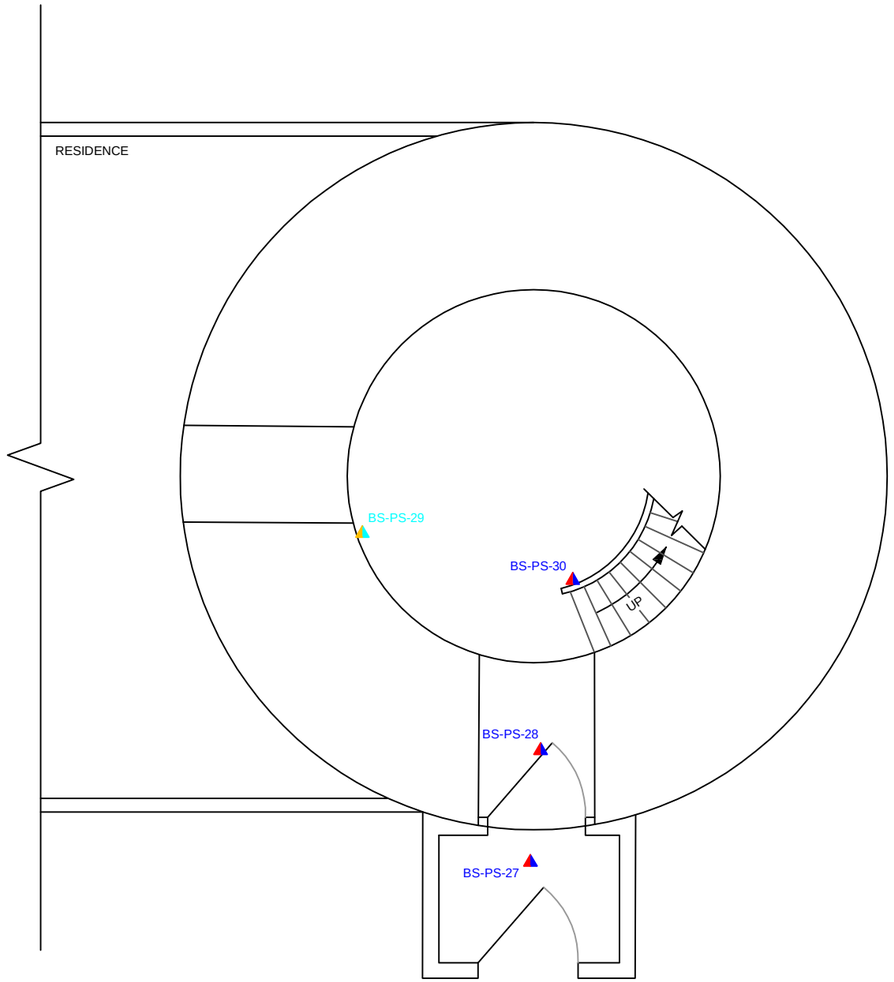
CHK'D BY: J. Lundrigan
SCALE: As Shown

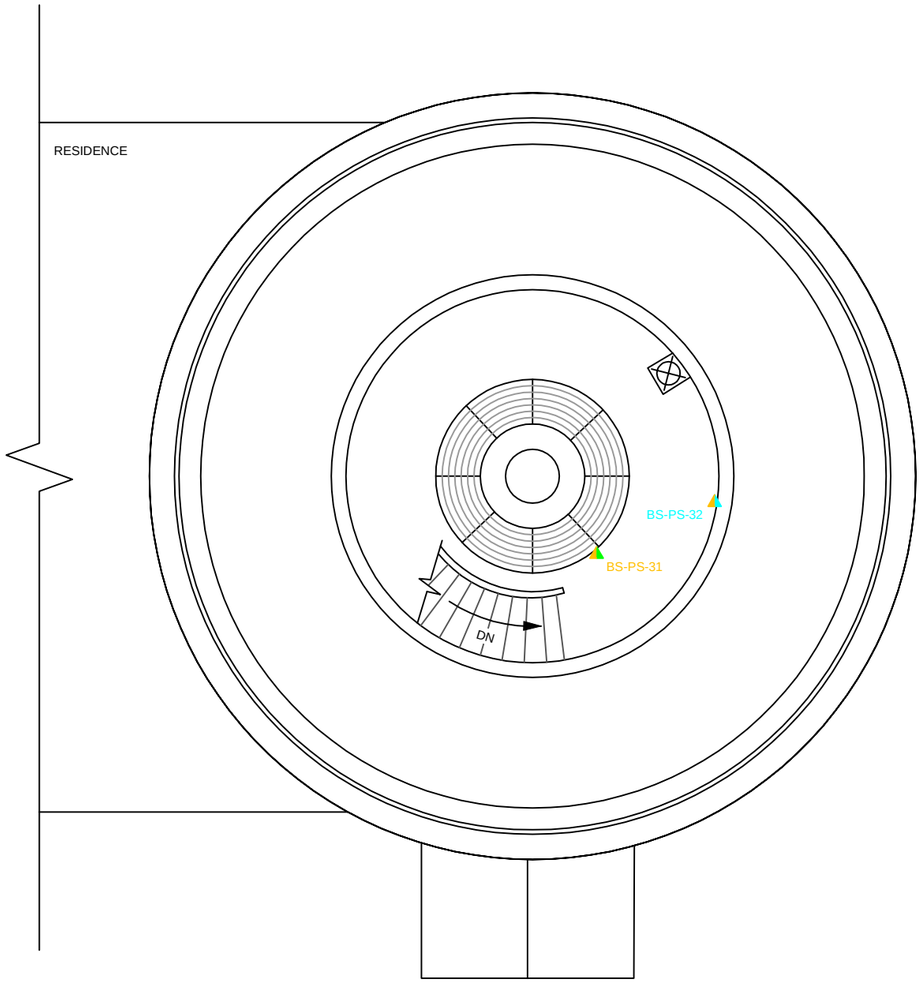
PROJECT: HAZARDOUS BUILDING MATERIALS SURVEY
BELLE ISLE SOUTH LIGHTSTATION
BELLE ISLE, NL

TITLE: DUPLEX DWELLING (BASEMENT & SECOND FLOOR)
SAMPLE LOCATION PLAN

DATE: March 2013
PROJECT No. TF12076461
REV. No. 0
FIGURE No. 4



MAIN FLOOR



TOP FLOOR

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 24 mg/kg FOR MERCURY
- PAINT SAMPLE LOCATION - RESULTS EXCEED 90 mg/kg AND LESS THAN 5000 mg/kg FOR LEAD AND EXCEED 24 mg/kg FOR MERCURY
- PAINT SAMPLE LOCATION - RESULTS EXCEED 5000 mg/kg FOR LEAD AND EXCEED 10 mg/kg AND LESS THAN 24 mg/kg FOR MERCURY

NOTE:

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CHK'D BY: J. Lundrigan

SCALE: NTS

PROJECT: HAZARDOUS BUILDING MATERIALS SURVEY
BELLE ISLE SOUTH LIGHTSTATION
BELLE ISLE, NL

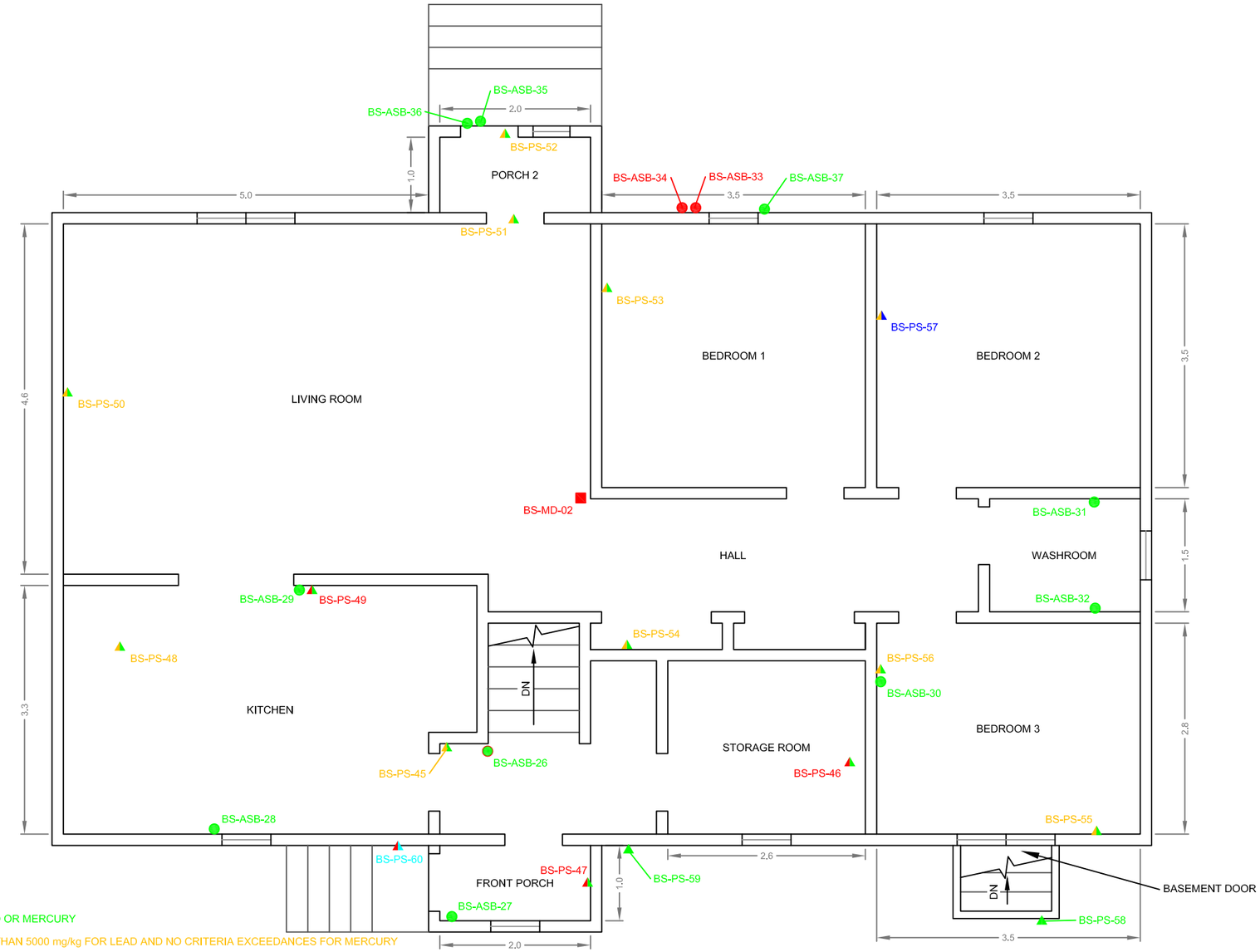
TITLE: LIGHT TOWER SAMPLE LOCATION PLAN

DATE: March 2013

PROJECT No.: TF12076461

REV. No.: 0

FIGURE No.: 5



LEGEND:

- PAINT SAMPLE LOCATION - NO CRITERIA EXCEEDANCES FOR LEAD OR MERCURY
- 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 90 mg/kg AND LESS THAN 5000 mg/kg FOR LEAD AND EXCEED 10 mg/kg AND LESS THAN 24 mg/kg FOR MERCURY
- PAINT SAMPLE LOCATION - RESULTS EXCEED 5000 mg/kg FOR LEAD AND NO CRITERIA EXCEEDANCES FOR MERCURY
- PAINT SAMPLE LOCATION - RESULTS EXCEED 5000 mg/kg FOR LEAD AND 24 mg/kg FOR MERCURY
- ASBESTOS SAMPLE LOCATION - ASBESTOS NOT DETECTED OR RESULTS < 1% FOR ASBESTOS
- ASBESTOS SAMPLE LOCATION - RESULTS EXCEED > 1% FOR ASBESTOS
- MOULD SAMPLE LOCATION - MOULD GROWTH DETECTED

SCALE:

0 m 5 m

NOTE:

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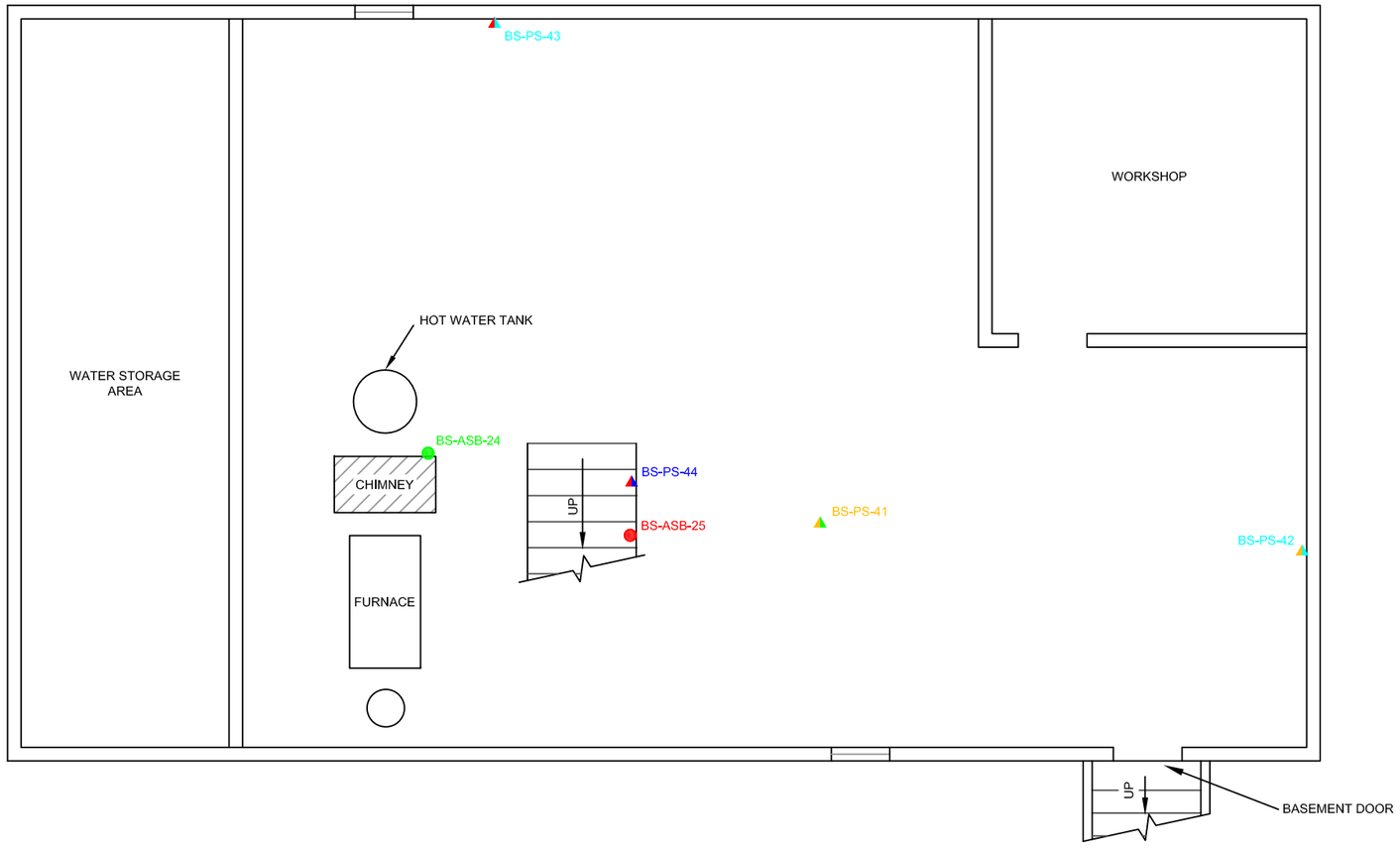
CHK'D BY: J. Lundrigan
SCALE: As Shown

PROJECT
HAZARDOUS BUILDING MATERIALS SURVEY
BELLE ISLE SOUTH LIGHTSTATION
BELLE ISLE, NL

TITLE
SINGLE DWELLING (MAIN FLOOR)
SAMPLE LOCATION PLAN

DATE: March 2013
PROJECT No.: TF12076461
REV. No.: 0
FIGURE No.: 6



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 24 mg/kg FOR MERCURY
- PAINT SAMPLE LOCATION - RESULTS EXCEED 90 mg/kg AND LESS THAN 5000 mg/kg FOR LEAD AND EXCEED 24 mg/kg FOR MERCURY
- PAINT SAMPLE LOCATION - RESULTS EXCEED 5000 mg/kg FOR LEAD AND EXCEED 10 mg/kg AND LESS THAN 24 mg/kg FOR MERCURY
- ASBESTOS SAMPLE LOCATION - ASBESTOS NOT DETECTED OR RESULTS < 1% FOR ASBESTOS
- ASBESTOS SAMPLE LOCATION - RESULTS EXCEED > 1% FOR ASBESTOS

SCALE:

0 m 5 m

NOTE:

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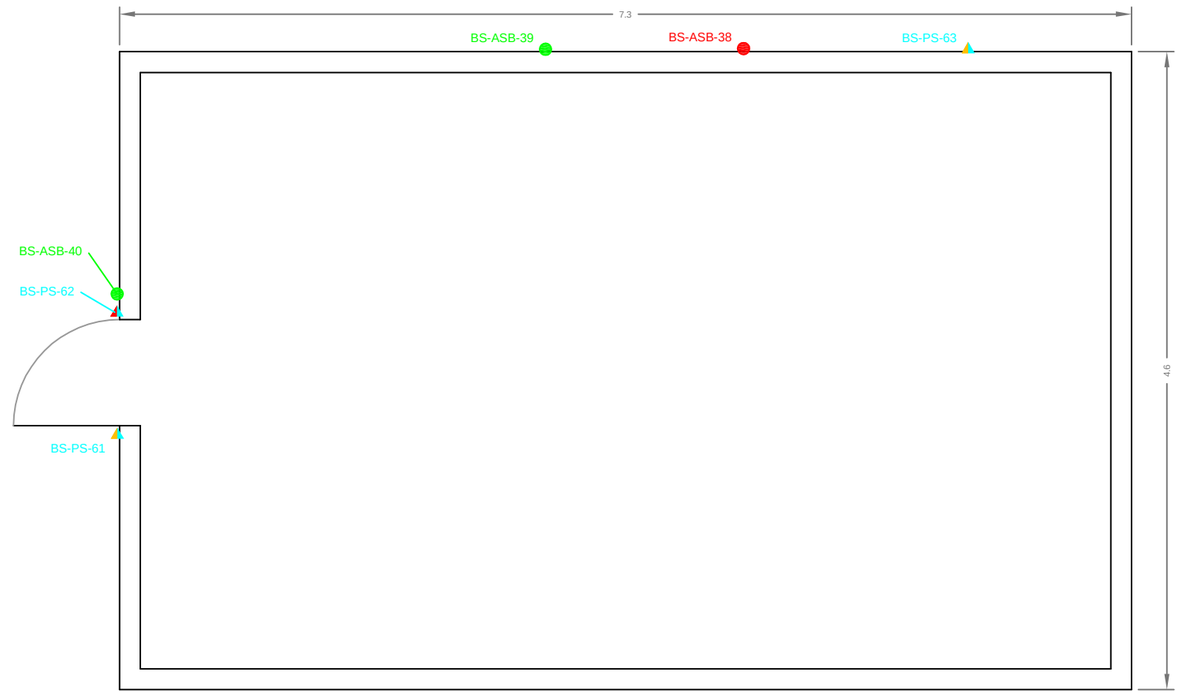
DWN BY: H. Ryan
CHK'D BY: J. Lundrigan
SCALE: As Shown

PROJECT: HAZARDOUS BUILDING MATERIALS SURVEY
BELLE ISLE SOUTH LIGHTSTATION
BELLE ISLE, NL

TITLE: SINGLE DWELLING (BASEMENT)
SAMPLE LOCATION PLAN

DATE: March 2013
PROJECT No. TF12076461
REV. No. 0
FIGURE No. 7



LEGEND:

- PAINT SAMPLE LOCATION - RESULTS EXCEED 5000 mg/kg FOR LEAD AND 24 mg/kg FOR MERCURY
- PAINT SAMPLE LOCATION - RESULTS EXCEED 90 mg/kg AND LESS THAN 5000 mg/kg FOR LEAD AND EXCEED OR EQUAL TO 24 mg/kg FOR MERCURY
- ASBESTOS SAMPLE LOCATION - ASBESTOS NOT DETECTED OR RESULTS < 1% FOR ASBESTOS
- ASBESTOS SAMPLE LOCATION - RESULTS EXCEED > 1% FOR ASBESTOS

SCALE:

0 m 1.25 m 2.5 m

NOTE:

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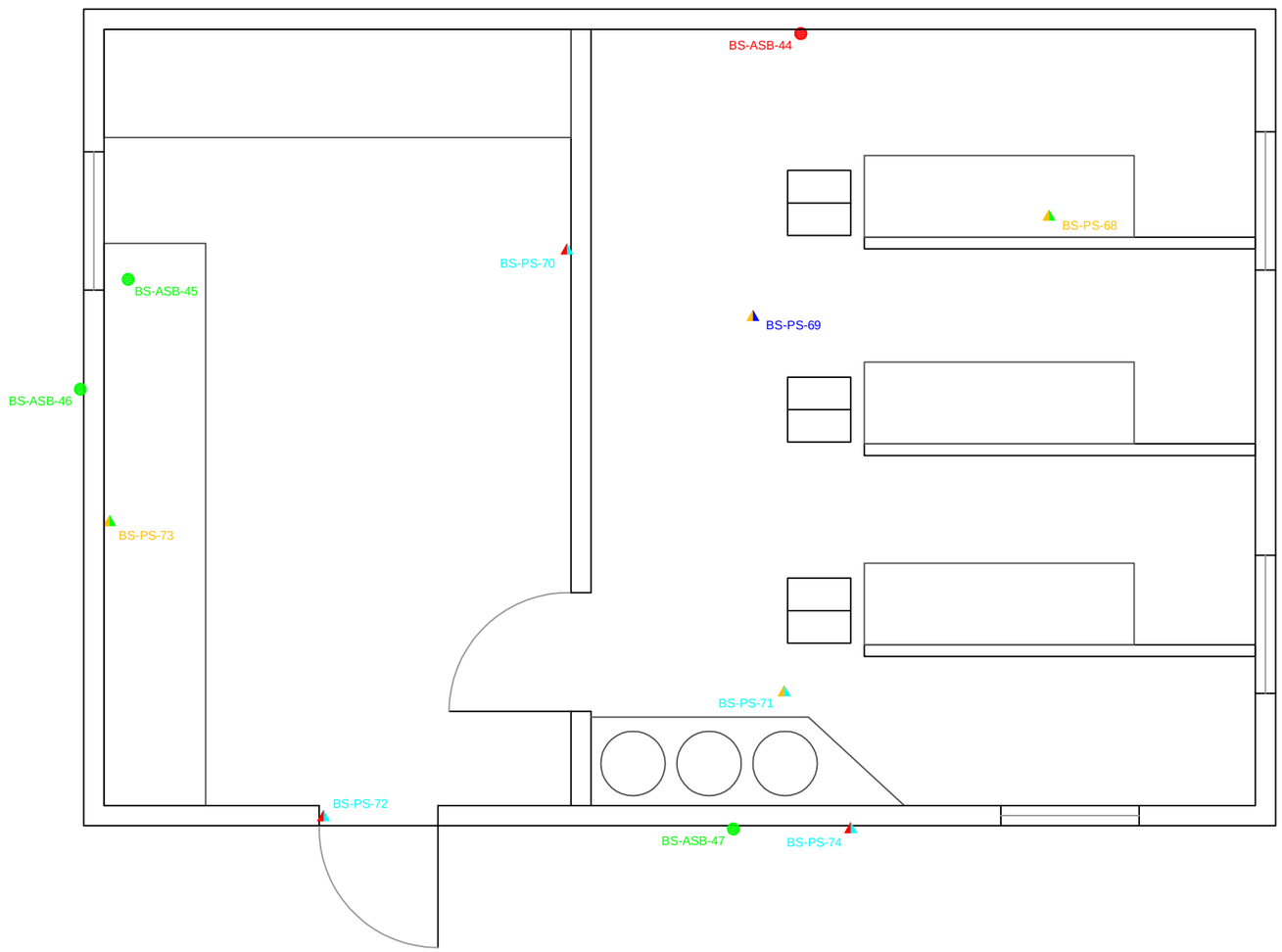
DWN BY: H. Ryan
CHK'D BY: J. Lundrigan
SCALE: As Shown

PROJECT: HAZARDOUS BUILDING MATERIALS SURVEY
BELLE ISLE SOUTH LIGHTSTATION
BELLE ISLE, NL

TITLE: STORAGE SHED #1 SAMPLE LOCATION PLAN

DATE: March 2013
PROJECT No. TF12076461
REV. No. 0
FIGURE No. 8



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 24 mg/kg FOR MERCURY
- PAINT SAMPLE LOCATION - RESULTS EXCEED 90 mg/kg AND LESS THAN 5000 mg/kg FOR LEAD AND EXCEED 24 mg/kg FOR MERCURY
- PAINT SAMPLE LOCATION - RESULTS EXCEED 90 mg/kg AND LESS THEN 5000 mg/kg FOR LEAD AND EXCEED 10 mg/kg AND LESS THAN 24 mg/kg FOR MERCURY
- ASBESTOS SAMPLE LOCATION - ASBESTOS NOT DETECTED OR RESULTS < 1% FOR ASBESTOS
- ASBESTOS SAMPLE LOCATION - RESULTS EXCEED = 1% FOR ASBESTOS

NOTE:

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DWN BY: H. Ryan
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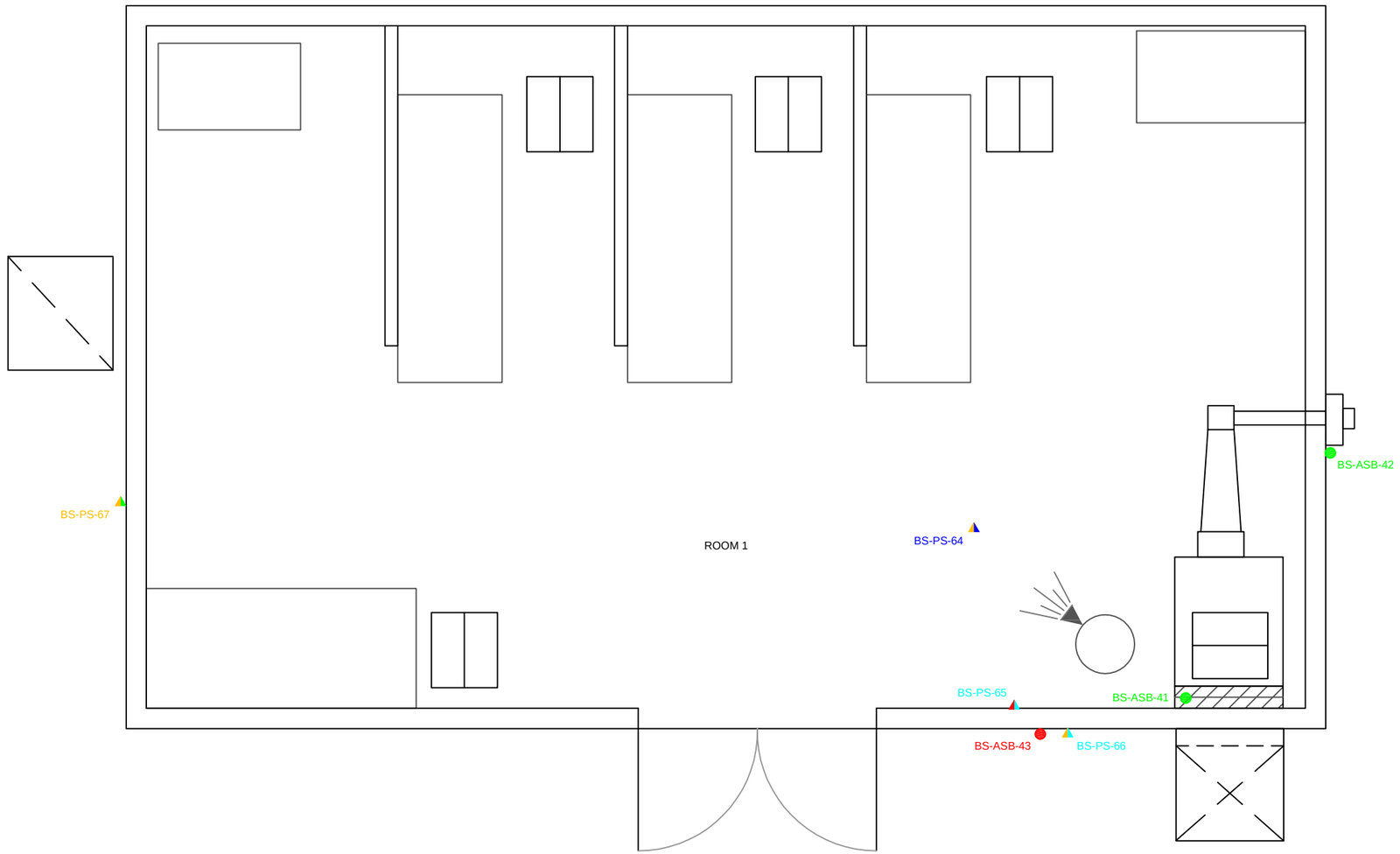
SCALE: NTS

PROJECT
HAZARDOUS BUILDING MATERIALS SURVEY
BELLE ISLE SOUTH LIGHTSTATION
BELLE ISLE, NL

TITLE
MAIN POWER BUILDING SAMPLE LOCATION PLAN

DATE: March 2013
PROJECT No. TF12076461
REV. No. 0
FIGURE No. 9



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 24 mg/kg FOR MERCURY
- PAINT SAMPLE LOCATION - RESULTS EXCEED 90 mg/kg AND LESS THAN 5000 mg/kg FOR LEAD AND EXCEED 24 mg/kg FOR MERCURY
- PAINT SAMPLE LOCATION - RESULTS EXCEED 90 mg/kg AND LESS THAN 5000 mg/kg FOR LEAD AND EXCEED 10 mg/kg AND LESS THAN 24 mg/kg FOR MERCURY
- ASBESTOS SAMPLE LOCATION - ASBESTOS NOT DETECTED OR RESULTS < 1% FOR ASBESTOS
- ASBESTOS SAMPLE LOCATION - RESULTS EXCEED > 1% FOR ASBESTOS

NOTE:

1. ALL DIMENSIONS ARE IN METRES.
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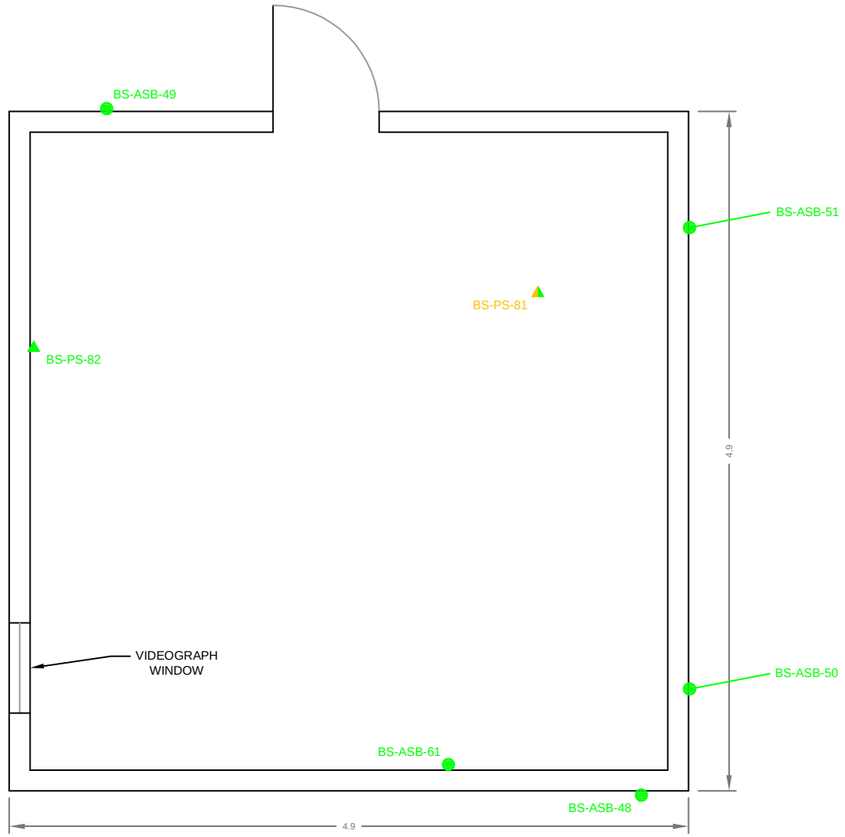
DWN BY:	H. Ryan
CHK'D BY:	J. Lundrigan
SCALE:	NTS
PROJECT	HAZARDOUS BUILDING MATERIALS SURVEY BELLE ISLE SOUTH LIGHTSTATION BELLE ISLE, NL
TITLE	STAND-BY DIESEL BUILDING SAMPLE LOCATION PLAN
DATE:	March 2013
PROJECT No.	TF12076461
REV. No.	0
FIGURE No.	10



LEGEND:

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

SCALE:

0 m 1.25 m 2.5 m

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.
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AMEC Environment & Infrastructure
133 Crosbie Road
St. John's, NL
A1B 4A5
709-722-7023

DWN BY: H. Ryan

CHK'D BY: J. Lundrigan

SCALE: As Shown

PROJECT: HAZARDOUS BUILDING MATERIALS SURVEY
BELLE ISLE SOUTH LIGHTSTATION
BELLE ISLE, NL

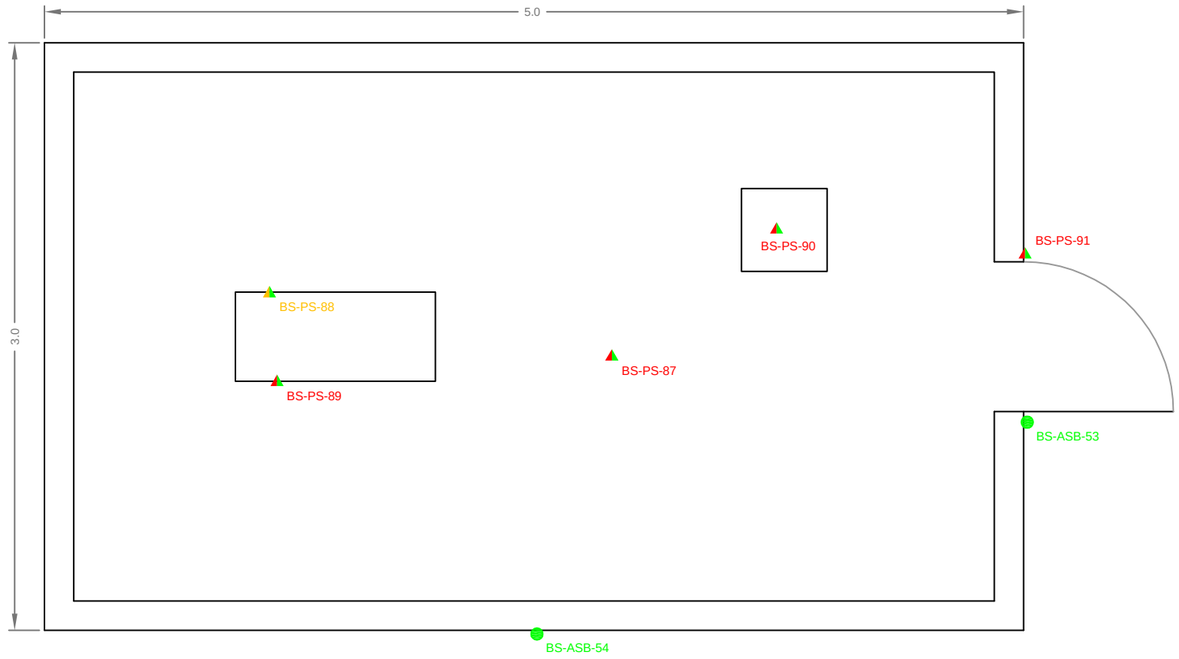
TITLE: VIDEOGRAPH BUILDING SAMPLE LOCATION PLAN

DATE: March 2013

PROJECT No. TF12076461

REV. No. 0

FIGURE No. 11



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 NO CRITERIA EXCEEDANCES FOR MERCURY
- ASBESTOS SAMPLE LOCATION - ASBESTOS NOT DETECTED OR RESULTS < 1% FOR ASBESTOS

SCALE:

0 m 1.25 m 2.5 m

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.
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709-722-7023

DWN BY: H. Ryan
CHK'D BY: J. Lundrigan
SCALE: As Shown

PROJECT: HAZARDOUS BUILDING MATERIALS SURVEY
BELLE ISLE SOUTH LIGHTSTATION
BELLE ISLE, NL

TITLE: WINCH HOUSE SAMPLE LOCATION PLAN

DATE: March 2013
PROJECT No. TF12076461
REV. No. 0
FIGURE No. 12

LEGEND:

▲ PAINT SAMPLE LOCATION - RESULTS EXCEED 5000 mg/kg FOR LEAD AND NO CRITERIA EXCEEDANCES FOR MERCURY

● ASBESTOS SAMPLE LOCATION - ASBESTOS NOT DETECTED OR RESULTS < 1% FOR ASBESTOS

SCALE:

0 m 1.25 m 2.5 m

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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709-722-7023

DWN BY: H. Ryan

CHK'D BY: J. Lundrigan

SCALE: As Shown

PROJECT: HAZARDOUS BUILDING MATERIALS SURVEY
BELLE ISLE SOUTH LIGHTSTATION
BELLE ISLE, NL

TITLE: STORAGE SHED #2 SAMPLE LOCATION PLAN

DATE: March 2013

PROJECT No. TF12076461

REV. No. 0

FIGURE No. 13

LEGEND:

▲ PAINT SAMPLE LOCATION - RESULTS EXCEED 5000 mg/kg FOR LEAD AND NO CRITERIA EXCEEDANCES FOR MERCURY

● ASBESTOS SAMPLE LOCATION - ASBESTOS NOT DETECTED OR RESULTS < 1% FOR ASBESTOS

SCALE:

0 m 1.25 m 2.5 m

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.
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709-722-7023

DWN BY: H. Ryan

CHK'D BY: J. Lundrigan

SCALE: As Shown

PROJECT: HAZARDOUS BUILDING MATERIALS SURVEY
BELLE ISLE SOUTH LIGHTSTATION
BELLE ISLE, NL

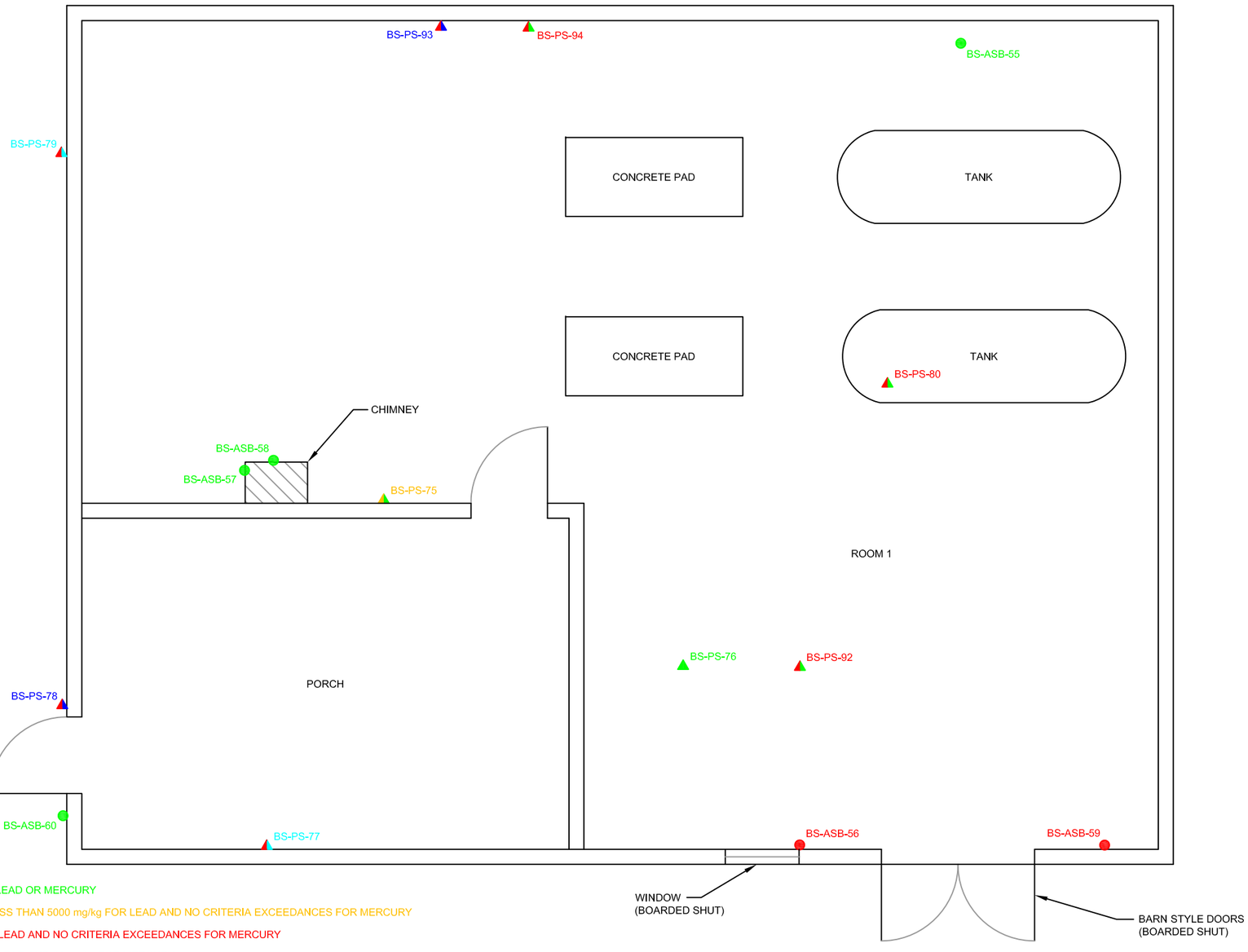
TITLE: POWERHOUSE SAMPLE LOCATION PLAN

DATE: March 2013

PROJECT No. TF12076461

REV. No. 0

FIGURE No. 14



LEGEND:

- PAINT SAMPLE LOCATION - NO CRITERIA EXCEEDANCES FOR LEAD OR MERCURY
- 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
- PAINT SAMPLE LOCATION - RESULTS EXCEED 5000 mg/kg FOR LEAD AND 24 mg/kg FOR MERCURY
- PAINT SAMPLE LOCATION - RESULTS EXCEED 5000 mg/kg FOR LEAD AND EXCEED 10 mg/kg AND LESS THAN 24 mg/kg FOR MERCURY
- ASBESTOS SAMPLE LOCATION - ASBESTOS NOT DETECTED OR RESULTS < 1% FOR ASBESTOS
- ASBESTOS SAMPLE LOCATION - RESULTS EXCEED > 1% FOR ASBESTOS

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.
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7. THIS FIGURE WAS PRODUCED FROM FIELD NOTES.

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Travaux publics et Services gouvernementaux Canada

AMEC Environment & Infrastructure
133 Crosbie Road
St. John's, NL
A1B 4A5
709-722-7023

DWN BY: H. Ryan
CHK'D BY: J. Lundrigan
SCALE: NTS

PROJECT: HAZARDOUS BUILDING MATERIALS SURVEY
BELLE ISLE SOUTH LIGHTSTATION
BELLE ISLE, NL

TITLE: OLD EQUIPMENT BUILDING SAMPLE LOCATION PLAN

DATE: March 2013
PROJECT No.: TF12076461
REV. No.: 0
FIGURE No.: 15

APPENDIX B

Photographic Record

Photo 1: View of main site area at the Belle Isle South Lightstation, Belle Isle, NL.

Photo 2: View of lower landing area at the Belle Isle South Lightstation, Belle Isle, NL.

Photo 3: View of lower light area at the Belle Isle South Lightstation, Belle Isle, NL.

Photo 4: View of beige and grey stripe pattern vinyl floor tile sample BS-ASB-01.

Photo 5: View of brick mortar sample BS-ASB-02.

Photo 6: View of drywall joint compound sample BS-ASB-03.

Photo 7: View of wood fibreboard sample BS-ASB-04.

Photo 8: View of drywall joint compound sample BS-ASB-05.

Photo 9: View of felt-type flooring sample BS-ASB-06.

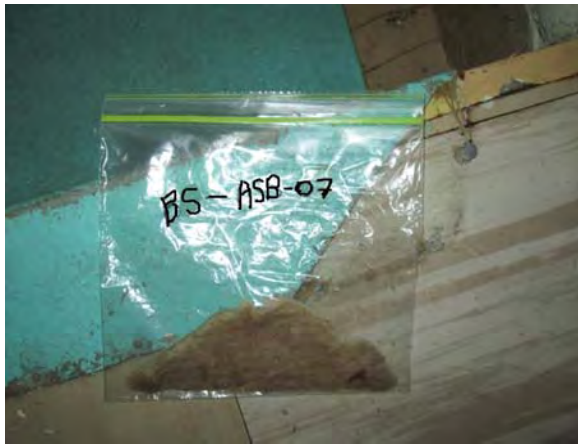

Photo 10: View of stair tread material sample BS-ASB-07.

Photo 11: View of beige and white stripe Pattern vinyl floor tile sample BS-ASB-08.

Photo 12: View of white caulking sample BS-ASB-09.

Photo 13: View of rolled flooring sample BS-ASB-10.

Photo 14: View of rolled flooring sample BS-ASB-11.

Photo 15: View of concrete block mortar sample BS-ASB-12.

Photo 16: View of brick mortar sample BS-ASB-13.

Photo 17: View of brick sample BS-ASB-14

Photo 18: View of fibreglass insulation with paper backing sample BS-ASB-15.

Photo 19: View of location of fibreglass insulation sample BS-ASB-16.

Photo 20: View of location of cardboard-type insulation sample BS-ASB-17.

Photo 21: View of concrete block mortar sample BS-ASB-18.

Photo 22: View of rolled flooring sample BS-ASB-19.

Photo 23: View of concrete parging sample BS-ASB-20.

Photo 24: View of rolled flooring sample BS-ASB-21.

Photo 25: View of window caulking sample BS-AS-22.

Photo 26: View of asphalt shingle with paper backing sample BS-ASB-23.

Photo 27: View of brick mortar sample BS-ASB-24.

Photo 28: View of drywall joint compound sample BS-ASB-25.

Photo 29: View of rolled flooring sample BS-ASB-26.

Photo 30: View of fibreglass insulation sample BS-ASB-27.

Photo 31: View of yellow speckled countertop sample BS-ASB-28.

Photo 32: View of fibreboard sample BS-ASB-29.

Photo 33: View of plastic/fabric-type material sample BS-ASB-30.

Photo 34: View of barker tile panel board sample BS-ASB-31.

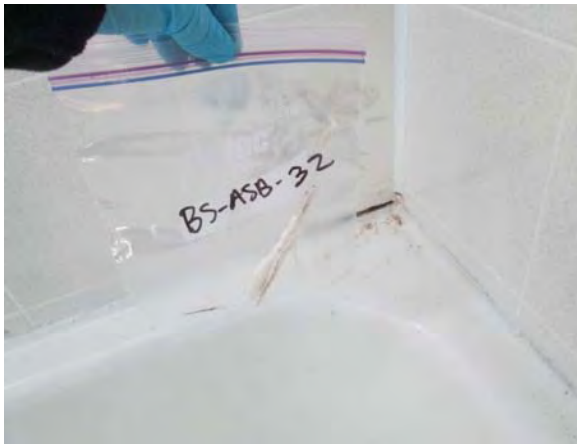

Photo 35: View of white caulking sample BS-ASB-32.

Photo 36: View of grey caulking sample BS-ASB-33.

Photo 37: View of black caulking sample BS-ASB-34.

Photo 38: View of felt tar paper sample BS-ASB-35.

Photo 39: View of red/black asphalt shingle sample BS-ASB-36.

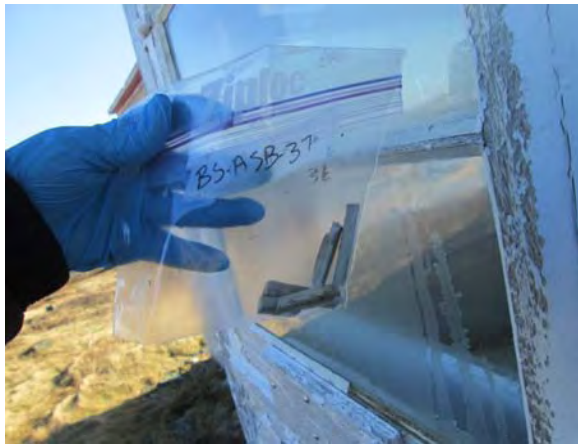

Photo 40: View of white window caulking sample BS-ASB-37.

Photo 41: View of black asphalt shingle sample BS-ASB-38.

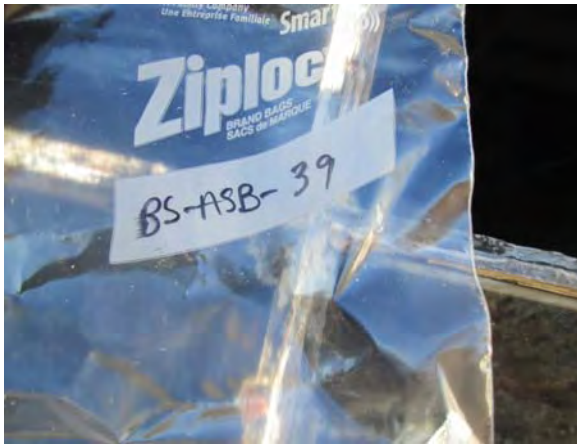

Photo 42: View of beige caulking sample BS-ASB-39.

Photo 43: View of felt tar paper sample BS-ASB-40.

Photo 44: View of beige caulking sample BS-ASB-41.

Photo 45: View of grey caulking sample BS-ASB-42.

Photo 46: View of black asphalt shingle with tar paper sample BS-ASB-43.

Photo 47: View of drywall joint compound and plaster sample BS-ASB-44.

Photo 48: View of black rubber coating sample BS-ASB-45.

Photo 49: View of grey caulking sample BS-ASB-46.

Photo 50: View of red/black asphalt shingle sample BS-ASB-47.

Photo 51: View of beige caulking sample BS-ASB-48.

Photo 52: View of grey/black window caulking sample BS-ASB-49.

Photo 53: View of red/black asphalt shingle sample BS-ASB-50.

Photo 54: View of white window caulking sample BS-ASB-51.

Photo 55: View of concrete parging sample BS-ASB-52. Note: sample ID revised.

Photo 56: View of felt tar paper sample BS-ASB-53. Note: sample ID revised.

Photo 57: View of asphalt shingle sample BS-ASB-54. Note: sample ID revised.

Photo 58: View of fibreglass insulation sample BS-ASB-55.

Photo 59: View of grey window caulking sample BS-ASB-56.

Photo 60: View of red brick sample BS-ASB-57.

Photo 61: View of grey brick mortar sample BS-ASB-58.

Photo 62: View of drywall joint compound sample BS-ASB-59.

Photo 63: View of felt tar paper sample BS-ASB-60.


Photo 64: View of yellow/orange insulation sample BS-ASB-61.


Photo 65: View of red brick sample BN-ASB-62.

Photo 66: View of grey brick mortar sample BS-ASB-63.

Photo 67: View of felt tar paper sample BS-ASB-64.

Photo 68: View of white caulking sample BS-ASB-65.

Photo 69: View of paint sample BS-PS-01.

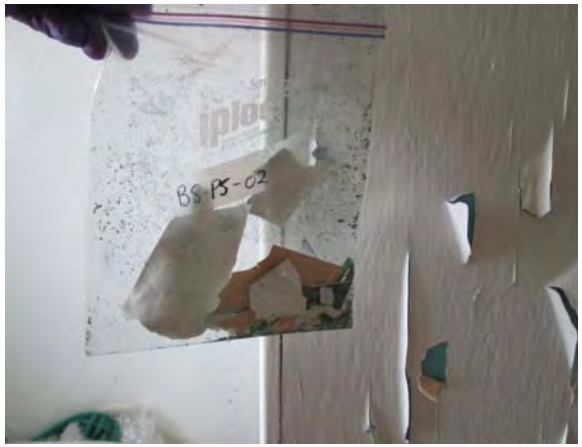

Photo 70: View of paint sample BS-PS-02.

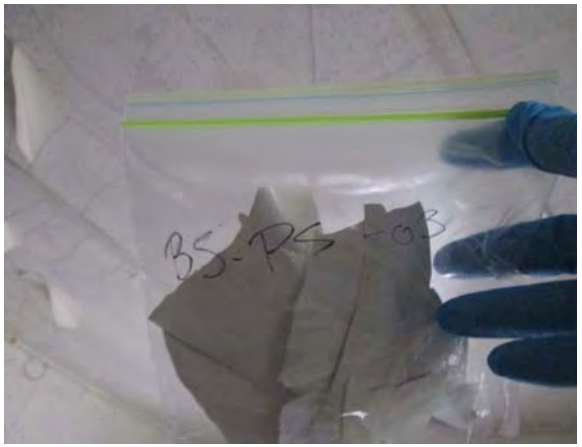

Photo 71: View of paint sample BS-PS-03.

Photo 72: View of paint sample BS-PS-04.

Photo 73: View of paint sample BS-PS-05.

Photo 74: View of paint sample BS-PS-06.

Photo 75: View of paint sample BS-PS-07.

Photo 76: View of paint sample BS-PS-08.

Photo 77: View of paint sample BS-PS-09.

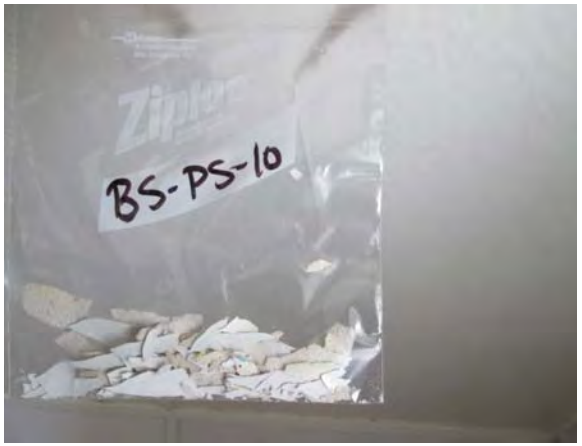

Photo 78: View of paint sample BS-PS-10.

Photo 79: View of paint sample BS-PS-11.

Photo 80: View of paint sample BS-PS-12.

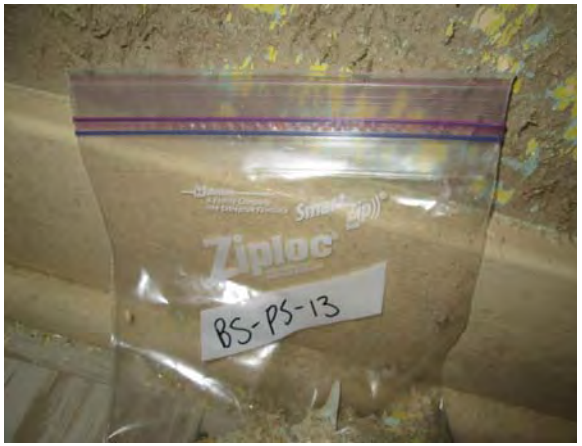

Photo 81: View of paint sample BS-PS-13.

Photo 82: View of paint sample BS-PS-14.

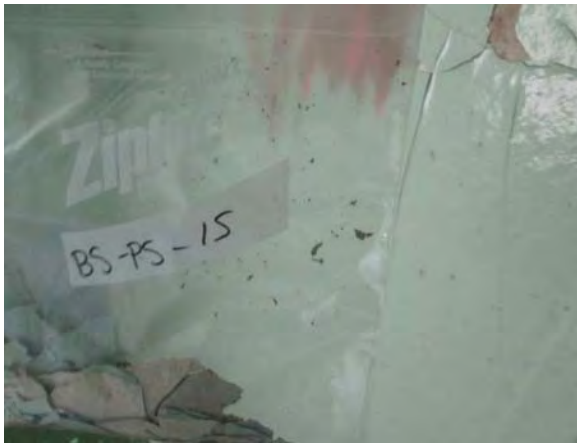

Photo 83: View of paint sample BS-PS-15.

Photo 84: View of paint sample BS-PS-16.

Photo 85: View of paint sample BS-PS-17.

Photo 86: View of paint sample BS-PS-18.

Photo 87: View of paint sample BS-PS-19.

Photo 88: View of paint sample BS-PS-20.

Photo 89: View of paint sample BS-PS-21.

Photo 90: View of paint sample BS-PS-22.

Photo 91: View of paint sample BS-PS-23.

Photo 92: View of paint sample BS-PS-24.

Photo 93: View of paint sample BS-PS-25.

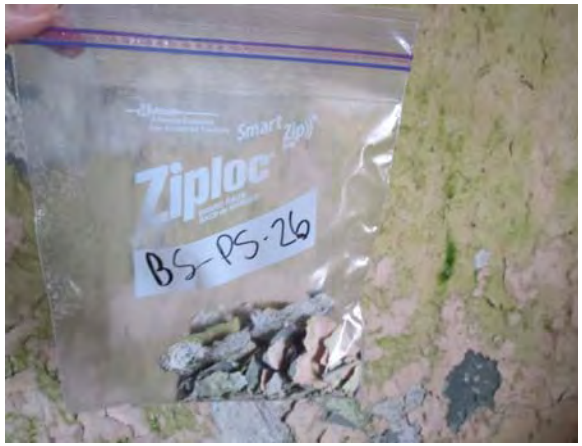

Photo 94: View of paint sample BS-PS-26.

Photo 95: View of paint sample BS-PS-27.

Photo 96: View of paint sample BS-PS-28.

Photo 97: View of paint sample BS-PS-29.

Photo 98: View of paint sample BS-PS-30.

Photo 99: View of paint sample BS-PS-31.

Photo 100: View of paint sample BS-PS-32

Photo 101: View of paint sample BS-PS-33

Photo 102: View of paint sample BS-PS-34

Photo 103: View of paint sample BS-PS-35

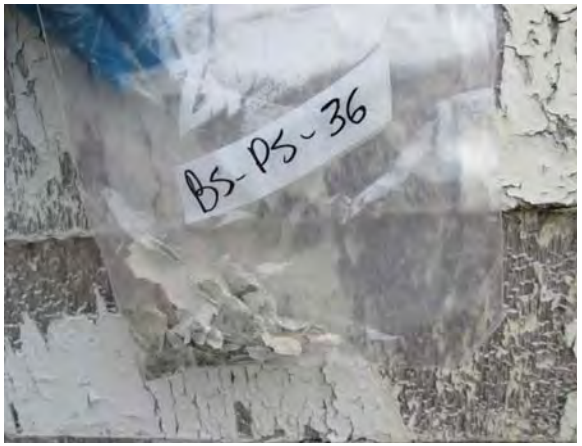

Photo 104: View of paint sample BS-PS-36

Photo 105: View of paint sample BS-PS-37

Photo 106: View of paint sample BS-PS-38

Photo 107: View of paint sample BS-PS-39

Photo 108: View of paint sample BS-PS-40

Photo 109: View of paint sample BS-PS-41

Photo 110: View of paint sample BS-PS-42

Photo 111: View of paint sample BS-PS-43

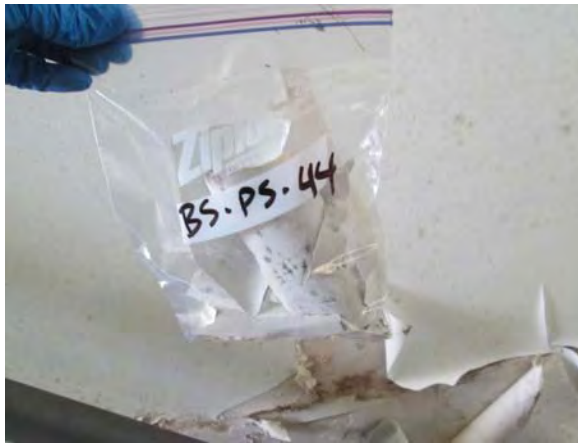

Photo 112: View of paint sample BS-PS-44

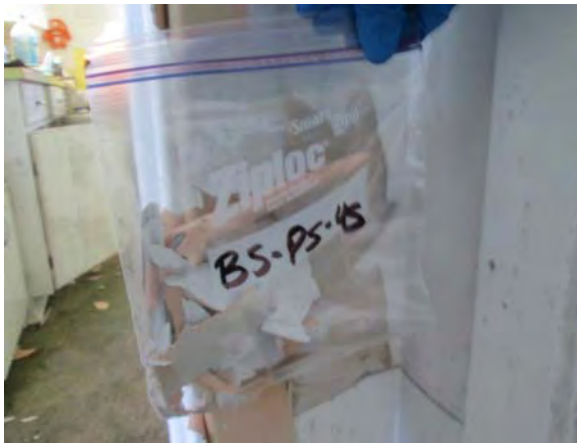

Photo 113: View of paint sample BS-PS-45

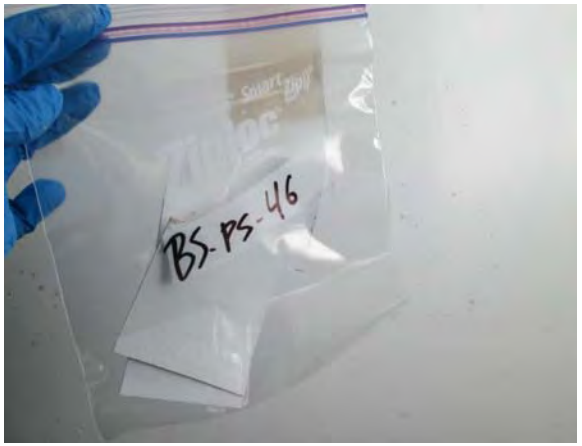

Photo 114: View of paint sample BS-PS-46

Photo 115: View of paint sample BS-PS-47

Photo 116: View of paint sample BS-PS-48

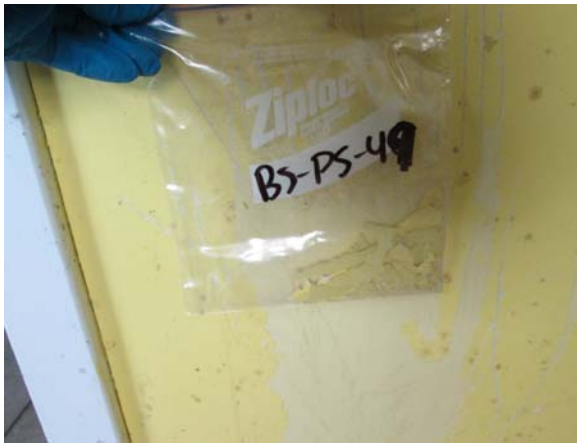

Photo 117: View of paint sample BS-PS-49

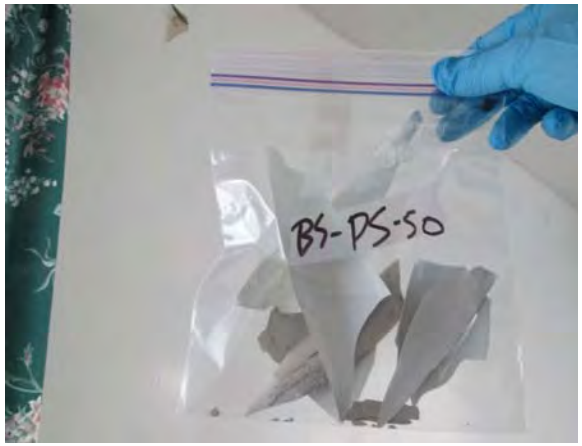

Photo 118: View of paint sample BS-PS-50

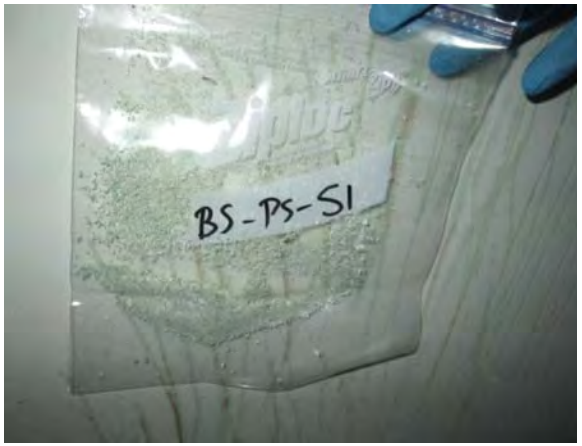

Photo 119: View of paint sample BS-PS-51

Photo 120: View of paint sample BS-PS-52

Photo 121: View of paint sample BS-PS-53

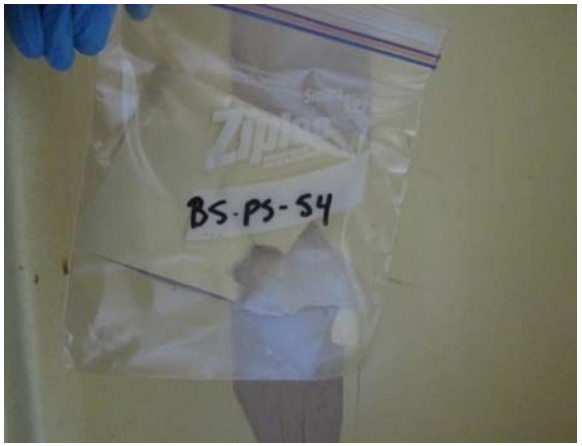

Photo 122: View of paint sample BS-PS-54

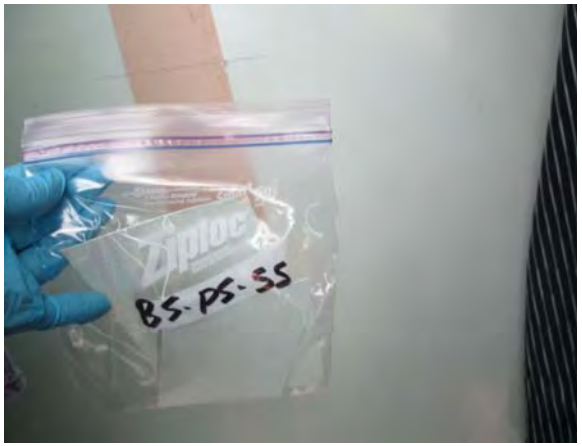

Photo 123: View of paint sample BS-PS-55

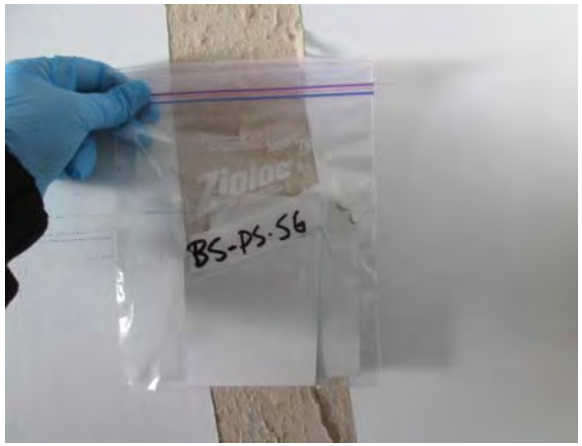

Photo 124: View of paint sample BS-PS-56

Photo 125: View of paint sample BS-PS-57

Photo 126: View of paint sample BS-PS-58

Photo 127: View of paint sample BS-PS-59

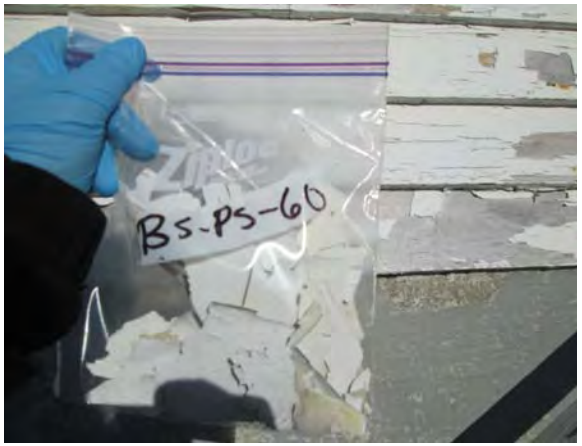

Photo 128: View of paint sample BS-PS-60

Photo 129: View of paint sample BS-PS-61

Photo 130: View of paint sample BS-PS-62

Photo 131: View of paint sample BS-PS-63

Photo 132: View of paint sample BS-PS-64

Photo 133: View of paint sample BS-PS-65

Photo 134: View of paint sample BS-PS-66

Photo 135: View of paint sample BS-PS-67

Photo 136: View of paint sample BS-PS-68

Photo 137: View of paint sample BS-PS-69

Photo 138: View of paint sample BS-PS-70

Photo 139: View of paint sample BS-PS-71

Photo 140: View of paint sample BS-PS-72

Photo 141: View of paint sample BS-PS-73

Photo 142: View of paint sample BS-PS-74

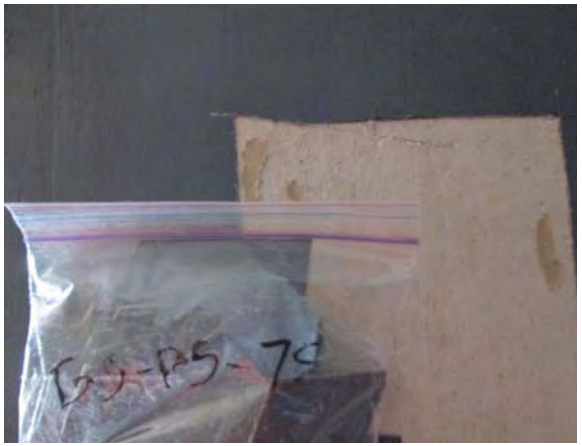
Photo 143: View of paint sample BS-PS-75

Photo 144: View of paint sample BS-PS-76

Photo 145: View of paint sample BS-PS-77

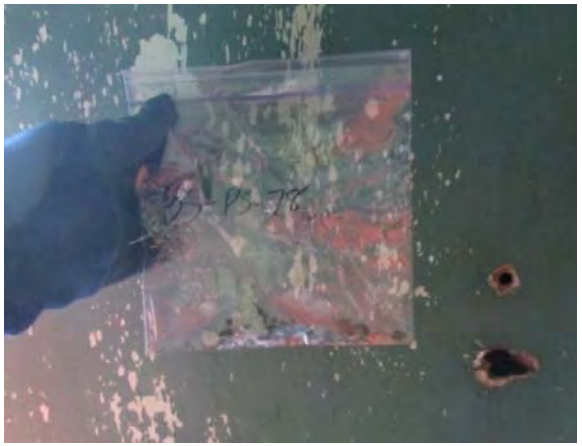

Photo 146: View of paint sample BS-PS-78

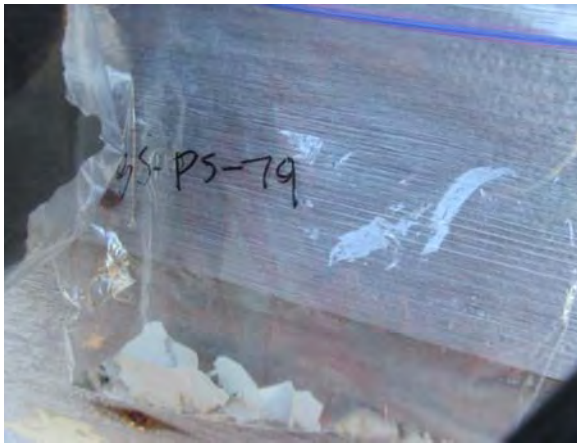

Photo 147: View of paint sample BS-PS-79

Photo 148: View of paint sample BS-PS-80

Photo 149: View of paint sample BS-PS-81

Photo 150: View of paint sample BS-PS-82

Photo 151: View of paint sample BS-PS-83

Photo 152: View of paint sample BS-PS-84

Photo 153: View of paint sample BS-PS-85

Photo 154: View of paint sample BS-PS-86

Photo 155: View of paint sample BS-PS-87

Photo 156: View of paint sample BS-PS-88

Photo 157: View of paint sample BS-PS-89

Photo 158: View of paint sample BS-PS-90

Photo 159: View of paint sample BS-PS-91

Photo 160: View of paint sample BS-PS-92

Photo 161: View of paint sample BS-PS-93

Photo 162: View of paint sample BS-PS-94

Photo 163: View of water damaged ceiling in single dwelling.

Photo 164: View of suspected visible mould growth in duplex dwelling washroom.

Photo 165: View of mould sample BS-MD-01.

Photo 166: View of mould sample BS-MD-02.

Photo 167: View of rectangular Honeywell thermostat (mercury-containing).

Photo 168: View of rectangular White-Rodgers thermostat (mercury-containing).

Photo 169: View of fluorescent light Ballasts (Cat./Serial No. 17A240N).

Photo 170: View of refrigerator in duplex dwelling kitchen.

Photo 171: View of freezer in duplex dwelling pantry.

Photo 172: View of refrigerator in duplex dwelling storage room 1.

Photo 173: View of refrigerator in single dwelling kitchen.

Photo 174: View of freezer in storage shed 1.

Photo 175: View of fire extinguisher in duplex dwelling living room.

Photo 176: View of fire extinguisher in duplex dwelling kitchen.

Photo 177: View of fire extinguisher in duplex dwelling pantry.

Photo 178: View of fire extinguisher in duplex dwelling hallway.

Photo 179: View of fire extinguisher in single dwelling kitchen.

Photo 180: View of fire extinguisher in single dwelling pantry.

Photo 181: View of fire extinguisher in single dwelling hallway.

Photo 182: View of fire extinguisher in standby diesel building.

Photo 183: View of solar batteries in videograph building.

Photo 184: View of coal pile in duplex dwelling basement.

APPENDIX C

Sample and Analytical Summary Tables

Table C-1: Asbestos Sample Descriptions and Analytical Results

Sample ID	Material (Layer) Analyzed	Detailed Material Description	Room	Analytical Result
BS-ASB-01	Vinyl Floor Tile	Beige and grey stripe pattern vinyl floor tile with yellow adhesive.	Duplex Dwelling Living Room	2.1% Chrysotile
BS-ASB-02	Mortar	Brick mortar from chimney.	Duplex Dwelling Living Room	ND
BS-ASB-03	Drywall Joint Compound	Drywall joint compound.	Duplex Living Room	ND
BS-ASB-04	Fibreboard	Wood fibreboard.	Duplex Dwelling Living Room	ND
BS-ASB-05	Drywall Joint Compound	Drywall joint compound.	Duplex Dwelling Kitchen	ND
BS-ASB-06	Rolled Flooring	Green felt-type flooring.	Duplex Dwelling Pantry	ND
BS-ASB-07	Stair Tread	Green cushioned stair tread material.	Duplex Dwelling Second Floor Stairs	ND
BS-ASB-08	Vinyl Floor Tile	Beige with white stripe pattern vinyl floor tile with black mastic.	Duplex Dwelling Second Floor Hallway	2.5% Chrysotile
BS-ASB-09	Caulking	White caulking around tub.	Duplex Dwelling Washroom	ND
BS-ASB-10	Rolled Flooring	Flower pattern rolled flooring.	Duplex Dwelling Bedroom 2	ND
BS-ASB-11	Rolled Flooring	Flower pattern rolled flooring.	Duplex Dwelling Storage Room 3	ND
BS-ASB-12	Mortar	Grey concrete block mortar.	Duplex Dwelling Storage Room 3	ND
BS-ASB-13	Mortar	Brown brick mortar.	Duplex Dwelling Storage Room 3	ND
BS-ASB-14	Brick	Yellow brick.	Duplex Dwelling Storage Room 3	ND
BS-ASB-15	Insulation	Pink fibreglass insulation with paper backing.	Duplex Dwelling Storage Room 3	ND
BS-ASB-16	Insulation	Grey/black fibreglass insulation.	Duplex Dwelling Attic	ND
BS-ASB-17	Insulation	Grey corrugated cardboard-type insulation around tank.	Duplex Dwelling Attic	30% Chrysotile
BS-ASB-18	Mortar	Grey concrete block mortar around pipe from furnace.	Duplex Dwelling Storage Room 1	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 C-1: Asbestos Sample Descriptions and Analytical Results (Continued)

Sample ID	Material (Layer) Analyzed	Detailed Material Description	AMEC Rm #	Analytical Result
BS-ASB-19	Rolled Flooring	Grey rolled flooring.	Duplex Dwelling Storage Room 1	ND
BS-ASB-20	Parging	Painted concrete parging on wall.	Duplex Dwelling Storage Room 2	ND
BS-ASB-21	Rolled Flooring	Black rolled flooring (painted green).	Duplex Dwelling Storage Room 2	ND
BS-ASB-22	Caulking	Beige window caulking.	Duplex Dwelling Exterior	ND
BS-ASB-23	Asphalt Shingle	Black asphalt shingle with paper backing.	Duplex Dwelling Exterior	ND
BS-ASB-24	Mortar	Grey brick mortar around pipe to chimney.	Single Dwelling Basement	ND
BS-ASB-25	Drywall Joint Compound	Drywall joint compound.	Single Dwelling Basement	5% Chrysotile
BS-ASB-26	Rolled Flooring	Grey rolled flooring with beige mesh backing.	Single Dwelling Front Porch	ND
BS-ASB-27	Insulation	Pink/beige fibreglass insulation with black backing.	Single Dwelling Front Porch	ND
BS-ASB-28	Countertop	Yellow speckled countertop.	Single Dwelling Kitchen	ND
BS-ASB-29	Fibreboard	Wood fibreboard.	Single Dwelling Kitchen	ND
BS-ASB-30	Fabric/plastic	Beige fabric/plastic type material.	Single Dwelling Bedroom 3	ND
BS-ASB-31	Barker Tile Panel Board	White with flower pattern barker tile panel board with grey adhesive.	Single Dwelling Washroom	ND
BS-ASB-32	Caulking	White caulking around tub.	Single Dwelling Washroom	ND
BS-ASB-33	Caulking	Grey caulking in hole.	Single Dwelling Exterior	40% Chrysotile
BS-ASB-34	Caulking	Black tar-like caulking in hole.	Single Dwelling Exterior	10% Chrysotile
BS-ASB-35	Felt Tar Paper	Black felt tar paper.	Single Dwelling Exterior	ND

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 C-1: Asbestos Sample Descriptions and Analytical Results (Continued)

Sample ID	Material (Layer) Analyzed	Detailed Material Description	AMEC Rm #	Analytical Result
BS-ASB-36	Asphalt Shingle	Red/black asphalt shingle with tar paper.	Single Dwelling Exterior	0.52% Chrysotile
BS-ASB-37	Caulking	White window caulking.	Single Dwelling Exterior	ND
BS-ASB-38	Asphalt Shingle	Black asphalt shingle.	Storage Shed 1 Exterior	1.5% Chrysotile
BS-ASB-39	Caulking	Beige window caulking.	Storage Shed 1 Exterior	0.26% Chrysotile
BS-ASB-40	Felt Tar Paper	Black felt tar paper on door frame.	Storage Shed 1 Exterior	ND
BS-ASB-41	Caulking	Beige caulking.	Stand-by Diesel Building Interior	0.64% Chrysotile
BS-ASB-42	Caulking	Grey caulking around electrical conduit.	Stand-by Diesel Building Exterior	0.32% Chrysotile
BS-ASB-43	Asphalt Shingle	Black asphalt shingle with tar paper.	Stand-by Diesel Building Exterior	2% Chrysotile
BS-ASB-44	Drywall Joint Compound	Drywall joint compound and plaster.	Main Power Building Interior	1% Chrysotile
BS-ASB-45	Rubber	Black rubber coating on wire.	Main Power Building Interior	ND
BS-ASB-46	Caulking	Grey caulking around electrical conduit.	Main Power Building Exterior	0.56% Chrysotile
BS-ASB-47	Asphalt Shingle	Red/black asphalt shingle.	Main Power Building Exterior	ND
BS-ASB-48	Caulking	Beige caulking.	Videograph Building Exterior	ND
BS-ASB-49	Caulking	Grey/black window caulking.	Videograph Building Exterior	ND
BS-ASB-50	Asphalt shingle	Red/black asphalt shingle.	Videograph Building Exterior	ND
BS-ASB-51	Caulking	White window caulking.	Videograph Building Exterior	ND

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 C-1: Asbestos Sample Descriptions and Analytical Results (Continued)

Sample ID	Material (Layer) Analyzed	Detailed Material Description	AMEC Rm #	Analytical Result
BS-ASB-52	Parging	Grey concrete parging.	Powerhouse Interior	ND
BS-ASB-53	Felt Tar Paper	Black felt tar paper under siding.	Winch House Exterior	<0.25% Chrysotile
BS-ASB-54	Asphalt Shingle	Black asphalt shingle.	Winch House Exterior	ND
BS-ASB-55	Insulation	Yellow fibreglass insulation with black paper backing.	Old Equipment Building Room 1	ND
BS-ASB-56	Caulking	Grey window caulking.	Old Equipment Building Room 1	2.6% Chrysotile
BS-ASB-57	Brick	Red Brick.	Old Equipment Building Room 1	ND
BS-ASB-58	Mortar	Grey brick mortar.	Old Equipment Building Room 1	ND
BS-ASB-59	Drywall Joint Compound	Drywall joint compound.	Old Equipment Building Room 1	5% Chrysotile
BS-ASB-60	Felt Tar Paper	Black felt tar paper.	Old Equipment Building Exterior	ND
BS-ASB-61	Insulation	Yellow/orange foam insulation.	Videograph Building Interior	ND
BS-ASB-62	Brick	Red brick.	Storage Shed 2 Interior	ND
BS-ASB-63	Mortar	Grey brick mortar.	Storage Shed 2 Interior	ND
BS-ASB-64	Felt Tar Paper	Black felt tar paper under siding.	Storage Shed 2 Exterior	ND
BS-ASB-65	Caulking	White caulking	Storage Shed 2 Exterior	ND
BS-ASB-DUP1	Drywall Joint Compound	Drywall joint compound.	Duplex Dwelling Kitchen	ND
BS-ASB-DUP2	Rolled Flooring	Black rolled flooring (painted green).	Duplex Dwelling Storage Room 2	ND
BS-ASB-DUP3	Caulking	Grey window caulking.	Old Equipment Building Room 1	3% Chrysotile
BS-ASB-DUP4	Asphalt Shingle	Black asphalt shingle.	Winch House Exterior	ND

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)
BS-ASB-DUP1 is a duplicate of BS-ASB-05
BS-ASB-DUP2 is a duplicate of BS-ASB-21
BS-ASB-DUP3 is a duplicate of BS-ASB-56
BS-ASB-DUP4 is a duplicate of BN-ASB-54

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

Sample ID	Colour Description	Substrate	Sample Location (Room No.)	RDL (mg/kg)	Total Lead (mg/kg)
BS-PS-01	Grey over red	Concrete	Duplex Dwelling Porch 1	5.0	**6,300**
BS-PS-02	White over light green over blue over dark green over beige	Wood panel	Duplex Dwelling Porch 1	5.0	**8,200**
BS-PS-03	White	Wood panel	Duplex Dwelling Living Room	5.0	**870**
BS-PS-04	White over beige over light green over blue over brown	Wood panel	Duplex Dwelling Living Room	5.0	**27,000**
BS-PS-05	White	Drywall	Duplex Dwelling Kitchen	5.0	**300**
BS-PS-06	White over pink over green	Wood baseboard	Duplex Dwelling Kitchen	5.0	**28,000**
BS-PS-07	White over blue over pink	Wood Panel	Duplex Dwelling Pantry	5.0	**38,000**
BS-PS-08	Green over orange over dark green	Wood boards	Duplex Dwelling Pantry	5.0	**37,000**
BS-PS-09	Beige over pink over blue	Wood particle board	Duplex Dwelling Pantry	5.0	**43,000**
BS-PS-10	White	Wood Panel	Duplex Dwelling Bedroom 4	5.0	**24,000**
BS-PS-11	Off-white over pink	Wood Panel	Duplex Dwelling Bedroom 4	5.0	**31,000**
BS-PS-12	Beige over white over red	Wood Panel	Duplex Dwelling Washroom	5.0	**7,600**
BS-PS-13	Beige over yellow over blue/green	Wood Panel	Duplex Dwelling Bedroom 1	5.0	**28,000**
BS-PS-14	Green over orange over red	Wood board	Duplex Dwelling Bedroom 2	5.0	**12,000**
BS-PS-15	Light green over beige over white	Drywall	Duplex Dwelling Bedroom 2	5.0	**37,000**
BS-PS-16	Beige over white	Wood panel	Duplex Dwelling Bedroom 3	5.0	**1,200**
BS-PS-17	Light green over dark green	Wood panel	Duplex Dwelling Porch 2	5.0	**23,000**
BS-PS-18	Grey over blue over green over red	Concrete	Duplex Dwelling Porch 2	5.0	**4,100**

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 C-2: Paint Sample Descriptions and Lead Analytical Results (Continued)

Sample ID	Colour Description	Substrate	Sample Location (Room No.)	RDL (mg/kg)	Total Lead (mg/kg)
BS-PS-19	Green over beige	Wood panel	Duplex Dwelling Storage Room 1	5.0	**36,000**
BS-PS-20	Yellow	Metal	Duplex Dwelling Storage Room 1	5.0	**15,000**
BS-PS-21	Pink over white	Wood panel	Duplex Dwelling Storage Room 1	5.0	**37,000**
BS-PS-22	White over red over grey over beige	Wood	Duplex Dwelling Storage Room 1	5.0	**61,000**
BS-PS-23	Green over orange over yellow over red	Wood	Duplex Dwelling Storage Room 2	5.0	**32,000**
BS-PS-24	Pink over beige	Wood	Duplex Dwelling Storage Room 2	5.0	**6,200**
BS-PS-25	Green over orange over dark grey	Wood	Duplex Dwelling Storage Room 2	5.0	**50,000**
BS-PS-26	Beige over yellow over grey over pink	Concrete	Duplex Dwelling Storage Room 2	5.0	**22,000**
BS-PS-27	Red over multiple layers of grey	Concrete	Lighthouse 1st Floor	5.0	**5,200**
BS-PS-28	White over beige over green over blue over grey	Wood	Lighthouse 1st Floor	5.0	**72,000**
BS-PS-29	White over red over grey over beige	Cinder block	Lighthouse 1st Floor	5.0	**2,600**
BS-PS-30	White over off-white over beige over grey over blue over light blue	Wood	Lighthouse 1st Floor	5.0	**63,000**
BS-PS-31	Red over grey over black	Wood	Lighthouse 2nd Floor	5.0	**4,100**
BS-PS-32	White over red over orange	Cinder block	Lighthouse 2nd Floor	5.0	**1,300**
BS-PS-33	Multiple layers of grey	Concrete	Duplex Dwelling Basement	5.0	**3,800**
BS-PS-34	Beige over white	Cinder block/brick	Duplex Dwelling Basement	5.0	**140**
BS-PS-35	White over orange over beige	Concrete	Duplex Dwelling Basement	5.0	**65,000**
BS-PS-36	Multiple layers of white	Wood	Duplex Dwelling Exterior	5.0	**31,000**

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 C-2: Paint Sample Descriptions and Lead Analytical Results (Continued)

Sample ID	Colour Description	Substrate	Sample Location (Room No.)	RDL (mg/kg)	Total Lead (mg/kg)
BS-PS-37	Multiple layers of grey	Wood	Duplex Dwelling Exterior	5.0	**2,900**
BS-PS-38	White over green over red	Wood	Duplex Dwelling Exterior	5.0	**18,000**
BS-PS-39	Multiple layers of grey over red	Concrete	Duplex Dwelling Exterior	5.0	**21,000**
BS-PS-40	Red over multiple layers of grey	Wood	Duplex Dwelling Exterior	5.0	**25,000**
BS-PS-41	Multiple layers of grey	Concrete	Single Dwelling Basement	5.0	**2,400**
BS-PS-42	Grey over light green over beige	Concrete	Single Dwelling Basement	5.0	**980**
BS-PS-43	Grey over red over white	Wood	Single Dwelling Basement	5.0	**7,100**
BS-PS-44	White over yellow	Drywall	Single Dwelling Basement	5.0	**12,000**
BS-PS-45	White over pink/beige over yellow	Drywall	Single Dwelling Front Porch	5.0	**4,800**
BS-PS-46	White over green	Drywall	Single Dwelling Storage Room	5.0	**14,000**
BS-PS-47	White over blue over pink over light green over beige	Drywall	Single Dwelling Front Porch	5.0	**12,000**
BS-PS-48	White	Drywall	Single Dwelling Kitchen	5.0	**2,000**
BS-PS-49	Yellow over white	Wood particleboard	Single Dwelling Kitchen	5.0	**24,000**
BS-PS-50	White	Drywall	Single Dwelling Living Room and Hallway	5.0	**2,400**
BS-PS-51	White over blue over yellow over green	Drywall	Single Dwelling Living Room and Hallway	5.0	**4,200**
BS-PS-52	White over blue over yellow over beige	Drywall	Single Dwelling Porch 2	5.0	**2,700**
BS-PS-53	Beige	Drywall	Single Dwelling Bedroom 1	5.0	**2,600**
BS-PS-54	Light yellow	Drywall	Single Dwelling Hallway	5.0	**1,600**

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 C-2: Paint Sample Descriptions and Lead Analytical Results (Continued)

Sample ID	Colour Description	Substrate	Sample Location (Room No.)	RDL (mg/kg)	Total Lead (mg/kg)
BS-PS-55	Green	Drywall	Single Dwelling Bedroom 3	5.0	**670**
BS-PS-56	White over light blue	Drywall	Single Dwelling Bedroom 3	5.0	**1,400**
BS-PS-57	White	Drywall	Single Dwelling Bedroom 2	5.0	**1,100**
BS-PS-58	Grey over red over grey	Concrete	Single Dwelling Extertior	5.0	60
BS-PS-59	Multiple layers of grey	Concrete	Single Dwelling Extertior	5.0	75
BS-PS-60	Multiple layers of white	Wood siding	Single Dwelling Extertior	5.0	**10,000**
BS-PS-61	Red over dark red	Wood	Storage Shed 1 Exterior	5.0	**750**
BS-PS-62	White over green	Wood	Storage Shed 1 Exterior	5.0	**13,000**
BS-PS-63	Multiple layers of white	Wood	Storage Shed 1 Exterior	5.0	**2,100**
BS-PS-64	Multiple layers of grey over light blue	Plywood	Stand-by Diesel Building Room 1	5.0	**2,100**
BS-PS-65	Blue over yellow over white	Plywood	Stand-by Diesel Building Room 1	5.0	**7,300**
BS-PS-66	Multiple layers of white	Wood Siding	Stand-by Diesel Building Exterior	5.0	**1,500**
BS-PS-67	Multiple layers of grey over red over white	Concrete	Stand-by Diesel Building Exterior	5.0	**1,100**
BS-PS-68	Red over dark grey over light grey over black	Concrete	Main Power Building Interior	5.0	**3,800**
BS-PS-69	Multiple layers of grey	Wood	Main Power Building Interior	5.0	**2,900**
BS-PS-70	Light green over white over blue	Drywall	Main Power Building Interior	5.0	**5,500**
BS-PS-71	White	Drywall	Main Power Building Interior	5.0	**1,300**
BS-PS-72	Red over multiple layers of white over grey	Wood Panel	Main Power Building Exterior	5.0	**8,900**

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 C-2: Paint Sample Descriptions and Lead Analytical Results (Continued)

Sample ID	Colour Description	Substrate	Sample Location (Room No.)	RDL (mg/kg)	Total Lead (mg/kg)
BS-PS-73	Multiple layers of grey over red	Concrete	Main Power Building Interior	5.0	**1,000**
BS-PS-74	Multiple layers white	Wood Siding	Main Power Building Exterior	5.0	**6,400**
BS-PS-75	Dark grey over green	Drywall	Old Equipment Building Room 1	5.0	**490**
BS-PS-76	White over black	Drywall	Old Equipment Building Room 1	5.0	36
BS-PS-77	Light Green	Drywall	Old Equipment Building Porch	5.0	**27,000**
BS-PS-78	Dark green over blue	Wood	Old Equipment Building Exterior	5.0	**45,000**
BS-PS-79	Multiple layers of white	Wood Siding	Old Equipment Building Exterior	5.0	**7,500**
BS-PS-80	White over yellow over red	Metal Tank	Old Equipment Building Room 1	5.0	**5,400**
BS-PS-81	Multiple layers of grey	Concrete	Videograph Building Interior	5.0	**4,200**
BS-PS-82	White	Wood	Videograph Building Interior	5.0	19
BS-PS-83	Light blue over green over greywith some brown	Wood	Storage Shed 2 Interior	5.0	**75,000**
BS-PS-84	Red over white over green	Wood	Storage Shed 2 Interior	5.0	**5,900**
BS-PS-85	Multiple layers of white	Wood Siding	Storage Shed 2 Exterior	5.0	**74,000**
BS-PS-86	Multiple layers of white	Wood Siding	Powerhouse Exterior	5.0	**70,000**
BS-PS-87	Multiple layers of red	Concrete	Winch House Interior	5.0	**25,000**
BS-PS-88	Red	Metal Winch	Winch House Interior	5.0	**3,100**
BS-PS-89	Green	Metal Winch	Winch House Interior	5.0	**29,000**
BS-PS-90	Grey	Metal Winch	Winch House Interior	5.0	**20,000**

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 C-2: Paint Sample Descriptions and Lead Analytical Results (Continued)

Sample ID	Colour Description	Substrate	Sample Location (Room No.)	RDL (mg/kg)	Total Lead (mg/kg)
BS-PS-91	Multiple layers of red over white	Wood	Winch House Interior	5.0	**42,000**
BS-PS-92	Multiple layers of red over grey	Concrete	Old Equipment Building Room 1	5.0	**32,000**
BS-PS-93	Light blue	Drywall	Old Equipment Building Room 1	5.0	**18,000**
BS-PS-94	Red over multiple layers of grey	Concrete	Old Equipment Building Room 1	5.0	**22,000**
BS-PS-DUP1	Grey over red	Concrete	Duplex Dwelling Porch 1	5.0	**6,800**
BS-PS-DUP2	Green over orange over yellow over red	Wood	Duplex Dwelling Storage Room 1	5.0	**62,000**
BS-PS-DUP3	Red over grey over black	Wood	Lighthouse 2nd Floor	5.0	**48,000**
BS-PS-DUP4	Multiple layers of grey	Concrete	Single Dwelling Basement	5.0	**1,900**
BS-PS-DUP5	Multiple layers of white	Wood siding	Single Dwelling Extertior	5.0	**16,000**
BS-PS-DUP6	Red over dark grey over light grey over black	Concrete	Main Power Building Interior	5.0	**3,900**
BS-PS-DUP7	Light blue	Drywall	Equipment Building Interior	5.0	**23,000**
BS-PS-DUP8	Red over multiple layers of grey	Concrete	Equipment Building Interior	5.0	**18,000**

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
BS-PS-DUP1 is a duplicate of BS-PS-01
BS-PS-DUP2 is a duplicate of BS-PS-23
BS-PS-DUP3 is a duplicate of BS-PS-31
BS-PS-DUP4 is a duplicate of BS-PS-41
BS-PS-DUP5 is a duplicate of BS-PS-60
BS-PS-DUP6 is a duplicate of BS-PS-68
BS-PS-DUP7 is a duplicate of BS-PS-93
BS-PS-DUP8 is a duplicate of BS-PS-94

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

Sample ID	Colour Description	Substrate	Sample Location (Room No.)	RDL (mg/kg)	Total Mercury (mg/kg)
BS-PS-01	Grey over red	Concrete	Duplex Dwelling Porch 1	1.0	***14***
BS-PS-02	White over light green over blue over dark green over beige	Wood panel	Duplex Dwelling Porch 1	1.0	6.3
BS-PS-03	White	Wood panel	Duplex Dwelling Living Room	1.0	1.1
BS-PS-04	White over beige over light green over blue over brown	Wood panel	Duplex Dwelling Living Room	1.0	1.1
BS-PS-05	White	Drywall	Duplex Dwelling Kitchen	1.0	<1.0
BS-PS-06	White over pink over green	Wood baseboard	Duplex Dwelling Kitchen	1.0	5.4
BS-PS-07	White over blue over pink	Wood Panel	Duplex Dwelling Pantry	1.0	***16***
BS-PS-08	Green over orange over dark green	Wood boards	Duplex Dwelling Pantry	1.0	6.4
BS-PS-09	Beige over pink over blue	Wood particle board	Duplex Dwelling Pantry	1.0	4.8
BS-PS-10	White	Wood Panel	Duplex Dwelling Bedroom 4	1.0	4.2
BS-PS-11	Off-white over pink	Wood Panel	Duplex Dwelling Bedroom 4	1.0	2.9
BS-PS-12	Beige over white over red	Wood Panel	Duplex Dwelling Washroom	1.0	2.2
BS-PS-13	Beige over yellow over blue/green	Wood Panel	Duplex Dwelling Bedroom 1	1.0	2.4
BS-PS-14	Green over orange over red	Wood board	Duplex Dwelling Bedroom 2	1.0	4.9
BS-PS-15	Light green over beige over white	Drywall	Duplex Dwelling Bedroom 2	1.0	10
BS-PS-16	Beige over white	Wood panel	Duplex Dwelling Bedroom 3	1.0	<1.0
BS-PS-17	Light green over dark green	Wood panel	Duplex Dwelling Porch 2	1.0	3.4
BS-PS-18	Grey over blue over green over red	Concrete	Duplex Dwelling Porch 2	1.0	2.5

Notes:
RDL: Reportable detection limit
<X: Non Detect
HPA: Hazardous Products Act
(1) Elevated reporting limit due to a low sample weight used in the digestion.
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 C-3: Paint Sample Descriptions and Mercury Analytical Results (Continued)

Sample ID	Colour Description	Substrate	Sample Location (Room No.)	RDL (mg/kg)	Total Mercury (mg/kg)
BS-PS-19	Green over beige	Wood panel	Duplex Dwelling Storage Room 1	1.0	***27***
BS-PS-20	Yellow	Metal	Duplex Dwelling Storage Room 1	1.0	3.8
BS-PS-21	Pink over white	Wood panel	Duplex Dwelling Storage Room 1	1.0	1.0
BS-PS-22	White over red over grey over beige	Wood	Duplex Dwelling Storage Room 1	1.0	1.1
BS-PS-23	Green over orange over yellow over red	Wood	Duplex Dwelling Storage Room 2	1.0	***11***
BS-PS-24	Pink over beige	Wood	Duplex Dwelling Storage Room 2	1.0	***18***
BS-PS-25	Green over orange over dark grey	Wood	Duplex Dwelling Storage Room 2	1.0	3.2
BS-PS-26	Beige over yellow over grey over pink	Concrete	Duplex Dwelling Storage Room 2	1.0	***25***
BS-PS-27	Red over multiple layers of grey	Concrete	Lighthouse 1st Floor	1.0	***11***
BS-PS-28	White over beige over green over blue over grey	Wood	Lighthouse 1st Floor	1.0	***15***
BS-PS-29	White over red over grey over beige	Cinder block	Lighthouse 1st Floor	1.0	***29***
BS-PS-30	White over off-white over beige over grey over blue over light blue	Wood	Lighthouse 1st Floor	1.0	***16***
BS-PS-31	Red over grey over black	Wood	Lighthouse 2nd Floor	1.0	7.9
BS-PS-32	White over red over orange	Cinder block	Lighthouse 2nd Floor	1.0	***47***
BS-PS-33	Multiple layers of grey	Concrete	Duplex Dwelling Basement	1.0	***12***
BS-PS-34	Beige over white	Cinder block/brick	Duplex Dwelling Basement	1.0	***31***
BS-PS-35	White over orange over beige	Concrete	Duplex Dwelling Basement	1.0	6.5
BS-PS-36	Multiple layers of white	Wood	Duplex Dwelling Exterior	1.0	***28***

Notes:
RDL: Reportable detection limit
<X: Non Detect
HPA: Hazardous Products Act
(1) Elevated reporting limit due to a low sample weight used in the digestion.
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 C-3: Paint Sample Descriptions and Mercury Analytical Results (Continued)

Sample ID	Colour Description	Substrate	Sample Location (Room No.)	RDL (mg/kg)	Total Mercury (mg/kg)
BS-PS-37	Multiple layers of grey	Wood	Duplex Dwelling Exterior	1.0	***41***
BS-PS-38	White over green over red	Wood	Duplex Dwelling Exterior	1.0	***26***
BS-PS-39	Multiple layers of grey over red	Concrete	Duplex Dwelling Exterior	1.0	***22***
BS-PS-40	Red over multiple layers of grey	Wood	Duplex Dwelling Exterior	1.0	***14***
BS-PS-41	Multiple layers of grey	Concrete	Single Dwelling Basement	1.0	3.4
BS-PS-42	Grey over light green over beige	Concrete	Single Dwelling Basement	1.0	***40***
BS-PS-43	Grey over red over white	Wood	Single Dwelling Basement	1.0	***72***
BS-PS-44	White over yellow	Drywall	Single Dwelling Basement	1.0	***15***
BS-PS-45	White over pink/beige over yellow	Drywall	Single Dwelling Front Porch	1.0	4.8
BS-PS-46	White over green	Drywall	Single Dwelling Storage Room	1.0	<1.0
BS-PS-47	White over blue over pink over light green over beige	Drywall	Single Dwelling Front Porch	1.0	2.4
BS-PS-48	White	Drywall	Single Dwelling Kitchen	1.0	4.9
BS-PS-49	Yellow over white	Wood particleboard	Single Dwelling Kitchen	1.0	2.2
BS-PS-50	White	Drywall	Single Dwelling Living Room and Hallway	1.0	7.0
BS-PS-51	White over blue over yellow over green	Drywall	Single Dwelling Living Room and Hallway	1.0	2.2
BS-PS-52	White over blue over yellow over beige	Drywall	Single Dwelling Porch 2	1.0	2.5
BS-PS-53	Beige	Drywall	Single Dwelling Bedroom 1	1.0	2.7
BS-PS-54	Light yellow	Drywall	Single Dwelling Hallway	1.0	2.4

Notes:
RDL: Reportable detection limit
<X: Non Detect
HPA: Hazardous Products Act
(1) Elevated reporting limit due to a low sample weight used in the digestion.
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 C-3: Paint Sample Descriptions and Mercury Analytical Results (Continued)

Sample ID	Colour Description	Substrate	Sample Location (Room No.)	RDL (mg/kg)	Total Mercury (mg/kg)
BS-PS-55	Green	Drywall	Single Dwelling Bedroom 3	1.0	9.2
BS-PS-56	White over light blue	Drywall	Single Dwelling Bedroom 3	1.0	5.7
BS-PS-57	White	Drywall	Single Dwelling Bedroom 2	1.0	***13***
BS-PS-58	Grey over red over grey	Concrete	Single Dwelling Extertior	1.0	<1.0
BS-PS-59	Multiple layers of grey	Concrete	Single Dwelling Extertior	1.0	<1.0
BS-PS-60	Multiple layers of white	Wood siding	Single Dwelling Extertior	1.0	***34***
BS-PS-61	Red over dark red	Wood	Storage Shed 1 Exterior	1.0	***80***
BS-PS-62	White over green	Wood	Storage Shed 1 Exterior	1.0	***32***
BS-PS-63	Multiple layers of white	Wood	Storage Shed 1 Exterior	1.0	***24***
BS-PS-64	Multiple layers of grey over light blue	Plywood	Stand-by Diesel Building Room 1	1.0	***13***
BS-PS-65	Blue over yellow over white	Plywood	Stand-by Diesel Building Room 1	1.0	***69***
BS-PS-66	Multiple layers of white	Wood Siding	Stand-by Diesel Building Exterior	1.0	***48***
BS-PS-67	Multiple layers of grey over red over white	Concrete	Stand-by Diesel Building Exterior	1.0	4.3
BS-PS-68	Red over dark grey over light grey over black	Concrete	Main Power Building Interior	1.0	7.7
BS-PS-69	Multiple layers of grey	Wood	Main Power Building Interior	1.0	***13***
BS-PS-70	Light green over white over blue	Drywall	Main Power Building Interior	1.0	***35***
BS-PS-71	White	Drywall	Main Power Building Interior	1.0	***72***
BS-PS-72	Red over multiple layers of white over grey	Wood Panel	Main Power Building Exterior	1.0	***40***

Notes:
RDL: Reportable detection limit
<X: Non Detect
HPA: Hazardous Products Act
(1) Elevated reporting limit due to a low sample weight used in the digestion.
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 C-3: Paint Sample Descriptions and Mercury Analytical Results (Continued)

Sample ID	Colour Description	Substrate	Sample Location (Room No.)	RDL (mg/kg)	Total Mercury (mg/kg)
BS-PS-73	Multiple layers of grey over red	Concrete	Main Power Building Interior	1.0	1.5
BS-PS-74	Multiple layers white	Wood Siding	Main Power Building Exterior	1.0	***29***
BS-PS-75	Dark grey over green	Drywall	Old Equipment Building Room 1	1.0	6.7
BS-PS-76	White over black	Drywall	Old Equipment Building Room 1	1.0	2.5
BS-PS-77	Light Green	Drywall	Old Equipment Building Porch	1.0	***29***
BS-PS-78	Dark green over blue	Wood	Old Equipment Building Exterior	1.0	***14***
BS-PS-79	Multiple layers of white	Wood Siding	Old Equipment Building Exterior	1.0	***28***
BS-PS-80	White over yellow over red	Metal Tank	Old Equipment Building Room 1	1.0	9.6
BS-PS-81	Multiple layers of grey	Concrete	Videograph Building Interior	1.0	8.8
BS-PS-82	White	Wood	Videograph Building Interior	1.0	<1.0
BS-PS-83	Light blue over green over grey with some brown	Wood	Storage Shed 2 Interior	1.0	<1.0
BS-PS-84	Red over white over green	Wood	Storage Shed 2 Interior	1.0	<1.0
BS-PS-85	Multiple layers of white	Wood Siding	Storage Shed 2 Exterior	1.0	5.2
BS-PS-86	Multiple layers of white	Wood Siding	Powerhouse Exterior	1.0	8.8
BS-PS-87	Multiple layers of red	Concrete	Winch House Interior	1.0	<1.0
BS-PS-88	Red	Metal Winch	Winch House Interior	1.0	<1.0
BS-PS-89	Green	Metal Winch	Winch House Interior	1.0	2.2
BS-PS-90	Grey	Metal Winch	Winch House Interior	1.0	1.2

Notes:
RDL: Reportable detection limit
<X: Non Detect
HPA: Hazardous Products Act
(1) Elevated reporting limit due to a low sample weight used in the digestion.
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 C-3: Paint Sample Descriptions and Mercury Analytical Results (Continued)

Sample ID	Colour Description	Substrate	Sample Location (Room No.)	RDL (mg/kg)	Total Mercury (mg/kg)
BS-PS-91	Multiple layers of red over white	Wood	Winch House Interior	1.0	5.0
BS-PS-92	Multiple layers of red over grey	Concrete	Old Equipment Building Room 1	1.0	3.0
BS-PS-93	Light blue	Drywall	Old Equipment Building Room 1	1.0	***18***
BS-PS-94	Red over multiple layers of grey	Concrete	Old Equipment Building Room 1	1.0	5.0
BS-PS-DUP1	Grey over red	Concrete	Duplex Dwelling Porch 1	1.0	***13***
BS-PS-DUP2	Green over orange over yellow over red	Wood	Duplex Dwelling Storage Room 1	1.0	***15***
BS-PS-DUP3	Red over grey over black	Wood	Lighthouse 2nd Floor	1.0	***110***
BS-PS-DUP4	Multiple layers of grey	Concrete	Single Dwelling Basement	1.0	2.5
BS-PS-DUP5	Multiple layers of white	Wood siding	Single Dwelling Extertior	1.0	***29***
BS-PS-DUP6	Red over dark grey over light grey over black	Concrete	Main Power Building Interior	1.0	6.9
BS-PS-DUP7	Light blue	Drywall	Equipment Building Interior	1.0	***16***
BS-PS-DUP8	Red over multiple layers of grey	Concrete	Equipment Building Interior	1.0	5.1

<X: Non Detect
HPA: Hazardous Products Act
(1) Elevated reporting limit due to a low sample weight used in the digestion.
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)
BS-PS-DUP1 is a duplicate of BS-PS-01
BS-PS-DUP2 is a duplicate of BS-PS-23
BS-PS-DUP3 is a duplicate of BS-PS-31
BS-PS-DUP4 is a duplicate of BS-PS-41
BS-PS-DUP5 is a duplicate of BS-PS-60
BS-PS-DUP6 is a duplicate of BS-PS-68
BS-PS-DUP7 is a duplicate of BS-PS-93
BS-PS-DUP8 is a duplicate of BS-PS-94

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

Sample ID	Colour Description	Substrate	Sample Location (Room No.)	MDL (mg/kg)	Total PCB (mg/kg)
BS-PS-01	Grey over red	Concrete	Duplex Dwelling Porch 1	5.0	<5.0
BS-PS-12	Beige over white over red	Wood Panel	Duplex Dwelling Washroom	5.0	<5.0
BS-PS-22	White over red over grey over beige	Wood	Duplex Dwelling Storage Room 1	5.0	<5.0
BS-PS-39	Multiple layers of grey over red	Concrete	Duplex Dwelling Exterior	5.0	<5.0
BS-PS-42	Grey over light green over beige	Concrete	Single Dwelling Basement	5.0	<5.0
BS-PS-51	White over blue over yellow over green	Drywall	Single Dwelling Living Room and Hallway	5.0	<5.0
BS-PS-68	Red over dark grey over light grey over black	Concrete	Main Power Building Interior	5.0	<5.0
BS-PS-84	Red over white over green	Wood	Storage Shed 2 Interior	5.0	<5.0
BS-PS-91	Multiple layers of red over white	Wood	Winch House Interior	5.0	<5.0
BS-PS-DUP1	Grey over red	Concrete	Duplex Dwelling Porch 1	5.0	<5.0
BS-PS-DUP6	Red over dark grey over light grey over black	Concrete	Main Power Building Interior	5.0	<5.0

Notes:
MDL: Method 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)
BS-PS-DUP1 is a duplicate of BS-PS-01
BS-PS-DUP6 is a duplicate of BS-PS-68

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

Sample ID	Colour Description	Substrate	Sample Location (Room No.)	MDL (mg/L)	Lead Leachate (mg/L)
BS-PS-01	Grey over red	Concrete	Duplex Dwelling Porch 1	0.005	3.1
BS-PS-02	White over light green over blue over dark green over beige	Wood panel	Duplex Dwelling Porch 1	0.005	43
BS-PS-04	White over beige over light green over blue over brown	Wood panel	Duplex Dwelling Living Room	0.005	23
BS-PS-06	White over pink over green	Wood baseboard	Duplex Dwelling Kitchen	0.005	67
BS-PS-07	White over blue over pink	Wood Panel	Duplex Dwelling Pantry	0.005	35
BS-PS-08	Green over orange over dark green	Wood boards	Duplex Dwelling Pantry	0.005	14
BS-PS-09	Beige over pink over blue	Wood particleboard	Duplex Dwelling Pantry	0.005	57
BS-PS-10	White	Wood Panel	Duplex Dwelling Bedroom 4	0.005	8.8
BS-PS-11	Off-white over pink	Wood Panel	Duplex Dwelling Bedroom 4	0.005	44
BS-PS-12	Beige over white over red	Wood Panel	Duplex Dwelling Washroom	0.005	8.6
BS-PS-13	Beige over yellow over blue/green	Wood Panel	Duplex Dwelling Bedroom 1	0.005	29
BS-PS-14	Green over orange over red	Wood board	Duplex Dwelling Bedroom 2	0.005	31
BS-PS-15	Light green over beige over white	Drywall	Duplex Dwelling Bedroom 2	0.005	28
BS-PS-17	Light green over dark green	Wood panel	Duplex Dwelling Porch 2	0.005	18
BS-PS-19	Green over beige	Wood panel	Duplex Dwelling Storage Room 1	0.005	71
BS-PS-20	Yellow	Metal	Duplex Dwelling Storage Room 1	0.005	26
BS-PS-21	Pink over white	Wood panel	Duplex Dwelling Storage Room 1	0.005	25
BS-PS-22	White over red over grey over beige	Wood	Duplex Dwelling Storage Room 1	0.005	50
BS-PS-24	Pink over beige	Wood	Duplex Dwelling Storage Room 1	0.005	5.4
BS-PS-25	Green over orange over dark grey	Wood	Duplex Dwelling Storage Room 2	0.005	71
BS-PS-26	Beige over yellow over grey over pink	Concrete	Duplex Dwelling Storage Room 2	0.005	2.5
BS-PS-27	Red over multiple layers of grey	Concrete	Lighthouse 1st Floor	0.005	13

Notes:

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 C-5: Paint Sample Descriptions and Lead Leachate Analytical Results (Continued)

Sample ID	Colour Description	Substrate	Sample Location (Room No.)	MDL (mg/L)	Lead Leachate (mg/L)
BS-PS-28	White over beige over green over blue over grey	Wood	Lighthouse 1st Floor	0.005	45
BS-PS-30	White over off-white over beige over grey over blue over light blue	Wood	Lighthouse 1st Floor	0.005	130
BS-PS-35	White over orange over beige	Concrete	Duplex Dwelling Basement	0.005	160
BS-PS-36	Multiple layers of white	Wood	Duplex Dwelling Exterior	0.005	30
BS-PS-38	White over green over red	Wood	Duplex Dwelling Exterior	0.005	41
BS-PS-39	Multiple layers of grey over red	Concrete	Duplex Dwelling Exterior	0.005	12
BS-PS-40	Red over multiple layers of grey	Wood	Duplex Dwelling Exterior	0.005	37
BS-PS-43	Grey over red over white	Wood	Single Dwelling Basement	0.005	2.1
BS-PS-44	White over yellow	Drywall	Single Dwelling Basement	0.005	0.29
BS-PS-46	White over green	Drywall	Single Dwelling Front Porch	0.005	7.5
BS-PS-47	White over blue over pink over light green over beige	Drywall	Single Dwelling Front Porch	0.005	8.9
BS-PS-49	Yellow over white	Wood particleboard	Single Dwelling Kitchen	0.005	46
BS-PS-52	White over blue over yellow over beige	Drywall	Single Dwelling Porch 2	0.005	2.0
BS-PS-62	White over green	Wood	Storage Shed 1 Exterior	0.005	7.8
BS-PS-65	Blue over yellow over white	Plywood	Stand-by Diesel Building Room 1	0.005	0.22
BS-PS-70	Light green over white over blue	Drywall	Main Power Building Interior	0.005	0.65
BS-PS-72	Red over multiple layers of white over grey	Wood Panel	Main Power Building Exterior	0.005	8.8
BS-PS-74	Multiple layers white	Wood Siding	Main Power Buiuilding Exterior	0.005	24
BS-PS-77	Light Green	Drywall	Equipment Building Porch	0.005	0.51
BS-PS-79	Multiple layers of white	Wood Siding	Equipment Building Exterior	0.005	24
BS-PS-80	White over yellow over red	Metal Tank	Equipment Building Room 1	0.005	1.5
BS-PS-83	Light blue over green over grey with some brown	Wood	Storage Shed 2 Interior	0.005	71

Notes:

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 C-5: Paint Sample Descriptions and Lead Leachate Analytical Results (Continued)

Sample ID	Colour Description	Substrate	Sample Location (Room No.)	MDL (mg/L)	Lead Leachate (mg/L)
BS-PS-84	Red over white over green	Wood	Storage Shed 2 Interior	0.05	140
BS-PS-85	Multiple layers of white	Wood Siding	Storage Shed 2 Exterior	0.05	240
BS-PS-86	Multiple layers of white	Wood Siding	Powerhouse Exterior	0.05	250
BS-PS-87	Multiple layers of red	Concrete	Winch House Interior	0.005	9.6
BS-PS-89	Green	Metal Winch	Winch House Interior	0.005	7.1
BS-PS-91	Multiple layers of red over white	Wood	Winch House Interior	0.005	57
BS-PS-92	Multiple layers of red over grey	Concrete	Equipment Building Interior	0.005	46
BS-PS-94	Red over multiple layers of grey	Concrete	Equipment Building Interior	0.005	4.8
BS-PS-DUP2	Green over orange over yellow over red	Wood	Duplex Dwelling Storage Room 1	0.005	36
BS-PS-DUP3	Red over grey over black	Wood	Lighthouse 2nd Floor	0.05	96
BS-PS-DUP5	Multiple layers of white	Wood siding	Single Dwelling Exterior	0.005	35
BS-PS-DUP7	Light blue	Drywall	Equipment Building Interior	0.005	8.2

Notes:

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

BS-PS-DUP2 is a duplicate of BS-PS-23
BS-PS-DUP3 is a duplicate of BS-PS-31
BS-PS-DUP5 is a duplicate of BS-PS-60
BS-PS-DUP7 is a duplicate of BS-PS-93

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

Sample ID	Colour Description	Substrate	Sample Location (Room No.)	MDL (mg/L)	Mercury Leachate (mg/L)
BS-PS-19	Green over beige	Wood panel	Duplex Dwelling Storage Room 1	0.0005	<0.00050
BS-PS-26	Beige over yellow over grey over pink	Concrete	Duplex Dwelling Storage Room 2	0.0005	<0.0005
BS-PS-29	White over red over grey over beige	Cinder block	Lighthouse 1st Floor	0.0001	0.00061
BS-PS-32	White over red over orange	Cinder block	Lighthouse 2nd Floor	0.0001	0.0012
BS-PS-34	Beige over white	Cinder block/brick	Duplex Dwelling Basement	0.0002	0.00032
BS-PS-36	Multiple layers of white	Wood	Duplex Dwelling Exterior	0.0001	0.0015
BS-PS-37	Multiple layers of grey	Wood	Duplex Dwelling Exterior	0.0001	0.0018
BS-PS-38	White over green over red	Wood	Duplex Dwelling Exterior	0.0005	<0.00050
BS-PS-42	Grey over light green over beige	Concrete	Single Dwelling Basement	0.001	0.0081
BS-PS-43	Grey over red over white	Wood	Single Dwelling Basement	0.0002	0.001
BS-PS-60	Multiple layers of white	Wood siding	Single Dwelling Extertior	0.0002	0.00049
BS-PS-61	Red over dark red	Wood	Storage Shed 1 Exterior	0.0005	0.0019
BS-PS-62	White over green	Wood	Storage Shed 1 Exterior	0.0002	<0.00020
BS-PS-63	Multiple layers of white	Wood	Storage Shed 1 Exterior	0.0001	0.0014
BS-PS-65	Blue over yellow over white	Plywood	Stand-by Diesel Building Room 1	0.001	0.0048
BS-PS-66	Multiple layers of white	Wood Siding	Stand-by Diesel Building Exterior	0.0002	0.0030
BS-PS-70	Light green over white over blue	Drywall	Main Power Building Interior	0.001	<0.0010
BS-PS-71	White	Drywall	Main Power Building Interior	0.0002	0.0039
BS-PS-72	Red over multiple layers of white over grey	Wood Panel	Main Power Building Exterior	0.001	<0.0010
BS-PS-74	Multiple layers white	Wood Siding	Main Power Buiuilding Exterior	0.0002	<0.00020
BS-PS-77	Light Green	Drywall	Equipment Building Porch	0.0005	<0.00050
BS-PS-79	Multiple layers of white	Wood Siding	Equipment Building Exterior	0.001	0.0043
BS-PS-DUP3	Red over grey over black	Wood	Lighthouse 2nd Floor	0.0002	<0.00020

Notes:

Shaded results indicate that mercury leachate concentration is above the provincial guidance document for leachable toxic waste criterion for mercury (0.10 mg/L)

BS-PS-DUP3 is a duplicate of BS-PS-31

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

Sample ID	Sample Description	Sample Location (Room No.)	Mould Identified, in rank order	Mould Growth
BS-MD-01	Drywall	Duplex Dwelling Kitchen Ceiling	*Stachybotrys, Cladosporium* and *Ulocladium*	Abundant
BS-MD-02	White Paint	Single Dwelling Living Room Wall	*Ulocladium, Cladosporium,* Fungal Hyphae and *Aspergillus*	Moderate to 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.

APPENDIX D

Laboratory Certificates of Analyses

EMSL Canada Inc.
10 Falconer Drive, Unit #3, Mississauga, ON L5N 3L8
Phone/Fax: 289-997-4602 / (289) 997-4607
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EMSL Canada Or	551205650
CustomerID:	55MEEN26
CustomerPO:	TF12076461
ProjectID:	

Attn: **Lori Wiseman**
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Phone:	(709) 722-7023
Fax:	(709) 722-7353
Received:	11/27/12 12:38 PM
Analysis Date:	12/4/2012
Collected:	

Project: **TF12076461-BELL#56 SOUTH**

Test Report: Asbestos Analysis of Non-Friable Organically Bound Materials by PLM via EPA 600/R-93/116 section 2.3

SAMPLE ID	DESCRIPTION	APPEARANCE	% MATRIX MATERIAL	% NON-ASBESTOS FIBERS	ASBESTOS TYPES
BS-ASB-01 *551205650-0001*	- Beige Striped VFT w/Yellow Adhesive	Brown /Tan /Various Non-Fibrous Heterogeneous	97.9	None	2.1% Chrysotile
BS-ASB-07 *551205650-0007*	- Green Carpet Material	Brown /Green Fibrous Heterogeneous	100	None	No Asbestos Detected
BS-ASB-08 *551205650-0008*	- Light Beige Striped VFT	Brown /Tan /Various Non-Fibrous Heterogeneous	97.5	None	2.5% Chrysotile
BS-ASB-09 *551205650-0009*	- White Caulking Around Tub	Brown /White /Blue Non-Fibrous Heterogeneous	100	None	No Asbestos Detected
BS-ASB-10 *551205650-0010*	- Flower Patern Black Rolled Flooring	Brown /Various /Black Non-Fibrous Heterogeneous	100	None	No Asbestos Detected
BS-ASB-19 *551205650-0019*	- Grey Rolled Flooring	Brown /Gray /Various Non-Fibrous Heterogeneous	100	None	No Asbestos Detected
BS-ASB-21 *551205650-0021*	- Black Rolled Flooring	Brown /Various /Black Non-Fibrous Heterogeneous	100	None	No Asbestos Detected
BS-ASB-22 *551205650-0022*	- Beige Caulking Around Windows	Gray /White /Various Non-Fibrous Heterogeneous	100	None	No Asbestos Detected
BS-ASB-23 *551205650-0023*	- Black Asphalt Shingle & Paper	Red /Various /Black Non-Fibrous Heterogeneous	100	None	No Asbestos Detected

Analyst(s)

Matthew Davis (33)

Kevin Pang
or other approved signatory

Initial report from 12/04/2012 15:45:55

EMSL Canada Inc.
10 Falconer Drive, Unit #3, Mississauga, ON L5N 3L8
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EMSL Canada Or	551205650
CustomerID:	55MEEN26
CustomerPO:	TF12076461
ProjectID:	

Attn: **Lori Wiseman**
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Phone:	(709) 722-7023
Fax:	(709) 722-7353
Received:	11/27/12 12:38 PM
Analysis Date:	12/4/2012
Collected:	

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Test Report: Asbestos Analysis of Non-Friable Organically Bound Materials by PLM via EPA 600/R-93/116 section 2.3

SAMPLE ID	DESCRIPTION	APPEARANCE	% MATRIX MATERIAL	% NON-ASBESTOS FIBERS	ASBESTOS TYPES
BS-ASB-28 *551205650-0028*	- Yellow Speckled Countertop	Brown /Yellow Non-Fibrous Heterogeneous	100	None	No Asbestos Detected
BS-ASB-32 *551205650-0032*	- White Caulking Around Tub	Brown /White Non-Fibrous Heterogeneous	100	None	No Asbestos Detected
BS-ASB-33 *551205650-0033*	- Grey Motart Caulking Sticky	White /Black Non-Fibrous Heterogeneous	60.0	None	40.0% Chrysotile
BS-ASB-35 *551205650-0035*	- Black Felt Paper on Door Frame	White /Black Non-Fibrous Heterogeneous	100	None	No Asbestos Detected
BS-ASB-36 *551205650-0036*	- Red/Black Asphalt Shingle w/Tar	Red /Various /Black Non-Fibrous Heterogeneous	99.5	None	0.52% Chrysotile
BS-ASB-37 *551205650-0037*	- White Caulking on Window	Brown /Gray /Various Non-Fibrous Heterogeneous	100	None	No Asbestos Detected
BS-ASB-38 *551205650-0038*	- Black Asphalt Shingle	Red /Various /Black Non-Fibrous Heterogeneous	98.5	None	1.5% Chrysotile
BS-ASB-39 *551205650-0039*	- Beige Caulking on Window	Brown /White /Various Non-Fibrous Heterogeneous	99.7	None	0.26% Chrysotile
BS-ASB-40 *551205650-0040*	- Black Felt Paper on Door Frame	Black Non-Fibrous Heterogeneous	100	None	No Asbestos Detected

Analyst(s)

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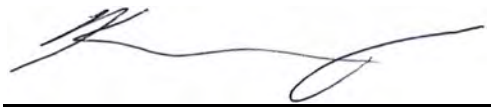

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Test Report: Asbestos Analysis of Non-Friable Organically Bound Materials by PLM via EPA 600/R-93/116 section 2.3

SAMPLE ID	DESCRIPTION	APPEARANCE	% MATRIX MATERIAL	% NON-ASBESTOS FIBERS	ASBESTOS TYPES
BS-ASB-41 *551205650-0041*	- Beige Caulking	Tan /White /Black Non-Fibrous Heterogeneous	99.4	None	0.64% Chrysotile
BS-ASB-42 *551205650-0042*	- Caulking/Parking Around Pipe	Gray /White /Various Non-Fibrous Heterogeneous	99.7	None	0.32% Chrysotile
BS-ASB-43 *551205650-0043*	- Black Asphalt Shingle & Tar Paper	Red /Various /Black Non-Fibrous Heterogeneous	98.0	None	2.0% Chrysotile
BS-ASB-46 *551205650-0046*	- Grey Caulking Around Electrical	Gray /White /Various Non-Fibrous Heterogeneous	99.4	None	0.56% Chrysotile
BS-ASB-47 *551205650-0047*	- Red/Black Asphalt Shingle	Red /Various /Black Non-Fibrous Heterogeneous	100	None	No Asbestos Detected
BS-ASB-48 *551205650-0048*	- Beige Caulking Around Siding	Gray /White /Various Non-Fibrous Heterogeneous	100	None	No Asbestos Detected
BS-ASB-49 *551205650-0049*	- Grey & Black Caulking Around Window	Gray /Black Non-Fibrous Heterogeneous	100	None	No Asbestos Detected
BS-ASB-50 *551205650-0050*	- Red/Black Asphalt Shingle	Gray /Various /Black Non-Fibrous Heterogeneous	100	None	No Asbestos Detected
BS-ASB-51 *551205650-0051*	- White Caulking Around Window	Brown /Gray /Various Non-Fibrous Heterogeneous	100	None	No Asbestos Detected

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Test Report: Asbestos Analysis of Non-Friable Organically Bound Materials by PLM via EPA 600/R-93/116 section 2.3

SAMPLE ID	DESCRIPTION	APPEARANCE	% MATRIX MATERIAL	% NON-ASBESTOS FIBERS	ASBESTOS TYPES
BS-ASB-56 *551205650-0056*	- Grey Caulking on Window	Gray /White /Various Non-Fibrous Heterogeneous	97.4	None	2.6% Chrysotile
BS-ASB-60 *551205650-0060*	- Black Felt Paper	Black Fibrous Heterogeneous	100	None	No Asbestos Detected
BS-ASB-64 *551205650-0064*	- Brow/Black Felt Paper	Brown /Black Fibrous Heterogeneous	100	None	No Asbestos Detected
BS-ASB-65 *551205650-0065*	- Caulking Parging Around Window White	Tan /White /Various Non-Fibrous Heterogeneous	100	None	No Asbestos Detected
BS-ASB-53 *551205650-0067*	- Black Felt Paper	Black Fibrous Homogeneous	100	None	<0.25% Chrysotile
BS-ASB-54 *551205650-0068*	- Black Asphalt Shingle	Gray /Various /Black Non-Fibrous Heterogeneous	100	None	No Asbestos Detected

Analyst(s)

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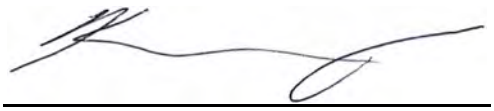

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Project: **TF12076461-BELL#56 SOUTH**

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

			Non-Asbestos			Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**		**% Non-Fibrous**	**% Type**
BS-ASB-02 *551205650-0002*	- Brick Mortar	Gray/Silver Non-Fibrous Heterogeneous			100% Non-fibrous (other)	**None Detected**
BS-ASB-03 *551205650-0003*	- Grey Joint Compound	Tan/Various Fibrous Heterogeneous	60%	Cellulose	40% Non-fibrous (other)	**None Detected**
BS-ASB-04 *551205650-0004*	- Particle Board Wood	Tan/Black Fibrous Heterogeneous	80%	Cellulose	20% Non-fibrous (other)	**None Detected**
BS-ASB-05 *551205650-0005*	- Drywall Joint Compound & Plaster	Gray Non-Fibrous Heterogeneous			100% Non-fibrous (other)	**None Detected**
BS-ASB-06 *551205650-0006*	- Green Felt Over Wood	Red/Various/Black Fibrous Heterogeneous	25%	Cellulose	75% Non-fibrous (other)	**None Detected**
BS-ASB-11 *551205650-0011*	- Paterned Rolled Flooring	Brown/Red Fibrous Heterogeneous	35%	Cellulose	65% Non-fibrous (other)	**None Detected**
BS-ASB-12 *551205650-0012*	- Cinder Block Mortar	Gray Non-Fibrous Heterogeneous			100% Non-fibrous (other)	**None Detected**
BS-ASB-13 *551205650-0013*	- Brown Brick Mortar	Brown/Beige Non-Fibrous Heterogeneous			100% Non-fibrous (other)	**None Detected**

Analyst(s)

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Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

			Non-Asbestos			Asbestos	
Sample	**Description**	**Appearance**	**% Fibrous**		**% Non-Fibrous**	**%**	**Type**
BS-ASB-14 *551205650-0014*	- Yellow Brick	Tan Non-Fibrous Heterogeneous			100% Non-fibrous (other)		**None Detected**
BS-ASB-15 *551205650-0015*	- Pink Fiberglass Insulation	Black Fibrous Heterogeneous	60%	Cellulose	40% Non-fibrous (other)		**None Detected**
BS-ASB-16 *551205650-0016*	- Grey/Black Insulation	Brown Fibrous Heterogeneous	90%	Hair	10% Non-fibrous (other)		**None Detected**
BS-ASB-17 *551205650-0017*	- Wraping Around Tank	Gray Fibrous Heterogeneous			70% Non-fibrous (other)	**30%**	**Chrysotile**
BS-ASB-18 *551205650-0018*	- Martar Around Furnace Pipe	Gray Non-Fibrous Heterogeneous			100% Non-fibrous (other)		**None Detected**
BS-ASB-20 *551205650-0020*	- Concrete Parging Type Material	Various/Beige Non-Fibrous Heterogeneous			100% Non-fibrous (other)		**None Detected**
BS-ASB-24 *551205650-0024*	- Grey Mortar Around Pipe	Gray Fibrous Heterogeneous	85%	Wollastonite	15% Non-fibrous (other)		**None Detected**
BS-ASB-25 *551205650-0025*	- Drywall Joint Cpd, Drywall, Plaster	Beige Non-Fibrous Heterogeneous			95% Non-fibrous (other)	**5%**	**Chrysotile**

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Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

			Non-Asbestos			Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**		**% Non-Fibrous**	**% Type**
BS-ASB-26 *551205650-0026*	- Grey Particle Board w/beige Mesh Backing	Brown/Gray Fibrous Heterogeneous	15%	Cellulose	85% Non-fibrous (other)	**None Detected**
BS-ASB-27 *551205650-0027*	- Pink/Beige Fiberglass Insulation w/Black Backing	Tan/Beige Fibrous Heterogeneous	15% 80%	Cellulose Min. Wool	5% Non-fibrous (other)	**None Detected**
BS-ASB-29 *551205650-0029*	- Particle Board	Brown/Tan Fibrous Heterogeneous	80%	Cellulose	20% Non-fibrous (other)	**None Detected**
BS-ASB-30 *551205650-0030*	- Fabric/Plastic Beige Closet Door	Tan Non-Fibrous Heterogeneous			100% Non-fibrous (other)	**None Detected**
BS-ASB-31 *551205650-0031*	- Tile Patern Particle Board w/Grey Adhesive	Brown/Gray Fibrous Heterogeneous	70%	Cellulose	30% Non-fibrous (other)	**None Detected**
BS-ASB-34 *551205650-0034*	- Black Tar Like Mortar	Black/Silver Non-Fibrous Heterogeneous			90% Non-fibrous (other)	**10% Chrysotile**
BS-ASB-44 *551205650-0044*	- Drywall Joint Compound & Plaster	Beige Non-Fibrous Heterogeneous			99% Non-fibrous (other)	**1% Chrysotile**
BS-ASB-45 *551205650-0045*	- Black Coating on Wire	Black Non-Fibrous Heterogeneous			100% Non-fibrous (other)	**None Detected**

Analyst(s)

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			Non-Asbestos			Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**		**% Type**
BS-ASB-55 *551205650-0055*	- Yellow Fiberglass Insulation w/backing	Black/Yellow Fibrous Heterogeneous	50% Cellulose 45% Min. Wool	5% Non-fibrous (other)		**None Detected**
BS-ASB-57 *551205650-0057*	- Red Brick from Chimney	Red Non-Fibrous Heterogeneous		100% Non-fibrous (other)		**None Detected**
BS-ASB-58 *551205650-0058*	- Grey Brick Mortar	Gray/Red/Beige Non-Fibrous Heterogeneous		100% Non-fibrous (other)		**None Detected**
BS-ASB-59 *551205650-0059*	- Drywall Joint Compound	Gray Non-Fibrous Heterogeneous		95% Non-fibrous (other)	**5%**	**Chrysotile**
BS-ASB-61 *551205650-0061*	- Orange Spray Foam Insulation	Gray/Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)		**None Detected**
BS-ASB-62 *551205650-0062*	- Red Brick	Red Non-Fibrous Heterogeneous		100% Non-fibrous (other)		**None Detected**
BS-ASB-63 *551205650-0063*	- Grey Brick Mortar	Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)		**None Detected**
BS-ASB-52 *551205650-0066*	- Parging Type Layer on Concrete	Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)		**None Detected**

Analyst(s)

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			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
BS-ASB-DUP1 *551205650-0069*		Gray/Various Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
BS-ASB-DUP2 *551205650-0070*		Red/Black Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
BS-ASB-DUP3 *551205650-0071*		Gray/White/Various Non-Fibrous Heterogeneous		97% Non-fibrous (other)	**3% Chrysotile**
BS-ASB-DUP4 *551205650-0072*		Various/Black Fibrous Heterogeneous	45% Cellulose	55% Non-fibrous (other)	**None Detected**

Analyst(s)

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Your Project #: TF12076461
Site Location: BELLE ISLE SOUTH

Attention: Lori Wiseman
AMEC Environment & Infrastructure
St John's - Standing Offer
PO Box 13216
133 Crosbie Rd, Suite 202
St John's, NL
A1B 4A5

Your C.O.C. #: B088249, B088250, B086038, B086037, B086029, B086030, B086036, B086032, B086033, B086035

Report Date: 2013/03/15
This report supersedes all previous reports with the same Maxxam job number

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B2I7178
Received: 2012/11/27, 11:34

Sample Matrix: Paint
Samples Received: 103

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Method Reference
Mercury - Total in Leachate (CVAA,LL)	17	2012/12/17	2012/12/17	ATL SOP 00026	Based on EPA245.1
Mercury - Total in Leachate (CVAA,LL)	4	2012/12/20	2012/12/20	ATL SOP 00026	Based on EPA245.1
Mercury - Total in Leachate (CVAA,LL)	1	2013/02/20	2013/02/20	ATL SOP 00026	Based on EPA245.1
Mercury - Total in Leachate (CVAA,LL)	1	2013/02/28	2013/02/28	ATL SOP 00026	Based on EPA245.1
Metals Leach TCLP/CGSB extraction	6	2012/12/12	2012/12/13	ATL SOP-00059	Based on EPA6020A
Metals Leach TCLP/CGSB extraction	16	2012/12/13	2012/12/14	ATL SOP-00059	Based on EPA6020A
Metals Leach TCLP/CGSB extraction	1	2012/12/13	2012/12/17	ATL SOP-00059	Based on EPA6020A
Metals Leach TCLP/CGSB extraction	14	2012/12/14	2012/12/15	ATL SOP-00059	Based on EPA6020A
Metals Leach TCLP/CGSB extraction	1	2012/12/14	2012/12/17	ATL SOP-00059	Based on EPA6020A
Metals Leach TCLP/CGSB extraction	10	2012/12/18	2012/12/18	ATL SOP-00059	Based on EPA6020A
Metals Leach TCLP/CGSB extraction	4	2012/12/18	2012/12/19	ATL SOP-00059	Based on EPA6020A
Metals Leach TCLP/CGSB extraction	4	2013/02/19	2013/02/19	ATL SOP-00059	Based on EPA6020A
Metals Paint Acid Extr. ICPMS	11	2012/11/30	2012/12/03	ATL SOP 00059	Based on EPA6020A
Metals Paint Acid Extr. ICPMS	38	2012/12/03	2012/12/03	ATL SOP 00059	Based on EPA6020A
Metals Paint Acid Extr. ICPMS	13	2012/12/03	2012/12/04	ATL SOP 00059	Based on EPA6020A
Metals Paint Acid Extr. ICPMS	40	2012/12/04	2012/12/04	ATL SOP 00059	Based on EPA6020A
PCBs in Paint by GC/ECD	11	2012/12/06	2012/12/11		in house
TCLP Inorganic extraction - pH	6	N/A	2012/12/12	ATL SOP-00035	Based on EPA1311
TCLP Inorganic extraction - pH	18	N/A	2012/12/13	ATL SOP-00035	Based on EPA1311
TCLP Inorganic extraction - pH	23	N/A	2012/12/14	ATL SOP-00035	Based on EPA1311
TCLP Inorganic extraction - pH	14	N/A	2012/12/18	ATL SOP-00035	Based on EPA1311
TCLP Inorganic extraction - pH	4	N/A	2013/02/19	ATL SOP-00035	Based on EPA1311
TCLP Inorganic extraction - pH	1	N/A	2013/02/27	ATL SOP-00035	Based on EPA1311
TCLP Inorganic extraction - Weight	6	N/A	2012/12/12	ATL SOP-00035	Based on EPA1311
TCLP Inorganic extraction - Weight	18	N/A	2012/12/13	ATL SOP-00035	Based on EPA1311
TCLP Inorganic extraction - Weight	23	N/A	2012/12/14	ATL SOP-00035	Based on EPA1311
TCLP Inorganic extraction - Weight	14	N/A	2012/12/18	ATL SOP-00035	Based on EPA1311
TCLP Inorganic extraction - Weight	4	N/A	2013/02/19	ATL SOP-00035	Based on EPA1311
TCLP Inorganic extraction - Weight	1	N/A	2013/02/27	ATL SOP-00035	Based on EPA1311

Remarks:

Reporting results to two significant figures at the RDL is to permit statistical evaluation and is not intended to be an indication of analytical precision.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
* Results relate only to the items tested.

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Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

Michelle Hill, Project Manager
Email: MHill@maxxam.ca
Phone# (902) 420-0203 Ext:289

==========

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Total cover pages: 2

Maxxam Job #: B2I7178
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RESULTS OF ANALYSES OF PAINT

Maxxam ID		PT7154		PT7155	PT7157	PT7159	PT7160	PT7161	PT7162		PT7163		
Sampling Date		2012/11/16		2012/11/16	2012/11/16	2012/11/16	2012/11/16	2012/11/16	2012/11/16		2012/11/16		
	Units	**BS-PS-01**	**QC Batch**	**BS-PS-02**	**BS-PS-04**	**BS-PS-06**	**BS-PS-07**	**BS-PS-08**	**BS-PS-09**	**QC Batch**	**BS-PS-10**	**RDL**	**QC Batch**
Inorganics													
Sample Weight (as received)	g	2.5	3126851	2.5	2.5	2.5	2.5	2.5	2.5	3066694	2.5	N/A	3067532
Initial pH	N/A	9.8	3126853	6.3	6.4	6.5	6.9	6.2	6.4	3066698	6.1		3067536
Final pH	N/A	5.6	3126853	5.2	5.1	5.2	5.4	5.1	5.3	3066698	5.3		3067536

Maxxam ID		PT7171	PT7172	PT7173	PT7174	PT7175	PT7177	PT7179	PT7180	PT7230	PT7231		
Sampling Date		2012/11/16	2012/11/16	2012/11/16	2012/11/16	2012/11/16	2012/11/16	2012/11/16	2012/11/16	2012/11/16	2012/11/16		
	Units	**BS-PS-11**	**BS-PS-12**	**BS-PS-13**	**BS-PS-14**	**BS-PS-15**	**BS-PS-17**	**BS-PS-19**	**BS-PS-20**	**BS-PS-21**	**BS-PS-22**	**RDL**	**QC Batch**
Inorganics													
Sample Weight (as received)	g	2.5	2.5	2.5	2.5	2.5	2.5	3.0	1.8	2.5	2.5	N/A	3067532
Initial pH	N/A	6.1	6.0	6.0	6.2	6.4	6.4	NA	NA	6.1	6.8		3067536
Final pH	N/A	5.3	5.0	5.3	5.1	5.3	5.1	5.1	5.1	5.2	5.2		3067536

Maxxam ID		PT7233	PT7234	PT7235	PT7236	PT7237	PT7238	PT7239		PT7297	PT7299		
Sampling Date		2012/11/16	2012/11/16	2012/11/16	2012/11/16	2012/11/16	2012/11/16	2012/11/16		2012/11/16	2012/11/16		
	Units	**BS-PS-24**	**BS-PS-25**	**BS-PS-26**	**BS-PS-27**	**BS-PS-28**	**BS-PS-29**	**BS-PS-30**	**QC Batch**	**BS-PS-32**	**BS-PS-34**	**RDL**	**QC Batch**
Inorganics													
Sample Weight (as received)	g	2.3	2.5	2.5	2.5	2.5	2.5	2.5	3067532	2.5	2.5	N/A	3068848
Initial pH	N/A	NA	6.2	8.4	8.5	6.6	9.8	7.3	3067536	9.6	8.7		3068852
Final pH	N/A	5.8	5.1	6.5	5.2	5.1	6.7	5.2	3067536	5.4	6.2		3068852

Maxxam ID		PT7300	PT7301		PT7303		PT7304	PT7305	PT7308	PT7309		
Sampling Date		2012/11/16	2012/11/16		2012/11/16		2012/11/16	2012/11/16	2012/11/17	2012/11/17		
	Units	**BS-PS-35**	**BS-PS-36**	**QC Batch**	**BS-PS-38**	**QC Batch**	**BS-PS-39**	**BS-PS-40**	**BS-PS-42**	**BS-PS-43**	**RDL**	**QC Batch**
Inorganics												
Sample Weight (as received)	g	2.5	5.0	3068848	5.0	3126851	2.5	2.5	2.5	5.0	N/A	3068848
Initial pH	N/A	8.4	7.7	3068852	6.5	3126853	8.0	6.6	10	6.9		3068852
Final pH	N/A	5.3	5.0	3068852	5.1	3126853	5.1	5.1	6.5	5.0		3068852

N/A = Not Applicable
RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam Analytics International Corporation o/a Maxxam Analytics 200 Bluewater Rd, Suite 105, Bedford, Nova Scotia Canada B4B 1G9 Tel:902-420-0203 Toll-free:800-565-7227 Fax:902-420-8612 www.maxxamanalytics.com

Maxxam Job #: B2I7178
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RESULTS OF ANALYSES OF PAINT

Maxxam ID		PT7310		PT7312	PT7313	PT7315		PT7321		PT7329	PT7332		
Sampling Date		2012/11/17		2012/11/17	2012/11/17	2012/11/17		2012/11/17		2012/11/17	2012/11/17		
	Units	**BS-PS-44**	**QC Batch**	**BS-PS-46**	**BS-PS-47**	**BS-PS-49**	**QC Batch**	**BS-PS-52**	**QC Batch**	**BS-PS-60**	**BS-PS-61**	**RDL**	**QC Batch**
Inorganics													
Sample Weight (as received)	g	2.5	3126851	2.5	2.5	2.5	3068848	2.5	3126851	2.5	2.5	N/A	3068848
Initial pH	N/A	8.8	3126853	6.1	6.7	5.3	3068852	6.7	3126853	5.9	5.3		3068852
Final pH	N/A	6.1	3126853	5.1	5.0	4.9	3068852	5.1	3126853	5.0	5.0		3068852

Maxxam ID		PT7333	PT7334		PT7336	PT7337	PT7341	PT7347	PT7348	PT7350	PT7353		
Sampling Date		2012/11/17	2012/11/17		2012/11/17	2012/11/17	2012/11/17	2012/11/17	2012/11/17	2012/11/17	2012/11/18		
	Units	**BS-PS-62**	**BS-PS-63**	**QC Batch**	**BS-PS-65**	**BS-PS-66**	**BS-PS-70**	**BS-PS-71**	**BS-PS-72**	**BS-PS-74**	**BS-PS-77**	**RDL**	**QC Batch**
Inorganics													
Sample Weight (as received)	g	5.0	2.5	3068848	3.8	2.5	5.0	2.5	5.0	5.0	5.0	N/A	3068857
Initial pH	N/A	6.0	5.6	3068852	NA	6.6	7.0	7.2	6.5	6.4	8.5		3068859
Final pH	N/A	5.1	5.0	3068852	6.1	5.0	5.0	5.2	5.0	5.1	6.0		3068859

Maxxam ID		PT7355		PT7356	PT7362	PT7363	PT7364	PT7365	PT7366	PT7368	PT7379		
Sampling Date		2012/11/18		2012/11/18	2012/11/18	2012/11/18	2012/11/18	2012/11/18	2012/11/18	2012/11/18	2012/11/18		
	Units	**BS-PS-79**	**QC Batch**	**BS-PS-80**	**BS-PS-83**	**BS-PS-84**	**BS-PS-85**	**BS-PS-86**	**BS-PS-87**	**BS-PS-89**	**BS-PS-91**	**RDL**	**QC Batch**
Inorganics													
Sample Weight (as received)	g	3.0	3068857	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	N/A	3072302
Initial pH	N/A	NA	3068859	7.1	6.6	5.6	6.5	6.5	6.5	NA	5.9		3072305
Final pH	N/A	5.2	3068859	5.1	5.3	5.0	5.2	5.1	5.1	5.0	5.0		3072305

Maxxam ID		PT7381	PT7382	PT7384	PT7386	PT7393	PT7395		QQ4699		
Sampling Date		2012/11/16	2012/11/16	2012/11/17	2012/11/18	2012/11/18	2012/11/18		2012/11/16		
	Units	**BS-PS-DUP2**	**BS-PS-DUP3**	**BS-PS-DUP5**	**BS-PS-DUP7**	**BS-PS-92**	**BS-PS-94**	**QC Batch**	**BS-PS-26 (P#PT7235)**	**RDL**	**QC Batch**
Inorganics											
Sample Weight (as received)	g	2.5	5.0	2.5	2.5	2.5	2.5	3072302	10	N/A	3134627
Initial pH	N/A	7.1	6.6	6.3	7.6	7.9	9.5	3072305	8.6		3134634
Final pH	N/A	5.1	5.0	5.0	5.9	5.6	5.6	3072305	6.0		3134634

N/A = Not Applicable
RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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MERCURY BY COLD VAPOUR AA (PAINT)

Maxxam ID		PT7179		PT7238	PT7297		PT7299		PT7301	PT7302			PT7303		
Sampling Date		2012/11/16		2012/11/16	2012/11/16		2012/11/16		2012/11/16	2012/11/16			2012/11/16		
	Units	**BS-PS-19**	**RDL**	**BS-PS-29**	**BS-PS-32**	**RDL**	**BS-PS-34**	**RDL**	**BS-PS-36**	**BS-PS-37**	**RDL**	**QC Batch**	**BS-PS-38**	**RDL**	**QC Batch**
Metals															
Leachable Mercury (Hg)	ug/L	<0.50(1)	0.50	0.61	1.2	0.10	0.32(1)	0.20	1.5	1.8	0.10	3071771	<0.50(2)	0.50	3128283

Maxxam ID		PT7308		PT7309	PT7329		PT7332		PT7333		PT7334		PT7336		
Sampling Date		2012/11/17		2012/11/17	2012/11/17		2012/11/17		2012/11/17		2012/11/17		2012/11/17		
	Units	**BS-PS-42**	**RDL**	**BS-PS-43**	**BS-PS-60**	**RDL**	**BS-PS-61**	**RDL**	**BS-PS-62**	**RDL**	**BS-PS-63**	**RDL**	**BS-PS-65**	**RDL**	**QC Batch**
Metals															
Leachable Mercury (Hg)	ug/L	8.1	1.0	1.0	0.49(1)	0.20	1.9	0.50	<0.20(1)	0.20	1.4	0.10	4.8	1.0	3071771

Maxxam ID		PT7337		PT7341		PT7347		PT7348			PT7350		
Sampling Date		2012/11/17		2012/11/17		2012/11/17		2012/11/17			2012/11/17		
	Units	**BS-PS-66**	**RDL**	**BS-PS-70**	**RDL**	**BS-PS-71**	**RDL**	**BS-PS-72**	**RDL**	**QC Batch**	**BS-PS-74**	**RDL**	**QC Batch**
Metals													
Leachable Mercury (Hg)	ug/L	3.0	0.20	<1.0(1)	1.0	3.9	0.20	<1.0(1)	1.0	3071771	<0.20(3)	0.20	3076661

Maxxam ID		PT7353		PT7355		PT7382			QQ4699		
Sampling Date		2012/11/18		2012/11/18		2012/11/16			2012/11/16		
	Units	**BS-PS-77**	**RDL**	**BS-PS-79**	**RDL**	**BS-PS-DUP3**	**RDL**	**QC Batch**	**BS-PS-26 (P#PT7235)**	**RDL**	**QC Batch**
Metals											
Leachable Mercury (Hg)	ug/L	<0.50(3)	0.50	4.3(3)	1.0	<0.20(3)	0.20	3076661	<0.50	0.50	3136655

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
(1) - Elevated RDL due to sample matrix.
(2) - Elevated RDL due to sample matrix
(3) - Elevated detection limit due to sample matrix.

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ELEMENTS BY ICP/MS (PAINT)

Maxxam ID		PT7154		PT7155	PT7157	PT7159	PT7160	PT7161	PT7162		PT7163		
Sampling Date		2012/11/16		2012/11/16	2012/11/16	2012/11/16	2012/11/16	2012/11/16	2012/11/16		2012/11/16		
	Units	**BS-PS-01**	**QC Batch**	**BS-PS-02**	**BS-PS-04**	**BS-PS-06**	**BS-PS-07**	**BS-PS-08**	**BS-PS-09**	**QC Batch**	**BS-PS-10**	**RDL**	**QC Batch**
Metals													
Leachable Lead (Pb)	ug/L	3100	3127293	43000	23000	67000	35000	14000	57000	3067056	8800	5.0	3068458

Maxxam ID		PT7171	PT7172	PT7173	PT7174	PT7175	PT7177	PT7179	PT7180	PT7230	PT7231		
Sampling Date		2012/11/16	2012/11/16	2012/11/16	2012/11/16	2012/11/16	2012/11/16	2012/11/16	2012/11/16	2012/11/16	2012/11/16		
	Units	**BS-PS-11**	**BS-PS-12**	**BS-PS-13**	**BS-PS-14**	**BS-PS-15**	**BS-PS-17**	**BS-PS-19**	**BS-PS-20**	**BS-PS-21**	**BS-PS-22**	**RDL**	**QC Batch**
Metals													
Leachable Lead (Pb)	ug/L	44000	8600	29000	31000	28000	18000	71000	26000	25000	50000	5.0	3068458

Maxxam ID		PT7233	PT7234	PT7235	PT7236	PT7237		PT7239		PT7300		PT7301		
Sampling Date		2012/11/16	2012/11/16	2012/11/16	2012/11/16	2012/11/16		2012/11/16		2012/11/16		2012/11/16		
	Units	**BS-PS-24**	**BS-PS-25**	**BS-PS-26**	**BS-PS-27**	**BS-PS-28**	**RDL**	**BS-PS-30**	**QC Batch**	**BS-PS-35**	**RDL**	**BS-PS-36**	**RDL**	**QC Batch**
Metals														
Leachable Lead (Pb)	ug/L	5400	71000	2500	13000	45000	5.0	130000	3068458	160000	50	30000	5.0	3070237

Maxxam ID		PT7303		PT7304	PT7305	PT7309		PT7310		PT7312	PT7313		
Sampling Date		2012/11/16		2012/11/16	2012/11/16	2012/11/17		2012/11/17		2012/11/17	2012/11/17		
	Units	**BS-PS-38**	**QC Batch**	**BS-PS-39**	**BS-PS-40**	**BS-PS-43**	**QC Batch**	**BS-PS-44**	**QC Batch**	**BS-PS-46**	**BS-PS-47**	**RDL**	**QC Batch**
Metals													
Leachable Lead (Pb)	ug/L	41000	3127293	12000	37000	2100	3070237	290	3127293	7500	8900	5.0	3070237

Maxxam ID		PT7315		PT7321		PT7333		PT7336	PT7341	PT7348	PT7350		
Sampling Date		2012/11/17		2012/11/17		2012/11/17		2012/11/17	2012/11/17	2012/11/17	2012/11/17		
	Units	**BS-PS-49**	**QC Batch**	**BS-PS-52**	**QC Batch**	**BS-PS-62**	**QC Batch**	**BS-PS-65**	**BS-PS-70**	**BS-PS-72**	**BS-PS-74**	**RDL**	**QC Batch**
Metals													
Leachable Lead (Pb)	ug/L	46000	3070237	2000	3127293	7800	3070237	220	650	8800	24000	5.0	3070240

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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ELEMENTS BY ICP/MS (PAINT)

Maxxam ID		PT7353	PT7355		PT7356	PT7362		PT7363	PT7364	PT7365		PT7366		
Sampling Date		2012/11/18	2012/11/18		2012/11/18	2012/11/18		2012/11/18	2012/11/18	2012/11/18		2012/11/18		
	Units	**BS-PS-77**	**BS-PS-79**	**QC Batch**	**BS-PS-80**	**BS-PS-83**	**RDL**	**BS-PS-84**	**BS-PS-85**	**BS-PS-86**	**RDL**	**BS-PS-87**	**RDL**	**QC Batch**
Metals														
Leachable Lead (Pb)	ug/L	510	24000	3070240	1500	71000	5.0	140000	240000	250000	50	9600	5.0	3073270

Maxxam ID		PT7368	PT7379	PT7381		PT7382		PT7384	PT7386	PT7393	PT7395		
Sampling Date		2012/11/18	2012/11/18	2012/11/16		2012/11/16		2012/11/17	2012/11/18	2012/11/18	2012/11/18		
	Units	**BS-PS-89**	**BS-PS-91**	**BS-PS-DUP2**	**RDL**	**BS-PS-DUP3**	**RDL**	**BS-PS-DUP5**	**BS-PS-DUP7**	**BS-PS-92**	**BS-PS-94**	**RDL**	**QC Batch**
Metals													
Leachable Lead (Pb)	ug/L	7100	57000	36000	5.0	96000	50	35000	8200	46000	4800	5.0	3073270

ELEMENTS BY ATOMIC SPECTROSCOPY (PAINT)

Maxxam ID		PT7154	PT7155	PT7156	PT7157	PT7158	PT7159	PT7160		PT7161	PT7161		
Sampling Date		2012/11/16	2012/11/16	2012/11/16	2012/11/16	2012/11/16	2012/11/16	2012/11/16		2012/11/16	2012/11/16		
	Units	**BS-PS-01**	**BS-PS-02**	**BS-PS-03**	**BS-PS-04**	**BS-PS-05**	**BS-PS-06**	**BS-PS-07**	**QC Batch**	**BS-PS-08**	**BS-PS-08 Lab-Dup**	**RDL**	**QC Batch**
Metals													
Acid Extractable Lead (Pb)	mg/kg	6300	8200	870	27000	300	28000	38000	3054345	37000	31000	5.0	3055903
Acid Extractable Mercury (Hg)	mg/kg	14	6.3	1.1	1.1	<1.0	5.4	16	3054345	6.4	12(1)	1.0	3055903

Maxxam ID		PT7161		PT7162	PT7163		PT7171	PT7172		PT7173	PT7174		
Sampling Date		2012/11/16		2012/11/16	2012/11/16		2012/11/16	2012/11/16		2012/11/16	2012/11/16		
	Units	**BS-PS-08 Lab-Dup 2**	**QC Batch**	**BS-PS-09**	**BS-PS-10**	**QC Batch**	**BS-PS-11**	**BS-PS-12**	**QC Batch**	**BS-PS-13**	**BS-PS-14**	**RDL**	**QC Batch**
Metals													
Acid Extractable Lead (Pb)	mg/kg	28000	3055903	43000	24000	3054345	31000	7600	3055998	28000	12000	5.0	3055903
Acid Extractable Mercury (Hg)	mg/kg	7.9	3055903	4.8	4.2	3054345	2.9	2.2	3055998	2.4	4.9	1.0	3055903

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
(1) - Poor RPD due to sample inhomogeneity.

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ELEMENTS BY ATOMIC SPECTROSCOPY (PAINT)

Maxxam ID		PT7175	PT7176	PT7177	PT7178	PT7179	PT7180	PT7230	PT7231	PT7232		
Sampling Date		2012/11/16	2012/11/16	2012/11/16	2012/11/16	2012/11/16	2012/11/16	2012/11/16	2012/11/16	2012/11/16		
	Units	**BS-PS-15**	**BS-PS-16**	**BS-PS-17**	**BS-PS-18**	**BS-PS-19**	**BS-PS-20**	**BS-PS-21**	**BS-PS-22**	**BS-PS-23**	**RDL**	**QC Batch**
Metals												
Acid Extractable Lead (Pb)	mg/kg	37000	1200	23000	4100	36000	15000	37000	61000	32000	5.0	3055903
Acid Extractable Mercury (Hg)	mg/kg	10	<1.0	3.4	2.5	27	3.8	1.0	1.1	11	1.0	3055903

Maxxam ID		PT7233	PT7234	PT7235	PT7236	PT7237		PT7238	PT7239	PT7239	PT7239		
Sampling Date		2012/11/16	2012/11/16	2012/11/16	2012/11/16	2012/11/16		2012/11/16	2012/11/16	2012/11/16	2012/11/16		
	Units	**BS-PS-24**	**BS-PS-25**	**BS-PS-26**	**BS-PS-27**	**BS-PS-28**	**QC Batch**	**BS-PS-29**	**BS-PS-30**	**BS-PS-30 Lab-Dup**	**BS-PS-30 Lab-Dup 2**	**RDL**	**QC Batch**
Metals													
Acid Extractable Lead (Pb)	mg/kg	6200	50000	22000	5200	72000	3055903	2600	63000	64000	34000(1)	5.0	3055906
Acid Extractable Mercury (Hg)	mg/kg	18	3.2	25	11	15	3055903	29	16	12	14	1.0	3055906

Maxxam ID		PT7296	PT7297	PT7298	PT7299		PT7300		PT7301	PT7302	PT7303		
Sampling Date		2012/11/16	2012/11/16	2012/11/16	2012/11/16		2012/11/16		2012/11/16	2012/11/16	2012/11/16		
	Units	**BS-PS-31**	**BS-PS-32**	**BS-PS-33**	**BS-PS-34**	**QC Batch**	**BS-PS-35**	**QC Batch**	**BS-PS-36**	**BS-PS-37**	**BS-PS-38**	**RDL**	**QC Batch**
Metals													
Acid Extractable Lead (Pb)	mg/kg	4100	1300	3800	140	3055906	65000	3056397	31000	2900	18000	5.0	3055906
Acid Extractable Mercury (Hg)	mg/kg	7.9	47	12	31	3055906	6.5	3056397	28	41	26	1.0	3055906

Maxxam ID		PT7304		PT7305	PT7307	PT7308	PT7309	PT7310	PT7311	PT7312		
Sampling Date		2012/11/16		2012/11/16	2012/11/17	2012/11/17	2012/11/17	2012/11/17	2012/11/17	2012/11/17		
	Units	**BS-PS-39**	**QC Batch**	**BS-PS-40**	**BS-PS-41**	**BS-PS-42**	**BS-PS-43**	**BS-PS-44**	**BS-PS-45**	**BS-PS-46**	**RDL**	**QC Batch**
Metals												
Acid Extractable Lead (Pb)	mg/kg	21000	3055906	25000	2400	980	7100	12000	4800	14000	5.0	3056397
Acid Extractable Mercury (Hg)	mg/kg	22	3055906	14	3.4	40	72	15	4.8	<1.0	1.0	3056397

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
(1) - Poor RPD due to sample inhomogeneity.

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ELEMENTS BY ATOMIC SPECTROSCOPY (PAINT)

Maxxam ID		PT7313	PT7314	PT7315	PT7316	PT7320	PT7321	PT7322	PT7323	PT7324		
Sampling Date		2012/11/17	2012/11/17	2012/11/17	2012/11/17	2012/11/17	2012/11/17	2012/11/17	2012/11/17	2012/11/17		
	Units	**BS-PS-47**	**BS-PS-48**	**BS-PS-49**	**BS-PS-50**	**BS-PS-51**	**BS-PS-52**	**BS-PS-53**	**BS-PS-54**	**BS-PS-55**	**RDL**	**QC Batch**
Metals												
Acid Extractable Lead (Pb)	mg/kg	12000	2000	24000	2400	4200	2700	2600	1600	670	5.0	3057235
Acid Extractable Mercury (Hg)	mg/kg	2.4	4.9	2.2	7.0	2.2	2.5	2.7	2.4	9.2	1.0	3057235

Maxxam ID		PT7325	PT7326	PT7326	PT7326	PT7327	PT7328	PT7329	PT7332	PT7333		
Sampling Date		2012/11/17	2012/11/17	2012/11/17	2012/11/17	2012/11/17	2012/11/17	2012/11/17	2012/11/17	2012/11/17		
	Units	**BS-PS-56**	**BS-PS-57**	**BS-PS-57 Lab-Dup**	**BS-PS-57 Lab-Dup 2**	**BS-PS-58**	**BS-PS-59**	**BS-PS-60**	**BS-PS-61**	**BS-PS-62**	**RDL**	**QC Batch**
Metals												
Acid Extractable Lead (Pb)	mg/kg	1400	1100	1500	1600(1)	60	75	10000	750	13000	5.0	3057235
Acid Extractable Mercury (Hg)	mg/kg	5.7	13	3.5(1)	1.7(1)	<1.0	<1.0	34	80	32	1.0	3057235

Maxxam ID		PT7334	PT7335	PT7336	PT7337	PT7338	PT7339	PT7340	PT7341		
Sampling Date		2012/11/17	2012/11/17	2012/11/17	2012/11/17	2012/11/17	2012/11/17	2012/11/17	2012/11/17		
	Units	**BS-PS-63**	**BS-PS-64**	**BS-PS-65**	**BS-PS-66**	**BS-PS-67**	**BS-PS-68**	**BS-PS-69**	**BS-PS-70**	**RDL**	**QC Batch**
Metals											
Acid Extractable Lead (Pb)	mg/kg	2100	2100	7300	1500	1100	3800	2900	5500	5.0	3057238
Acid Extractable Mercury (Hg)	mg/kg	24	13	69	48	4.3	7.7	13	35	1.0	3057238

Maxxam ID		PT7347	PT7348	PT7349	PT7350	PT7351		PT7352	PT7352	PT7352		
Sampling Date		2012/11/17	2012/11/17	2012/11/17	2012/11/17	2012/11/18		2012/11/18	2012/11/18	2012/11/18		
	Units	**BS-PS-71**	**BS-PS-72**	**BS-PS-73**	**BS-PS-74**	**BS-PS-75**	**QC Batch**	**BS-PS-76**	**BS-PS-76 Lab-Dup**	**BS-PS-76 Lab-Dup 2**	**RDL**	**QC Batch**
Metals												
Acid Extractable Lead (Pb)	mg/kg	1300	8900	1000	6400	490	3055906	36	35	38	5.0	3055998
Acid Extractable Mercury (Hg)	mg/kg	72	40	1.5	29	6.7	3055906	2.5	2.7	2.5	1.0	3055998

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
(1) - Poor RPD due to sample inhomogeneity.

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ELEMENTS BY ATOMIC SPECTROSCOPY (PAINT)

Maxxam ID		PT7353	PT7354		PT7355	PT7356	PT7360	PT7361	PT7362		
Sampling Date		2012/11/18	2012/11/18		2012/11/18	2012/11/18	2012/11/18	2012/11/18	2012/11/18		
	Units	**BS-PS-77**	**BS-PS-78**	**QC Batch**	**BS-PS-79**	**BS-PS-80**	**BS-PS-81**	**BS-PS-82**	**BS-PS-83**	**RDL**	**QC Batch**
Metals											
Acid Extractable Lead (Pb)	mg/kg	27000	45000	3055906	7500	5400	4200	19	75000	5.0	3055998
Acid Extractable Mercury (Hg)	mg/kg	29	14	3055906	28	9.6	8.8	<1.0	<1.0	1.0	3055998

Maxxam ID		PT7363		PT7364	PT7365		PT7366	PT7367	PT7368	PT7369		
Sampling Date		2012/11/18		2012/11/18	2012/11/18		2012/11/18	2012/11/18	2012/11/18	2012/11/18		
	Units	**BS-PS-84**	**RDL**	**BS-PS-85**	**BS-PS-86**	**QC Batch**	**BS-PS-87**	**BS-PS-88**	**BS-PS-89**	**BS-PS-90**	**RDL**	**QC Batch**
Metals												
Acid Extractable Lead (Pb)	mg/kg	5900	50	74000	70000	3055998	25000	3100	29000	20000	5.0	3057238
Acid Extractable Mercury (Hg)	mg/kg	<1.0	1.0	5.2	8.8	3055998	<1.0	<1.0	2.2	1.2	1.0	3057238

Maxxam ID		PT7379	PT7380		PT7381	PT7382		PT7383	PT7383		
Sampling Date		2012/11/18	2012/11/16		2012/11/16	2012/11/16		2012/11/17	2012/11/17		
	Units	**BS-PS-91**	**BS-PS-DUP1**	**QC Batch**	**BS-PS-DUP2**	**BS-PS-DUP3**	**QC Batch**	**BS-PS-DUP4**	**BS-PS-DUP4 Lab-Dup**	**RDL**	**QC Batch**
Metals											
Acid Extractable Lead (Pb)	mg/kg	42000	6800	3057238	62000	48000	3057259	1900	1900	5.0	3057238
Acid Extractable Mercury (Hg)	mg/kg	5.0	13	3057238	15	110	3057259	2.5	2.5	1.0	3057238

Maxxam ID		PT7383		PT7384	PT7385	PT7386	PT7386	PT7386	PT7387		
Sampling Date		2012/11/17		2012/11/17	2012/11/17	2012/11/18	2012/11/18	2012/11/18	2012/11/18		
	Units	**BS-PS-DUP4 Lab-Dup 2**	**QC Batch**	**BS-PS-DUP5**	**BS-PS-DUP6**	**BS-PS-DUP7**	**BS-PS-DUP7 Lab-Dup**	**BS-PS-DUP7 Lab-Dup 2**	**BS-PS-DUP8**	**RDL**	**QC Batch**
Metals											
Acid Extractable Lead (Pb)	mg/kg	2000	3057238	16000	3900	23000	21000	24000	18000	5.0	3057259
Acid Extractable Mercury (Hg)	mg/kg	2.3	3057238	29	6.9	16	15	15	5.1	1.0	3057259

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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ELEMENTS BY ATOMIC SPECTROSCOPY (PAINT)

Maxxam ID		PT7393	PT7394		PT7395		
Sampling Date		2012/11/18	2012/11/18		2012/11/18		
	Units	**BS-PS-92**	**BS-PS-93**	**QC Batch**	**BS-PS-94**	**RDL**	**QC Batch**
Metals							
Acid Extractable Lead (Pb)	mg/kg	32000	18000	3057238	22000	5.0	3057259
Acid Extractable Mercury (Hg)	mg/kg	3.0	18	3057238	5.0	1.0	3057259

POLYCHLORINATED BIPHENYLS BY GC-ECD (PAINT)

Maxxam ID		PT7154	PT7172	PT7231	PT7304	PT7308		
Sampling Date		2012/11/16	2012/11/16	2012/11/16	2012/11/16	2012/11/17		
	Units	**BS-PS-01**	**BS-PS-12**	**BS-PS-22**	**BS-PS-39**	**BS-PS-42**	**RDL**	**QC Batch**
PCBs								
Total PCB	mg/kg	<5.0	<5.0	<5.0	<5.0	<5.0	5.0	3060802
Surrogate Recovery (%)								
Decachlorobiphenyl	%	16(1)	11(1)	34(2)	39	13(3)		3060802

Maxxam ID		PT7320	PT7339	PT7363	PT7379	PT7380	PT7385		
Sampling Date		2012/11/17	2012/11/17	2012/11/18	2012/11/18	2012/11/16	2012/11/17		
	Units	**BS-PS-51**	**BS-PS-68**	**BS-PS-84**	**BS-PS-91**	**BS-PS-DUP1**	**BS-PS-DUP6**	**RDL**	**QC Batch**
PCBs									
Total PCB	mg/kg	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5.0	3060802
Surrogate Recovery (%)									
Decachlorobiphenyl	%	8.6(1)	23(3)	9.7(1)	13(1)	10(1)	14(3)		3060802

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
(1) - PCB surrogate not within acceptance limits. Analysis was repeated with similar results.
(2) - PCB:Unidentified (possibly halogenated) compounds detected.
(3) - PCB surrogate not within acceptance limits. Analysis was repeated with similar results. PCB:Unidentified (possibly halogenated) compounds detected.

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Package 1	14.7°C

Each temperature is the average of up to three cooler temperatures taken at receipt

GENERAL COMMENTS

Revised Report: Re-issued to remove leachate analysis from samples BS-PS-37 and BS-PS-45 due to lab error. 3/15/13 MMC

Revised report: Revised to include TCLP Leachate + Lead on the following samples:

BS=PS-DUP1
BS=PS-02
BS=PS-04
BS=PS-06
BS=PS-07
BS=PS-08
BS=PS-09
BS=PS-10
BS=PS-11
BS=PS-12
BS=PS-13
BS=PS-14
BS=PS-15
BS=PS-17
BS=PS-19
BS=PS-20
BS=PS-21
BS=PS-22
BS=PS-DUP2
BS=PS-24
BS=PS-25
BS=PS-26
BS=PS-27
BS=PS-28
BS=PS-30
BS-PS-DUP3
BS=PS-35
BS=PS-36
BS=PS-39
BS=PS-40
BS=PS-43
BS=PS-46

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BS=PS-47
BS=PS-49
BS=PS-DUP5
BS=PS-62
BS=PS-65
BS=PS-70
BS=PS-72
BS=PS-74
BS=PS-77
BS=PS-78
BS=PS-79
BS=PS-80
BS=PS-83
BS=PS-84
BS=PS-85
BS=PS-86
BS=PS-87
BS=PS-89
BS=PS-90
BS=PS-91
BS=PS-92
BS=PS-DUP7
BS=PS-94

and to include TCLP Leachate + mercury on the following samples:
BS=PS-19
BS=PS-29
BS=PS-32
BS=PS-34
BS=PS-36
BS=PS-42
BS=PS-43
BS=PS-60
BS=PS-61
BS=PS-62
BS=PS-63
BS=PS-65
BS=PS-66
BS=PS-70
BS=PS-71
BS=PS-72
BS=PS-74

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BS=PS-77
BS=PS-79
BS=PS-DUP3

as requested by Lori Wiseman on December 5, 2012

Revised report (Revision 2): TCLP Leachate extraction plus leachable lead analysis completed on samples:

BS=PS-1
BS=PS-38
BS=PS-44
BS=PS-52

TCLP Leachate extraction plus leachable mercury analysis completed on sample BS=PS-38 as requested on February 13, 2013

Revised report (Revision 3): TCLP Leachate extraction plus leachable mercury analysis completed on sample BS-PS-26 as requested on February 25, 2013 MHL

Sample PT7154-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality.

Sample PT7155-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality.

Sample PT7157-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality.

Sample PT7159-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality.

Sample PT7160-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality.

Sample PT7161-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality.

Sample PT7162-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality.

Sample PT7163-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality.

Sample PT7171-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample

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data quality.

Sample PT7172-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality.

Sample PT7173-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality.

Sample PT7174-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality.

Sample PT7175-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality.

Sample PT7177-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality.

Sample PT7179-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality.

Sample PT7180-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality.

Sample PT7230-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality.

Sample PT7231-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality.

Sample PT7233-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality.

Sample PT7234-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality.

Sample PT7235-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality.

Sample PT7236-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality.

Sample PT7237-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample

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data quality.

Sample PT7238-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality.

Sample PT7239-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality.

Sample PT7297-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality.

Sample PT7299-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality.

Sample PT7300-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality.

Sample PT7301-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality.

Sample PT7302-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality.

Sample PT7303-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality.

Sample PT7304-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality.

Sample PT7305-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality.

Sample PT7308-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality.

Sample PT7309-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality.

Sample PT7310-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality.

Sample PT7311-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample

data quality.

Sample PT7312-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality.

Sample PT7313-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality.

Sample PT7315-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality.

Sample PT7321-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality.

Sample PT7329-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality.

Sample PT7332-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality.

Sample PT7333-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality.

Sample PT7334-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality.

Sample PT7336-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality.

Sample PT7337-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality.

Sample PT7341-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality.

Sample PT7347-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality.

Sample PT7348-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality.

Sample PT7350-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample

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data quality.

Sample PT7353-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality.

Sample PT7355-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality.

Sample PT7356-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality.

Sample PT7362-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality.

Sample PT7363-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality.

Sample PT7364-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality.

Sample PT7365-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality.

Sample PT7366-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality.

Sample PT7368-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality.

Sample PT7379-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality.

Sample PT7381-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality.

Sample PT7382-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality.

Sample PT7384-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality.

Sample PT7386-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample

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data quality.

Sample PT7393-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality.

Sample PT7395-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality.

Sample QQ4699-01: Method Deviation Comment: Reduced sample weight used for leachate procedure due to insufficient sample. All extraction ratios maintained. Minimal impact on sample data quality

POLYCHLORINATED BIPHENYLS BY GC-ECD (PAINT)

PCBs in Paint by GC/ECD: This data was generated using accepted laboratory practices and standard Quality Control procedures. However, due to the absence of a recognized reference method for PCB in Paint, an in-house method was used. Quality control samples were analyzed, however certain QC elements are unavailable, as noted:
Calculations of Method Detection Limit (MDL) as per CFR 40 (Part 136)
Accuracy and precision study
External performance evaluation study

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QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits	% Recovery	QC Limits
3054345	Acid Extractable Lead (Pb)	2012/12/01	NC	75 - 125	95	75 - 125	<5.0	mg/kg	107(1, 2)	35		
3054345	Acid Extractable Mercury (Hg)	2012/12/01	85	75 - 125	101	75 - 125	<1.0	mg/kg	NC	35		
3055903	Acid Extractable Lead (Pb)	2012/12/03	NC	75 - 125	99	75 - 125	<5.0	mg/kg	16.6	35		
3055903	Acid Extractable Mercury (Hg)	2012/12/03	NC	75 - 125	102	75 - 125	<1.0	mg/kg	56.5(1, 3)	35		
3055906	Acid Extractable Lead (Pb)	2012/12/03	NC	75 - 125	100	75 - 125	<5.0	mg/kg	2.1	35		
3055906	Acid Extractable Mercury (Hg)	2012/12/03	NC	75 - 125	101	75 - 125	<1.0	mg/kg	32.8	35		
3055998	Acid Extractable Lead (Pb)	2012/12/03	NC	75 - 125	99	75 - 125	<5.0	mg/kg	2.9	35		
3055998	Acid Extractable Mercury (Hg)	2012/12/03	97	75 - 125	104	75 - 125	<1.0	mg/kg	NC	35		
3056397	Acid Extractable Lead (Pb)	2012/12/04	NC	75 - 125	100	75 - 125	<5.0	mg/kg	107(1, 3)	35		
3056397	Acid Extractable Mercury (Hg)	2012/12/04	101	75 - 125	105	75 - 125	<1.0	mg/kg				
3057235	Acid Extractable Lead (Pb)	2012/12/04	NC	75 - 125	98	75 - 125	<5.0	mg/kg	27.6	35		
3057235	Acid Extractable Mercury (Hg)	2012/12/04	NC	75 - 125	104	75 - 125	<1.0	mg/kg	NC(3)	35		
3057238	Acid Extractable Lead (Pb)	2012/12/04	NC	75 - 125	98	75 - 125	<5.0	mg/kg	2.2	35		
3057238	Acid Extractable Mercury (Hg)	2012/12/04	99	75 - 125	103	75 - 125	<1.0	mg/kg	NC	35		
3057259	Acid Extractable Lead (Pb)	2012/12/04	NC	75 - 125	100	75 - 125	<5.0	mg/kg	7.2	35		
3057259	Acid Extractable Mercury (Hg)	2012/12/04	NC	75 - 125	107	75 - 125	<1.0	mg/kg	7.4	35		
3060802	Decachlorobiphenyl	2012/12/11	10(1, 4)	30 - 130	36	30 - 130	68	%				
3060802	Total PCB	2012/12/11	25(1, 5)	60 - 130	108	60 - 130	<5.0	mg/kg	NC	50		
3066694	Sample Weight (as received)	2012/12/12					NA, RDL=N/A	g	0	N/A		
3067056	Leachable Lead (Pb)	2012/12/13			105	80 - 120	<5.0	ug/L	NC	35		
3067532	Sample Weight (as received)	2012/12/13					NA, RDL=N/A	g				
3068458	Leachable Lead (Pb)	2012/12/14			98	80 - 120	<5.0	ug/L				
3068848	Sample Weight (as received)	2012/12/14					NA, RDL=N/A	g	0	N/A		
3068857	Sample Weight (as received)	2012/12/14					NA, RDL=N/A	g				
3070237	Leachable Lead (Pb)	2012/12/15			95	80 - 120	<5.0	ug/L	NC	35		
3070240	Leachable Lead (Pb)	2012/12/15			106	80 - 120	<5.0	ug/L				
3071771	Leachable Mercury (Hg)	2012/12/17			100	N/A	<0.10	ug/L			102	80 - 120
3072302	Sample Weight (as received)	2012/12/18					NA, RDL=N/A	g	0	N/A		
3073270	Leachable Lead (Pb)	2012/12/18			106	80 - 120	<5.0	ug/L	NC	35		
3076661	Leachable Mercury (Hg)	2012/12/20			97	N/A	<0.10	ug/L			94	80 - 120
3126851	Sample Weight (as received)	2013/02/19					NA, RDL=N/A	g				
3127293	Leachable Lead (Pb)	2013/02/19			103	80 - 120	<5.0	ug/L				
3128283	Leachable Mercury (Hg)	2013/02/20			97	80 - 120	<0.10	ug/L			97	80 - 120

Maxxam Job #: B2I7178
Report Date: 2013/03/15

AMEC Environment & Infrastructure
Client Project #: TF12076461
Site Location: BELLE ISLE SOUTH
Sampler Initials: JL

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits	% Recovery	QC Limits
3134627	Sample Weight (as received)	2013/02/27					NA, RDL=N/A	g	19.2	N/A		
3136655	Leachable Mercury (Hg)	2013/02/28			96	80 - 120	<0.10	ug/L	NC	25	96	80 - 120

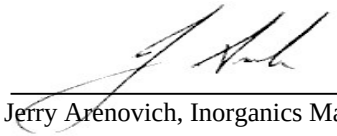
N/A = Not Applicable
RDL = Reportable Detection Limit
RPD = Relative Percent Difference
Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.
Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.
QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.
Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.
Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.
Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.
NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spiked amount was not sufficiently significant to permit a reliable recovery calculation.
NC (RPD): The RPD was not calculated. The level of analyte detected in the parent sample and its duplicate was not sufficiently significant to permit a reliable calculation.
(1) - Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.
(2) - Poor RPD due to sample inhomogeneity. Results confirmed by redigestion and analysis.
(3) - Poor RPD due to sample inhomogeneity.
(4) - PCB surrogate not within acceptance limits. Analysis was repeated with similar results.
(5) - Matrix Spike: results are outside acceptance limit. Analysis was repeated with similar results.

Maxxam Analytics International Corporation o/a Maxxam Analytics 200 Bluewater Rd, Suite 105, Bedford, Nova Scotia Canada B4B 1G9 Tel:902-420-0203 Toll-free:800-565-7227 Fax:902-420-8612 www.maxxamanalytics.com

Validation Signature Page

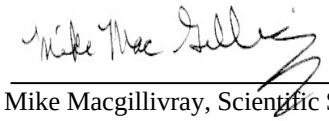
Maxxam Job #: B2I7178

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

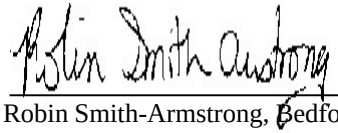


Jerry Arenovich, Inorganics Manager

Kevin Macdonald, Inorganics Supervisor



Mike Macgillivray, Scientific Specialist (Inorganics)



Robin Smith-Armstrong, Bedford SemiVol Spvsr

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Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

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emcscientific
INCORPORATED

Laboratory Analysis Report

To:

Lori Wiseman
AMEC Environment & Infrastructure
133 Crosbie Road
P.O. Box 13216
St. John's, Newfoundland
A1B 4A5

EMC LAB REPORT NUMBER: 39499
Job/Project Name: Belle Isle South
Job/Project No: TF12076461 **No. of Samples:** 2
Sample Type: Bulk **Date Received:** Nov 27/12
Analysis Method(s): Direct Microscopic Examination
Date Analyzed: Nov 30/12 **Date Reported:** Nov 30/12
Analyst: Weizhong Liu, Ph.D., *Mycologist*
Approved By: Fajun Chen, Ph.D., *Principal Mycologist*

Client's Sample ID	Lab Sample No.	Date Sampled	Description/Location	Mould Identified, in Rank Order	Mould Growth
BS-MD-01	188140	Nov 17/12	Ceiling drywall	*Stachybotrys* *Cladosporium* *Ulocladium*	Abundant
BS-MD-02	188141	Nov 17/12	White paint on wall	*Ulocladium* *Cladosporium* Fungal hyphae *Aspergillus*	Moderate to abundant

Note:
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.

APPENDIX E

Room-By-Room Inspection Sheets

Lower light.

Building	Room No. / Description	Floor No.	Room Description	Dimensions (L x W x H)
~~[illegible]~~	~~[illegible]~~ 0 Room 1	Interior		

old equipment bld - Lower Area

	Description	Condition (good, fair, poor)	Quantity (SF, LF, total)	Visual/Actual Sample Collected
Floor	red over grey over concrete			BS-PS-~~72~~ 92
Walls	Blue light over drywall + red over multiple grey over concrete on foundation	BS-PS-DUP-07		BS-PS-~~73~~ 93 BS-PS-~~74~~ ~~74~~ BS-PS-DUP 08
Ceiling	white over drywall over black			BS-PS-76
Paint				
Insulation	~~[illegible]~~ yellow fiberglass with paper backing			BS-ASB-55
Piping	Piping for tanks + left over from old tanks			See pics
Lighting (fluorescent, incandescent, HG, vapour)	None visible Potential 4 incandescent wiring visible		Serial #s (10% to be checked):	
Thermostats (eg. Honeywell, etc.)	/		Total: HG containing: Non-HG:	
Lead Containing Materials	-			
Mould / Water Staining	Yes			
Other (CO,VOCs,ODSs)				
Photos				

Legend: PS (paint sample); VPS (visual reference to PS); AS (asbestos sample); VAS (visual reference to AS); FS (fungal sample); ACM (asbestos-containing material); DJC (drywall joint compound); VFT (vinyl floor tile); ACT (acoustic ceiling tile); LF (linear feet); SF (square feet); PLM (polarized light microscopy); Transmission Electron microscopy; CO (Carbon Monoxide); VOCs (Volatile Organic Compounds); ODSs (Ozone Depleting Substances); ND (non-detect)

Notes/Comments:

Red brick chimney BS-ASB-57
grey mortar from chimney BS-ASB-55
2 Large ASTS - white paint -
dk grey over green over drywall - BS-PS-75
grey caulking on window - BS-ASB-56 (BS-ASB-DUP3)
Drywall & Joint cpd - BS-ASB-59

BS-PS-80
white on yellow on red on tank

Lower Light

Building	Room No. / Description	Floor No.	Room Description	Dimensions (L x W x H)
old ~~Shed~~ Equipment Bld - lower area	Porch			

	Description	Condition (good, fair, poor)	Quantity (SF, LF, total)	Visual/Actual Sample Collected
Floor	Same as [illegible]			
Walls	light green over drywall			BS-PS-77
Ceiling				
Paint				
Insulation				
Piping				
Lighting (fluorescent, incandescent, HG, vapour)				
Thermostats (eg. Honeywell, etc.)	—		Total: HG containing: Non-HG:	
Lead Containing Materials				
Mould / Water Staining				
Other (CO,VOCs,ODSs)				
Photos				

Lower light Area

Belle Isle South

Legend: PS (paint sample); VPS (visual reference to PS); AS (asbestos sample); VAS (visual reference to AS); FS (fungal sample); ACM (asbestos-containing material); DJC (drywall joint compound); VFT (vinyl floor tile); ACT (acoustic ceiling tile); LF (linear feet); SF (square feet); PLM (polarized light microscopy); Transmission Electron microscopy; CO (Carbon Monoxide); VOCs (Volatile Organic Compounds); ODSs (Ozone Depleting Substances); ND (non-detect)

Exterior

Notes/Comments:

Exterior

Door (DK green over blue) - BS-PS-78

exterior white over siding BS-PS-79

Black felt paper (tar)? BS-ASB-60

Building	Room No. / Description	Floor No.	Room Description	Dimensions (L x W x H)
right duplex	Hall / Stairwell	2	Hall / Stairwell	

	Description	Condition (good, fair, poor)	Quantity (SF, LF, total)	Visual/Actual Sample Collected
Floor	green carpet on ~~green~~ stairs Bright white ~~Beige~~ striped VFT	poor		BS-ASB-07 BS-ASB-08
Walls	~~white painted board panel white over pink over paint~~			~~BS-ASB~~
Ceiling	same as bedroom			
Paint	—			
Insulation	—			
Piping	—			
Lighting (fluorescent, incandescent, HG, vapour)	1 incandescent		Serial #s (10% to be checked):	
Thermostats (eg. Honeywell, etc.)	— heater in hallway		Total: HG containing: Non-HG:	
Lead Containing Materials	—			
Mould / Water Staining	—			
Other (CO,VOCs,ODSs)				
Photos				

Legend: PS (paint sample); VPS (visual reference to PS); AS (asbestos sample); VAS (visual reference to AS); FS (fungal sample); ACM (asbestos-containing material); DJC (drywall joint compound); VFT (vinyl floor tile); ACT (acoustic ceiling tile); LF (linear feet); SF (square feet); PLM (polarized light microscopy); Transmission Electron microscopy; CO (Carbon Monoxide); VOCs (Volatile Organic Compounds); ODSs (Ozone Depleting Substances); ND (non-detect)

Notes/Comments:

this side ↓

Building	Room No. / Description	Floor No.	Room Description	Dimensions (L x W x H)
Duplex right side	porch	1	porch	

	Description	Condition (good, fair, poor)	Quantity (SF, LF, total)	Visual/Actual Sample Collected
Floor	painted concrete grey over red	poor		BS-PS-01
Walls	white over lg green over blue over dk green over beige - on wood panel	poor	~~BS-PS-01~~ BS-PS-02	
Ceiling	white ~~over~~ over wood			~~BS-PS-03~~
Paint	—			
Insulation				
Piping				
Lighting (fluorescent, incandescent, HG, vapour)	incandescent		Serial #s (10% to be checked):	
Thermostats (eg. Honeywell, etc.)	—		Total: HG containing: Non-HG:	
Lead Containing Materials	—			
Mould / Water Staining	yes visible			
Other (CO,VOCs,ODSs)	—			
Photos	—			

Legend: PS (paint sample); VPS (visual reference to PS); AS (asbestos sample); VAS (visual reference to AS); FS (fungal sample); ACM (asbestos-containing material); DJC (drywall joint compound); VFT (vinyl floor tile); ACT (acoustic ceiling tile); LF (linear feet); SF (square feet); PLM (polarized light microscopy); Transmission Electron microscopy; CO (Carbon Monoxide): VOCs (Volatile Organic Compounds); ODSs (Ozone Depleting Substances); ND (non-detect)

Notes/Comments:

~~Brick mortar (either) from chimney BS-AS-02~~

Building	Room No. / Description	Floor No.	Room Description	Dimensions (L x W x H)
right side duplex	living room	1	living room	See drawing

	Description	Condition (good, fair, poor)	Quantity (SF, LF, total)	Visual/Actual Sample Collected
Floor	~~Beige~~ grey Beige Striped vinyl floor tile w yellow adhesive over wood	poor		BS-ASB-01
Walls	Wood panels - white over beige over light green over blue over brown	poor	~~poor~~	BS-PS-04
Ceiling	white panels wood			BS-PS-03
Paint	—			
Insulation	None			
Piping	—			
Lighting (fluorescent, incandescent, HG, vapour)	2 incandescent		Serial #s (10% to be checked):	
Thermostats (eg. Honeywell, etc.)	yes ~~honeywell~~ honeywell		Total: HG containing: yes mercury Non-HG:	
Lead Containing Materials	—			
Mould / Water Staining	yes ceiling			
Other (CO,VOCs,ODSs)	BC fire extinguisher			
Photos				

Legend: PS (paint sample); VPS (visual reference to PS); AS (asbestos sample); VAS (visual reference to AS); FS (fungal sample); ACM (asbestos-containing material); DJC (drywall joint compound); VFT (vinyl floor tile); ACT (acoustic ceiling tile); LF (linear feet); SF (square feet); PLM (polarized light microscopy); Transmission Electron microscopy; CO (Carbon Monoxide); VOCs (Volatile Organic Compounds); ODSs (Ozone Depleting Substances); ND (non-detect)

Notes/Comments:

smoke ~~fire~~ detector

Chimney - BS-ASB-02 - silver brick mortar

Joint compound - grey - BS-ASB-03

Woodish particle board on walls - BS-ASB-04

Building	Room No. / Description	Floor No.	Room Description	Dimensions (L x W x H)
right Duplex	Kitchen	1	Kitchen	See drawing

	Description	Condition (good, fair, poor)	Quantity (SF, LF, total)	Visual/Actual Sample Collected
Floor	Same as Living room			
Walls	Drywall white paint wood Baseboards Paint - white over pink over green			BS-PS-05 BS-PS-06
Ceiling	White paint			
Paint	See samples			
Insulation	N/A			
Piping	PVC under sink possible sauder on Hot water tank.			
Lighting (fluorescent, incandescent, HG, vapour)	incandescent		Serial #s (10% to be checked):	
Thermostats (eg. Honeywell, etc.)	—		Total: HG containing: Non-HG:	
Lead Containing Materials				
Mould / Water Staining	BS-MD-01 Ceiling white			BS-MD-01
Other (CO,VOCs,ODSs)	Pyrene fire extinguisher - Dry chemical			
Photos				

Legend: PS (paint sample); VPS (visual reference to PS); AS (asbestos sample); VAS (visual reference to AS); FS (fungal sample); ACM (asbestos-containing material); DJC (drywall joint compound); VFT (vinyl floor tile); ACT (acoustic ceiling tile); LF (linear feet); SF (square feet); PLM (polarized light microscopy); Transmission Electron microscopy; CO (Carbon Monoxide); VOCs (Volatile Organic Compounds); ODSs (Ozone Depleting Substances); ND (non-detect)

Notes/Comments:

Joint cpd - White plaster & Drywall - BS-ASB-05
BS-ASB-DUP-01

Building	Room No. / Description	Floor No.	Room Description	Dimensions (L x W x H)
right duplex	larder / spare room		larder	

	Description	Condition (good, fair, poor)	Quantity (SF, LF, total)	Visual/Actual Sample Collected
Floor	felt green floor over wood - wood is painted green over orange dk green			BS-ASB-06 BS-PS-08
Walls	Beige over pink over blue wood particle board			BS-PS-09
Ceiling	white over blue over pink BS-PS-07			BS-PS-07
Paint	—			
Insulation	NONE			
Piping	NONE			
Lighting (fluorescent, incandescent, HG, vapour)	incandescent		Serial #s (10% to be checked):	
Thermostats (eg. Honeywell, etc.)	NO		Total: HG containing: Non-HG:	
Lead Containing Materials	—			
Mould / Water Staining				
Other (CO,VOCs,ODSs)				
Photos				

Legend: PS (paint sample); VPS (visual reference to PS); AS (asbestos sample); VAS (visual reference to AS); FS (fungal sample); ACM (asbestos-containing material); DJC (drywall joint compound); VFT (vinyl floor tile); ACT (acoustic ceiling tile); LF (linear feet); SF (square feet); PLM (polarized light microscopy); Transmission Electron microscopy; CO (Carbon Monoxide); VOCs (Volatile Organic Compounds); ODSs (Ozone Depleting Substances); ND (non-detect)

Notes/Comments:

Building	Room No. / Description	Floor No.	Room Description	Dimensions (L x W x H)
Duplex right	Bed #4	2	Bed	See drawing

	Description	Condition (good, fair, poor)	Quantity (SF, LF, total)	Visual/Actual Sample Collected
Floor	Same as hall			
Walls	white painted board/panel - ceiling off-white over pink on panel - wall			BS-PS-10 BS-PS-11
Ceiling				
Paint				
Insulation				
Piping				
Lighting (fluorescent, incandescent, HG, vapour)	Incandesc		Serial #s (10% to be checked):	
Thermostats (eg. Honeywell, etc.)			Total: HG containing: Non-HG:	
Lead Containing Materials				
Mould / Water Staining				
Other (CO,VOCs,ODSs)				
Photos				

Legend: PS (paint sample); VPS (visual reference to PS); AS (asbestos sample); VAS (visual reference to AS); FS (fungal sample); ACM (asbestos-containing material); DJC (drywall joint compound); VFT (vinyl floor tile); ACT (acoustic ceiling tile); LF (linear feet); SF (square feet); PLM (polarized light microscopy); Transmission Electron microscopy; CO (Carbon Monoxide); VOCs (Volatile Organic Compounds); ODSs (Ozone Depleting Substances); ND (non-detect)

Notes/Comments:

Building	Room No. / Description	Floor No.	Room Description	Dimensions (L x W x H)
right duplex	Bathroom	2		

	Description	Condition (good, fair, poor)	Quantity (SF, LF, total)	Visual/Actual Sample Collected
Floor	Same as hall			
Walls	Blue over white over red			BS-PS-12
Ceiling	Same			
Paint	—			
Insulation	—			
Piping	Possible splatter of sink			
Lighting (fluorescent, incandescent, HG, vapour)	incandescent		Serial #s (10% to be checked):	
Thermostats (eg. Honeywell, etc.)	—		Total: HG containing: Non-HG:	
Lead Containing Materials	—			
Mould / Water Staining	yes			
Other (CO,VOCs,ODSs)	—			
Photos	—			

Legend: PS (paint sample); VPS (visual reference to PS); AS (asbestos sample); VAS (visual reference to AS); FS (fungal sample); ACM (asbestos-containing material); DJC (drywall joint compound); VFT (vinyl floor tile); ACT (acoustic ceiling tile); LF (linear feet); SF (square feet); PLM (polarized light microscopy); Transmission Electron microscopy; CO (Carbon Monoxide); VOCs (Volatile Organic Compounds); ODSs (Ozone Depleting Substances); ND (non-detect)

Notes/Comments:

Caulking around tub. BS-ASB-09

Building	Room No. / Description	Floor No.	Room Description	Dimensions (L x W x H)
right duplex	Bedroom #1	2	#1 Bed	See fig

	Description	Condition (good, fair, poor)	Quantity (SF, LF, total)	Visual/Actual Sample Collected
Floor	same as hall			
Walls	Beige over yellow over blue/green over panel			BS-PS-13
Ceiling	—			
Paint	—			
Insulation	—			
Piping				
Lighting (fluorescent, incandescent, HG, vapour)	1 incandescent		Serial #s (10% to be checked):	
Thermostats (eg. Honeywell, etc.)	—		Total: HG containing: Non-HG:	
Lead Containing Materials	—			
Mould / Water Staining	leak in ceiling			
Other (CO,VOCs,ODSs)				
Photos				

Legend: PS (paint sample); VPS (visual reference to PS); AS (asbestos sample); VAS (visual reference to AS); FS (fungal sample); ACM (asbestos-containing material); DJC (drywall joint compound); VFT (vinyl floor tile); ACT (acoustic ceiling tile); LF (linear feet); SF (square feet); PLM (polarized light microscopy); Transmission Electron microscopy; CO (Carbon Monoxide); VOCs (Volatile Organic Compounds); ODSs (Ozone Depleting Substances); ND (non-detect)

Notes/Comments:

Building	Room No. / Description	Floor No.	Room Description	Dimensions (L x W x H)
right duplex	Bed #2	2	#2 Bed	see drawing

	Description	Condition (good, fair, poor)	Quantity (SF, LF, total)	Visual/Actual Sample Collected
Floor	flower patterned - Black rolled flooring over painted wood			BS-ASB-10 BS-PS-14
Walls	green over orange over red light green over beige over white.			BS-PS-15
Ceiling	white same as hall			
Paint	—			
Insulation	—			
Piping	—			
Lighting (fluorescent, incandescent, HG, vapour)	1 incandescent		Serial #s (10% to be checked):	
Thermostats (eg. Honeywell, etc.)	✓		Total: HG containing: Non-HG:	
Lead Containing Materials	—			
Mould / Water Staining	✓			
Other (CO,VOCs,ODSs)				
Photos				

Legend: PS (paint sample); VPS (visual reference to PS); AS (asbestos sample); VAS (visual reference to AS); FS (fungal sample); ACM (asbestos-containing material); DJC (drywall joint compound); VFT (vinyl floor tile); ACT (acoustic ceiling tile); LF (linear feet); SF (square feet); PLM (polarized light microscopy); Transmission Electron microscopy; CO (Carbon Monoxide); VOCs (Volatile Organic Compounds); ODSs (Ozone Depleting Substances); ND (non-detect)

Notes/Comments:

Building	Room No. / Description	Floor No.	Room Description	Dimensions (L x W x H)
Bright Duplex	Bd #3	2	Bd 3	See drawn

	Description	Condition (good, fair, poor)	Quantity (SF, LF, total)	Visual/Actual Sample Collected
Floor	Same as hall			
Walls	window well Beige over White			BS-PS-16
Ceiling	white sand			
Paint	—			
Insulation	—			
Piping	—			
Lighting (fluorescent, incandescent, HG, vapour)	1 incandescent		Serial #s (10% to be checked):	
Thermostats (eg. Honeywell, etc.)	—		Total: HG containing: Non-HG:	
Lead Containing Materials	—			
Mould / Water Staining	water damage			
Other (CO,VOCs,ODSs)	—			
Photos	—			

Legend: PS (paint sample); VPS (visual reference to PS); AS (asbestos sample); VAS (visual reference to AS); FS (fungal sample); ACM (asbestos-containing material); DJC (drywall joint compound); VFT (vinyl floor tile); ACT (acoustic ceiling tile); LF (linear feet); SF (square feet); PLM (polarized light microscopy); Transmission Electron microscopy; CO (Carbon Monoxide); VOCs (Volatile Organic Compounds); ODSs (Ozone Depleting Substances); ND (non-detect)

Notes/Comments:

Building	Room No. / Description	Floor No.	Room Description	Dimensions (L x W x H)
right duplex	Storage room	2	storage room	See drawing

	Description	Condition (good, fair, poor)	Quantity (SF, LF, total)	Visual/Actual Sample Collected
Floor	patterned floor rolled different kinds cinderblock	Lori to Access which to send	BS- ASB-11	
Walls	~~Brick~~ Cinderblock mortar grey Brick ~~red~~ mortar ~~grey~~ Brown			BS-ASB-12 BS-ASB-13
Ceiling	Unfinished wood	yellow Brick		BS-ASB-14
Paint	—			
Insulation	Pink fibreglass with backing around window			BS-ASB-15
Piping	—			
Lighting (fluorescent, incandescent, HG, vapour)	1 incandescent		Serial #s (10% to be checked):	
Thermostats (eg. Honeywell, etc.)	—		Total: HG containing: Non-HG:	
Lead Containing Materials	—			
Mould / Water Staining	—			
Other (CO,VOCs,ODSs)				
Photos				

Legend: PS (paint sample); VPS (visual reference to PS); AS (asbestos sample); VAS (visual reference to AS); FS (fungal sample); ACM (asbestos-containing material); DJC (drywall joint compound); VFT (vinyl floor tile); ACT (acoustic ceiling tile); LF (linear feet); SF (square feet); PLM (polarized light microscopy); Transmission Electron microscopy; CO (Carbon Monoxide); VOCs (Volatile Organic Compounds); ODSs (Ozone Depleting Substances); ND (non-detect)

Notes/Comments:

Building	Room No. / Description	Floor No.	Room Description	Dimensions (L x W x H)
1/2 duplex	Attic	3	Attic	/

	Description	Condition (good, fair, poor)	Quantity (SF, LF, total)	Visual/Actual Sample Collected
Floor	unfinished wood			
Walls	unfin wood			
Ceiling	wood			
Paint	/			
Insulation	grey black insulation			BS-ASB-16
Piping	wraping around tank			BS-ASB-17
Lighting (fluorescent, incandescent, HG, vapour)	/		Serial #s (10% to be checked):	
Thermostats (eg. Honeywell, etc.)	/		Total: HG containing: Non-HG:	
Lead Containing Materials	/			
Mould / Water Staining	/			
Other (CO,VOCs,ODSs)				
Photos				

Legend: PS (paint sample); VPS (visual reference to PS); AS (asbestos sample); VAS (visual reference to AS); FS (fungal sample); ACM (asbestos-containing material); DJC (drywall joint compound); VFT (vinyl floor tile); ACT (acoustic ceiling tile); LF (linear feet); SF (square feet); PLM (polarized light microscopy); Transmission Electron microscopy; CO (Carbon Monoxide); VOCs (Volatile Organic Compounds); ODSs (Ozone Depleting Substances); ND (non-detect)

Notes/Comments:

Building	Room No. / Description	Floor No.	Room Description	Dimensions (L x W x H)
duplex	~~[illegible]~~ Porch 2	1		see drawing

	Description	Condition (good, fair, poor)	Quantity (SF, LF, total)	Visual/Actual Sample Collected
Floor	painted grey over blue over green over red over concrete			BS-PS-18
Walls	lg green over dk green			BS-PS-17
Ceiling	white panel			
Paint	—			
Insulation	—			
Piping	—			
Lighting (fluorescent, incandescent, HG, vapour)	1 incandescent		Serial #s (10% to be checked):	
Thermostats (eg. Honeywell, etc.)	—		Total: HG containing: Non-HG:	
Lead Containing Materials	—			
Mould / Water Staining	—			
Other (CO,VOCs,ODSs)				
Photos				

Legend: PS (paint sample); VPS (visual reference to PS); AS (asbestos sample); VAS (visual reference to AS); FS (fungal sample); ACM (asbestos-containing material); DJC (drywall joint compound); VFT (vinyl floor tile); ACT (acoustic ceiling tile); LF (linear feet); SF (square feet); PLM (polarized light microscopy); Transmission Electron microscopy; CO (Carbon Monoxide); VOCs (Volatile Organic Compounds); ODSs (Ozone Depleting Substances); ND (non-detect)

Notes/Comments:

~~[illegible]~~

*Complete diff. sheet for Hallway

Building	Room No. / Description	Floor No.	Room Description	Dimensions (L x W x H)
Duplex	Storage Room	1		

	Description	Condition (good, fair, poor)	Quantity (SF, LF, total)	Visual/Actual Sample Collected
Floor	wood painted grey			
Walls	pink green over beige wood panel			BS-PS-19.
	Pink over white on wood Panel			BS-PS-21.
Ceiling	white wood panel			
Paint	Door - White over red over grey over Beige			BS-PS-22
Insulation	/			
Piping	Furnace ducts and possible lead solder on piping			
Lighting (fluorescent, incandescent, HG, vapour)	2 Incandescent		Serial #s (10% to be checked):	
Thermostats (eg. Honeywell, etc.)	/		Total: HG containing: Non-HG:	
Lead Containing Materials	/			
Mould / Water Staining	/			
Other (CO,VOCs,ODSs)	fire extinguisher BC Ansul			
Photos				

Legend: PS (paint sample); VPS (visual reference to PS); AS (asbestos sample); VAS (visual reference to AS); FS (fungal sample); ACM (asbestos-containing material); DJC (drywall joint compound); VFT (vinyl floor tile); ACT (acoustic ceiling tile); LF (linear feet); SF (square feet); PLM (polarized light microscopy); Transmission Electron microscopy; CO (Carbon Monoxide); VOCs (Volatile Organic Compounds); ODSs (Ozone Depleting Substances); ND (non-detect)

Notes/Comments:

~~BS-ASB-20 = rotted green orange yellow on Hallway~~

BS-ASB-18 - mortar around furnace pipe

BS-PS-20 - yellow paint on tank.

BS-ASB-19 - grey rotted flooring

BS-PS-23/BS-PS-DUP-0 green on orange on yellow on red over wood in hallway.

BS-PS-24 ~~rose on Pink~~ beige

Building	Room No. / Description	Floor No.	Room Description	Dimensions (L x W x H)
Duplex	Storage 2	1	attached to lighthouse	

	Description	Condition (good, fair, poor)	Quantity (SF, LF, total)	Visual/Actual Sample Collected
Floor	Rolled floorm Painted atop of wood	poor		BS-ASB-21 Black Rolled floorm (BS-ASB-DUP2)
Walls	Concrete/gypsum	poor		BS-PS-26 BS-ASB-20 concrete?
Ceiling	Painted Concrete	poor		
Paint				
Insulation	NA			
Piping	NA			
Lighting (fluorescent, incandescent, HG, vapour)	1		Serial #s (10% to be checked):	
Thermostats (eg. Honeywell, etc.)	NA		Total: HG containing: Non-HG:	
Lead Containing Materials	NA.			
Mould / Water Staining	NA.			
Other (CO,VOCs,ODSs)	NA			
Photos				

Legend: PS (paint sample); VPS (visual reference to PS); AS (asbestos sample); VAS (visual reference to AS); FS (fungal sample); ACM (asbestos-containing material); DJC (drywall joint compound); VFT (vinyl floor tile); ACT (acoustic ceiling tile); LF (linear feet); SF (square feet); PLM (polarized light microscopy); Transmission Electron microscopy; CO (Carbon Monoxide); VOCs (Volatile Organic Compounds); ODSs (Ozone Depleting Substances); ND (non-detect)

Notes/Comments:

BS-PS-25 – green over orange over dark grey on door

Building	Room No. / Description	Floor No.	Room Description	Dimensions (L x W x H)
Lighthouse	Bottom Level	1		

	Description	Condition (good, fair, poor)	Quantity (SF, LF, total)	Visual/Actual Sample Collected
Floor	Red Brick & Mortar red-painted	poor		BS-PS-27 Red w/ multiple layers of grey
Walls	Red cinder blocks. Painted	poor		BS-PS-29 - White over red - on brick BS-PS-30 White over OSB White over beige over grey over blue over light blue.
Ceiling	Wood - painted white open			
Paint				
Insulation	NA -			
Piping	NA			
Lighting (fluorescent, incandescent, HG, vapour)	1		Serial #s (10% to be checked):	
Thermostats (eg. Honeywell, etc.)	NA		Total: HG containing: Non-HG:	
Lead Containing Materials	NA			
Mould / Water Staining	NA			
Other (CO,VOCs,ODSs)	NA			
Photos				

Legend: PS (paint sample); VPS (visual reference to PS); AS (asbestos sample); VAS (visual reference to AS); FS (fungal sample); ACM (asbestos-containing material); DJC (drywall joint compound); VFT (vinyl floor tile); ACT (acoustic ceiling tile); LF (linear feet); SF (square feet); PLM (polarized light microscopy); Transmission Electron microscopy; CO (Carbon Monoxide); VOCs (Volatile Organic Compounds); ODSs (Ozone Depleting Substances); ND (non-detect)

Notes/Comments:

On door PS-28 - white over beige over green over blue over grey

Building	Room No. / Description	Floor No.	Room Description	Dimensions (L x W x H)
Lighthouse		2		

	Description	Condition (good, fair, poor)	Quantity (SF, LF, total)	Visual/Actual Sample Collected
Floor	red over grey over black over wood			BS-PS-31 BS-PS-DUP-03
Walls	White over red over orange over cinder block			BS PS-32
Ceiling	—			
Paint	—			
Insulation				
Piping				
Lighting (fluorescent, incandescent, HG, vapour)			Serial #s (10% to be checked):	
Thermostats (eg. Honeywell, etc.)			Total: HG containing: Non-HG:	
Lead Containing Materials				
Mould / Water Staining				
Other (CO,VOCs,ODSs)				
Photos				

Legend: PS (paint sample); VPS (visual reference to PS); AS (asbestos sample); VAS (visual reference to AS); FS (fungal sample); ACM (asbestos-containing material); DJC (drywall joint compound); VFT (vinyl floor tile); ACT (acoustic ceiling tile); LF (linear feet); SF (square feet); PLM (polarized light microscopy); Transmission Electron microscopy; CO (Carbon Monoxide); VOCs (Volatile Organic Compounds); ODSs (Ozone Depleting Substances); ND (non-detect)

Notes/Comments:

Stairs unstable.

Building	Room No. / Description	Floor No.	Room Description	Dimensions (L x W x H)
Basement.				

	Description	Condition (good, fair, poor)	Quantity (SF, LF, total)	Visual/Actual Sample Collected
Floor	painted concrete			BN-PS-33 multiple layers of grey
Walls	cinderblock/brick			BN-PS-~~31~~ - white and beige ~~BN-PS-34~~
Ceiling	unfinished wood			
Paint				
Insulation	no			
Piping	yes: plastic. no insul.			
Lighting (fluorescent, ~~incandescent~~, HG, vapour)	4		Serial #s (10% to be checked):	
Thermostats (eg. Honeywell, etc.)	NO		Total: HG containing: Non-HG:	
Lead Containing Materials	yes. maybe sanded			
Mould / Water Staining	~~no~~ yes on ceiling			
Other (CO,VOCs,ODSs)				
Photos				

Legend: PS (paint sample); VPS (visual reference to PS); AS (asbestos sample); VAS (visual reference to AS); FS (fungal sample); ACM (asbestos-containing material); DJC (drywall joint compound); VFT (vinyl floor tile); ACT (acoustic ceiling tile); LF (linear feet); SF (square feet); PLM (polarized light microscopy); Transmission Electron microscopy; CO (Carbon Monoxide); VOCs (Volatile Organic Compounds); ODSs (Ozone Depleting Substances); ND (non-detect)

Notes/Comments:

~~BN-PS-~~ BN-PS-35 - white over orange over beige/multi

* Looks like possible

Building	Room No. / Description	Floor No.	Room Description	Dimensions (L x W x H)
Duplex	Exterior			

	Description	Condition (good, fair, poor)	Quantity (SF, LF, total)	Visual/Actual Sample Collected
Floor	patio(wood)-multiple layers of grey-front patio			BS-PS-37
Walls	wood siding, multiple layers of white paint			BS-PS-36
Ceiling				
Paint				
Insulation				
Piping				
Lighting (fluorescent, incandescent, HG, vapour)	incandescent		Serial #s (10% to be checked):	
Thermostats (eg. Honeywell, etc.)			Total: HG containing: Non-HG:	
Lead Containing Materials				
Mould / Water Staining				
Other (CO,VOCs,ODSs)				
Photos				

Legend: PS (paint sample); VPS (visual reference to PS); AS (asbestos sample); VAS (visual reference to AS); FS (fungal sample); ACM (asbestos-containing material); DJC (drywall joint compound); VFT (vinyl floor tile); ACT (acoustic ceiling tile); LF (linear feet); SF (square feet); PLM (polarized light microscopy); Transmission Electron microscopy; CO (Carbon Monoxide); VOCs (Volatile Organic Compounds); ODSs (Ozone Depleting Substances); ND (non-detect)

Notes/Comments:

right Exterior door - white over green over red - BS-PS-38
foundation(concrete) - multiple grey over red - BS-PS-39
Beige caulking around window - BS-ASB-22
Black Asphalt Shingle & paper - BS-ASB-23
Wood trim ~~ctg~~ (facia?) redover multiple layers of grey - BS-PS-40

Building	Room No. / Description	Floor No.	Room Description	Dimensions (L x W x H)
Single Dwellings	Basement	—	—	

	Description	Condition (good, fair, poor)	Quantity (SF, LF, total)	Visual/Actual Sample Collected
Floor	Painted Concrete. Various layers of grey.			BS-PS-41 BS-PS-DUP-4
Walls	Painted concrete. grey over light green over beige			BS-PS-42 BS-PS-43 grey on red on white? taken from door.
Ceiling	Open unfinished			
Paint	~~N/A~~			
Insulation	NA			
Piping				
Lighting (fluorescent, incandescent, HG, vapour)	45		Serial #s (10% to be checked):	
Thermostats (eg. Honeywell, etc.)	NA		Total: HG containing: Non-HG:	
Lead Containing Materials	Solder on pipes possible).			
Mould / Water Staining	water in areas.			
Other (CO,VOCs,ODSs)	hot water tank / large freezer / fire extinguisher ABC			
Photos				

Legend: PS (paint sample); VPS (visual reference to PS); AS (asbestos sample); VAS (visual reference to AS); FS (fungal sample); ACM (asbestos-containing material); DJC (drywall joint compound); VFT (vinyl floor tile); ACT (acoustic ceiling tile); LF (linear feet); SF (square feet); PLM (polarized light microscopy); Transmission Electron microscopy; CO (Carbon Monoxide); VOCs (Volatile Organic Compounds); ODSs (Ozone Depleting Substances); ND (non-detect)

Notes/Comments:

furnace.
water pump? see pics
BS-ABB-24 - grey Mortar? around pipe

Workshop in corner.
Plywood floors/walls. grey paint
2x4 studding.

hallway coming up steps BS-PS-44. white on yellow on gypsum
BS-ABB-25 drywall joint compound/gypsum/plaster

Building	Room No. / Description	Floor No.	Room Description	Dimensions (L x W x H)
Single Dwelling	Portion of Storage Room			

	Description	Condition (good, fair, poor)	Quantity (SF, LF, total)	Visual/Actual Sample Collected
Floor	Grey Particle Board with beige Mesh on Plywood	poor		BS-ASB-26
Walls	Painted gypsc.		pinkish beige	BS-PS-45 white over beige over yellow BS-PS-46 white over green BS-PS-47 white over blue over pink over green over beige
Ceiling	Painted gypsc.			
Paint				
Insulation	yes. pinkish fiberglass insulation Beige Black Backing.			BS-ASB-27
Piping	no.			
Lighting (fluorescent, ~~incandescent~~, HG, vapour)	3.		Serial #s (10% to be checked):	
Thermostats (eg. Honeywell, etc.)	no.		Total: HG containing: Non-HG:	
Lead Containing Materials	no			
Mould / Water Staining	yes baseboards			
Other (CO,VOCs,ODSs)	fire extinguisher BC			
Photos				

Legend: PS (paint sample); VPS (visual reference to PS); AS (asbestos sample); VAS (visual reference to AS); FS (fungal sample); ACM (asbestos-containing material); DJC (drywall joint compound); VFT (vinyl floor tile); ACT (acoustic ceiling tile); LF (linear feet); SF (square feet); PLM (polarized light microscopy); Transmission Electron microscopy; CO (Carbon Monoxide); VOCs (Volatile Organic Compounds); ODSs (Ozone Depleting Substances); ND (non-detect)

Notes/Comments:

Building	Room No. / Description	Floor No.	Room Description	Dimensions (L x W x H)
Single Dwelling	Kitchen	1		

	Description	Condition (good, fair, poor)	Quantity (SF, LF, total)	Visual/Actual Sample Collected
Floor	Grey particle Board on plywood			
Walls	Half particle board half gyproc white top yellow bottom.			BS-ASB-29. Particle board BS-PS-49 yellow on white.
Ceiling	Painted gyproc.			BS-DS-48 White
Paint				
Insulation	~~Batt~~ ~~Grey~~ FG w/Block Backing.			
Piping	under sink.			
Lighting (fluorescent, incandescent, HG, vapour)	1 light 2 Ballasts		Serial #s (10% to be checked): Serial 17A240N	
Thermostats (eg. Honeywell, etc.)	NA		Total: HG containing: Non-HG:	
Lead Containing Materials	under sink possible solder.			
Mould / Water Staining	ceiling & walls			
Other (CO,VOCs,ODSs)	domestic fridge.			
Photos				

Legend: PS (paint sample); VPS (visual reference to PS); AS (asbestos sample); VAS (visual reference to AS); FS (fungal sample); ACM (asbestos-containing material); DJC (drywall joint compound); VFT (vinyl floor tile); ACT (acoustic ceiling tile); LF (linear feet); SF (square feet); PLM (polarized light microscopy); Transmission Electron microscopy; CO (Carbon Monoxide); VOCs (Volatile Organic Compounds); ODSs (Ozone Depleting Substances); ND (non-detect)

Notes/Comments:

BS-ASB-28 - Countertop (yellow speckled)

Building	Room No. / Description	Floor No.	Room Description	Dimensions (L x W x H)
RSingle Dwelling	Living Room + Hallway	1		

	Description	Condition (good, fair, poor)	Quantity (SF, LF, total)	Visual/Actual Sample Collected
Floor	Grey Particle board on plywood			
Walls	White painted gyproc			BS-PS-SC white on gyproc. BS-PS-S (door to porch) white over label on yellow green
Ceiling	white painted gyproc			
Paint				X BS-PS-SY light yellow closet in Hallway.
Insulation	Batt & fibreglass w/ Black Backing			
Piping	NA			
Lighting (fluorescent, incandescent, HG, vapour)	2		Serial #s (10% to be checked):	
Thermostats (eg. Honeywell, etc.)	yes 1 White-Rogers (rectangle)		Total: HG containing: yes Non-HG:	
Lead Containing Materials	NA			
Mould / Water Staining	yes. walls.			BS-MD-02
Other (CO,VOCs,ODSs)	fire extinguisher (Unknown), fire extinguisher (Pyrene) single detect.			
Photos				

Legend: PS (paint sample); VPS (visual reference to PS); AS (asbestos sample); VAS (visual reference to AS); FS (fungal sample); ACM (asbestos-containing material); DJC (drywall joint compound); VFT (vinyl floor tile); ACT (acoustic ceiling tile); LF (linear feet); SF (square feet); PLM (polarized light microscopy); Transmission Electron microscopy; CO (Carbon Monoxide); VOCs (Volatile Organic Compounds); ODSs (Ozone Depleting Substances); ND (non-detect)

Notes/Comments:

Building	Room No. / Description	Floor No.	Room Description	Dimensions (L x W x H)
Single Dwelling	Portch 2			

	Description	Condition (good, fair, poor)	Quantity (SF, LF, total)	Visual/Actual Sample Collected
Floor	Grey particleboard			
Walls	Painted gyproc			BS-PS-S2 White on blue on yellow on beige.
Ceiling	White painted gyproc			
Paint				
Insulation	Beige FG w/ Black Backing			
Piping	NA			
Lighting (fluorescent, incandescent, HG, vapour)	1		Serial #s (10% to be checked):	
Thermostats (eg. Honeywell, etc.)	NA		Total: HG containing: Non-HG:	
Lead Containing Materials	NA.			
Mould / Water Staining	Walls / Ceiling.			
Other (CO,VOCs,ODSs)	NA.			
Photos				

Legend: PS (paint sample); VPS (visual reference to PS); AS (asbestos sample); VAS (visual reference to AS); FS (fungal sample); ACM (asbestos-containing material); DJC (drywall joint compound); VFT (vinyl floor tile); ACT (acoustic ceiling tile); LF (linear feet); SF (square feet); PLM (polarized light microscopy); Transmission Electron microscopy; CO (Carbon Monoxide); VOCs (Volatile Organic Compounds); ODSs (Ozone Depleting Substances); ND (non-detect)

Notes/Comments:

Building	Room No. / Description	Floor No.	Room Description	Dimensions (L x W x H)
Singh Duplex	Room 1	1		

	Description	Condition (good, fair, poor)	Quantity (SF, LF, total)	Visual/Actual Sample Collected
Floor	Grey particle board			
Walls	Paint on gyproc			BS-PS-53 (inclosed) Beige
Ceiling	Paint on gyproc			
Paint				
Insulation	Beige FG W/ Black backing			
Piping	NA			
Lighting (fluorescent, incandescent, HG, vapour)	1		Serial #s (10% to be checked):	
Thermostats (eg. Honeywell, etc.)	NA		Total: HG containing: Non-HG:	
Lead Containing Materials	NA			
Mould / Water Staining	yes ceiling			
Other (CO,VOCs,ODSs)				
Photos				

Legend: PS (paint sample); VPS (visual reference to PS); AS (asbestos sample); VAS (visual reference to AS); FS (fungal sample); ACM (asbestos-containing material); DJC (drywall joint compound); VFT (vinyl floor tile); ACT (acoustic ceiling tile); LF (linear feet); SF (square feet); PLM (polarized light microscopy); Transmission Electron microscopy; CO (Carbon Monoxide); VOCs (Volatile Organic Compounds); ODSs (Ozone Depleting Substances); ND (non-detect)

Notes/Comments:

Building	Room No. / Description	Floor No.	Room Description	Dimensions (L x W x H)
Single Dwelling	Room 3.	1		

	Description	Condition (good, fair, poor)	Quantity (SF, LF, total)	Visual/Actual Sample Collected
Floor	Grey particle Board.			
Walls	White painted gyproc			BS-PS-55 Green, in closet, BS-PS-56 white on light blue on t[illegible]
Ceiling	White painted gyproc			
Paint	Beige FG w/ Black backing			
Insulation				
Piping	NA			
Lighting (fluorescent, incandescent, HG, vapour)	1		Serial #s (10% to be checked):	
Thermostats (eg. Honeywell, etc.)	NA		Total: HG containing: Non-HG:	
Lead Containing Materials	NA			
Mould / Water Staining	around baseboard			
Other (CO,VOCs,ODSs)	No.			
Photos				

Legend: PS (paint sample); VPS (visual reference to PS); AS (asbestos sample); VAS (visual reference to AS); FS (fungal sample); ACM (asbestos-containing material); DJC (drywall joint compound); VFT (vinyl floor tile); ACT (acoustic ceiling tile); LF (linear feet); SF (square feet); PLM (polarized light microscopy); Transmission Electron microscopy; CO (Carbon Monoxide); VOCs (Volatile Organic Compounds); ODSs (Ozone Depleting Substances); ND (non-detect)

Notes/Comments: BSASB-30 – Closet door material. Beige

plastic / fabric type

Building	Room No. / Description	Floor No.	Room Description	Dimensions (L x W x H)
Single dwelling	Room 2	1		

	Description	Condition (good, fair, poor)	Quantity (SF, LF, total)	Visual/Actual Sample Collected
Floor	Grey particle board			
Walls	White painted gyproc			BS-PS-57 white cover pink
Ceiling	White painted gyproc			
Paint				
Insulation	Beige FG w/ Black backing			
Piping	NA			
Lighting (fluorescent, incandescent, HG, vapour)	1		Serial #s (10% to be checked):	
Thermostats (eg. Honeywell, etc.)	NA		Total: HG containing: Non-HG:	
Lead Containing Materials	NA			
Mould / Water Staining	Baseboard yes			
Other (CO,VOCs,ODSs)				
Photos				

Legend: PS (paint sample); VPS (visual reference to PS); AS (asbestos sample); VAS (visual reference to AS); FS (fungal sample); ACM (asbestos-containing material); DJC (drywall joint compound); VFT (vinyl floor tile); ACT (acoustic ceiling tile); LF (linear feet); SF (square feet); PLM (polarized light microscopy); Transmission Electron microscopy; CO (Carbon Monoxide); VOCs (Volatile Organic Compounds); ODSs (Ozone Depleting Substances); ND (non-detect)

Notes/Comments:

Building	Room No. / Description	Floor No.	Room Description	Dimensions (L x W x H)
Single Apt	Bathroom	1		

	Description	Condition (good, fair, poor)	Quantity (SF, LF, total)	Visual/Actual Sample Collected
Floor	Grey particle board			
Walls	Tile printed particle board w/grey adhesive			BS-ASB-31 (wall)
Ceiling	White painted gypwc.			
Paint	~~NA~~			
Insulation				
Piping	under sink			
Lighting (fluorescent, incandescent, HG, vapour)	1		Serial #s (10% to be checked):	
Thermostats (eg. Honeywell, etc.)	NA		Total: HG containing: Non-HG:	
Lead Containing Materials	NA			
Mould / Water Staining	on toilet & B. boards			
Other (CO,VOCs,ODSs)				
Photos				

Legend: PS (paint sample); VPS (visual reference to PS); AS (asbestos sample); VAS (visual reference to AS); FS (fungal sample); ACM (asbestos-containing material); DJC (drywall joint compound); VFT (vinyl floor tile); ACT (acoustic ceiling tile); LF (linear feet); SF (square feet); PLM (polarized light microscopy); Transmission Electron microscopy; CO (Carbon Monoxide); VOCs (Volatile Organic Compounds); ODSs (Ozone Depleting Substances); ND (non-detect)

Notes/Comments:

BS-ASB-32 – tub caulking (white)

Building	Room No. / Description	Floor No.	Room Description	Dimensions (L x W x H)
SFH Dwelling	Attic			

	Description	Condition (good, fair, poor)	Quantity (SF, LF, total)	Visual/Actual Sample Collected
Floor				
Walls				
Ceiling	open			
Paint				
Insulation	Beige FG insul w/Blackback			
Piping				
Lighting (fluorescent, incandescent, HG, vapour)			Serial #s (10% to be checked):	
Thermostats (eg. Honeywell, etc.)			Total: HG containing: Non-HG:	
Lead Containing Materials				
Mould / Water Staining	NO			
Other (CO,VOCs,ODSs)				
Photos				

Legend: PS (paint sample); VPS (visual reference to PS); AS (asbestos sample); VAS (visual reference to AS); FS (fungal sample); ACM (asbestos-containing material); DJC (drywall joint compound); VFT (vinyl floor tile); ACT (acoustic ceiling tile); LF (linear feet); SF (square feet); PLM (polarized light microscopy); Transmission Electron microscopy; CO (Carbon Monoxide); VOCs (Volatile Organic Compounds); ODSs (Ozone Depleting Substances); ND (non-detect)

Notes/Comments:

Building	Room No. / Description	Floor No.	Room Description	Dimensions (L x W x H)
Singly Dwell.	Exterior			

	Description	Condition (good, fair, poor)	Quantity (SF, LF, total)	Visual/Actual Sample Collected
Floor				
Walls				
Ceiling				
Paint				
Insulation				
Piping				
Lighting (fluorescent, incandescent, HG, vapour)			Serial #s (10% to be checked):	
Thermostats (eg. Honeywell, etc.)			Total: HG containing: Non-HG:	
Lead Containing Materials				
Mould / Water Staining				
Other (CO,VOCs,ODSs)				
Photos				

Legend: PS (paint sample); VPS (visual reference to PS); AS (asbestos sample); VAS (visual reference to AS); FS (fungal sample); ACM (asbestos-containing material); DJC (drywall joint compound); VFT (vinyl floor tile); ACT (acoustic ceiling tile); LF (linear feet); SF (square feet); PLM (polarized light microscopy); Transmission Electron microscopy; CO (Carbon Monoxide); VOCs (Volatile Organic Compounds); ODSs (Ozone Depleting Substances); ND (non-detect)

Notes/Comments: *Entrance for basement BS-PS-58 (grey over red over various grey)
*Concrete on exterior BS-PS-59 various shades of grey
* wooded siding on plywood BS-PS-60 BS-PS-DUP-5 multiple layers of white
BS-ASB-34 black tar like mortar. BS-ASB-33 grey sticky mortar
BS-AS-35 - felt on door frame black. BS-AS-36 red/black shingle (tar)
BS-ASB-37 white window caulking. ~~BS-ASB-38 [illegible]~~

AS '41
64

Building	Room No. / Description	Floor No.	Room Description	Dimensions (L x W x H)
Stand by Diesel Building	1		interior	

	Description	Condition (good, fair, poor)	Quantity (SF, LF, total)	Visual/Actual Sample Collected
Floor	plywood floors (grey)	poor		BS-PS-64 various shades of grey.
Walls	plywood (green/white)	poor		BS-PS-65 blue over yellow over white
Ceiling	white painted plywood.			
Paint				
Insulation				
Piping	NO			
Lighting (fluorescent, incandescent, HG, vapour)	NO		Serial #s (10% to be checked):	
Thermostats (eg. Honeywell, etc.)	NO.		Total: HG containing: Non-HG:	
Lead Containing Materials				
Mould / Water Staining				
Other (CO,VOCs,ODSs)	fire ext. Pyrene see pic			BS-ASB-41 Interior
Photos				

Legend: PS (paint sample); VPS (visual reference to PS); AS (asbestos sample); VAS (visual reference to AS); FS (fungal sample); ACM (asbestos-containing material); DJC (drywall joint compound); VFT (vinyl floor tile); ACT (acoustic ceiling tile); LF (linear feet); SF (square feet); PLM (polarized light microscopy); Transmission Electron microscopy; CO (Carbon Monoxide); VOCs (Volatile Organic Compounds); ODSs (Ozone Depleting Substances); ND (non-detect)

Exterior

Notes/Comments:

BS-ASB-41- Beige caulking inside ~~door~~

BS-ASB-42 - caulking/parging around pipe. grey

BS-ASB-43- Black Asphalt Shingle & tar paper

BS-PS-66 - White multiple layers on siding

BS-PS-67 - multiple grey on white on wood foundation

Building	Room No. / Description	Floor No.	Room Description	Dimensions (L x W x H)
Storage Shed 1	1	1		

	Description	Condition (good, fair, poor)	Quantity (SF, LF, total)	Visual/Actual Sample Collected
Floor	Unfinished no paint wood			
Walls	Unfinished not Paint wood			
Ceiling	open 11			
Paint				
Insulation	NA			
Piping	NA			
Lighting (fluorescent, ~~incandescent~~, ~~HG~~, vapour)	1		Serial #s (10% to be checked):	
Thermostats (eg. Honeywell, etc.)	NA		Total: HG containing: Non-HG:	
Lead Containing Materials	NA			
Mould / Water Staining	NA			
Other (CO,VOCs,ODSs)				
Photos	ASB-40 Black paper felt on door frame			

Legend: PS (paint sample); VPS (visual reference to PS); AS (asbestos sample); VAS (visual reference to AS); FS (fungal sample); ACM (asbestos-containing material); DJC (drywall joint compound); VFT (vinyl floor tile); ACT (acoustic ceiling tile); LF (linear feet); SF (square feet); PLM (polarized light microscopy); Transmission Electron microscopy; CO (Carbon Monoxide); VOCs (Volatile Organic Compounds); ODSs (Ozone Depleting Substances); ND (non-detect)

Notes/Comments:

BS-PS-61 - red over dark red on wood trim exterior door bottom

BS-PS-62 - white over green on door trim (sides)

BS-PS-63 - white multiple layers on wood siding

BS-ASB-39 - caulking beige on window

BS-ASB-38 BLACK Asphalt Shingle

PS-83 ASB-62 Lower Landm - South

Building	Room No. / Description	Floor No.	Room Description	Dimensions (L x W x H)
storage shed 2	interior			

	Description	Condition (good, fair, poor)	Quantity (SF, LF, total)	Visual/Actual Sample Collected
Floor	Concrete			
Walls	Unfinished wood w. ~~stone~~ Partial light blue green/grey			BS-PS-83
Ceiling	white woodboards			
Paint ASB	Brick (red) mortar (grey).			BS-ASB-62 BS ASB 63
Insulation				
Piping				
Lighting (fluorescent, incandescent, HG, vapour)				
Thermostats (eg. Honeywell, etc.)				
Lead Containing Materials				
Mould / Water Staining	caulking/ parging on window white			BS-ASB-65
Other (CO,VOCs,ODSs)				
Photos				

Landing Area

Belle Isle South

Legend: PS (paint sample); VPS (visual reference to PS); AS (asbestos sample); VAS (visual reference to AS); FS (fungal sample); ACM (asbestos-containing material); DJC (drywall joint compound); VFT (vinyl floor tile); ACT (acoustic ceiling tile); LF (linear feet); SF (square feet); PLM (polarized light microscopy); Transmission Electron microscopy; CO (Carbon Monoxide); VOCs (Volatile Organic Compounds); ODSs (Ozone Depleting Substances); ND (non-detect)

Exterior

Notes/Comments: ~~Cedar~~ cedar shake shingle

Red over white over green on wood door frame BS-PS-84

multiple white on siding (cedar) BS-PS-85

Black/Brown paper under siding BS-ASB-64

Red painted concrete foundation - could not obtain not enough

Lower Landry - South

Building	Room No. / Description	Floor No.	Room Description	Dimensions (L x W x H)
~~Storage~~ Powerhouse				

	Description	Condition (good, fair, poor)	Quantity (SF, LF, total)	Visual/Actual Sample Collected
Floor	Unpainted concrete Possible paving type	layer on top		BS ASB-66
Walls	Unfinished ~~walls~~ wood			
Ceiling	Unfinished wood			
Paint	N/A			
Insulation	—			
Piping	—			
Lighting (fluorescent, incandescent, HG, vapour)	—		Serial #s (10% to be checked):	
Thermostats (eg. Honeywell, etc.)	—		Total: HG containing: Non-HG:	
Lead Containing Materials	—			
Mould / Water Staining	—			
Other (CO,VOCs,ODSs)	OLD Gas Cans see pics			
Photos				

Legend: PS (paint sample); VPS (visual reference to PS); AS (asbestos sample); VAS (visual reference to AS); FS (fungal sample); ACM (asbestos-containing material); DJC (drywall joint compound); VFT (vinyl floor tile); ACT (acoustic ceiling tile); LF (linear feet); SF (square feet); PLM (polarized light microscopy); Transmission Electron microscopy; CO (Carbon Monoxide); VOCs (Volatile Organic Compounds); ODSs (Ozone Depleting Substances); ND (non-detect)

Notes/Comments: Exterior

~~Asphalt shingle Black - BS ASB 67~~ Shingle NO sample Black cedar shake

Siding cedar - painted white - Most has come off - low quantity - difficult to obtain - High winds - took some - possible not enough

BS-PS-86

Lower Landing – South

Building	Room No. / Description	Floor No.	Room Description	Dimensions (L x W x H)
winch house	Interior	1	winch room	see drawing

	Description	Condition (good, fair, poor)	Quantity (SF, LF, total)	Visual/Actual Sample Collected
Floor	painted concrete (red)			BS-PS-87
Walls	unfinished wood			
Ceiling	unfinished wood			
Paint	winch: red winch wheel - green			BS-PS-85 BS-PS-89
Insulation	~~winch~~ type machine grey very small quantity			BS-PS-90
Piping	/			
Lighting (fluorescent, incandescent, HG, vapour)	1 incandescent		Serial #s (10% to be checked):	
Thermostats (eg. Honeywell, etc.)	/		Total: HG containing: Non-HG:	
Lead Containing Materials	/			
Mould / Water Staining	yes			
Other (CO,VOCs,ODSs)				
Photos				

Legend: PS (paint sample); VPS (visual reference to PS); AS (asbestos sample); VAS (visual reference to AS); FS (fungal sample); ACM (asbestos-containing material); DJC (drywall joint compound); VFT (vinyl floor tile); ACT (acoustic ceiling tile); LF (linear feet); SF (square feet); PLM (polarized light microscopy); Transmission Electron microscopy; CO (Carbon Monoxide); VOCs (Volatile Organic Compounds); ODSs (Ozone Depleting Substances); ND (non-detect)

exterior

Notes/Comments:

BS-RSB-67
Black felt paper under siding

Black Asphalt shingle
BS-ASB-68
(BS-ASB-Dup)

red (same as floor)
white siding (could not obtain, same as storage shed)
Door frame - red over white multiple layers of grey - BS-PS-94

Building	Room No. / Description	Floor No.	Room Description	Dimensions (L x W x H)
Videotron Building	1	1		

	Description	Condition (good, fair, poor)	Quantity (SF, LF, total)	Visual/Actual Sample Collected
Floor	Grey painted concrete Multiple layers of Grey			BS-PS-81
Walls	White painted Plywood			BS-PS-82 White/tan.
Ceiling	White painted Plywood			
Paint	?			
Insulation	?			
Piping	NA			
Lighting (fluorescent, incandescent, HG, vapour)	Check Photos to confirm light type. 4 lights		Serial #s (10% to be checked):	
Thermostats (eg. Honeywell, etc.)	NA.		Total: HG containing: Non-HG:	
Lead Containing Materials	NA.			
Mould / Water Staining	Ceiling mould growth.			
Other (CO,VOCs,ODSs)	NA.			
Photos				

Legend: PS (paint sample); VPS (visual reference to PS); AS (asbestos sample); VAS (visual reference to AS); FS (fungal sample); ACM (asbestos-containing material); DJC (drywall joint compound); VFT (vinyl floor tile); ACT (acoustic ceiling tile); LF (linear feet); SF (square feet); PLM (polarized light microscopy); Transmission Electron microscopy; CO (Carbon Monoxide); VOCs (Volatile Organic Compounds); ODSs (Ozone Depleting Substances); ND (non-detect)

Notes/Comments:

BS-ASB-61 - Yellow/Orange spray foam insulation around wiring

Building	Room No. / Description	Floor No.	Room Description	Dimensions (L x W x H)
Videograph Building	Exterior			

	Description	Condition (good, fair, poor)	Quantity (SF, LF, total)	Visual/Actual Sample Collected
Floor				
Walls				
Ceiling				
Paint				
Insulation				
Piping				
Lighting (fluorescent, incandescent, HG, vapour)			Serial #s (10% to be checked):	
Thermostats (eg. Honeywell, etc.)			Total: HG containing: Non-HG:	
Lead Containing Materials				
Mould / Water Staining				
Other (CO,VOCs,ODSs)				
Photos				

Legend: PS (paint sample); VPS (visual reference to PS); AS (asbestos sample); VAS (visual reference to AS); FS (fungal sample); ACM (asbestos-containing material); DJC (drywall joint compound); VFT (vinyl floor tile); ACT (acoustic ceiling tile); LF (linear feet); SF (square feet); PLM (polarized light microscopy); Transmission Electron microscopy; CO (Carbon Monoxide); VOCs (Volatile Organic Compounds); ODSs (Ozone Depleting Substances); ND (non-detect)

Notes/Comments:

ASB 48 - 51 on opposite Page

Building	Room No. / Description	Floor No.	Room Description	Dimensions (L x W x H)
main power Bld.	interior	1	interior	

	Description	Condition (good, fair, poor)	Quantity (SF, LF, total)	Visual/Actual Sample Collected
Floor	concrete pad dark Red over grey concrete light grey over black concrete floor - multiple layers of grey			BS-PS-68 DUP-06
Walls	lg green over white over Blue on Drywall		BS-ASB-45 drywall compound plaster	BS-PS-69 BS-PS-70
Ceiling	White on Drywall			BS-PS-71
Paint	—			
Insulation	—			
Piping	piping see pic			
Lighting (fluorescent, incandescent, HG, vapour)	4 incandescent fixtures		Serial #s (10% to be checked):	
Thermostats (eg. Honeywell, etc.)	—		Total: HG containing: Non-HG:	
Lead Containing Materials				
Mould / Water Staining	water Damage			
Other (CO,VOCs,ODSs)	→ ASB 45 taken interior			
Photos				

Legend: PS (paint sample); VPS (visual reference to PS); AS (asbestos sample); VAS (visual reference to AS); FS (fungal sample); ACM (asbestos-containing material); DJC (drywall joint compound); VFT (vinyl floor tile); ACT (acoustic ceiling tile); LF (linear feet); SF (square feet); PLM (polarized light microscopy); Transmission Electron microscopy; CO (Carbon Monoxide); VOCs (Volatile Organic Compounds); ODSs (Ozone Depleting Substances); ND (non-detect)

Exterior

Notes/Comments:

BS-PS-72A red over multiple white over grey over wood A
BS-ASB-45 - Black Coating on wire
BS-PS-73A multiple layers of grey over red on concrete
BS-PS-74A multiple white on siding
BS-ASB-46 caulking grey around electrical outside
BS-ASB-47 red/black shingles outside

APPENDIX F

Report Limitations

LIMITATIONS

1. The work performed in the preparation of this report and the conclusions presented are subject to the following:

   (a) The Standard Terms and Conditions which form a part of our Contract;
   (b) The Scope of Services;
   (c) Time and Budgetary limitations as described in our Contract; and,
   (d) The Limitations stated herein.

2. No other warranties or representations, either expressed or implied, are made as to the professional services provided under the terms of our Contract, or the conclusions presented.

3. The conclusions presented in this report were based, in part, on visual observations of the site and attendant structures. Our conclusions cannot and are not extended to include those portions of the site or structures which were not reasonably available, in AMEC's opinion, for direct observation.

4. The environmental conditions at the site were assessed, within the limitations set out above, having due regard for applicable environmental regulations as of the date of the inspection. A review of compliance by past owners or occupants of the site with any applicable local, provincial or federal by-laws, orders-in-council, legislative enactments and regulations was not performed.

5. Where testing was performed it was carried out in accordance with the terms of our contract providing for testing. Other substances, or different quantities of substances testing for, might be present on site and be revealed by different or other testing not provided for in our contract.

6. The findings within this report do not reflect potential ACMs in areas not accessed, such as remote space areas, roof areas, wall cavities and ceilings spaces. During future renovations or demolition activities and subsequent removal of interior wall and ceiling materials, the actual quantities of asbestos containing materials can be verified. Also at this time, analysis of suspect ACM materials may be required if the appearance differs from that of materials previously confirmed to contain asbestos in adjacent rooms.

7. Because of the limitations referred to above, different environmental conditions from those stated in our report might exist. Should such different conditions be encountered, AMEC must be notified in order that it may determine if modifications to the conclusions in the report are necessary.

8. The utilization of AMEC's services during the implementation of any remedial measures will allow AMEC to observe compliance with the conclusions and recommendations contained in the report. AMEC's involvement will also allow for changes to be made as necessary to suit field conditions as they are encountered.

9. This report is for the sole use of the party to whom it is addressed unless expressly stated otherwise in the report or contract. Any use which any third party makes of the report, in whole or the part, or any reliance thereon or decisions made based on any information or conclusions in the report, is the sole responsibility of such third party. AMEC accepts no responsibility whatsoever for damages or loss of any nature or kind suffered by any such third party as a result of actions taken or not taken or decisions made in reliance on the report or anything set out therein.

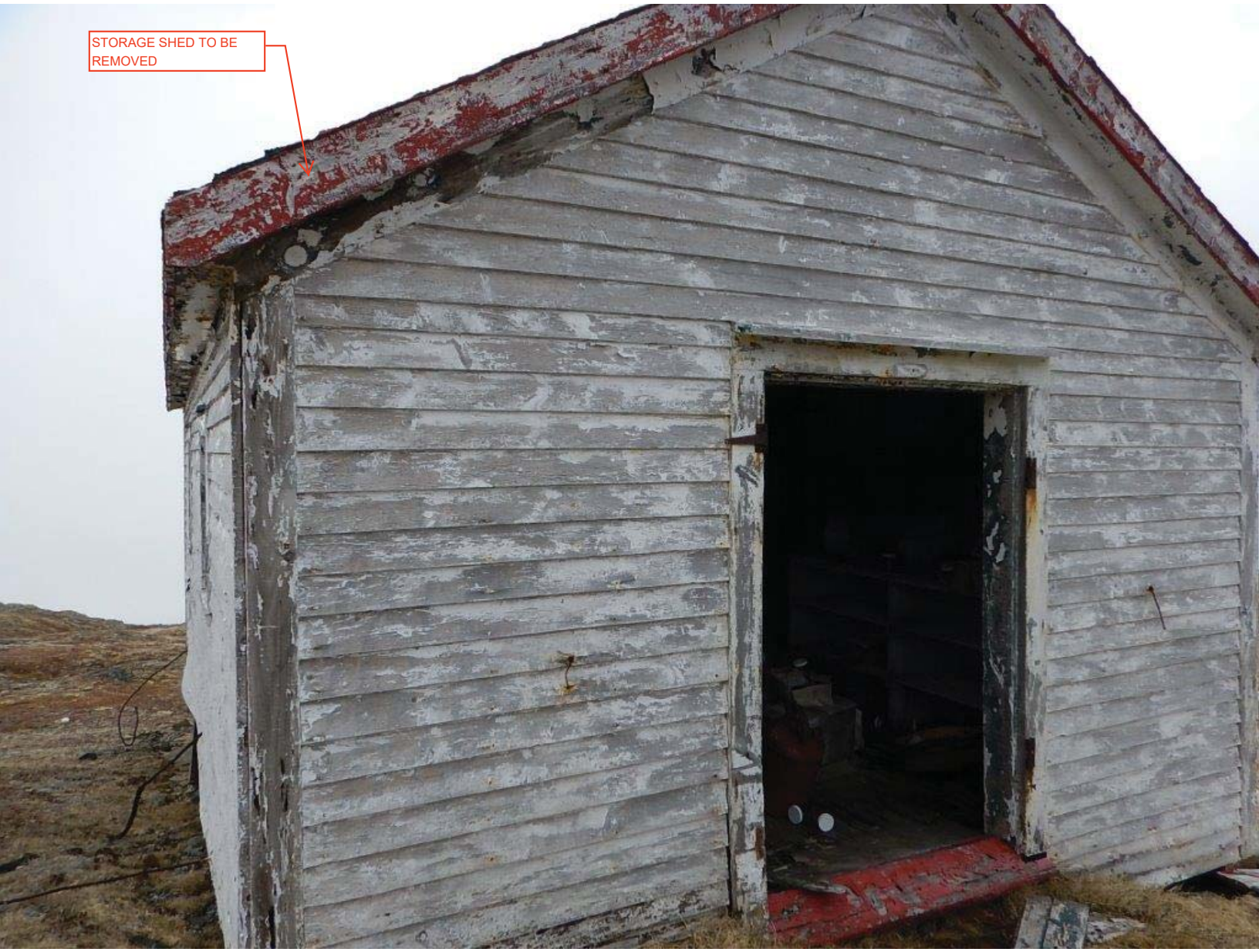
10. This report is not to be given over to any third party for any purpose whatsoever without the written permission of AMEC.

Appendix B: Picture File


DWELLING TO BE REMOVED
STAND-BY DIESEL BUILDING AND MAIN POWER BUILDING TO BE REMOVED
STORAGE BUILDING TO BE REMOVED


OLD FOG ALARM
BUILDING TO BE
REMOVED

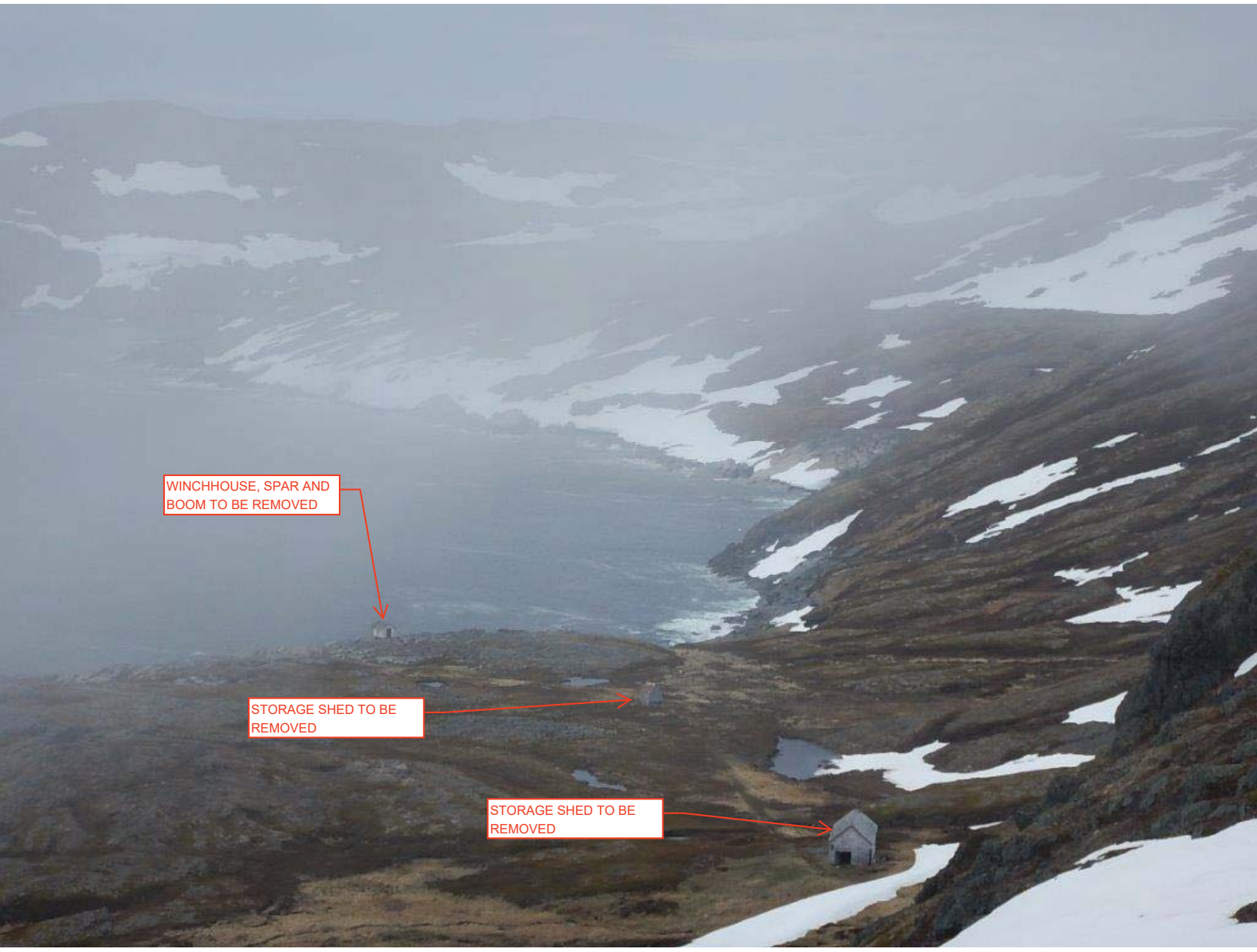

DWELLING TO BE
REMOVED


STORAGE SHED TO BE REMOVED


STORAGE SHED TO BE REMOVED

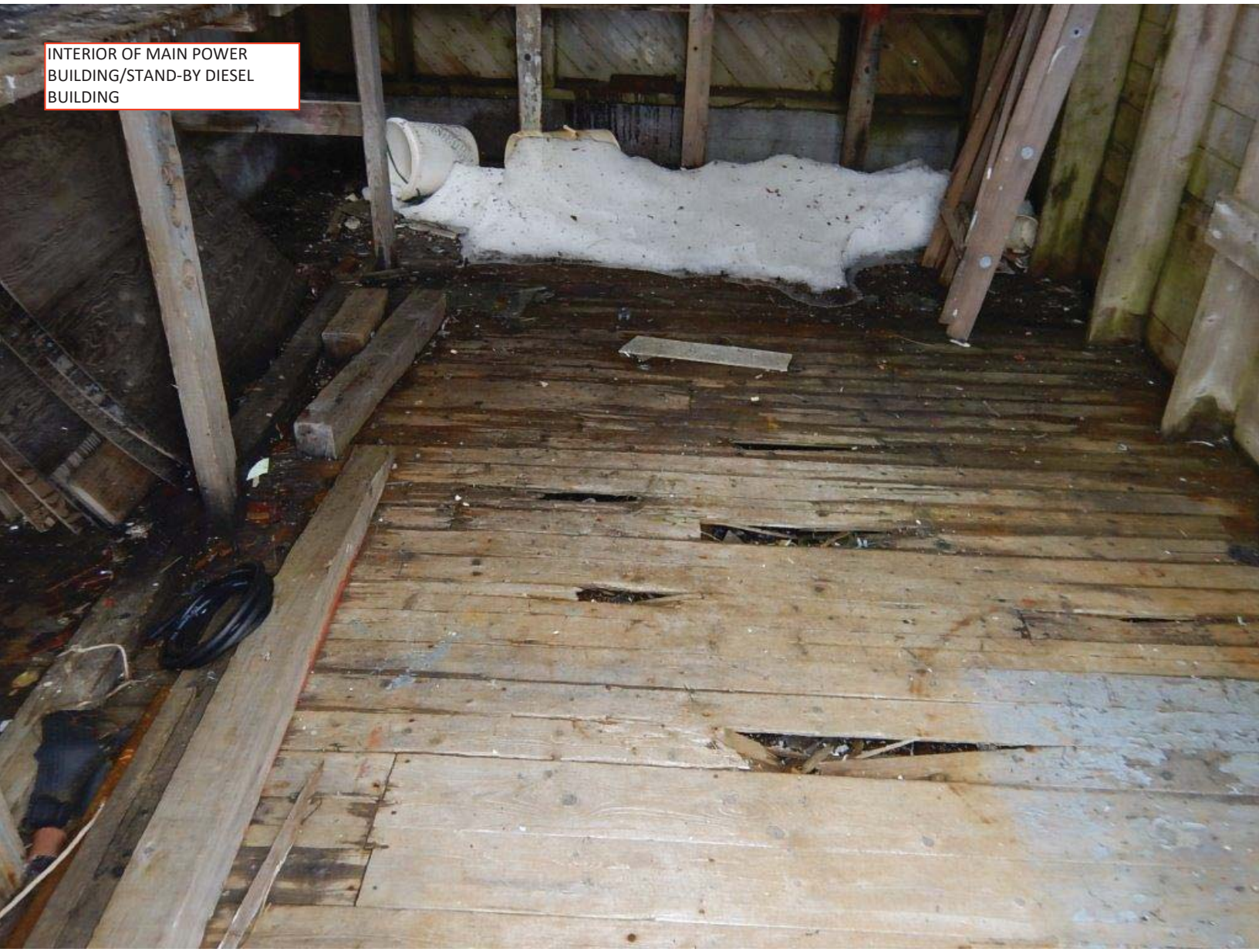
INTERIOR OF STORAGE SHED

INTERIOR OF STORAGE SHED


WINCHHOUSE, SPAR AND BOOM TO BE REMOVED
STORAGE SHED TO BE REMOVED
STORAGE SHED TO BE REMOVED


STAND-BY DIESEL
BUILDING AND MAIN
POWER BUILDING TO BE
REMOVED

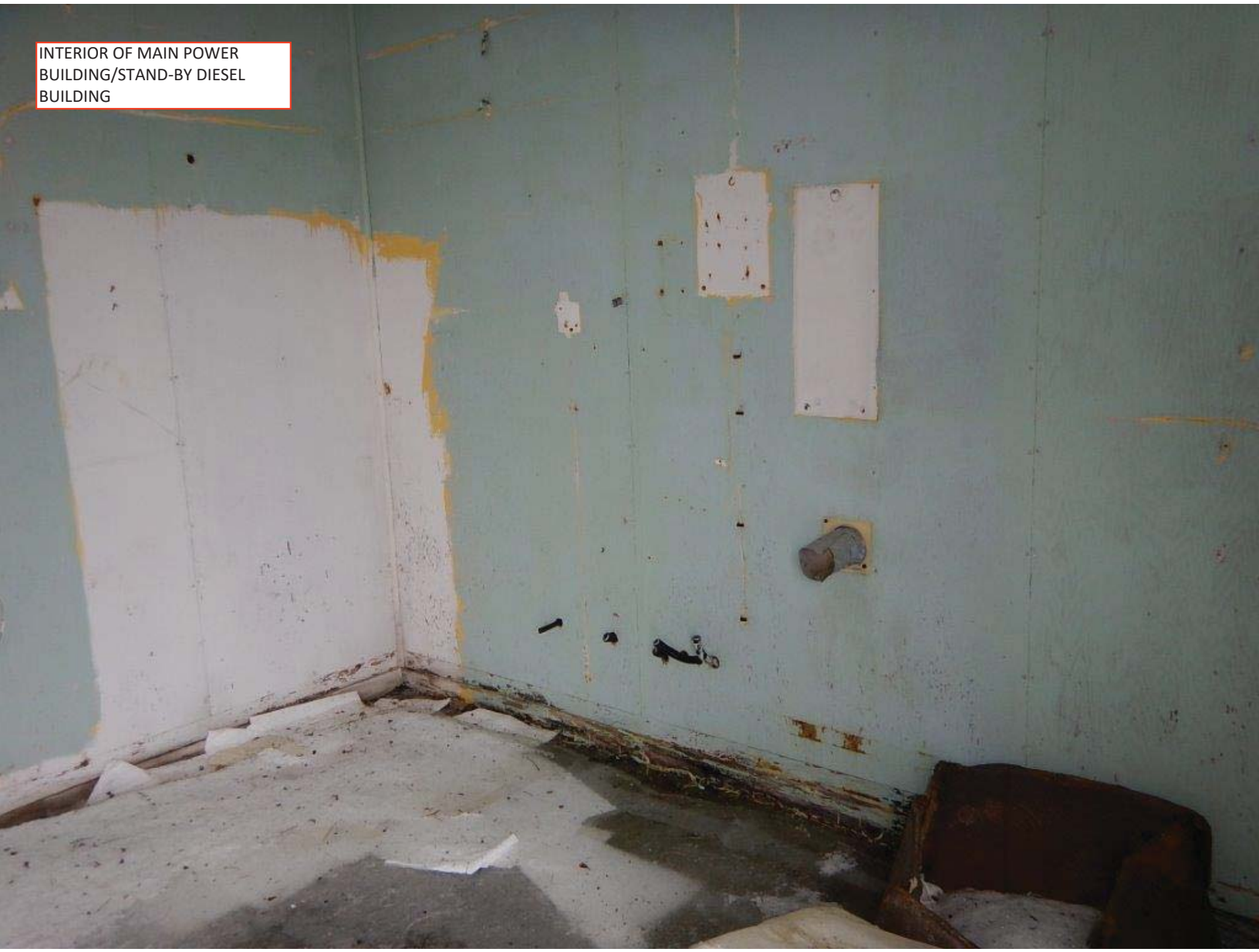

STAND-BY DIESEL BUILDING AND MAIN POWER BUILDING TO BE REMOVED



INTERIOR OF MAIN POWER BUILDING/STAND-BY DIESEL BUILDING

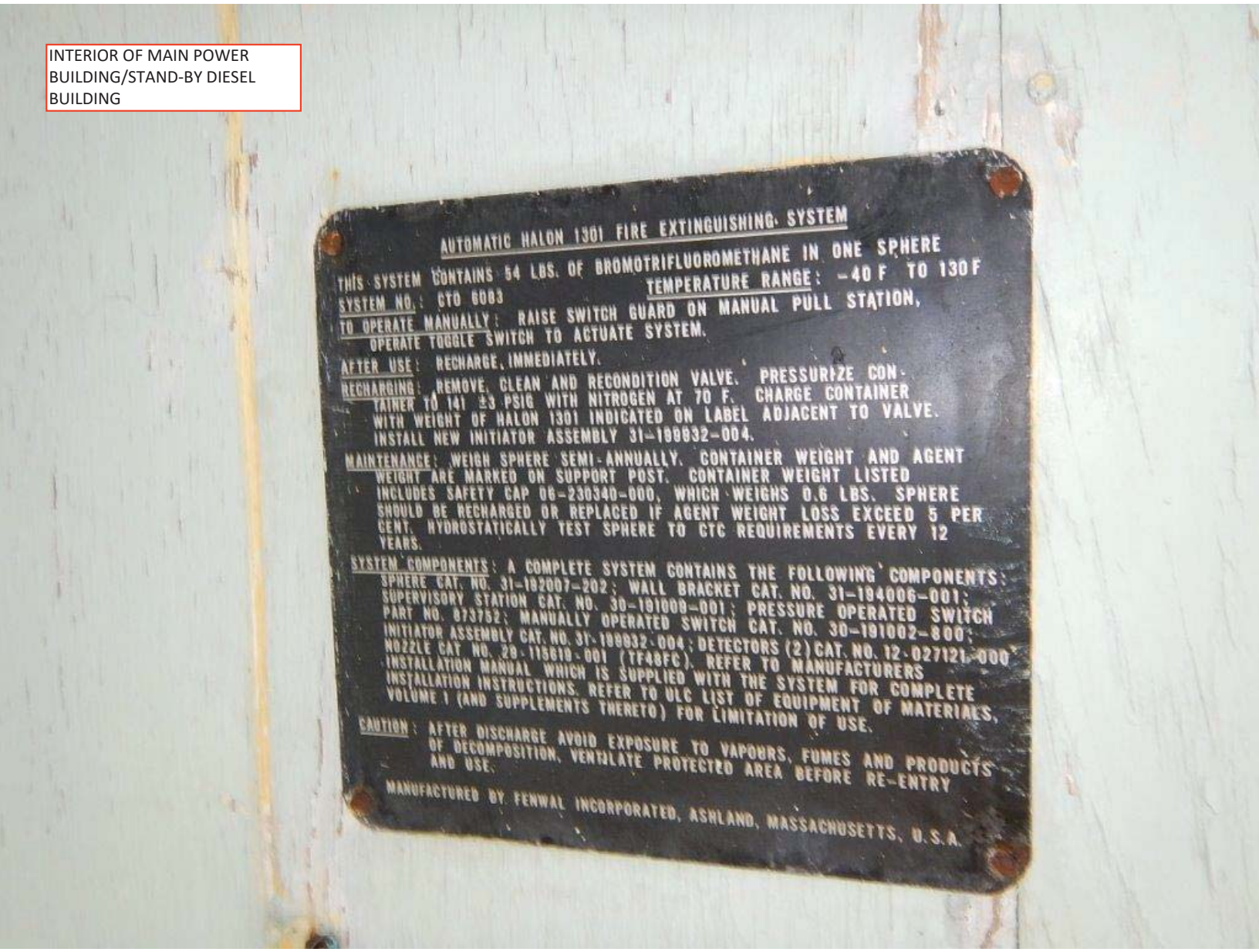
INTERIOR OF MAIN POWER BUILDING/STAND-BY DIESEL BUILDING

INTERIOR OF MAIN POWER BUILDING/STAND-BY DIESEL BUILDING



INTERIOR OF MAIN POWER BUILDING/STAND-BY DIESEL BUILDING

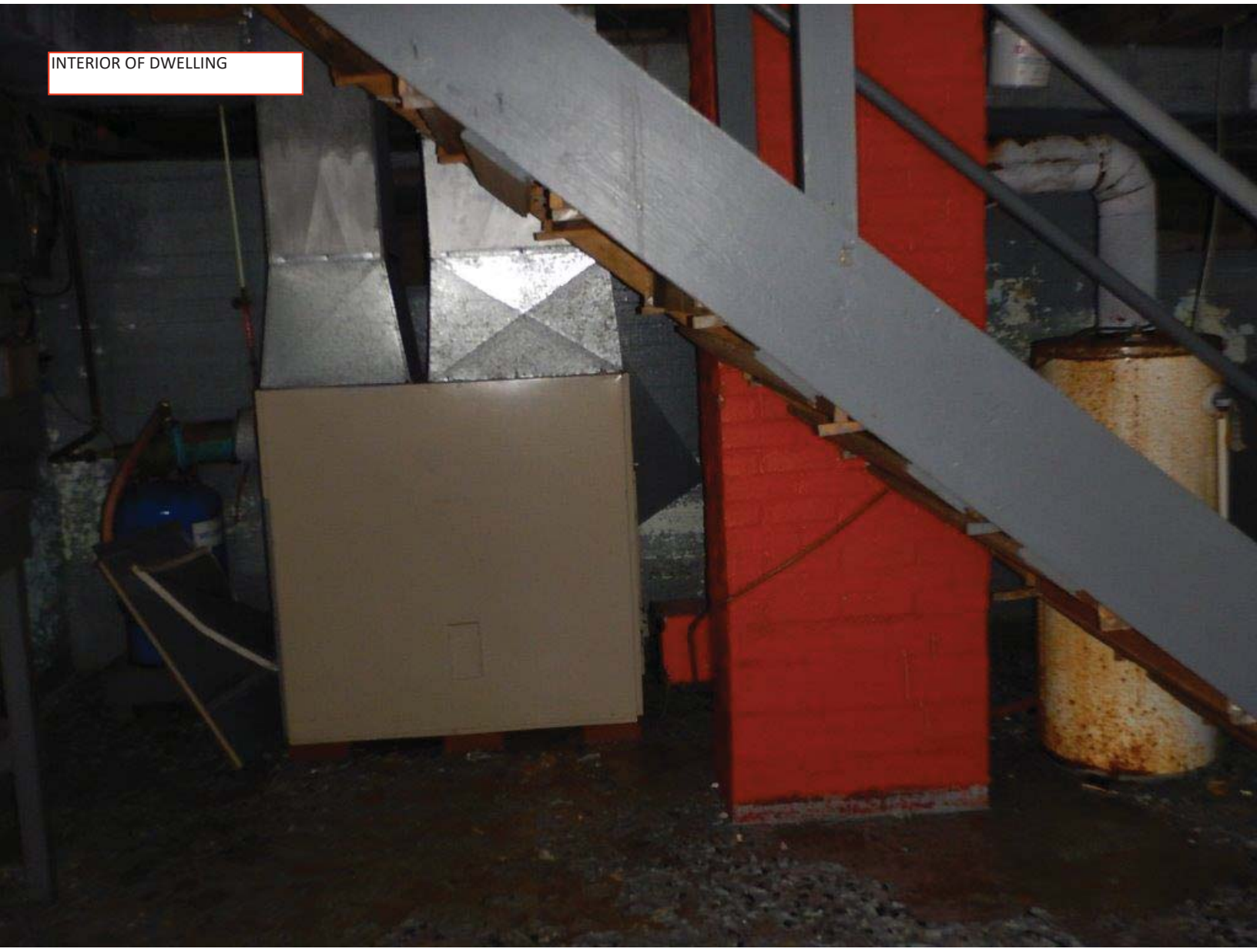
INTERIOR OF MAIN POWER BUILDING/STAND-BY DIESEL BUILDING




DWELLING TO BE
REMOVED


INTERIOR OF DWELLING


INTERIOR OF DWELLING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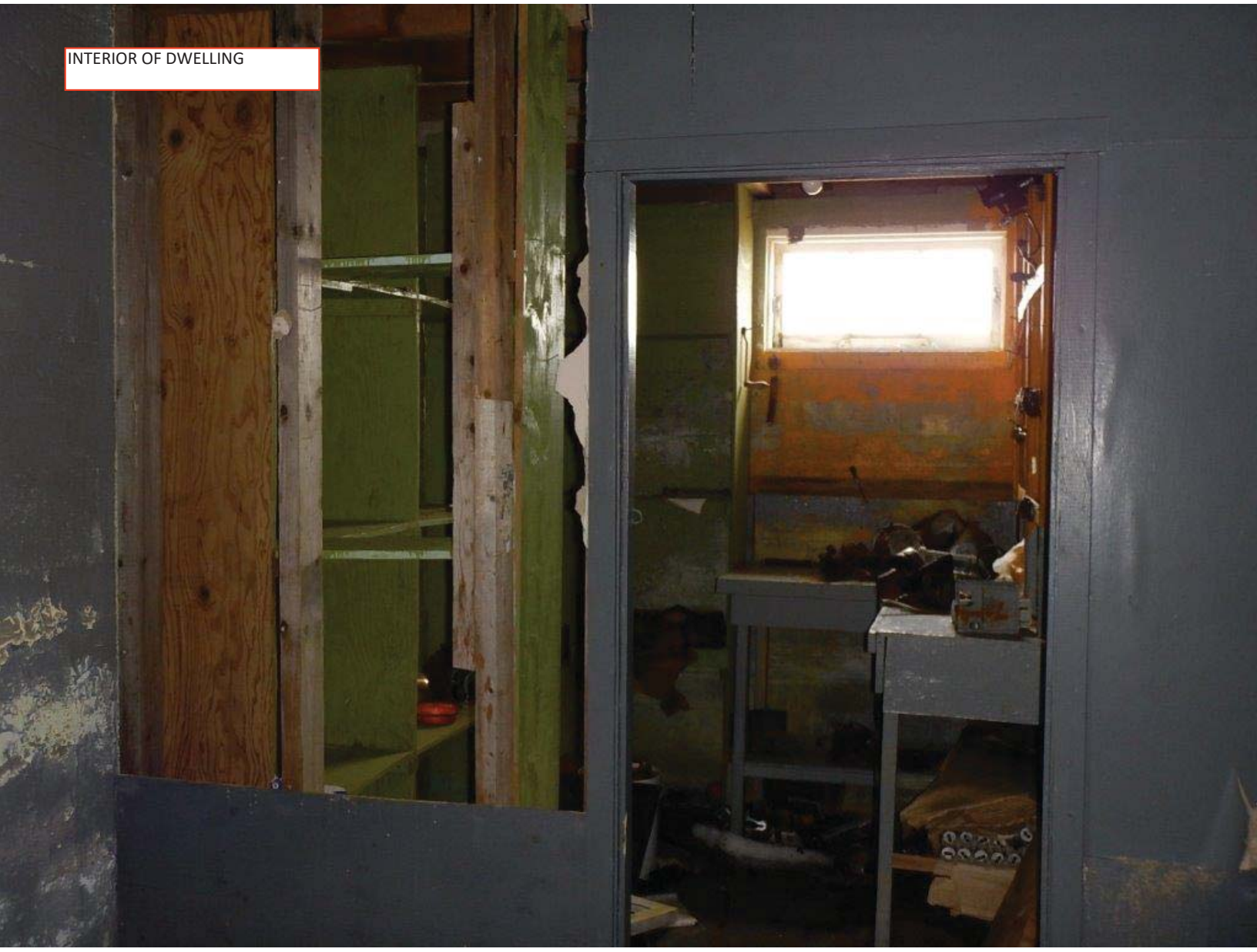
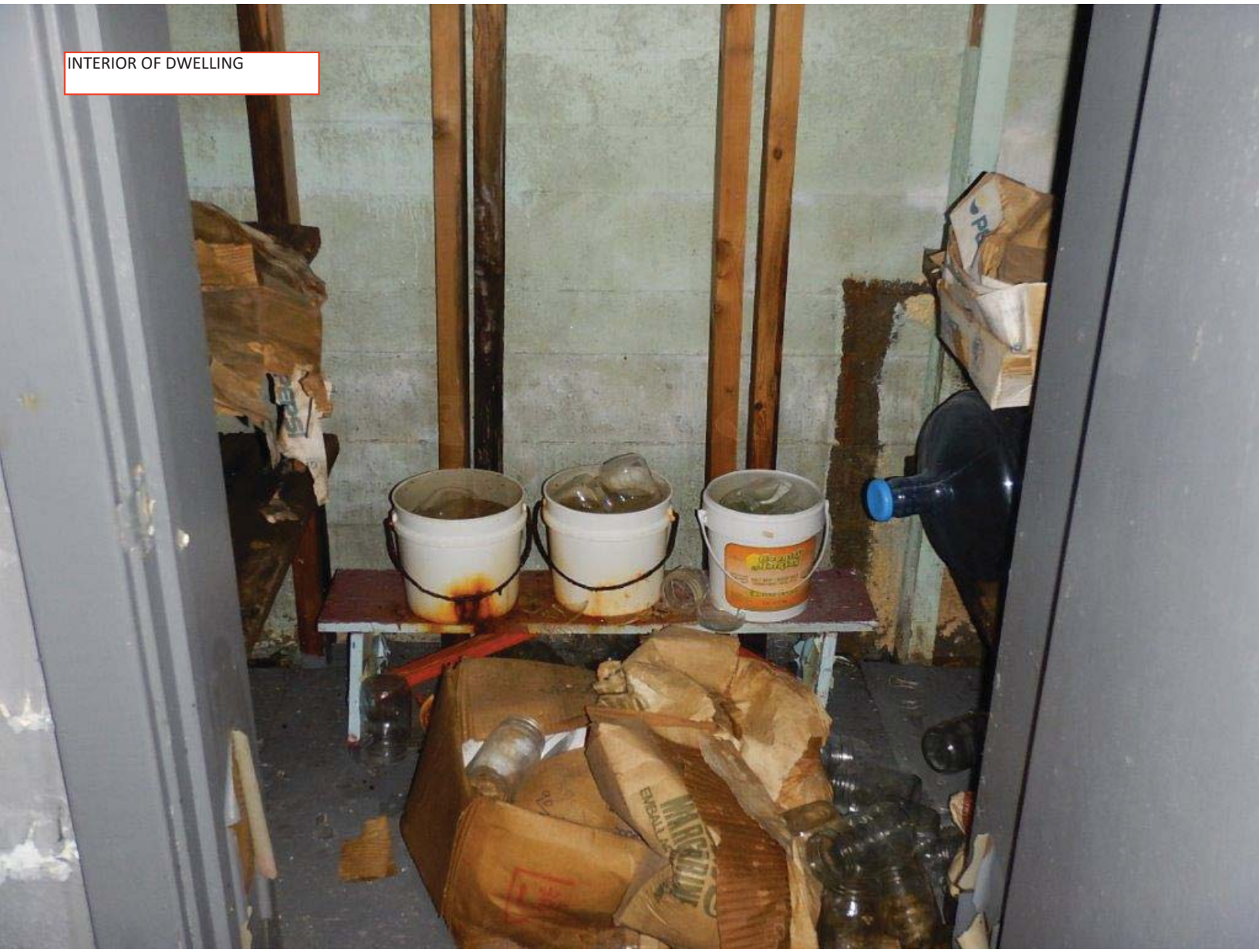

INTERIOR OF DWELLING


INTERIOR OF DWELLING
John Wood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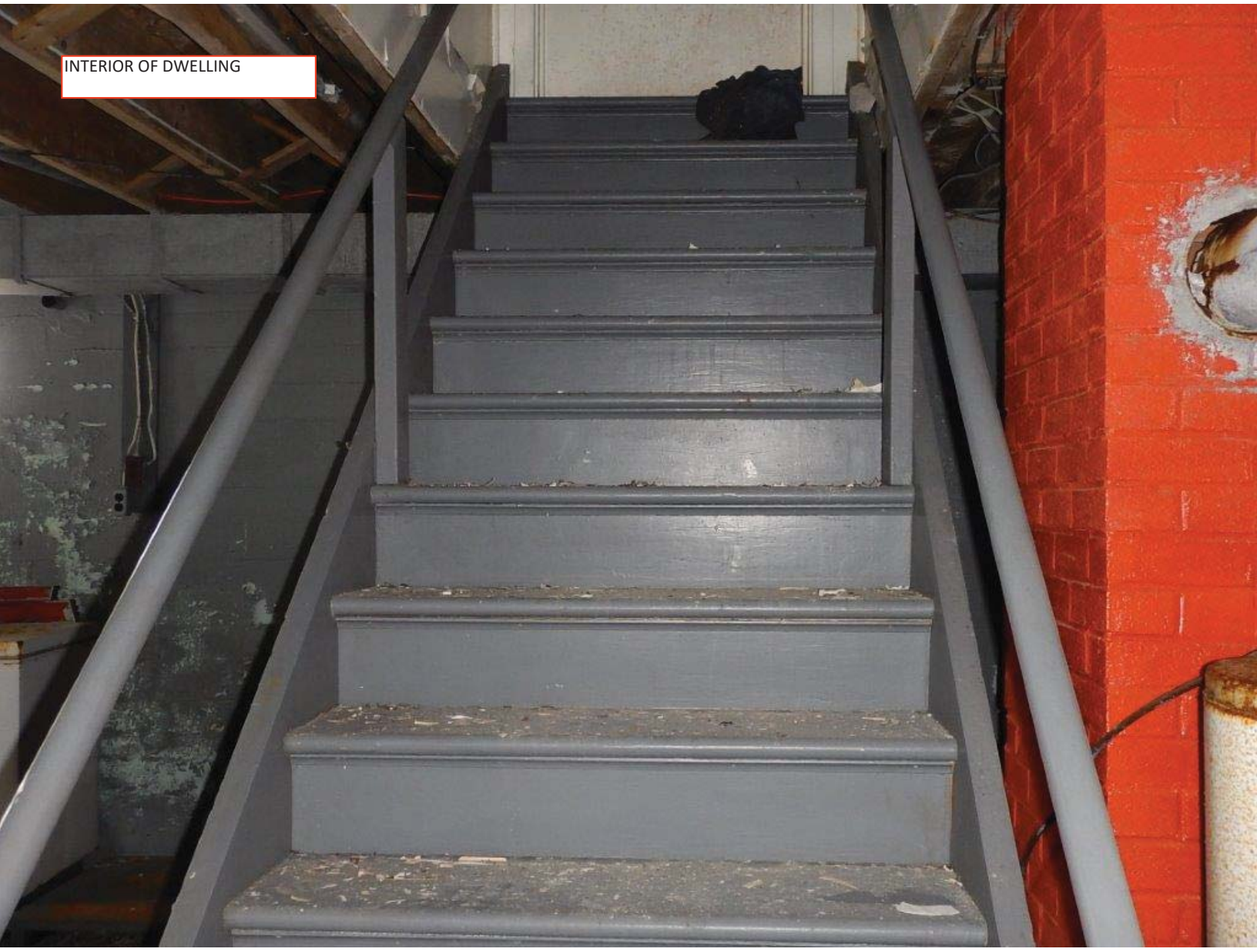
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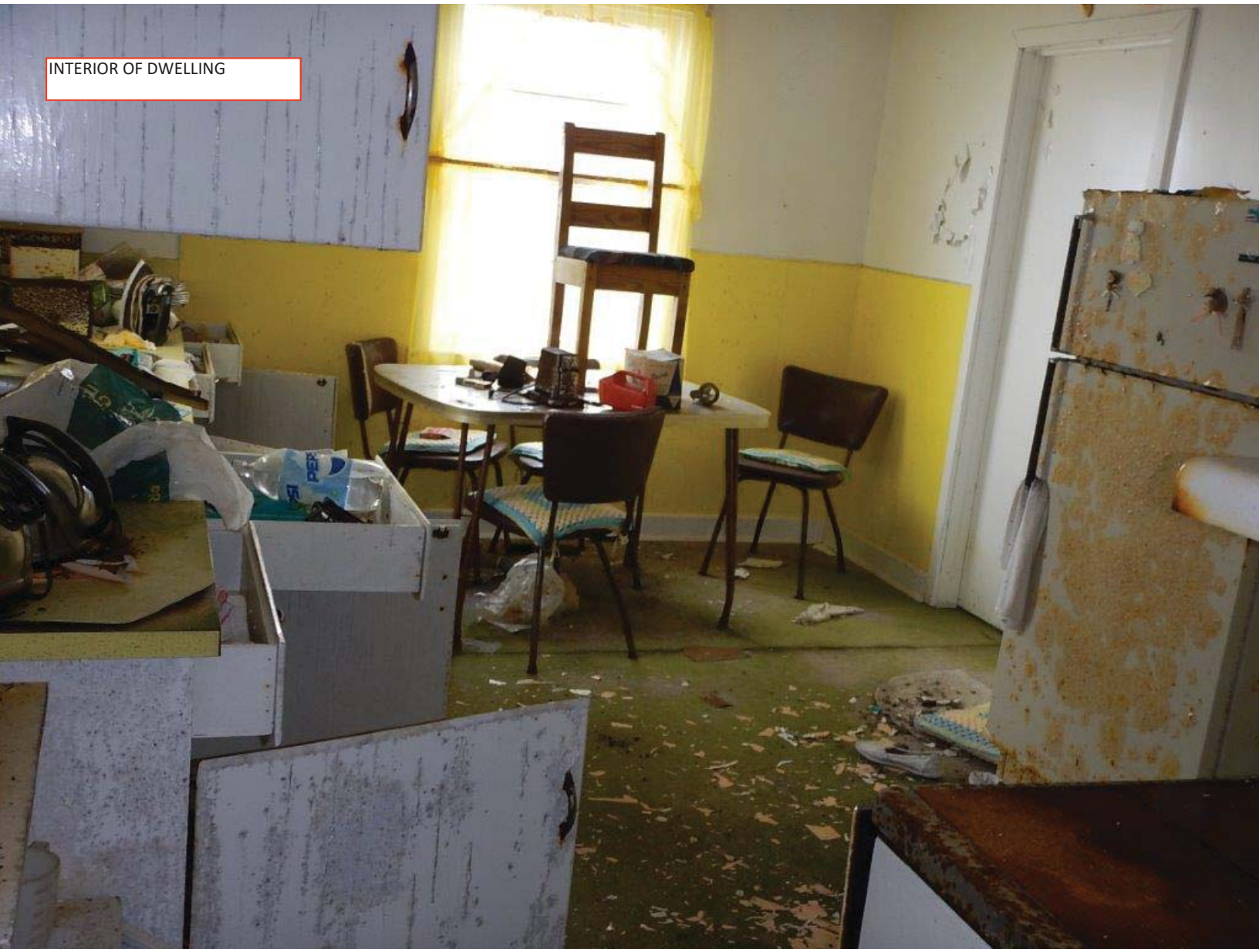
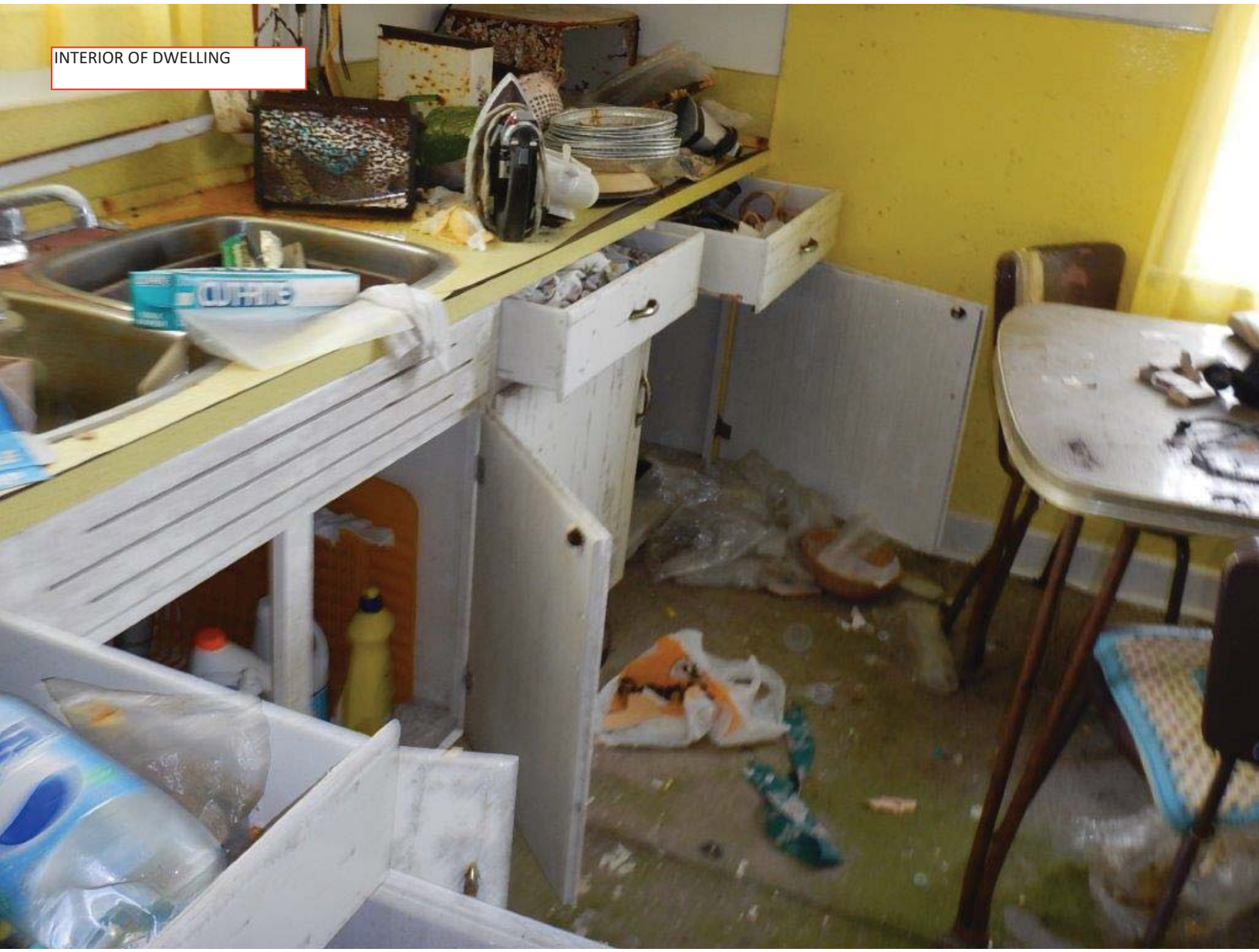
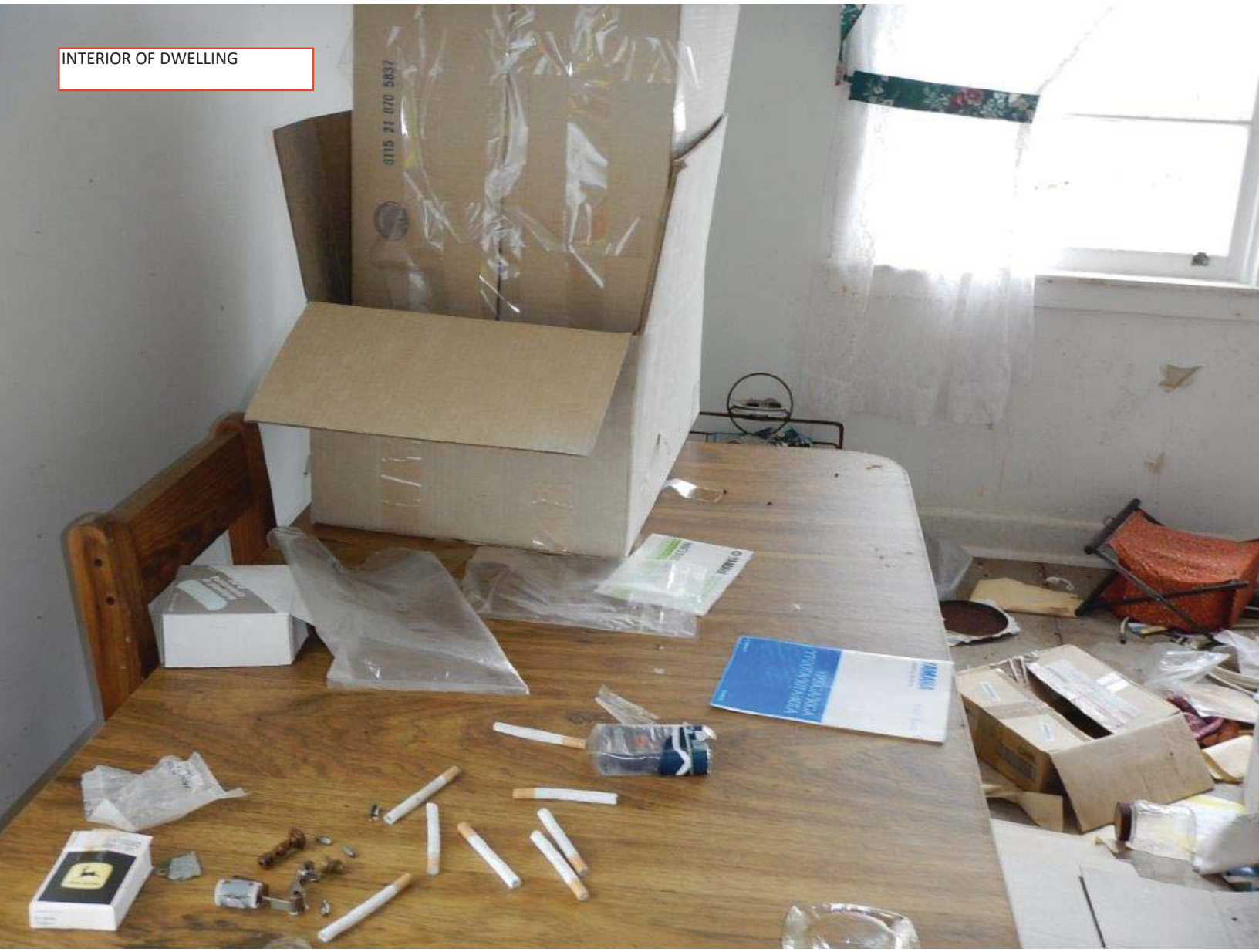

INTERIOR OF DWELLING


INTERIOR OF DWELLING
White


INTERIOR OF DWELLING
KEEP FROZEN

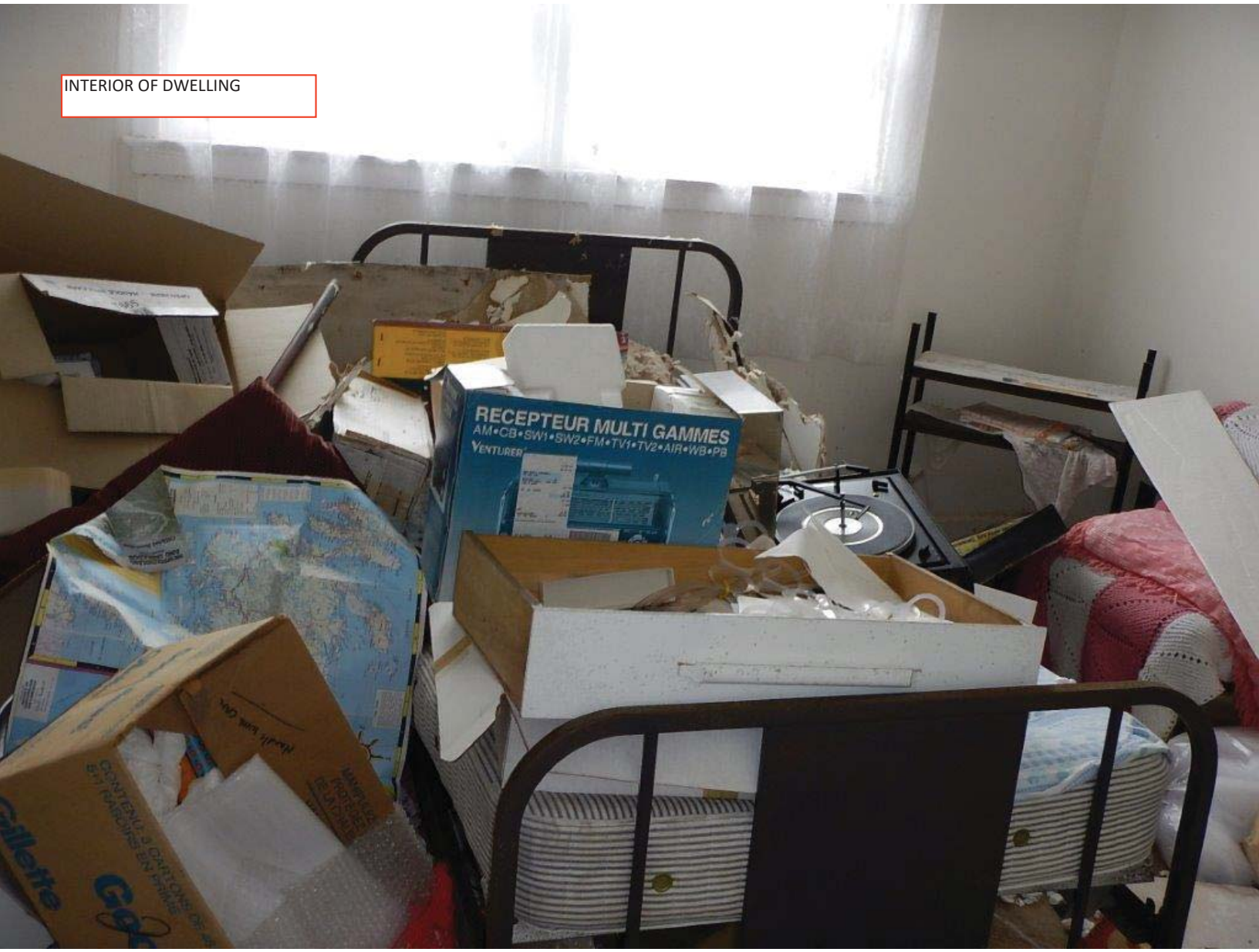
INTERIOR OF DWELLING

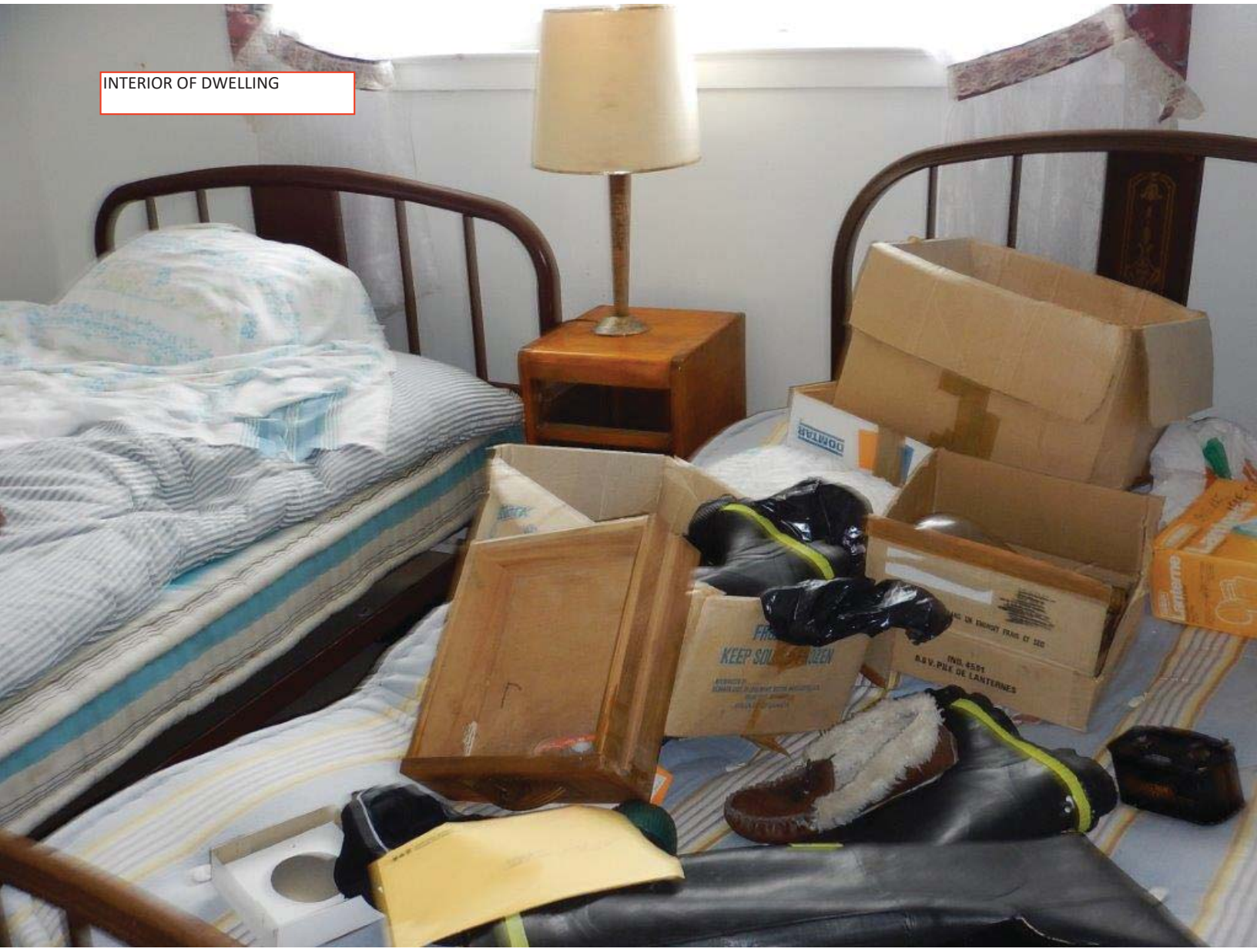



INTERIOR OF DWELLING


INTERIOR OF DWELLING

INTERIOR OF DWELLING




INTERIOR OF DWELLING

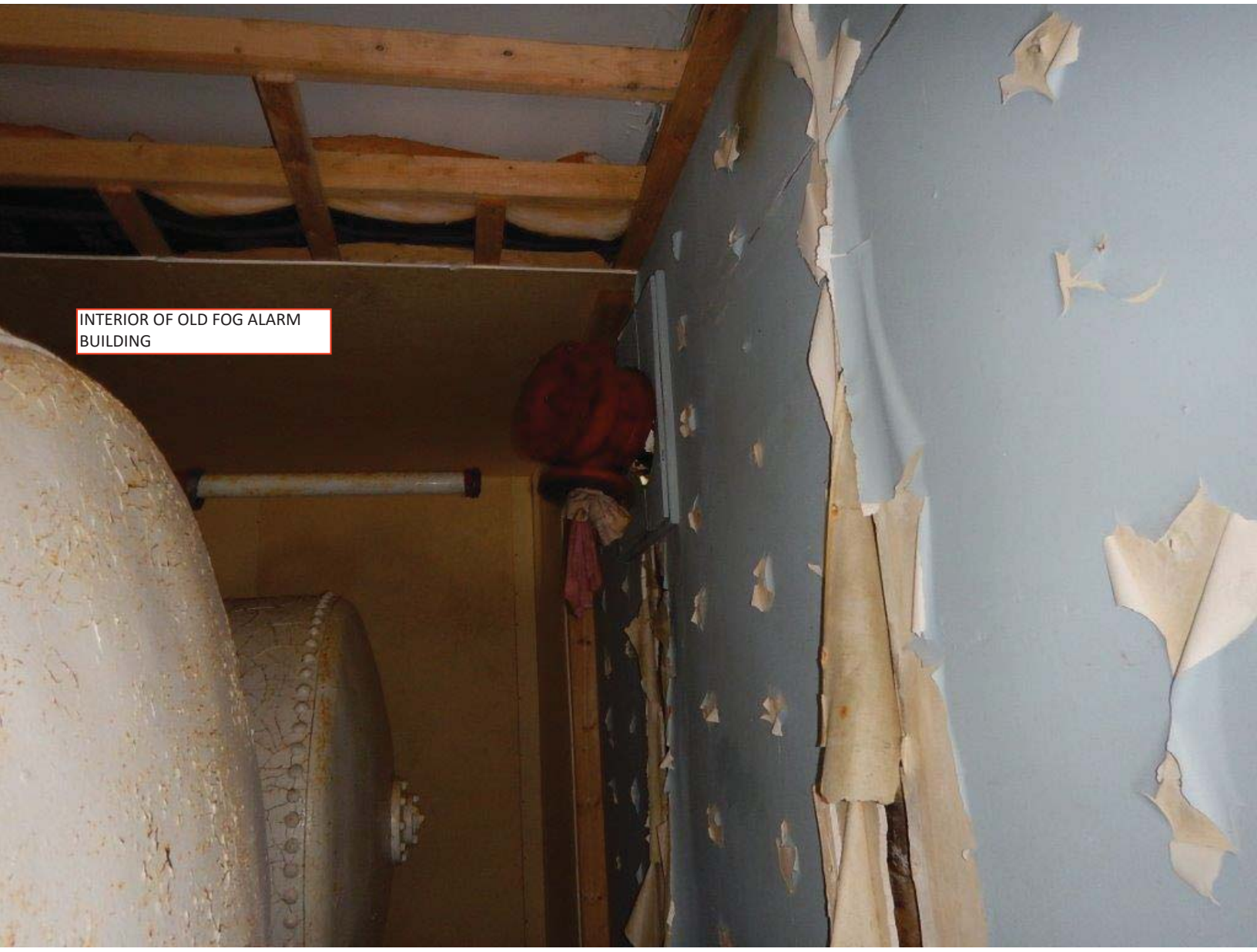

OLD FOG ALARM
BUILDING TO BE
REMOVED

INTERIOR OF OLD FOG ALARM BUILDING


INTERIOR OF OLD FOG ALARM BUILDING

INTERIOR OF OLD FOG ALARM BUILDING


INTERIOR OF OLD FOG ALARM BUILDING



INTERIOR OF OLD FOG ALARM BUILDING


WINCH HOUSE, BOOM AND SPAR TO BE REMOVED


STORAGE SHED AND
POWERHOUSE TO BE
REMOVED


STORAGE SHED TO BE
REMOVED