

Addendum No.1

Date: September 29, 2021

Description: F521A-210346/A CCG Base Buoy Maintenance Building HVAC

General Inquiries/Clarifications:

Question No 1: Looking for clarity on the timeline for this project. The spec states that substantial completion should be within 90 days of Award of contract date but it also states that all work is to be completed and commissioned by October 31st. Please provide more specific info on timeline of this project

Answer: The completion date for the project will be March 31, 2022.

Question No 2: There is no mechanical equipment schedule attached that breaks down responsibilities of mechanical and electrical sub trades. In Example: Who is expected to provide VSD's, transfer switches, motor starters and disconnects? Will this be something that is provided along with drawings?

Answer: Please refer to specification section 01 11 00 Scope of Work, which describes the scope of work for both mechanical and electrical separately. In regard to disconnect switches, where disconnect switches are factory installed with the mechanical equipment, these will be part of the mechanical supply. All electrical connections, wiring, conduit, panels, breakers, transformers, safety switches etc. shall be electrical as per scope of work provided. VSD's are expected to be supplied by mechanical, in coordination with electrical. Electrical connections by electrical

Question No 3: New drawing note #5 on ME-2 states prime/paint steel support/protection cage for the storage tank, the expansion tank and they glycol mixing tank. Is there detail for this ?

Answer: No detail is available. Contractor to submit proposed support frame / protection cage as part of shop drawing submittals

Question No 4: Drawing note #1 on ME-3 states existing structural steel to be re-painted and evaluated by structural engineer with respect to new AHU. Will this structural engineer cost be by client ?

Answer: New unit is equal to existing unit capacity and configuration, but with a smaller footprint. The unit weight is 2400kg which is equal or less than existing unit weight. No existing roof structure and upstand modification is required as part of the mechanical contractors scope. However, the existing I-beam support frame shall be modified as design-build to suit the new unit footprint and weight. Structural engineer shall be retained by

mechanical contractor as part of the project to review and design the required modifications of the existing I-beam support frame. Mechanical Contractors' Structural engineer shall provide a schedules B and C-B for this structural engineering work. The modified I-beam support frame shall also be seismically restrained and signed off by the mechanical contractors seismic engineer as per specifications

Question No 5: Drawing note #2 on ME-3 states provide primed and painted support platform for HP-100 and HP-200. Is there detail for this ?

Answer: No detail is available. Contractor to submit recommended method of installation with proposed structural steel support, mounted to existing roof curb details, sizes and location of mounting bolt holes as part of shop drawing submittals as per specifications. The new support frame shall be provided as design-build to suit the new equipment set up. Structural engineer shall be retained by mechanical contractor as part of the project. The equipment support frame shall also be seismically restrained and signed off by the mechanical contractors seismic engineer as per specifications

Question No 6: Drawing note #4 on ME-3 states provide primed and painted support platform/rails as required for HP-HW to spread the weight of unit over 75% of the existing roof curbs. Is there detail for this ?

Answer: No detail is available. Contractor to submit recommended method of installation with proposed structural steel support, mounted to existing roof curb details, sizes and location of mounting bolt holes as part of shop drawing submittals as per specifications. The new support frame shall be provided as design-build to suit the new equipment set up. Structural engineer shall be retained by mechanical contractor as part of the project. The equipment support frame shall also be seismically restrained and signed off by the mechanical contractors seismic engineer as per specifications

Question No 7: Drawing note #5 on ME-3 states provide primed and painted support platform/rails as required to mount the unit on the existing roof curbs. Is there detail for this ?

Answer: No detail is available. Contractor to submit recommended method of installation with proposed structural steel support, mounted to existing roof curb details, sizes and location of mounting bolt holes as part of shop drawing submittals as per specifications. The new support frame shall be provided as design-build to suit the new equipment set up. Structural engineer shall be retained by mechanical contractor as part of the project. The equipment support frame shall also be seismically restrained and signed off by the mechanical contractors seismic engineer as per specifications

Question No 8: Is there detail for welded, prime and painted steel support stands for VSD's and line filters? Spec 01 11 00: Part 1.1.3.25

Answer: No detail is available. Contractor to submit recommended method of installation with proposed structural steel support stands, mounting details, sizes and location of mounting

bolt holes as part of shop drawing submittals as per specifications. The new support frame shall be provided as design-build to suit the new VSD's set up. Structural engineer shall be retained by mechanical contractor as part of the project. The equipment support frame shall also be seismically restrained and signed off by the mechanical contractors seismic engineer as per specifications

Question No 9: There is hazardous materials section in specification 02 81 01. Is there building material assessment report or project specific hazmat report?

Answer: Please see attached reports titled "00 181-06946-00 DFO Bulk ACM Buoy Mnt Bld Report_Final.pdf"

End of Addendum No.1

**BULK MATERIAL SAMPLING AND ANALYSIS
FOR ASBESTOS, BUOY MAINTENANCE
BUILDING, CCG BASE VICTORIA, BC.**

FISHERIES AND OCEANS CANADA
PROJECT NO. 181-06946-00
MAY 2018



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- V Standard Limitations**

May 22, 2018

Real Property, Safety & Security,
Fisheries and Oceans Canada
9860 West Saanich Road
Sidney, BC, V8L 4B2

Attention: Linda Barley
Steve Brame

via email: Linda.Barley@df-mpo.gc.ca
Steve.Brame@df-mpo.gc.ca

Project: Bulk Material Sampling and Analysis for Asbestos, Buoy Maintenance Building,
Canadian Coast Guard Base, 25 Huron Street, Victoria, BC.

1 INTRODUCTION

WSP Canada Inc. (WSP) was retained by Fisheries and Oceans Canada (client) for Asbestos Consulting Services associated with conducting a site review, bulk sampling and analysis for asbestos within the Buoy Maintenance Building at the Canadian Coast Guard Base, 25 Huron Street, Victoria, BC (refer to attached *Figure 1 - Site Location Plan, Figure 2 - Subject Building Area Plan, and Figure 3 - Sample Location Plan* in Appendix I).

WSP understands that a site review, bulk sampling and analysis for asbestos is required by Fisheries and Oceans Canada for due diligence and regulatory compliance purposes as per WorkSafeBC (WSBC) Occupational Health and Safety Regulation (OHSR) and the Federal Asbestos Regulations.

For the purpose of this report, although employees working on the site are governed by Federal Occupational Health and Safety regulations, all local contractors performing work on the site are governed by the WSBC OHSR, and hence the scope of work will be consistent with the requirements of the WSBC OHSR, which are more explicit than the federal regulations.

As of February 1, 2012, the definition of asbestos-containing material (ACM) within British Columbia for manufactured articles or other material, other than vermiculite insulation, includes materials that contain at least 0.5% asbestos, as determined by methods referenced in WorkSafeBC OHS Regulation section 6.1. Vermiculite insulation containing any asbestos, as determined by the referenced method, is also an ACM.

Section 20.112 of the BC Occupational Health and Safety Regulation requires that an asbestos building materials survey should be conducted by a qualified person prior to any demolition or renovation activity which might disturb asbestos materials.

2 OBJECTIVE

The Buoy Maintenance Building is anticipated to have been originally constructed in 1998-99. Based on the estimated late 20th century period construction, common asbestos containing construction materials are not anticipated to be present on site. However, limited specific materials may be present at the site.

The objective of the asbestos consulting service was to establish the presence / absence, location and type of asbestos building materials utilized in the construction of the facility by means of a site review including interpretive reconnaissance, sample collection and subsequent laboratory analysis.

Sampling and analysis was for due diligence purposes and as required for regulatory compliance purposes as per WorkSafeBC Occupational Health and Safety (OHS) Regulation. Bulk Material Sampling and Analysis for Asbestos was also undertaken to comply with the Canadian Occupational Health and Safety Regulations and Canada Labour Code, Part II, which applies to all areas under federal jurisdiction, and stipulates the requirements for protection of employees.

The site review, bulk sampling and analysis for asbestos was undertaken within the subject area interior main floor single storey northeast portion of the Buoy Maintenance Building as described below.

3 SITE DESCRIPTION AND LIMITATIONS

The site review, bulk sampling and analysis for asbestos was undertaken within the subject area interior main floor single storey northeast portion of the Buoy Maintenance Building.

On May 14, 2018, WSP observed the Subject Area interior main floor single storey northeast portion of the Buoy Maintenance Building is approximately 285 m² (3,070 sq. ft.) in area and comprised of a locker room, washrooms, laundry closet, workshop, storage room, corridors, and offices.

The subject area of the Buoy Maintenance Building has typical late 20th Century building material finishes (i.e., vinyl sheet flooring, ceramic floor and wall tiles, painted drywall walls and fixed ceilings, suspended ceilings, and ceiling plenums with utilities, etc.).

This report documents the on-site review, bulk sampling and analysis for asbestos that was undertaken within the subject area interior main floor single storey northeast portion of the Buoy Maintenance Building completed by WSP on May 14, 2018.

4 SCOPE OF WORK

To achieve the objective of this investigation, WSP completed the following scope of work:

4.1 BULK MATERIAL SAMPLING AND ANALYSIS FOR ASBESTOS

- Review of available site plans.
- Collect representative building materials potentially containing asbestos. Material samples were labelled to include the BMB (Buoy Maintenance Building) within the identification numbering. The sampling methodology and number of samples collected were undertaken in accordance with the appropriate WorkSafeBC Guidelines. Fourteen (14) samples of suspect materials were collected with a total of twenty (20) material layers analyzed for potential asbestos.
- The samples were sent to an accredited laboratory, AREC Environmental Group, for rush 24hr turn-around analysis of bulk samples for asbestos using polarized light microscopy (PLM) NIOSH Method 9002.
- Photographs were taken of the materials sampled as well as the general area to give context.
- Preparation of this report summarizing the specific asbestos-containing materials identified through review and analysis. The report includes photographs of the determined significant asbestos materials identified.

For the purpose of this report, the scope of work was principally non-destructive in nature and limited to suspect potential asbestos materials as readily accessible from within subject area.

5 METHODOLOGY

For confirmation purposes, bulk sampling for suspect asbestos-containing materials was deemed prudent. Review was based on experienced professional judgment in consideration of, but not necessarily limited to, the era of construction, and uniformity of materials and size of area of homogeneous materials.

On May 14, 2018, Mr. Gordon Philippe, B. Tech., Environmental Technologist of WSP completed the suspect building materials review for potential asbestos content according to the following protocol. The building materials review and bulk material sample collection for analysis of potential asbestos was consistent with recognized industry standards and principles of good occupational hygiene practice for 20th century period construction/alteration in North America.

Visual review was conducted for assessable suspect asbestos building materials within the subject area interior main floor single storey northeast portion of the Buoy Maintenance Building.

Photographs of the assessable suspect asbestos building materials are presented in Appendix II.

The collected bulk material samples were submitted for analysis following the EPA 600/R-93/116 method. The completed Chain-of-Custody (COC) forms and the Laboratory Reports of analytical results are presented in Appendix III.

As it is neither practical nor feasible to sample materials on a foot by foot basis, visually similar materials' analysis results will be extrapolated throughout the two rooms and / or based on estimated phases of construction, where that information was made available.

For the purposes of this report, ACM means any manufactured article or other material, other than vermiculite insulation, which is assumed to be ACM, that would be determined to contain at least 0.5% asbestos if tested in accordance with one of the methods specified in the Occupational Health and Safety (OHS) Regulation [Enacted by B.C. Reg. 188/2011, effective February 1, 2012.].

Conclusions presented in this report have been extrapolated from sample results and site conditions.

6 REGULATORY FRAMEWORK

The details of the regulatory frameworks for the site review, bulk sampling and analysis for asbestos as conducted within the Buoy Maintenance Building are presented in Appendix IV.

7 ASBESTOS MATERIALS SAMPLING SURVEY RESULTS

The WSP sampled suspect building materials of interest are presented in the following table along with the Sample ID and the corresponding laboratory results.

Notes: *Italic Red Text indicates that asbestos was detected but was below the WorkSafeBC 0.5% criteria.*

Bold Red Text indicates that asbestos was detected above the WorkSafeBC 0.5% criteria.

Table 1: Suspect Asbestos Analysis Results

Area	Material of Interest	Sample ID	Content/Type
Envir. Crew Workshop and Corridor Vinyl Sheet Flooring Materials	Blue with Grey Specks with Mastic; Blue Variable Shades with Mastic; and Gap Filler.	18A-BMB-01	All Layers None Detected for asbestos
Locker Room Floor & Wall Tiling Materials	3" Ceramic Tile; Edging Grout; and Backing Mortar on Drywall.	18A-BMB-02	All Layers None Detected for asbestos

Area	Material of Interest	Sample ID	Content/Type
Reinforced Glazing Interior Windows in Steel Framing	Black Mastic	18A-BMB-03	None Detected for asbestos
Locker Room Ceiling Plenum Ducting	Grey Duct Mastic	18A-BMB-04	None Detected for asbestos
Locker Room Ceiling Drywall	Drywall Joint Compound (DWJC)	18A-BMB-05	None Detected for asbestos
Laundry Room Wall Drywall	DWJC	18A-BMB-06	None Detected for asbestos
Envir Crew Workshop Wall Drywall	DWJC	18A-BMB-07	None Detected for asbestos
Locker Room Ceiling Drywall	DWJC	18A-BMB-08	None Detected for asbestos
Envir Crew Storage Wall Drywall	DWJC	18A-BMB-09	None Detected for asbestos
General Body Maintenance Wall Drywall Over Entrance to Envir Crew Workshop	DWJC	18A-BMB-10	None Detected for asbestos
General Body Maintenance Wall Drywall Over Entrance to Paint Shop Office	DWJC	18A-BMB-11	None Detected for asbestos
Yard Maintenance Foreman Office Wall Drywall	DWJC	18A-BMB-12	None Detected for asbestos
Vestibule Wall Drywall	DWJC	18A-BMB-13	None Detected for asbestos
Corridor Ceiling	Suspended Ceiling Tile	18A-BMB-14	None Detected for asbestos

According to WorkSafeBC, the definition of an asbestos-containing material is 0.5% by weight.

Based on the representative sampling, corresponding IATL results of 'None Detected' for asbestos content, WorkSafeBC criteria, and site review assessment, the above-noted materials are not considered to be asbestos-containing.

Locations where the samples were collected are shown in *Figure 3 - Sample Location Plan* in Appendix I.

Photographs of the aforementioned sampled materials are presented in Appendix II.

The completed Chain-of-Custody (COCs) forms and the Laboratory Reports of analytical results are presented in Appendix III.

8 RECOMMENDATIONS

Based on the above noted results, WSP recommends the following:

- If during the course of future renovations/modifications a material is uncovered that was not previously identified assume that it is asbestos containing until it has been tested and shown to be none detected for asbestos.
- Develop, maintain and update the asbestos labelling program should specific materials beyond those reviewed as part of the scope of this subject area site review be identified in the future as asbestos-containing (i.e., potential mechanical system gaskets, air handling unit mastics, etc.) to reflect revealed materials or changes to ACMs managed in place, as per WorkSafeBC occupational health and safety regulation, Section 6.5 Identification. All ACMs should be inspected annually for evidence of damage and the inventory updated.
- Retain a copy of this report and provide it to any contractors who may be undertaking renovation work in the building as required by Section 20.112 of the WorkSafeBC regulations.

9 CLOSURE

No site review, bulk sampling and analysis for asbestos can wholly eliminate uncertainty regarding the potential for ACM at the site. Performance of a standardized ACM review protocol is intended to reduce, but not eliminate uncertainty regarding the potential for ACM at the site, given reasonable limits of time and cost.

This report has been prepared by WSP exclusively for Fisheries and Oceans Canada and is intended to provide a summary of the potential asbestos-containing building materials within the subject area interior main floor single storey northeast portion of the Buoy Maintenance Building located at the Canadian Coast Guard Base, 25 Huron Street, Victoria, BC.

Any use which a third party makes of this report, or any reliance on or decisions to be made or actions based on it, are the responsibility of such third parties. WSP accepts no responsibility for damages, if any, suffered by a third party as a result of decisions made or actions based on this report. The standard limitations of this report and terms of reference for hazardous materials and occupational health and safety reports are specified in Appendix V.

Respectfully submitted,

WSP Canada Inc.



Gordon Philippe, B. Tech.
Environmental Technologist



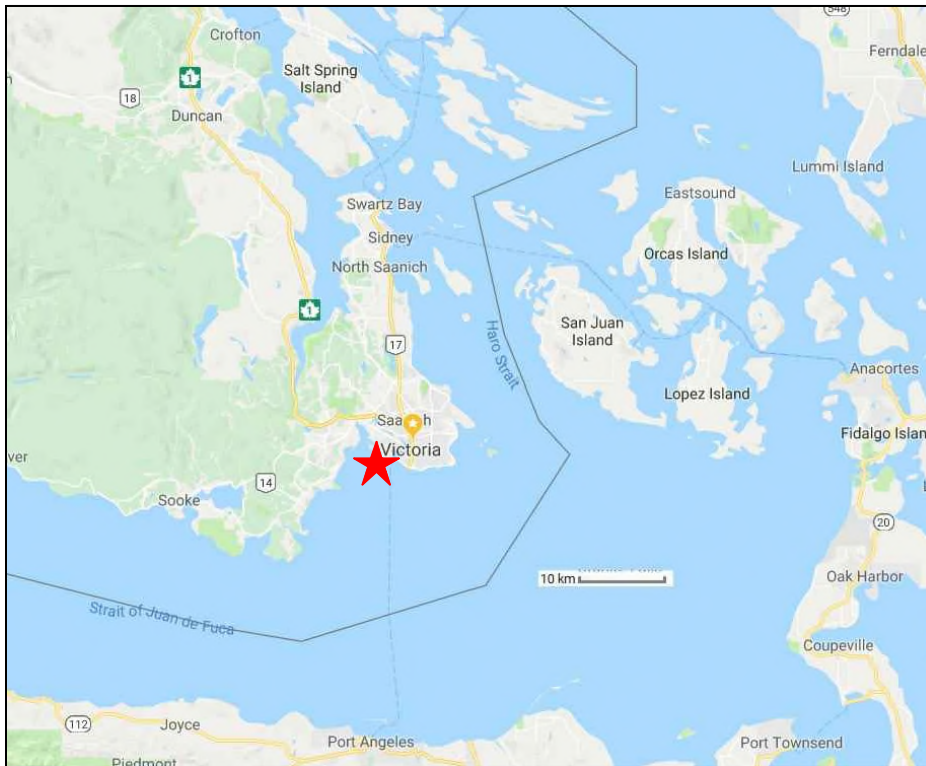
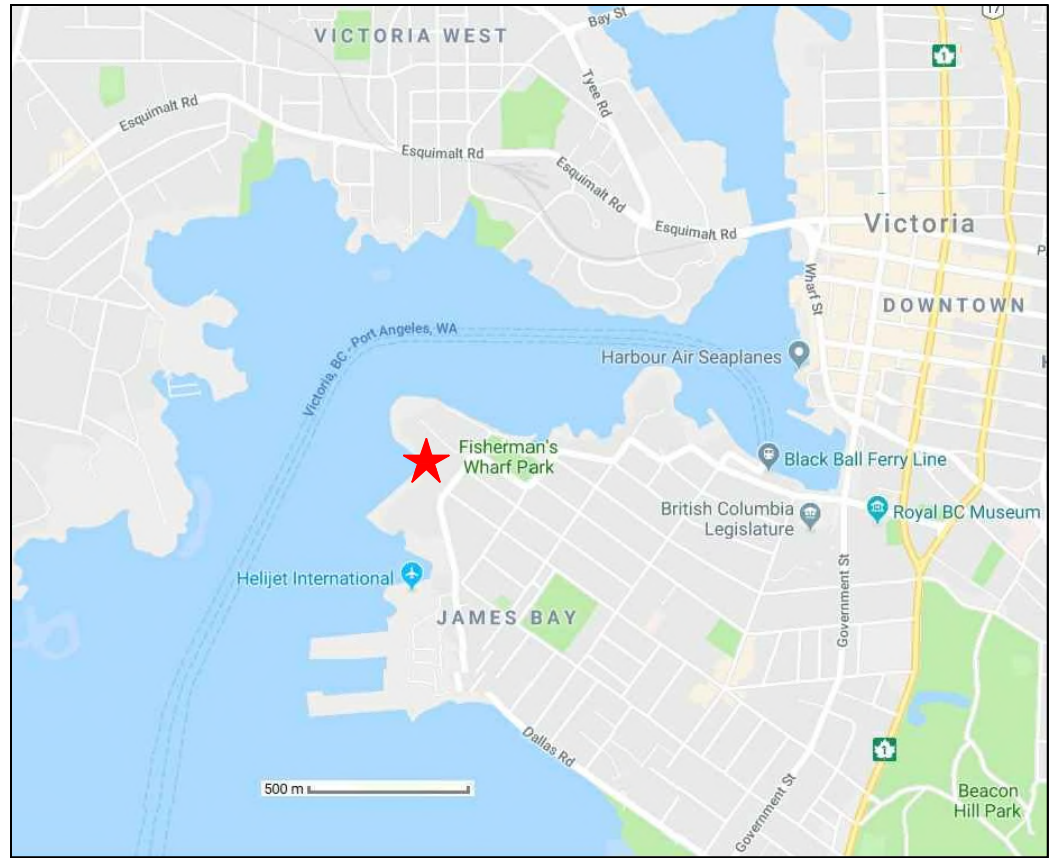
Anthony Dickinson, M.A.Sc., P.Eng.
Senior Environmental Engineer

Appendix I	Figures
Appendix II	Photographs
Appendix III	Chain-of-Custodies and Laboratory Reports
Appendix IV	Regulatory Framework
Appendix V	Standard Limitations


APPENDIX

I

Figures



LEGEND

 – SUBJECT SITE



WSP Canada Inc.
 Victoria, BC V8Z 6R4
 T: 250.475.1000
 F: 250.475.2211
 www.wspgroup.com

TITLE:

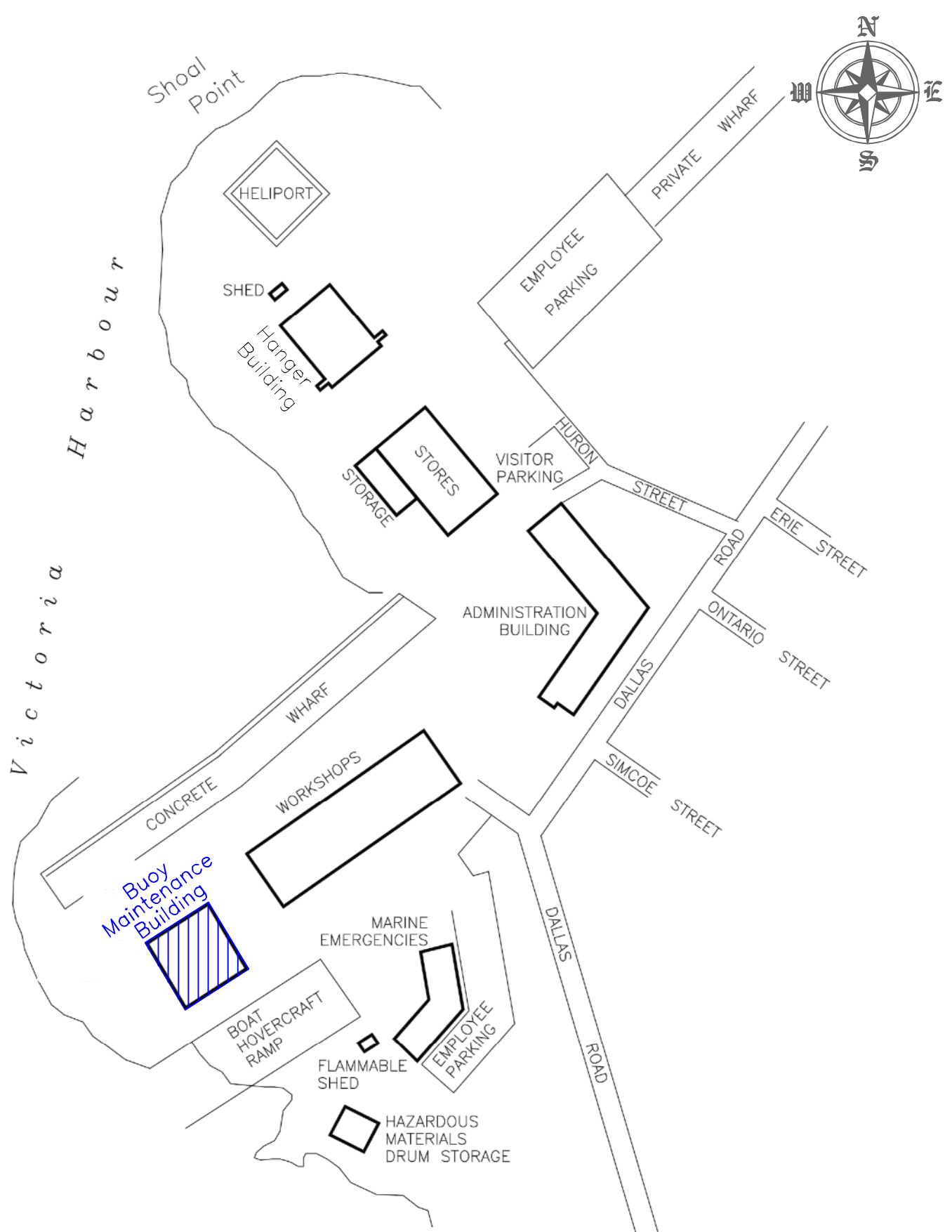
Site Location Plan

PROJECT:

Bulk Material Sampling and Analysis for Asbestos
 Buoy Maintenance Building
 Canadian Coast Guard Base Victoria BC
 Fisheries and Oceans Canada

CLIENT:

DES.	DR.	GP
CH.	SCALE	NTS
APP.	DATE	May 2018
FILE NO.	181-06946-00	
DWG. NO.	FIGURE 1	



WSP Canada Inc.
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 T: 250.475.1000
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 www.wspgroup.com

TITLE:

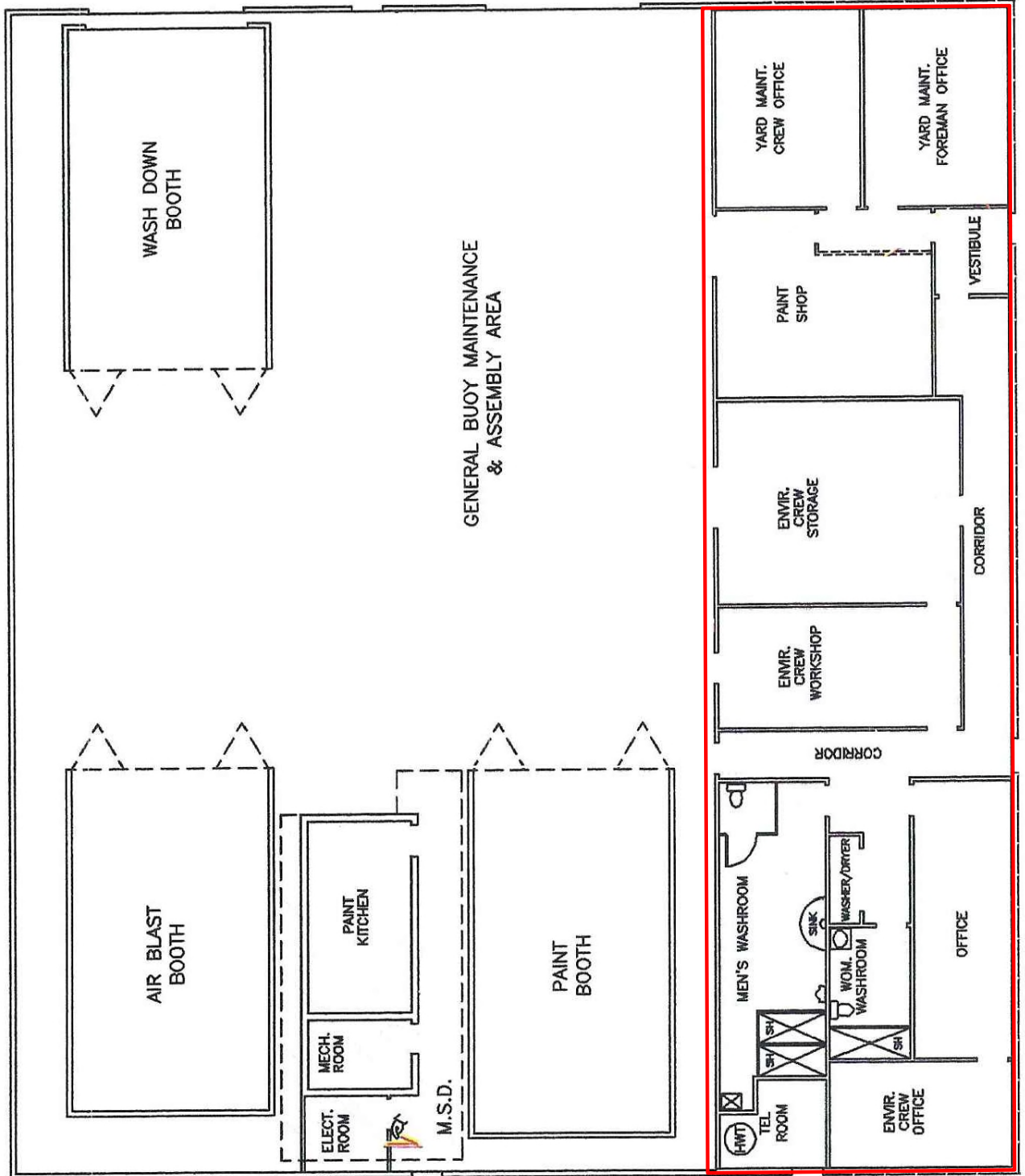
Building Location Plan

PROJECT:

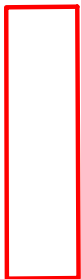
Bulk Material Sampling and Analysis for Asbestos
 Buoy Maintenance Building
 Canadian Coast Guard Base Victoria BC
 Fisheries and Oceans Canada

CLIENT:

DES.	DR.	GP
CH.	SCALE	NTS
APP.	DATE	May 2018
FILE NO.	181-06946-00	
DWG. NO.	FIGURE 2	



LEGEND



SUBJECT BUILDING AREA

For Reference Only

Original Base Drawing Supplied By Fisheries Oceans Canada



WSP Canada Inc.
 Victoria, BC V8Z 6R4
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 F: 250.475.2211
 www.wspgroup.com

TITLE:

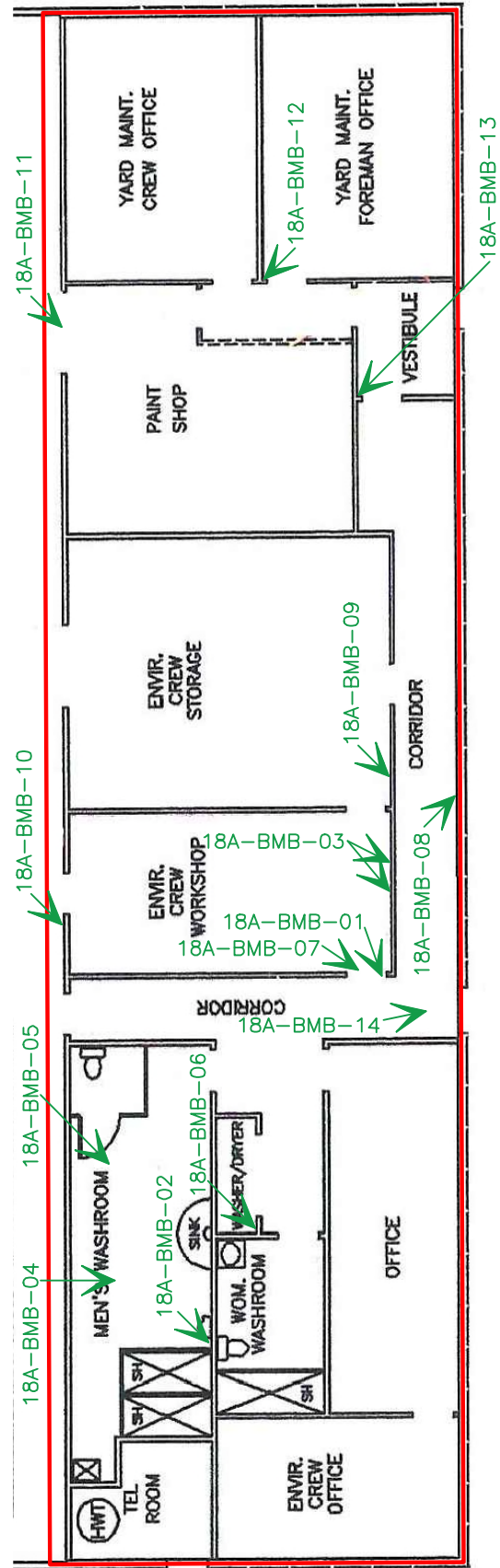
Subject Building Area Plan

PROJECT:

Bulk Material Sampling and Analysis for Asbestos
 Buoy Maintenance Building
 Canadian Coast Guard Base Victoria BC
 Fisheries and Oceans Canada

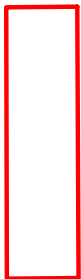
CLIENT:

DES.	DR.	GP
CH.	SCALE	NTS
APP.	DATE	May 2018
FILE NO.	181-06946-00	
DWG. NO.	FIGURE 3	



LEGEND

- ▲ - BULK SAMPLE determined "NONE DETECTED" for asbestos
- ▲ - BULK SAMPLE detected or determined to be "Asbestos-Containing" relative to WorkSafeBC 0.5% criteria



SUBJECT BUILDING AREA

For Reference Only
Original Base Drawing Supplied By Fisheries Oceans Canada



WSP Canada Inc.
Victoria, BC V8Z 6R4
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www.wspgroup.com

TITLE:

Sample Location Plan

PROJECT:

Bulk Material Sampling and Analysis for Asbestos
Buoy Maintenance Building
Canadian Coast Guard Base Victoria BC
Fisheries and Oceans Canada

CLIENT:

DES.	DR.	GP
CH.	SCALE	NTS
APP.	DATE	May 2018
FILE NO.	181-06946-00	
DWG. NO.	FIGURE 4	

APPENDIX

II

Site Photographs



North Wall West End Penetration Grey Concrete Parging Sample 18A-Corr1206-01 was 'None Detected' for asbestos.



West End Heater North Pipe Lower Elbow Threads. Possible Grey Residual Thermal Pipe Insulation (TPI) Sample 18A-Corr1206-02 Was 'None Detected' for asbestos.



Enviro. Crew Workshop & Corridor Vinyl Sheet Flooring Materials. Blue with Grey Specks with Mastic (right); Blue Variable Shades with Mastic (left); and Gap Filler. Sample 18A-BMB-01 layers were 'None Detected' for asbestos.



Locker Room Floor & Wall Tiling Materials 3" Ceramic Tile; Edging Grout; and Backing Mortar Sample 18A-BMB-02 layers were 'None Detected' for asbestos.



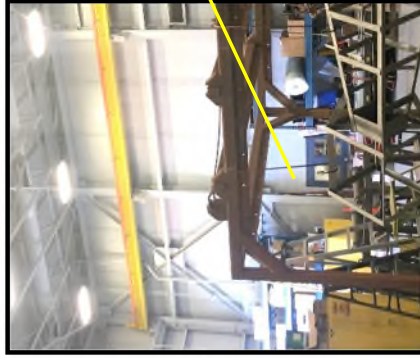
Reinforced Glazing Interior Windows in Steel Framing
Black Mastic

Sample 18A-BMB-03 was 'None Detected' for asbestos.



Locker Room Ceiling Plenum Ducting
Grey Mastic

Sample 18A-BMB-04 was 'None Detected' for asbestos.



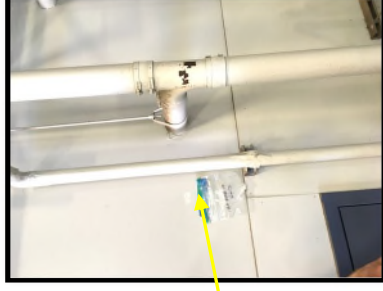
General Body Maintenance Wall Drywall Over
Entrance to Paint Shop Office

Drywall Joint Compound Sample 18A-BMB-11 was
'None Detected' for asbestos.



General Body Maintenance Wall Drywall Over
Entrance to Paint Shop Office

Drywall Joint Compound Sample 18A-BMB-10 was
'None Detected' for asbestos.





Corridor Ceiling, Suspended Ceiling Tile Sample 18A-BMB-14 was 'None Detected' for asbestos.

APPENDIX

III

Chain of Custodies and Laboratory Results

AREC Environmental Group, Ltd.
 6825 A Veyaness Rd.
 Saanichton, BC, V8M 2A7

Chain of Custody - Analysis Request Form 2017 v1.5

Name & Sample Address: WSP Canada Inc. 760 Enterprise Crescent, Victoria BC , V8Z 6R4			PO / Job#: DFO Buoy Maint Bld Date: 14 May 2018			
			Turn Around Time: 24hrs or less, Tuesday 15 May midday			
			All turn around times above are measured in "Business Days"			
			Notes:			
Contact: Gordon Philippe						
Phone: 250-360-6537			★ Bulk: PLM (EPA Method 600/R-93/116)			
E-mail: Gordon.Philippe@WSP.com			Report Via: ★ E-Mail			
Sample ID	FOR AIR SAMPLES ONLY Date / Time	Sample Location / Description	FOR AIR SAMPLES ONLY			Sample Area / Air Volume
			Time On/Off	Avg. LPM	Total Time	
18A-BMB-01		Floor / 2 types of Vinyl Sheet Flooring & Gap Filler/ a.) blue with grey specks with mastic; b.) blue variable shades with mastic; and c.) gap filler.				
18A-BMB-02		Locker Room Floor & Wall Tiling Materials/ a.) 3" ceramic tile; b.) edging grout; and c.) Backing mortar on drywall.				
18A-BMB-03		Reinforced Glazing Windows in Steel Framing/ a.) black mastic				
18A-BMB-04		Locker Room Ceiling Plenum Ducting/ a.) grey duct mastic				
18A-BMB-05		Locker Room Ceiling Drywall/ a.) drywall joint compound (DWJC)				
18A-BMB-06		Laundry Room Wall Drywall/ a.) DWJC				
18A-BMB-07		Envir Crew Workshop Wall Drywall/ a.) DWJC				
18A-BMB-08		Corridor Outer Perimeter Wall Drywall/ a.) DWJC				
18A-BMB-09		Envir Crew Storage Wall Drywall/ a.) DWJC				
18A-BMB-10		General Body Maintenance Wall Drywall Over Entrance to Envir Crew Workshop/ a.) DWJC				
18A-BMB-11		General Body Maintenance Wall Drywall Over Entrance to Paint Shop Office/ a.) DWJC				

Sample ID	Date / Time	Sample Location / Description	FOR AIR SAMPLES ONLY			Sample Area / Air Volume
			Time On/Off	Avg. LPM	Total Time	
18A-BMB-12		Yard Maintenance Foreman Office Wall Drywall/ a.) DWJC				
18A-BMB-13		Vestibule Wall Drywall/ a.) DWJC				
18A-BMB-14		Corridor Ceiling/ a.) suspended ceiling tile				
Sampled By: Gordon Philippe		Date: 14 May 2018	Time: 09:00 – 12:30			
Shipped Via: Drop Off						
Relinquished By Gordon Philippe		Date: 14 May 2018	Time: 13:30			
Received By:		Date:	Time:			
Condition Acceptable? <input type="checkbox"/> Yes		<input type="checkbox"/> No				



Asbestos Analyses Results
DFO Buoy Maint. Building



AREC Environmental Group, Ltd.
6825 Suite A, Veyaness Rd.
Saanichton, BC, V8M 2A7
ARECEnvironmental.com

SAMPLE ANALYSIS

Asbestos Analyses Results		Date of Analysis: May 15, 2018			
Project Number:	NA	Client:	Gordon - WSP Canada		
Site Address:	NA	Analyst:	C. Nordin		
Description:	DFO Buoy Maintenance Building	Notes:			
Lab Analysis Method:	EPA 600/R-93/116 (July 1993)				
Client Number	Lab Number	Description/Sampling Location	Asbestos Type and Percentage	Non-Asbestos Fibrous Material	Non-Fibrous Material
01a1	PLM-24078	Vinyl Sheet Flooring (Blue w/ Grey Specks) – Floor	None detected	10% fibrous glass (ashed)	90%
01a2	PLM-24079	Vinyl Sheet Flooring Mastic (Blue w/ Grey Specks) – Floor	None detected	1% cellulose	99%
01b1	PLM-24080	Vinyl Sheet Flooring (Blue Variable Shades) – Floor	None detected	0% (ashed)	100%
01b2	PLM-24081	Vinyl Sheet Flooring Mastic (Blue Variable Shades) – Floor	None detected	0%	100%
01c	PLM-24082	Gap Filler – Floor	None detected	0%	100%
02a	PLM-24083	3" Ceramic Tile – Locker Room Floor	None detected	0%	100%
02b	PLM-24084	3" Ceramic Tile Edging Grout – Locker Room Floor	None detected	0%	100%
02c	PLM-24085	Backing Mortar on Drywall – Locker Room Wall	None detected	1% cellulose	99%



AREC Environmental participates in the ChemScope proficiency analytical testing program as part of its quality assurance.

03	PLM-24086	Mastic (Black) – Reinforced Windows in Steel Framing	None detected	0% (ashed)	100%
04	PLM-24087	Mastic (Grey) – Locker Room Plenum Ducting	None detected	0% (ashed)	100%
05	PLM-24088	Drywall Joint Compound – Locker Room Ceiling	None detected	0%	100%
06	PLM-24089	Drywall Joint Compound – Laundry Room Wall	None detected	0%	100%
07	PLM-24090	Drywall Joint Compound – Envir. Crew Workshop Wall	None detected	0%	100%
08	PLM-24091	Drywall Joint Compound – Corridor Outer Perim. Wall	None detected	0%	100%
09	PLM-24092	Drywall Joint Compound – Envir. Crew Storage Wall	None detected	0%	100%
10	PLM-24093	Drywall Joint Compound – General Body Maint. Wall Over Entrance to Envir. Crew Workshop	None detected	0%	100%
11	PLM-24094	Drywall Joint Compound – General Body Maint. Wall Over Entrance to Paint Shop Office	None detected	0%	100%
12	PLM-24095	Drywall Joint Compound – Yard Maint. Foreman Office Wall	None detected	0%	100%
13	PLM-24096	Drywall Joint Compound – Vestibule Wall	None detected	0%	100%
14	PLM-24097	Suspended Ceiling Tile – Corridor Ceiling	None detected	75% cellulose, 20% fibrous glass	5%

*WorkSafeBC defines materials containing 0.5% asbestos or greater as an asbestos-containing material (ACM).

Environmental Group

APPENDIX

IV

Regulatory Framework

REGULATORY FRAMEWORK

1. Occupational Health and Safety Regulation (Including amendments up to Jan 1, 2018),
2. Safe Work Practices for Handling Asbestos, WorkSafeBC, (Publication Date April 2017).
3. Hazardous Waste Regulation, BC Ministry Of Environment. (Including amendments up to B.C. Reg. 243/2016, November 1, 2017).
4. Environmental Management Act SBC 2003, c53 (including amendments to October 30, 2017).
5. Transportation of Dangerous Goods Regulations (Including amendments up to SOR / 2016-95).
6. Canadian Occupational Health and Safety Regulations SOR / 86-304 (Including amendments up to June 20, 2017).
7. Canada Labour Code, Part II, - R.S.C., 1985, c. L-2

APPENDIX

V

Standard Limitations



1. STANDARD OF CARE

WSP Canada Inc. (“WSP”) prepared and issued this report (the “Report”) for its client (the “Client”) in accordance with generally-accepted consulting practices for the hazardous materials and occupational health and safety disciplines. No other warranty, expressed or implied, is made. Unless specifically stated in the Report, the Report does not address environmental issues.

The terms of reference for hazardous materials and occupational health and safety reports issued by WSP (the “Terms of Reference”) contained in the present document provide additional information and caution related to standard of care and the use of the Report. The Client should read and familiarize itself with these Terms of Reference.

2. COMPLETENESS OF THE REPORT

All documents, records, drawings, correspondence, data, files and deliverables, whether hard copy, electronic or otherwise, generated as part of the services for the Client are inherent components of the Report and, collectively, form the instruments of professional services (the “Instruments of Professional Services”). The Report is of a summary nature and is not intended to stand alone without reference to the instructions given to WSP by the Client, the communications between WSP and the Client, and to any other reports, writings, proposals or documents prepared by WSP for the Client relative to the specific site described in the Report, all of which constitute the Report.

TO PROPERLY UNDERSTAND THE INFORMATION, OBSERVATIONS, FINDINGS, SUGGESTIONS, RECOMMENDATIONS AND OPINIONS CONTAINED IN THE REPORT, REFERENCE MUST BE MADE TO THE WHOLE OF THE REPORT. WSP CANNOT BE RESPONSIBLE FOR USE BY ANY PARTY OF PORTIONS OF THE REPORT WITHOUT REFERENCE TO THE WHOLE REPORT AND ITS VARIOUS COMPONENTS.

3. BASIS OF THE REPORT

WSP prepared the Report for the Client for the specific objectives and purpose that the Client described to WSP. The applicability and reliability of any of the information, observations, findings, suggestions, recommendations and opinions contained in the Report are only valid to the extent that there was no material alteration to or variation from any of the said descriptions provided by the Client to WSP unless the Client specifically requested WSP to review and revise the Report in light of such alteration or variation.

4. USE OF THE REPORT

The information, observations, findings, suggestions, recommendations and opinions contained in the Report, or any component forming the Report, are for the sole use and benefit of the Client and the team of consultants selected by the Client for the specific project that the Report was provided. NO OTHER PARTY MAY USE OR RELY UPON THE REPORT OR ANY PORTION OR COMPONENT WITHOUT THE WRITTEN CONSENT OF WSP. WSP will consent to any reasonable request by the Client to approve the use of this Report by other parties designated by the Client as the “Approved Users”. As a condition for the consent of WSP to approve the use of the Report by an Approved User, the Client must provide a copy of these Terms of Reference to that Approved User and the Client must obtain written confirmation from that Approved User that the Approved User will comply with these Terms of Reference, such written confirmation to be provided separately by each Approved User prior to beginning use of the Report. The Client will provide WSP with a copy of the written confirmation from an Approved User when it becomes available to the Client, and in any case, within two weeks of the Client receiving such written confirmation.

The Report and all its components remain the copyright property of WSP and WSP authorises only the Client and the Approved Users to make copies of the Report, but only in such quantities as are reasonably necessary for the use of the Report by the Client and the Approved Users. The Client and the Approved Users may not give, lend, sell or otherwise disseminate or make the Report, or any portion thereof, available to any party without the written permission of WSP. Any use which a third party makes of the Report, or any portion of the Report, is the sole responsibility of such third parties. WSP accepts no responsibility for damages suffered by any third party resulting from the use of the Report. The Client and the Approved Users acknowledge and agree to indemnify and hold harmless WSP, its officers, directors, employees, agents, representatives or sub-consultants, or any or all of them, against any claim of any nature whatsoever brought against WSP by any third parties, whether in contract or in tort, arising or related to the use of contents of the Report.

5. INTERPRETATION OF THE REPORT

- a. **Hidden Conditions:** The Client acknowledges that subsurface and concealed conditions may vary from those encountered or reviewed. WSP can only comment on the conditions observed on the date(s) the assessment is performed. The work is limited to those areas of concern identified by the Client and/or outlined in our proposal. Other areas of concern may exist but were not investigated within the scope of this assessment.
- b. **Reliance on information:** The evaluation and conclusions contained in the Report have been prepared on the basis of conditions in evidence at the time of site investigation and field review and on the basis of information provided to WSP. WSP has relied in good faith upon representations, information and instructions provided by the Client and others concerning the site. Accordingly, WSP cannot accept responsibility for any deficiency, misstatement or inaccuracy contained in the report as a result of misstatements, omissions, misrepresentations or fraudulent acts of persons providing information.
- c. **Additional Involvement by WSP:** To avoid misunderstandings, WSP should be retained to assist other professionals to explain relevant hazardous materials and occupational health and safety findings and to review the hazardous materials and occupational health and safety aspects of the plans, drawings and specifications of other professionals relative to the services provided by WSP. To ensure compliance and consistency with the applicable hazardous materials and occupational health and safety codes, legislation, regulations, guidelines and generally-accepted practices, WSP should also be retained to provide field review services during the performance of any related work. Where applicable, it is understood that such field review services must meet or exceed the minimum necessary requirements to ascertain that the work being carried out is in general conformity with the recommendations made by WSP. Any reduction from the level of services recommended by WSP will result in WSP providing qualified opinions regarding adequacy of the work.

6. ALTERNATE REPORT FORMAT

When WSP submits both electronic and hard copy versions of the Instruments of Professional Services, the Client agrees that only the signed and sealed hard copy versions shall be considered final and legally binding upon WSP. The hard copy versions submitted by WSP shall be the original documents for record and working purposes, and, in the event of a dispute or discrepancy, the hard copy versions shall govern over the electronic versions; furthermore, the Client agrees and waives all future right of dispute that the original hard copy signed and sealed versions of the Instruments of Professional Services maintained or retained, or both, by WSP shall be deemed to be the overall originals for the Project.

The Client agrees that the electronic file and hard copy versions of Instruments of Professional Services shall not, under any circumstances, no matter who owns or uses them, be altered by any party except WSP. The Client warrants that the Instruments of Professional Services will be used only and exactly as submitted by WSP.

The Client recognizes and agrees that WSP prepared and submitted electronic files using specific software or hardware systems, or both. WSP makes no representation about the compatibility of these files with the current or future software and hardware systems of the Client, the Approved Users or any other party. The Client further agrees that WSP is under no obligation, unless otherwise expressly specified, to provide the Client, the Approved Users and any other party, or any or all of them, with specific software and hardware systems that are compatible with any electronic submitted by WSP. The Client further agrees that should the Client, an Approved User or a third party require WSP to provide specific software or hardware systems, or both, compatible with the electronic files prepared and submitted by WSP, for any reason whatsoever included but not restricted to an order from a court, then the Client will pay WSP for all reasonable costs related to the provision of the specific software or hardware systems, or both. The Client further agrees to indemnify and hold harmless WSP, its officers, directors, employees, agents, representative or sub-consultant, or any or all of them, against any claim or any nature whatsoever brought against WSP, whether in contract or in tort, arising or related to the provision or use or any specific software or hardware provided by WSP.