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SOLICITATION AMENDMENT
MODIFICATION DE L'INVITATION

The referenced document is hereby revised; unless otherwise indicated, all other terms and conditions of the Solicitation remain the same.

Ce document est par la présente révisé; sauf indication contraire, les modalités de l'invitation demeurent les mêmes.

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Title - Sujet CCGS PIERRE RADISSON VESSEL LIFE EX	
Solicitation No. - N° de l'invitation F7049-160074/A	**Amendment No. - N° modif.** 008
Client Reference No. - N° de référence du client F7049-160074	**Date** 2016-07-06
GETS Reference No. - N° de référence de SEAG PW-$$MD-031-25863	
File No. - N° de dossier 031md.F7049-160074	**CCC No./N° CCC - FMS No./N° VME**
Solicitation Closes - L'invitation prend fin **at - à 02:00 PM** **on - le 2016-07-20**	**Time Zone** **Fuseau horaire** Eastern Daylight Saving Time EDT
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Name and title of person authorized to sign on behalf of Vendor/Firm (type or print) **Nom et titre de la personne autorisée à signer au nom du fournisseur/ de l'entrepreneur (taper ou écrire en caractères d'imprimerie)** **Signature** **Date**	

Canada

Amendment #8 is issued to publish the following changes to the Invitation to Tender:

1. Correction to Amendment 6. Under Clause 6.3 and Annex H, Clause H6, Vessel Transfer Costs, delete entirely at the end of both Clauses the vessel transfer costs table.

   Insert at the end of both Clauses 6.3 and Annex H, Clause H6, Vessel Transfer Costs the following table:

Shipyard / Ship Repair Facility		Applicable Vessel Transfer Cost
Company	**City**	**Transfer Cost Unmanned**
Groupe Verreault Navigation Inc.	Les Méchins, Québec	$46,160
Chantiers Davie Canada Inc.	Lévis, Québec	$0
New Dock St John's Dockyard Limited	St. John's, Newfoundland and Labrador	$120,765
Heddle Marine Service Inc.	Hamilton, Ontario	$57,044
Port Weller Dry Docks	St-Catherines, Ontario	$54,457

2. Translation of the "CCGS Pierre Radisson Hazardous Material Management" Report is following. The translation of the "Groupe Gesfor, Poirier, Pinchin" Report will be published as soon as it will be made available.

Fisheries and Oceans Canada / Canadian Coast Guard
Central and Arctic Region – Marine Engineering

HAZARDOUS MATERIALS MANAGEMENT

CCGS PIERRE RADISSON

WSP

Fisheries and Oceans Canada / Canadian Coast Guard

HAZARDOUS MATERIALS MANAGEMENT

Final report

Project no.: 141-19427-02
Date: January 2015

WSP Canada Inc.
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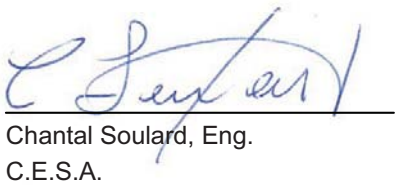
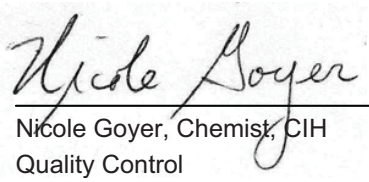
SIGNATURES

PREPARED BY



Chantal Soulard, Eng.
C.E.S.A.

REVIEWED BY



Nicole Goyer, Chemist, CIH
Quality Control

PROJECT TEAM

FISHERIES AND OCEANS CANADA / CANADIAN COAST GUARD
CENTRAL AND ARCTIC REGION – MARINE ENGINEERING

Senior Vessel Maintenance Manager	Alexandre Gouin

WSP CANADA INC. (WSP)

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Technician	CIH
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	Linette Poulin

SUBCONTRACTOR

EMSL Canada Inc.

Reference:

WSP. 2015. *Hazardous materials management, CCGS PIERRE RADISSON.* Report by WSP for Fisheries and Oceans Canada and the Canadian Coast Guard (DFO-CCG). 15 p. and appendices.

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1. INTRODUCTION

1.1 BACKGROUND

The Canadian Coast Guard, an agency of Fisheries and Oceans Canada, (DFO-CCG) is required by Transport Canada to inspect its ships annually for lead (Pb), asbestos, mercury (Hg) and polychlorinated biphenyls (PCBs) and to verify management of materials and equipment that contain these substances. The application of the Workplace Hazardous Materials Information System (WHMIS) must also be inspected.

1.2 MANDATE AND OBJECTIVES

1.2.1 STANDING OFFER

To fulfil this requirements, DFO-CCG, through Public Works and Government Services Canada (PWGSC), has retained the professional services of WSP Canada Inc. (WSP) to inspect 12 ships in the Central and Arctic Region under standing offer agreement number F3065-14N334/001/QCL, which is valid from May 26, 2014, to May 25, 2015. The contract was awarded to WSP following a public tender process.

1.2.2 SPECIFIC ORDER

On November 4, 2014, DFO-CCG sent specific order number F3019-14IN660 to WSP. Alexandre Gouin, Senior Vessel Maintenance Manager, acted as DFO-CCG's representative. The ship involved is described below.

CCGS Pierre Radisson	
Class:	Vessel able to carry out icebreaking and ship escort operations in the Arctic two seasons per year and on the Great Lakes, St. Lawrence Seaway and Atlantic coast in winter.
Home port:	Quebec, QC
Length:	98 m
Breadth:	19.2 m
Gross tonnage:	5,755 t
Builder:	Burrard Dry Dock Ltd.
Year built:	1978

The specific order was to provide the materials, tools and labour required to assess the hazardous materials on board the vessel (item 2 of standing offer specifications F3065-14N334). The presence of materials or equipment containing lead (Pb), asbestos, mercury (Hg) and polychlorinated biphenyls (PCBs) was verified.
Note that verification of the application of WHMIS was not covered by this study, since DFO-CCG is planning to implement a compilation service developed by 3M.

The specific order also involved providing a deliverable presenting the information listed in item 5 of standing offer specifications F3065-14N334: date the specific order was issued, description of the specific order, agent's contact information, consultant's contact information, date and time of vessel inspection, methodology, results, recommendations, certificates of analysis and signatures. This report meets this requirement.

1.3 PREVIOUS STUDY

DFO-CCG brought to WSP's attention a previous study performed by Groupe Gesfor, Poirier, Pinchin (GPP, 2013)[1]. This study presented the results of a characterization of materials that may contain asbestos. It contains no information on the presence of Pb, Hg or PCBs or the use of WHMIS. The results and recommendations of GPP's study are included in this report.

1.4 WORK PERFORMED BY WSP

The vessel was inspected on November 18 and 19, 2014, by Chantal Soulard and Sacha Bois, engineer and senior technician, respectively, at WSP, both based out of the Quebec office. They were on board the vessel from 8 a.m. to 4:30 p.m. the first day, and Mr. Bois was on board from 9 a.m. to 12 p.m. the second day. In total, 20 hours were spent on the vessel.

Mr. Gouin of DFO-CCG appointed Stéphane Belzile, Chief Engineer, as contact person on board the vessel. WSP also met with Gabrielle Chapados, Chief Electrician.

[1] LE GROUPE GESFOR, POIRIER, PINCHIN. May 2013. *Relevé des matériaux susceptibles de contenir de l'amiante pour la Garde côtière canadienne, nom du navire : GCC Pierre Radisson, numéro du navire : 383326. Numéro de projet Gesfor : Q04-25193-1.1 (MA11166-PLE)*. Report prepared by Le Groupe Gesfor, Poirier, Pinchin for Fisheries and Oceans Canada. 13 pages and appendices.

2. ASBESTOS

Up to the 1980s, asbestos was used in many construction products and materials (insulating materials for water and steam heating systems, flameproof acoustic wall and ceiling tiles, vinyl floor tiles, plaster finishing and decorative coatings, siding, putties, bulk vermiculite, etc.). Gypsum panels and joint compounds manufactured after January 1980 are deemed not to contain asbestos. However, spray-applied insulation in buildings constructed before 1990 and pipe insulation in buildings constructed before 1999 may contain asbestos. Note that in Quebec, a material is deemed to contained asbestos when the concentration is at least 0.1%.

For the CCGS Pierre Radisson, we followed up on the previous report (GPP, 2013) to determine whether the recommendations made in the management program were implemented in the past year.

During the vessel inspection, it was found that none of the recommendations made in the management program (GPP, 2013) were implemented. These recommendations therefore still apply and are reiterated in the management program in Appendix 2.

3. LEAD

3.1 PAINT

Lead used to be used in paint to make it quickly drying, wear resistant and brightly coloured. The amount and type of lead vary depending on the type of paint. In the early 1990s, Canadian paint manufacturers mostly stopped using lead in paint, except for certain specialized and industrial paints. Because the vessel was built in 1978, lead paint was likely used.

To test for lead in the paint, samples (paint chips) were taken from 25 painted surfaces. The main surfaces sampled were walls, floors, doors, ramps, bulkheads, etc. The samples were send to EMSL's laboratory in Cinnaminson, New Jersey, where they were tested by inductively coupled plasma optical emission spectrometry (ICP-OES / US EPA 3050B-6010C).

The results are presented in Table 1, and the certificate of analysis issued by the laboratory is included in Appendix 1.

Of the 25 samples analyzed, 23 or the majority tested positive for lead. Lead concentrations in these samples varied between 22 and 63,000 mg/kg.

The paint observed on the vessel is generally in good condition (not chipping, not cracked, etc.). Therefore, there is no short-term action required. Additionally, should DFO-CCG wish to perform work on something with lead paint, work procedures will have to be implemented to protect the health of workers and the crew and the paint residue will have to be disposed of appropriately.

3.2 EQUIPMENT

A survey of the equipment that could contain lead was performed with the chief engineer and chief electrician. The only equipment that contains lead is the batteries, as reported in Table 2.

These batteries were stored in a compartment designed for this purpose and each was labelled Pb. When they are no longer used or require replacement, the must be disposed of in compliance with the regulations in effect by a specialized company.

No other equipment that could contain lead was brought to WSP's attention by the chief engineer or chief electrician.

Table 1 Paint samples for lead testing

SAMPLE	LOCATION	ITEM	LEAD CONCENTRATION
1	Navigation bridge, room 100	Beige window frame	960
2	Navigation bridge, room 202	Pinkish-beige door frame	1,300
3	Navigation bridge, room 205	White window frame	800
4	Navigation bridge, room 201	Red floor	63,000
5	Boat deck, corridor	Fire engine red F3 fire station	17,000
6	Vessel deck, room 410	Beige bulkhead and door	940
7	Vessel deck, room 409	Grey floor	37,000
8	Vessel deck, room 409	Blue equipment	23,000
9	Vessel deck, room 409	Pale beige duct	1,500
10	Upper deck, room 513	Creamy white shelf	450
11	Main deck, forward corridor	Red floor	2,200
12	Main deck, forward corridor	Fluorescent orange hatch	2,500
13	Main deck, forward corridor	Black doorstep	Not detected
14	Main deck, forward corridor	White wall	1,700
15	Main deck, rudder room	Blue-green equipment	2,600
16	Main deck, rudder room	Grey floor	870
17	Apartments above the engine room	Caramel brown ducts	2,200
18	Upper deck, (location 15)	Beige duct	1,000
19	Upper deck, (location 15)	Black stair railing	1,800
20	Engine room	Beige-green equipment	2,900
21	Boat deck, exterior	Yellow crane	Not detected
22	Upper deck, forward exterior	Fire engine red bulwark	130
23	Upper deck, forward exterior	Red floor	22
24	Upper deck, forward exterior	White wall	4,300
25	Main deck, room 689	Yellow floor	50

Table 2 Equipment that contains lead

EQUIPMENT	LOCATION
About 40 batteries	Room 413

4. MERCURY

4.1 PAINT

Mercury was used in paints as an anti-microbial pesticide or preservative to fight mold. It stopped being used in the early 2000s. Once paint that contains mercury has hardened, the mercury is incorporated into the base paint and cannot be released.

To test for mercury in the paint, samples (paint chips) were taken from 25 painted surfaces and tested in the laboratory. The main surfaces sampled were walls, floors, doors, ramps, bulkheads, etc. The samples were send to EMSL's laboratory in Cinnaminson, New Jersey, where they were tested by inductively coupled plasma optical emission spectrometry (ICP-OES / US EPA 7471B).

The results are presented in Table 3, and the certificate of analysis issued by the laboratory is included in Appendix 1.

Of the 25 samples analyzed, 21 or the majority tested positive for mercury. Mercury concentrations in these samples varied between 0.0076 and 4.2 mg/kg.

The paint observed on the vessel is generally in good condition (not chipping, not cracked, etc.). Therefore, there is no short-term action required. Additionally, should DFO-CCG wish to perform work on something with paint that contains mercury, work procedures will have to be implemented to protect the health of workers and the crew and the paint residue will have to be disposed of appropriately.

4.2 EQUIPMENT

A survey of the equipment that could contain mercury was performed with the chief engineer and chief electrician. The equipment that contains mercury is presented in Table 4.

This equipment must be used in compliance with the manufacturer's recommendations and disposed of by a specialized company.

No other equipment that could contain mercury was brought to WSP's attention by the chief engineer or chief electrician.

Table 3 Paint samples for mercury testing

SAMPLE	LOCATION	ITEM	MERCURY CONCENTRATION
1	Navigation bridge, room 100	Beige window frame	2.4
2	Navigation bridge, room 202	Pinkish-beige door frame	0.12
3	Navigation bridge, room 205	White window frame	2.9
4	Navigation bridge, room 201	Red floor	0.71
5	Boat deck, corridor	Fire engine red F3 fire station	0.58
6	Vessel deck, room 410	Beige bulkhead and door	0.10
7	Vessel deck, room 409	Grey floor	0.29
8	Vessel deck, room 409	Blue equipment	0.70
9	Vessel deck, room 409	Pale beige duct	0.083
10	Upper deck, room 513	Creamy white shelf	0.11
11	Main deck, forward corridor	Red floor	0.10
12	Main deck, forward corridor	Fluorescent orange hatch	0.51
13	Main deck, forward corridor	Black doorstep	0.076
14	Main deck, forward corridor	White wall	0.40
15	Main deck, rudder room	Blue-green equipment	0.13
16	Main deck, rudder room	Grey floor	0.12
17	Apartments above the engine room	Caramel brown ducts	0.22
18	Upper deck, (location 15)	Beige duct	Not detected
19	Upper deck, (location 15)	Black stair railing	0.21
20	Engine room	Beige-green equipment	0.14
21	Boat deck, exterior	Yellow crane	Not detected
22	Upper deck, forward exterior	Fire engine red bulwark	Not detected
23	Upper deck, forward exterior	Red floor	Not detected
24	Upper deck, forward exterior	White wall	4.2
25	Main deck, room 689	Yellow floor	0.095

Table 4 Equipment that could contain mercury

EQUIPMENT	LOCATION
Fluorescent tubes	Throughout the vessel
Lamps	Throughout the vessel

5. PCBs

5.1 BALLASTS AND CAPACITORS

Fluorescent lighting and high-intensity discharge (HID) lamps require ballasts. Ballasts maintain a stable current despite variations in input voltage. Their resistance varies with temperature changes.

Ballast capacitors contain PCBs. If they overheat, the mixture in the capacitor can leak, and so can PCBs. Once cooled to room temperature, a mixture without PCBs will remain hard, but a mixture with PCBs will remain in the form of a viscous oil.

Ballasts that can contain PCBs are identified with a manufacturing code on their casing. Table 5 lists the manufacturing codes of several suppliers and indicates which ones indicate that they contain PCBs.

Table 5 Ballast identification codes

MANUFACTURER	YEAR	CODE	MEANING
Aerovox Canada Limited	<1979	P 193 **F**C (capacitor)	F = contains PCBs G or R = does not contain PCBs
Aerovox Canada Limited	> 1979	Z 93 P 3417 E (capacitor)	This type of code means it does not contain PCBs
Aerovox Canada Limited	Year PCBs stopped being used: 1979	AE **82**50 (ballast)	82 = year of manufacture (1982) *1980 and + do not contain PCBs
Advance (Philips)	Year PCBs stopped being used: 1979	1-**90**	90 = year of manufacture (1990) *1980 and + do not contain PCBs
Allancon (Jannock Limited)	Year PCBs stopped being used: 1980	D**M** (ballast)	M = year of manufacture (1981) *first year used A = 1969 *1981 and + do not contain PCBs
Allancon (Jannock Limited)	>1987	05**87** (ballast)	87 = year of manufacture (1987) *for HID lamp ballast capacitors, if the code starts with an N they do not contain PCBs ___
GE Canada Inc.	Year PCBs stopped being used: 1978	17A287**E**	E (or EI, ER, EW) = does not contain PCBs *E = environmentally friendly *1979 and + do not contain
Holophane Canada Inc.	Year PCBs stopped being used: 1979	BAA nnn BAB nnn	PCBs BAA nnn = contains PCBs BAB nnn = does not contain PCBs *1980 and + do not contain PCBs

Table 5 (continued) Ballast identification codes

MANUFACTURER	YEAR	CODE	MEANING
Magnatek Polygon	< 1968	218 **65** 12	65 = year of manufacture (1967) *Capacitors manufactured before 1978 that are marked "High Power Factor" contain PCBs (unless otherwise indicated)
Magnatek Polygon	> 1967	J **72** 12	72 = year of manufacture (1967) *Capacitors manufactured before 1978 that are marked "High Power Factor" contain PCBs (unless otherwise indicated)
Magnatek Polygon	> 1977	W **80** 12	80 = year of manufacture (1967) *Capacitors manufactured before 1978 that are marked "High Power Factor" contain PCBs (unless otherwise indicated)
Magnatek Universal	Year PCBs stopped being used: 1978	C**79**	79 = year of manufacture (1979) *1979 and + do not contain PCBs
Philips 0	<198	5**75** or 11**75**	75 = year of manufacture (1975) *1979 and + do not contain PCBs
Philips	> 1980	**1**175	1 = year of manufacture (1981) *1979 and + do not contain PCBs
Sola (Canada)	Year PCBs stopped being used: 1979	A**68**	68 = year of manufacture (1968) *1980 and + do not contain PCBs
Sola (USA)	Year PCBs stopped being used: 1979	**61**F311EG	61 = year of manufacture (1961) *1980 and + do not contain PCBs
Westinghouse Canada	Year PCBs stopped being used: 1978	A-**78** or 01-**99**	78 = year of manufacture (1978) 99 = year of manufacture (1999)

All fluorescent lights and HID lamps with ballasts have been removed from the vessel and replaced with PCB-free units. No further action is required.

5.2 OTHER EQUIPMENT

No other equipment that could contain PCBs was brought to WSP's attention by the chief engineer or chief electrician.

6. WHMIS

WHMIS is an information system used to label hazardous materials used in the workplace. Verification of the application of WHMIS was not covered by this study, since DFO-CCG is planning to implement a compilation system developed by 3M.

7. CONCLUSION

DFO-CCG, through PWGSC, has retained the professional services of WSP to inspect 12 ships in the Central and Arctic Region WSP was given a specific order to provide the materials, tools and labour required to assess the hazardous materials on board the CCGS Pierre Radisson. The substances targeted were asbestos, lead, mercury and polychlorinated biphenyls (PCBs). The application of WHMIS was also to be inspected.

Asbestos

A previous report (GPP, 2013) was updated to determine whether the recommendations made in the management program were implemented in the past year.

During the inspection, it was found that none of the recommendations made in the management program were implemented. These recommendations therefore still apply and are reiterated in the management program in Appendix 2.

Lead

To test for lead in the paint, samples (paint chips) were taken from painted surfaces. Of the 25 samples analyzed, 23 or the majority tested positive for lead. The paint observed on the vessel is generally in good condition (not chipping, not cracked, etc.). Therefore, there is no short-term action required. Additionally, should DFO-CCG wish to perform work on something with lead paint, work procedures will have to be implemented to protect the health of workers and the crew and the paint residue will have to be disposed of appropriately.

A survey of the equipment that could contain lead was performed with the chief engineer and chief electrician. The only equipment found was about 40 batteries in room 413. These batteries were stored in a compartment designed for this purpose and each was labelled Pb. When they are no longer used or require replacement, the must be disposed of in compliance with the regulations in effect by a specialized company. No other equipment that could contain lead was brought to WSP's attention by the chief engineer or chief electrician.

Mercury

To test for mercury in the paint, samples (paint chips) were taken from painted surfaces. Of the 25 samples analyzed, 21 or the majority tested positive for mercury. The paint observed on the vessel is generally in good condition (not chipping, not cracked, etc.). Therefore, there is no short-term action required. Additionally, should DFO-CCG wish to perform work on something with paint that contains mercury, work procedures will have to be implemented to protect the health of workers and the crew and the paint residue will have to be disposed of appropriately.

A survey of the equipment that could contain mercury was performed with the chief engineer and chief electrician. Fluorescence tubes and lamps that could contain mercury were observed throughout the vessel. This equipment must be used in compliance with the manufacturer's recommendations and disposed of by a specialized company. No other equipment that could contain mercury was brought to WSP's attention by the chief engineer or chief electrician.

PCBs

Fluorescent lights and HID lamps require ballasts, which can contain PCBs. Ballasts that can contain PCBs are identified with a manufacturing code on their casing. This type of equipment has been removed from the vessel and replaced with PCB-free units. No further action is required.

No other equipment that could contain PCBs was brought to WSP's attention by the chief engineer or chief electrician.

WHMIS

WHMIS is an information system used to label hazardous materials used in the workplace. Verification of the application of WHMIS was not covered by this study, since DFO-CCG is planning to implement a compilation system developed by 3M.

8. BIBLIOGRAPHY

ENVIRONMENT CANADA. 1991. Environmental Protection Series, Identification of lamp ballasts containing PCBs. Report EPS 2/CC/2 (revised). 20 pages and appendix. http://publications.gc.ca/collections/collection_2014/ec/En49-2-2-2-1991-1-eng.pdf

LE GROUPE GESFOR, POIRIER, PINCHIN. May 2013. *Relevé des matériaux susceptibles de contenir de l'amiante pour la Garde côtière canadienne, nom du navire : GCC Pierre Radisson, numéro du navire : 383326. Numéro de projet Gesfor : Q04-25193-1.1 (MA11166-PLE)*. Report prepared by Le Groupe Gesfor, Poirier, Pinchin for Fisheries and Oceans Canada. 13 pages and appendices.

UNEP. 1999. United Nations Environment Programme, Guidelines for the Identification of PCBs and Materials Containing PCBs. https://www.aber.ac.uk/en/media/departmental/healthsafetyenvironment/pcb_unep1.pdf

CMHC. 1992. Research and Development Highlights, Lead Precautionary Measures. Technical series 92-206. 7-page pamphlet. http://www.cmhc-schl.gc.ca/publications/en/rh-pr/tech/92-206.pdf

Annexe 1

C RTIFICATS D'ANALYSES

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Quebec, QC G2J 1C8
Phone: (418) 623-7066
Fax: (418) 623-2434

12/8/2014

The following analytical report covers the analysis performed on samples submitted to EMSL Analytical, Inc. on 11/21/2014. The results are tabulated on the attached data pages for the following client designated project:

141-19427-02

The reference number for these samples is EMSL Order #011406464. Please use this reference when calling about these samples. If you have any questions, please do not hesitate to contact me at (856) 303-2500.

Reviewed and Approved By:

Julie Smith - Laboratory Director

The test results contained within this report meet the requirements of NELAP and/or the specific certification program that is applicable, unless otherwise noted.
NELAP Certifications: NJ 03036, NY 10872, PA 68-00367

The QC sample duplicate RPD result for Mercury fell outside the control limits for sample -0025. All other QC results met criteria.

EMSL Analytical Inc.
200 Route 130 North, Cinnaminson, NJ 08077
Phone/Fax: (856) 303-2500 / (856) 858-4571
http://www.EMSL.com EnvChemistry2@emsl.com

EMSL Order: 011406464
CustomerID: GNVQ42
CustomerPO: 141-19427-02
ProjectID:

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Phone: (418) 623-7066
Fax: (418) 623-2434
Received: 11/21/14 9:40 AM

Project: **141-19427-02**

Analytical Results

Client Sample Description 1 Pont de navigation, local 100 Cadre de fenetre — ***Collected:*** — ***Lab ID:*** *0001*

Method	*Parameter*	*Result*	*RL*	*Units*	*Prep Date*	*Analyst*	*Analysis Date*	*Analyst*
3050B/6010C	Lead	960	12	mg/Kg	11/26/2014	CM	12/4/2014	BE
7471B	Mercury	2.4	0.20	mg/Kg	12/1/2014	JS	12/1/2014	JS

Client Sample Description 2 Pont de navigation, local 202 Cadre de porte beige — ***Collected:*** — ***Lab ID:*** *0002*

Method	*Parameter*	*Result*	*RL*	*Units*	*Prep Date*	*Analyst*	*Analysis Date*	*Analyst*
3050B/6010C	Lead	1300	11	mg/Kg	11/26/2014	CM	12/4/2014	BE
7471B	Mercury	0.12	0.049	mg/Kg	12/1/2014	JS	12/1/2014	JS

Client Sample Description 3 Pont de navigation, local 205 Cadre de fenetre — ***Collected:*** — ***Lab ID:*** *0003*

Method	*Parameter*	*Result*	*RL*	*Units*	*Prep Date*	*Analyst*	*Analysis Date*	*Analyst*
3050B/6010C	Lead	800	25	mg/Kg	11/26/2014	CM	12/1/2014	BE
7471B	Mercury	2.9	0.24	mg/Kg	12/1/2014	JS	12/1/2014	JS

Client Sample Description 4 Pont de navigation, local 201 Plancher rouge — ***Collected:*** — ***Lab ID:*** *0004*

Method	*Parameter*	*Result*	*RL*	*Units*	*Prep Date*	*Analyst*	*Analysis Date*	*Analyst*
3050B/6010C	Lead	63000	570	mg/Kg	11/26/2014	CM	12/4/2014	BE
7471B	Mercury	0.71	0.049	mg/Kg	12/1/2014	JS	12/1/2014	JS

Client Sample Description 5 Pont des embarcations, couloir Poste incendie F3 — ***Collected:*** — ***Lab ID:*** *0005*

Method	*Parameter*	*Result*	*RL*	*Units*	*Prep Date*	*Analyst*	*Analysis Date*	*Analyst*
3050B/6010C	Lead	17000	240	mg/Kg	11/26/2014	CM	12/4/2014	BE
7471B	Mercury	0.58	0.058	mg/Kg	12/2/2014	JS	12/2/2014	JS

Client Sample Description 6 Pont des embarcations, local 410 Cloison et porte — ***Collected:*** — ***Lab ID:*** *0006*

Method	*Parameter*	*Result*	*RL*	*Units*	*Prep Date*	*Analyst*	*Analysis Date*	*Analyst*
3050B/6010C	Lead	940	12	mg/Kg	11/26/2014	CM	12/4/2014	BE
7471B	Mercury	0.10	0.050	mg/Kg	12/2/2014	JS	12/2/2014	JS

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Analytical Results

Client Sample Description 7
Pont des embarcations, local 409 Plancher gris
Collected: ***Lab ID:*** *0007*

Method	*Parameter*	*Result*	*RL*	*Units*	*Prep Date*	*Analyst*	*Analysis Date*	*Analyst*
3050B/6010C	Lead	37000	240	mg/Kg	11/26/2014	CM	12/4/2014	BE
7471B	Mercury	0.29	0.048	mg/Kg	12/2/2014	JS	12/2/2014	JS

Client Sample Description 8
Pont des embarcations, local 409 Equipement bleu
Collected: ***Lab ID:*** *0008*

Method	*Parameter*	*Result*	*RL*	*Units*	*Prep Date*	*Analyst*	*Analysis Date*	*Analyst*
3050B/6010C	Lead	23000	240	mg/Kg	11/26/2014	CM	12/4/2014	BE
7471B	Mercury	0.70	0.050	mg/Kg	12/2/2014	JS	12/2/2014	JS

Client Sample Description 9
Pont des embarcations, local 409 Conduit beige
Collected: ***Lab ID:*** *0009*

Method	*Parameter*	*Result*	*RL*	*Units*	*Prep Date*	*Analyst*	*Analysis Date*	*Analyst*
3050B/6010C	Lead	1500	12	mg/Kg	11/26/2014	CM	12/4/2014	BE
7471B	Mercury	0.083	0.050	mg/Kg	12/2/2014	JS	12/2/2014	JS

Client Sample Description 10
Pont superieur, local 513 Etagere blanc crème
Collected: ***Lab ID:*** *0010*

Method	*Parameter*	*Result*	*RL*	*Units*	*Prep Date*	*Analyst*	*Analysis Date*	*Analyst*
3050B/6010C	Lead	450	4.6	mg/Kg	11/26/2014	CM	12/4/2014	BE
7471B	Mercury	0.11	0.048	mg/Kg	12/2/2014	JS	12/2/2014	JS

Client Sample Description 11
Pont principal, couloir avant Plancher rouge
Collected: ***Lab ID:*** *0011*

Method	*Parameter*	*Result*	*RL*	*Units*	*Prep Date*	*Analyst*	*Analysis Date*	*Analyst*
3050B/6010C	Lead	2200	23	mg/Kg	11/26/2014	CM	12/4/2014	BE
7471B	Mercury	0.10	0.048	mg/Kg	12/2/2014	JS	12/2/2014	JS

Client Sample Description 12
Pont principal, couloir avant Ecoutille orange
Collected: ***Lab ID:*** *0012*

Method	*Parameter*	*Result*	*RL*	*Units*	*Prep Date*	*Analyst*	*Analysis Date*	*Analyst*
3050B/6010C	Lead	2500	24	mg/Kg	11/26/2014	CM	12/4/2014	BE
7471B	Mercury	0.51	0.049	mg/Kg	12/2/2014	JS	12/2/2014	JS

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Analytical Results

Client Sample Description 13
Pont principal, couloir avant Seuil de porte noir
Collected: ***Lab ID:*** *0013*

Method	*Parameter*	*Result*	*RL*	*Units*	*Prep Date*	*Analyst*	*Analysis Date*	*Analyst*
3050B/6010C	Lead	ND	48	mg/Kg	11/26/2014	CM	12/8/2014	BE
7471B	Mercury	0.076	0.048	mg/Kg	12/2/2014	JS	12/2/2014	JS

Client Sample Description 14
Pont principal, couloir avant Mur blanc
Collected: ***Lab ID:*** *0014*

Method	*Parameter*	*Result*	*RL*	*Units*	*Prep Date*	*Analyst*	*Analysis Date*	*Analyst*
3050B/6010C	Lead	1700	44	mg/Kg	11/28/2014	CM	12/4/2014	BE
7471B	Mercury	0.40	0.049	mg/Kg	12/2/2014	JS	12/2/2014	JS

Client Sample Description 15
Pont principal salle du gouvernail Equipement bleu
Collected: ***Lab ID:*** *0015*

Method	*Parameter*	*Result*	*RL*	*Units*	*Prep Date*	*Analyst*	*Analysis Date*	*Analyst*
3050B/6010C	Lead	2600	47	mg/Kg	11/28/2014	CM	12/4/2014	BE
7471B	Mercury	0.13	0.048	mg/Kg	12/2/2014	JS	12/2/2014	JS

Client Sample Description 16
Pont principal salle du gouvernail Plancher gris
Collected: ***Lab ID:*** *0016*

Method	*Parameter*	*Result*	*RL*	*Units*	*Prep Date*	*Analyst*	*Analysis Date*	*Analyst*
3050B/6010C	Lead	870	24	mg/Kg	12/2/2014	CM	12/8/2014	BE
7471B	Mercury	0.12	0.050	mg/Kg	12/2/2014	JS	12/2/2014	JS

Client Sample Description 17
appartements su-dessus des salles des machines
Collected: ***Lab ID:*** *0017*

Method	*Parameter*	*Result*	*RL*	*Units*	*Prep Date*	*Analyst*	*Analysis Date*	*Analyst*
3050B/6010C	Lead	2200	46	mg/Kg	12/2/2014	CM	12/8/2014	BE
7471B	Mercury	0.22	0.048	mg/Kg	12/2/2014	JS	12/2/2014	JS

Client Sample Description 18
Pont superieur, (location 15) Conduite beige
Collected: ***Lab ID:*** *0018*

Method	*Parameter*	*Result*	*RL*	*Units*	*Prep Date*	*Analyst*	*Analysis Date*	*Analyst*
3050B/6010C	Lead	1000	25	mg/Kg	12/2/2014	CM	12/8/2014	BE
7471B	Mercury	ND	0.050	mg/Kg	12/2/2014	JS	12/2/2014	JS

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Analytical Results

Client Sample Description 19 Pont superieur, (location 15) Rampe d'escalier — ***Collected:*** — ***Lab ID:*** *0019*

Method	*Parameter*	*Result*	*RL*	*Units*	*Prep Date*	*Analyst*	*Analysis Date*	*Analyst*
3050B/6010C	Lead	1800	24	mg/Kg	12/2/2014	CM	12/8/2014	BE
7471B	Mercury	0.21	0.049	mg/Kg	12/2/2014	JS	12/2/2014	JS

Client Sample Description 20 Salle des machines Equipement beige-vert — ***Collected:*** — ***Lab ID:*** *0020*

Method	*Parameter*	*Result*	*RL*	*Units*	*Prep Date*	*Analyst*	*Analysis Date*	*Analyst*
3050B/6010C	Lead	2900	44	mg/Kg	12/2/2014	CM	12/8/2014	BE
7471B	Mercury	0.14	0.048	mg/Kg	12/2/2014	JS	12/2/2014	JS

Client Sample Description 21 Pont des embarcations, exterieur Grue jaune — ***Collected:*** — ***Lab ID:*** *0021*

Method	*Parameter*	*Result*	*RL*	*Units*	*Prep Date*	*Analyst*	*Analysis Date*	*Analyst*
3050B/6010C	Lead	ND	4.4	mg/Kg	12/2/2014	CM	12/8/2014	BE
7471B	Mercury	ND	0.049	mg/Kg	12/2/2014	JS	12/2/2014	JS

Client Sample Description 22 Pont superieur, exterieur avant Pavois rouge — ***Collected:*** — ***Lab ID:*** *0022*

Method	*Parameter*	*Result*	*RL*	*Units*	*Prep Date*	*Analyst*	*Analysis Date*	*Analyst*
3050B/6010C	Lead	130	4.8	mg/Kg	12/2/2014	CM	12/4/2014	BE
7471B	Mercury	ND	0.049	mg/Kg	12/2/2014	JS	12/2/2014	JS

Client Sample Description 23 Pont superieur, exterieur avant Plancher rouge — ***Collected:*** — ***Lab ID:*** *0023*

Method	*Parameter*	*Result*	*RL*	*Units*	*Prep Date*	*Analyst*	*Analysis Date*	*Analyst*
3050B/6010C	Lead	22	4.8	mg/Kg	12/2/2014	CM	12/4/2014	BE
7471B	Mercury	ND	0.048	mg/Kg	12/2/2014	JS	12/2/2014	JS

Client Sample Description 24 Pont superieur, exterieur avant Mur blanc — ***Collected:*** — ***Lab ID:*** *0024*

Method	*Parameter*	*Result*	*RL*	*Units*	*Prep Date*	*Analyst*	*Analysis Date*	*Analyst*
3050B/6010C	Lead	4300	47	mg/Kg	12/2/2014	CM	12/8/2014	BE
7471B	Mercury	4.2	0.24	mg/Kg	12/2/2014	JS	12/2/2014	JS

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Project: **141-19427-02**

Analytical Results

Client Sample Description 25
Pont principal, local 689 Plancher jaune

Collected: ***Lab ID:*** *0025*

Method	*Parameter*	*Result*	*RL*	*Units*	*Prep Date*	*Analyst*	*Analysis Date*	*Analyst*
3050B/6010C	Lead	50	4.9	mg/Kg	12/2/2014	CM	12/5/2014	BE
7471B	Mercury	0.095	0.050	mg/Kg	12/5/2014	JS	12/5/2014	JS

Definitions:
ND - indicates that the analyte was not detected at the reporting limit
RL - Reporting Limit

Annexe 2

P OGRAM E DE GESTION DE L'AMIANTE

ANNEXE IV

PROGRAMME DE GESTION DE L'AMIANTE

PINCHIN ENVIRONMENTAL HMIS Hazardous Material Inventory System

Client: Canadian Coast Guard **Site:** Vessels

Building Number(s): 383326

Action Report for Action

Building #: 383326 **Building Name: CCGS Pierre Radisson** **Surveyor:** **Survey Date: 2013-05-07**
Location #: 14 **Location Name: Incinerator** **Floor: Main Deck** **Room #:** **Square ft: 400**

System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action						Units	Sample	Hazard	Friability
							Good		Fair		Poor					
Mechanical Equipment	Exhaust	Magnesia block			B	Y	9	(7)	1	(6)			LF	V0011	Confirmed Asbestos	Friable

Building #: 383326 **Building Name: CCGS Pierre Radisson** **Surveyor:** **Survey Date: 2013-05-07**
Location #: 23 **Location Name: A/C #5** **Floor: Upper Deck** **Room #:** **Square ft: 150**

System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action						Units	Sample	Hazard	Friability
							Good		Fair		Poor					
Piping	Hot Water Heating	Parging Cement	Elbow	Canvas	B	Y	3	(7)	1	(6)			SF	V0021	Confirmed Asbestos	Friable

PINCHIN ENVIRONMENTAL

HMIS
Hazardous Material Inventory System

Client: Canadian Coast Guard **Site:** Vessels

Building Number(s): 383326

Action Report for Action

Legend:

Action				Access		Condition		Sample Number	
(1)	Clean Up of ACM Debris	(2)	Precautions for Access Which may Disturb ACM Debris	A	Accessible to all building occupants	Good	No visible damage or deterioration.	S####	Sample collected
(3)	ACM removal	(4)	Precautions for Work Which may Disturb ACM in Poor Condition	B	Accessible to maintenance and operations staff without a ladder	Fair	Minor, repairable damage, cracking or deterioration.	V####	Material is visually identified to be identical to S###
(5)	Proactive ACM removal (Minimum repair required for fair condition)	(6)	ACM repair	C	Accessible to maintenance and operations staff with a ladder. Also rarely entered, locked	Poor	Irreparable damage or deterioration with exposed and missing material	V0000	Known non-asbestos material
(7)	Management program and surveillance			D	Not normally accessible or without demolition	NOTE: See report for full definitions of action, access and condition		V9000	Material is visually identified to contain asbestos
								V9500	Material is presumed to contain asbestos
NOTE: Actions in round brackets ( ) are auto-calculated. Actions in square brackets [ ] are manual								Note: Presumed various materials identified in the report are ACM if not sampled.	

Units SF - Square feet LF - Linear feet EA - Each % - Percentage

Date: 14/05/13 09:31:21

PINCHIN ENVIRONMENTAL HMIS Hazardous Material Inventory System

Client: Canadian Coast Guard **Site:** Vessels

Building Number(s): 383326

Action Report for Action

Building #: 383326 **Building Name: CCGS Pierre Radisson** **Surveyor:** **Survey Date: 2013-05-07**
Location #: 1 **Location Name: Propulsion Engine** **Floor: Tank Top** **Room #:** **Square ft: 2500**

System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action						Units	Sample	Hazard	Friability
							Good		Fair		Poor					
Piping	Hot Water Heating	Parging Cement	Elbow	Canvas	B	Y	11	(7)					EA	S0002	Confirmed Asbestos	Friable

Building #: 383326 **Building Name: CCGS Pierre Radisson** **Surveyor:** **Survey Date: 2013-05-07**
Location #: 5 **Location Name: Aft Engine** **Floor: Engine Dec** **Room #:** **Square ft: 2500**

System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action						Units	Sample	Hazard	Friability
							Good		Fair		Poor					
Mechanical Equipment	Compressor	Magnesia block	Surface	Canvas	B		20	(7)					LF	S0007	Confirmed Asbestos	Friable

Note: Compressor

Building #: 383326 **Building Name: CCGS Pierre Radisson** **Surveyor:** **Survey Date: 2013-05-07**
Location #: 7 **Location Name: Propulsion** **Floor: Engine Dec** **Room #:** **Square ft: 2500**

System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action						Units	Sample	Hazard	Friability
							Good		Fair		Poor					
Piping	Oil supply	Paper	Surface	Paint	B	Y	8	(7)					LF	S0008	Confirmed Asbestos	Non-Friable

Note: Oil = Oil Cleaner

Building #: 383326 **Building Name: CCGS Pierre Radisson** **Surveyor:** **Survey Date: 2013-05-07**
Location #: 12 **Location Name: Engine Room Casing** **Floor: Main Deck** **Room #:** **Square ft: 400**

System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action						Units	Sample	Hazard	Friability
							Good		Fair		Poor					
Mechanical Equipment	Generator Exhaust	Magnesia block	Surface	Canvas	B	Y	30	(7)					LF	S0010	Confirmed Asbestos	Friable

PINCHIN ENVIRONMENTAL HMIS Hazardous Material Inventory System

Client: Canadian Coast Guard **Site:** Vessels

Building Number(s): 383326

Action Report for Action

Building #: 383326 **Building Name: CCGS Pierre Radisson** **Surveyor:** **Survey Date: 2013-05-07**
Location #: 13 **Location Name: Engine Room Casing** **Floor: Main Deck** **Room #:** **Square ft: 400**

System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action						Units	Sample	Hazard	Friability
							Good		Fair		Poor					
Mechanical Equipment	Exhaust	Magnesia block	Surface	Canvas	B	Y	10	(7)					LF	S0011	Confirmed Asbestos	Friable
Mechanical Equipment	Generator Exhaust	Magnesia block	Surface	Canvas	B	Y	15	(7)					LF	V0010	Confirmed Asbestos	Friable
Mechanical Equipment	Exhaust	Magnesia block	Surface	Canvas	B	Y	20	(7)					LF	V0007	Confirmed Asbestos	Friable

Building #: 383326 **Building Name: CCGS Pierre Radisson** **Surveyor:** **Survey Date: 2013-05-07**
Location #: 14 **Location Name: Incinerator** **Floor: Main Deck** **Room #:** **Square ft: 400**

System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action						Units	Sample	Hazard	Friability
							Good		Fair		Poor					
Mechanical Equipment	Exhaust	Magnesia block			B	Y	9	(7)	1	(6)			LF	V0011	Confirmed Asbestos	Friable

Building #: 383326 **Building Name: CCGS Pierre Radisson** **Surveyor:** **Survey Date: 2013-05-07**
Location #: 15 **Location Name: Engine Room Casing** **Floor: Upper Deck** **Room #:** **Square ft: 800**

System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action						Units	Sample	Hazard	Friability
							Good		Fair		Poor					
Mechanical Equipment	Exhaust	Magnesia block	Surface	Canvas	B	Y	20	(7)					LF	V0007	Confirmed Asbestos	Friable
Mechanical Equipment	Exhaust	Magnesia block	Surface	Canvas	B	Y	20	(7)					LF	S0015	Confirmed Asbestos	Friable

Action Report for Action

Building #: 383326 **Building Name: CCGS Pierre Radisson** **Surveyor:** **Survey Date: 2013-05-07**
Location #: 16 **Location Name: Engine Room** **Floor: Boat Deck** **Room #:** **Square ft: 400**

System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action						Units	Sample	Hazard	Friability
							Good		Fair		Poor					
Mechanical Equipment	Exhaust	Magnesia block	Surface	Canvas	B	Y	30	(7)					LF	V0015	Confirmed Asbestos	Friable
Mechanical Equipment	Exhaust	Magnesia block	Surface	Canvas	B	Y	10	(7)					LF	V0007	Confirmed Asbestos	Friable

Building #: 383326 **Building Name: CCGS Pierre Radisson** **Surveyor:** **Survey Date: 2013-05-07**
Location #: 17 **Location Name: Engine Room** **Floor: Bridge Dec** **Room #:** **Square ft: 400**

System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action						Units	Sample	Hazard	Friability
							Good		Fair		Poor					
Mechanical Equipment	Exhaust	Magnesia block	Surface	Canvas	B	Y	20	(7)					LF	V0015	Confirmed Asbestos	Friable
Mechanical Equipment	Generator Exhaust	Magnesia block	Surface	Canvas	B	Y	60	(7)					LF	S0019	Confirmed Asbestos	Friable

Building #: 383326 **Building Name: CCGS Pierre Radisson** **Surveyor:** **Survey Date: 2013-05-07**
Location #: 23 **Location Name: A/C #5** **Floor: Upper Deck** **Room #:** **Square ft: 150**

System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action						Units	Sample	Hazard	Friability
							Good		Fair		Poor					
Piping	Hot Water Heating	Parging Cement	Elbow	Canvas	B	Y	3	(7)	1	(6)			SF	V0021	Confirmed Asbestos	Friable

Building #: 383326 **Building Name: CCGS Pierre Radisson** **Surveyor:** **Survey Date: 2013-05-07**
Location #: 29 **Location Name: A/C #2-3** **Floor: Boat Deck** **Room #:** **Square ft: 400**

System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action						Units	Sample	Hazard	Friability
							Good		Fair		Poor					
Piping	Hot Water Heating	Canvas	Straight	Paint	B	Y	3	(7)			1	(3)	LF	S0022	Confirmed Asbestos	Non-Friable

PINCHIN ENVIRONMENTAL HMIS Hazardous Material Inventory System

Client: Canadian Coast Guard **Site:** Vessels

Building Number(s): 383326

Action Report for Action

Building #: 383326 **Building Name: CCGS Pierre Radisson** **Surveyor:** **Survey Date: 2013-05-07**
Location #: 33 **Location Name: Canteen Store** **Floor: Main Deck** **Room #:** **Square ft: 32**

System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action						Units	Sample	Hazard	Friability
							Good		Fair		Poor					
Floor	Floor Tile 1	VAT and Mastic Adhesive	Surface		A	Y	50	(7)					SF	V0026	Presumed Asbestos	Non-Friable
Floor	Floor Tile 1	VAT and Mastic Adhesive	Surface		A	Y	50	(7)					SF	V0027	Presumed Asbestos	Non-Friable

Building #: 383326 **Building Name: CCGS Pierre Radisson** **Surveyor:** **Survey Date: 2013-05-07**
Location #: 38 **Location Name: Corridor** **Floor: Main Deck** **Room #:** **Square ft: 800**

System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action						Units	Sample	Hazard	Friability
							Good		Fair		Poor					
Floor	Floor Tile 1	VAT and Mastic Adhesive	Surface		A	Y	1	(7)					SF	S0025	Presumed Asbestos	Non-Friable
Floor	Floor Tile 1	VAT and Mastic Adhesive	Surface		A	Y	5	(7)					SF	S0035	Presumed Asbestos	Non-Friable
Floor	Floor Tile 1	VAT and Mastic Adhesive	Surface		A	Y	1	(7)					SF	S0026	Presumed Asbestos	Non-Friable
Floor	Floor Tile 1	VAT and Mastic Adhesive	Surface		A	Y	790	(7)					SF	S0033	Presumed Asbestos	Non-Friable

Note: S-33 - 1x1 green S-25 - 1x1 black S-26 - 1x1 Blue S-35 - 1x1 Red

Action Report for Action

Building #: 383326 **Building Name: CCGS Pierre Radisson** **Surveyor:** **Survey Date: 2013-05-07**
Location #: 42 **Location Name: Cafeteria** **Floor: Main Deck** **Room #:** **Square ft: 800**

System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action						Units	Sample	Hazard	Friability
							Good		Fair		Poor					
Floor	Floor Tile 1	VAT and Mastic Adhesive			A	Y	200	(7)					SF	S0029	Presumed Asbestos	Non-Friable
Floor	Floor Tile 1	VAT and Mastic Adhesive			A	Y	100	(7)					SF	V0030	Presumed Asbestos	Non-Friable
Floor	Floor Tile 1	VAT and Mastic Adhesive			A	Y	200	(7)					SF	S0027	Presumed Asbestos	Non-Friable
Floor	Floor Tile 1	VAT and Mastic Adhesive			A	Y	200	(7)					SF	V0035	Presumed Asbestos	Non-Friable
Floor	Floor Tile 1	VAT and Mastic Adhesive			A	Y	100	(7)					SF	V0026	Presumed Asbestos	Non-Friable
Floor	Floor Tile 1	VAT and Mastic Adhesive			A	Y	50	(7)					SF	V0025	Presumed Asbestos	Non-Friable

Note: S-27 - 1x1 Beige S-29 - 1x1 Grey

Building #: 383326 **Building Name: CCGS Pierre Radisson** **Surveyor:** **Survey Date: 2013-05-07**
Location #: 58 **Location Name: Cabin** **Floor: Main Deck** **Room #:** **Square ft: 150**

System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action						Units	Sample	Hazard	Friability
							Good		Fair		Poor					
Floor	Floor Tile 1	VAT and Mastic Adhesive			A	Y	50	(7)					SF	V0031	Confirmed Asbestos	Non-Friable
Floor	Floor Tile 1	VAT and Mastic Adhesive			A	Y	100	(7)					SF	V0027	Presumed Asbestos	Non-Friable

Action Report for Action

Building #: 383326 **Building Name: CCGS Pierre Radisson** **Surveyor:** **Survey Date: 2013-05-07**
Location #: 59 **Location Name: Cabin** **Floor: Main Deck** **Room #:** **Square ft: 150**

System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action						Units	Sample	Hazard	Friability
							Good		Fair		Poor					
Floor	Floor Tile 1	VAT and Mastic Adhesive			A	Y	80	(7)					SF	V0035	Presumed Asbestos	Non-Friable
Floor	Floor Tile 1	VAT and Mastic Adhesive			A	Y	80	(7)					SF	V0027	Presumed Asbestos	Non-Friable

Building #: 383326 **Building Name: CCGS Pierre Radisson** **Surveyor:** **Survey Date: 2013-05-07**
Location #: 60 **Location Name: Cabin** **Floor: Main Deck** **Room #:** **Square ft: 200**

System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action						Units	Sample	Hazard	Friability
							Good		Fair		Poor					
Floor	Floor Tile 1	VAT and Mastic Adhesive			A	Y	75	(7)					SF	V0027	Presumed Asbestos	Non-Friable
Floor	Floor Tile 1	VAT and Mastic Adhesive			A	Y	75	(7)					SF	V0035	Presumed Asbestos	Non-Friable

Building #: 383326 **Building Name: CCGS Pierre Radisson** **Surveyor:** **Survey Date: 2013-05-07**
Location #: 69 **Location Name: Hobby Room** **Floor: Main Deck** **Room #:** **Square ft: 300**

System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action						Units	Sample	Hazard	Friability
							Good		Fair		Poor					
Floor	Floor Tile 1	VAT and Mastic Adhesive			A	Y	300	(7)					SF	S0030	Presumed Asbestos	Non-Friable

Building #: 383326 **Building Name: CCGS Pierre Radisson** **Surveyor:** **Survey Date: 2013-05-07**
Location #: 79 **Location Name: Corridor** **Floor: Main Deck** **Room #:** **Square ft: 400**

System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action						Units	Sample	Hazard	Friability
							Good		Fair		Poor					
Floor	Floor Tile 1	VAT and Mastic Adhesive			A	Y	800	(7)					SF	V0033	Presumed Asbestos	Non-Friable

PINCHIN ENVIRONMENTAL HMIS Hazardous Material Inventory System

Client: Canadian Coast Guard **Site:** Vessels

Building Number(s): 383326

Action Report for Action

Building #: 383326 **Building Name: CCGS Pierre Radisson** **Surveyor:** **Survey Date: 2013-05-07**
Location #: 81 **Location Name: Gymnasium** **Floor: Main Deck** **Room #:** **Square ft: 400**

System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action						Units	Sample	Hazard	Friability
							Good		Fair		Poor					
Floor	Floor Tile 1	VAT and Mastic Adhesive			A	Y	400	(7)					SF	V0031	Confirmed Asbestos	Non-Friable

Building #: 383326 **Building Name: CCGS Pierre Radisson** **Surveyor:** **Survey Date: 2013-05-07**
Location #: 82 **Location Name: Elevator Mechanical Room** **Floor: Main Deck** **Room #:** **Square ft: 100**

System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action						Units	Sample	Hazard	Friability
							Good		Fair		Poor					
Floor	Floor Tile 1	VAT and Mastic Adhesive			A	Y	50	(7)					SF	V0027	Presumed Asbestos	Non-Friable
Floor	Floor Tile 1	VAT and Mastic Adhesive			A	Y	50	(7)					SF	V0026	Presumed Asbestos	Non-Friable

Building #: 383326 **Building Name: CCGS Pierre Radisson** **Surveyor:** **Survey Date: 2013-05-07**
Location #: 83 **Location Name: Smocking Room** **Floor: Main Deck** **Room #:** **Square ft: 64**

System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action						Units	Sample	Hazard	Friability
							Good		Fair		Poor					
Floor	Floor Tile 1	VAT and Mastic Adhesive			A	Y	100	(7)					SF	V0027	Presumed Asbestos	Non-Friable

Building #: 383326 **Building Name: CCGS Pierre Radisson** **Surveyor:** **Survey Date: 2013-05-07**
Location #: 86 **Location Name: Corridor** **Floor: Main Deck** **Room #:** **Square ft: 800**

System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action						Units	Sample	Hazard	Friability
							Good		Fair		Poor					
Floor	Floor Tile 1	VAT and Mastic Adhesive			A	Y	800	(7)					SF	V0033	Presumed Asbestos	Non-Friable

Action Report for Action

Building #: 383326 **Building Name: CCGS Pierre Radisson** **Surveyor:** **Survey Date: 2013-05-07**
Location #: 87 **Location Name: Corridor** **Floor: Main Deck** **Room #:** **Square ft: 800**

System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action						Units	Sample	Hazard	Friability
							Good		Fair		Poor					
Floor	Floor Tile 1	VAT and Mastic Adhesive			A	Y	800	(7)					SF	V0033	Presumed Asbestos	Non-Friable

Building #: 383326 **Building Name: CCGS Pierre Radisson** **Surveyor:** **Survey Date: 2013-05-07**
Location #: 90 **Location Name: Canteen** **Floor: Main Deck** **Room #:** **Square ft: 49**

System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action						Units	Sample	Hazard	Friability
							Good		Fair		Poor					
Floor	Floor Tile 1	VAT and Mastic Adhesive			A	Y	49	(7)					SF	V0031	Confirmed Asbestos	Non-Friable

Building #: 383326 **Building Name: CCGS Pierre Radisson** **Surveyor:** **Survey Date: 2013-05-07**
Location #: 97 **Location Name: Dispensery** **Floor: Upper Deck** **Room #:** **Square ft: 144**

System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action						Units	Sample	Hazard	Friability
							Good		Fair		Poor					
Floor		Leveling Compou			A	Y	144	(7)					SF	V9500	Presumed Asbestos	Non-Friable

Note: S-28 - 1x1 White

Building #: 383326 **Building Name: CCGS Pierre Radisson** **Surveyor:** **Survey Date: 2013-05-07**
Location #: 98 **Location Name: Lobby** **Floor: Upper Deck** **Room #:** **Square ft: 36**

System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action						Units	Sample	Hazard	Friability
							Good		Fair		Poor					
Floor		Leveling Compou			A	Y	15	(7)					SF	V9500	Presumed Asbestos	Non-Friable

Action Report for Action

Building #: 383326 **Building Name: CCGS Pierre Radisson** **Surveyor:** **Survey Date: 2013-05-07**
Location #: 99 **Location Name: Washroom** **Floor: Upper Deck** **Room #:** **Square ft: 18**

System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action						Units	Sample	Hazard	Friability
							Good		Fair		Poor					
Floor		Leveling Compou			A	Y	30	(7)					SF	V9500	Presumed Asbestos	Non-Friable

Building #: 383326 **Building Name: CCGS Pierre Radisson** **Surveyor:** **Survey Date: 2013-05-07**
Location #: 102 **Location Name: Engineer Office** **Floor: Upper Deck** **Room #:** **Square ft: 144**

System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action						Units	Sample	Hazard	Friability
							Good		Fair		Poor					
Floor	Floor Tile 1	VSF and Mastic Adhesive	Surface		B	Y	300	(7)					SF	S0048	Presumed Asbestos	Non-Friable

Note: s-48 - Grey

Building #: 383326 **Building Name: CCGS Pierre Radisson** **Surveyor:** **Survey Date: 2013-05-07**
Location #: 103 **Location Name: Cabin** **Floor: Upper Deck** **Room #:** **Square ft: 150**

System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action						Units	Sample	Hazard	Friability
							Good		Fair		Poor					
Floor		Leveling Compou			A	Y	25	(7)					SF	V9500	Presumed Asbestos	Non-Friable
Floor	Floor Tile 1	VAT and Mastic Adhesive			A	Y	130	(7)					SF	V0029	Presumed Asbestos	Non-Friable
Floor	Floor Tile 1	VAT and Mastic Adhesive			A	Y	20	(7)					SF	V0033	Presumed Asbestos	Non-Friable

Building #: 383326 **Building Name: CCGS Pierre Radisson** **Surveyor:** **Survey Date: 2013-05-07**
Location #: 104 **Location Name: Corridor** **Floor: Upper Deck** **Room #:** **Square ft: 800**

System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action						Units	Sample	Hazard	Friability
							Good		Fair		Poor					
Floor	Floor Tile 1	VAT and Mastic Adhesive			A	Y	800	(7)					SF	V0030	Presumed Asbestos	Non-Friable

PINCHIN ENVIRONMENTAL HMIS Hazardous Material Inventory System

Client: Canadian Coast Guard **Site:** Vessels

Building Number(s): 383326

Action Report for Action

Building #: 383326 **Building Name: CCGS Pierre Radisson** **Surveyor:** **Survey Date: 2013-05-07**
Location #: 107 **Location Name: Corridor** **Floor: Upper Deck** **Room #:** **Square ft: 800**

System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action						Units	Sample	Hazard	Friability
							Good		Fair		Poor					
Floor	Floor Tile 1	VAT and Mastic Adhesive			A	Y	800	(7)					SF	V0030	Presumed Asbestos	Non-Friable

Building #: 383326 **Building Name: CCGS Pierre Radisson** **Surveyor:** **Survey Date: 2013-05-07**
Location #: 108 **Location Name: Laundry** **Floor: Upper Deck** **Room #:** **Square ft: 150**

System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action						Units	Sample	Hazard	Friability
							Good		Fair		Poor					
Floor		VSF and Mastic Adhesive			A	Y	400	(7)					SF	V9500	Presumed Asbestos	Non-Friable

Building #: 383326 **Building Name: CCGS Pierre Radisson** **Surveyor:** **Survey Date: 2013-05-07**
Location #: 112 **Location Name: Sick Bay** **Floor: Uppder Dec** **Room #:** **Square ft: 150**

System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action						Units	Sample	Hazard	Friability
							Good		Fair		Poor					
Floor		Leveling Compou			A	Y	35	(7)					SF	V9500	Presumed Asbestos	Non-Friable
Floor	Floor Tile 1	VAT and Mastic Adhesive			A	Y	150	(7)					SF	V0040	Presumed Asbestos	Non-Friable

Building #: 383326 **Building Name: CCGS Pierre Radisson** **Surveyor:** **Survey Date: 2013-05-07**
Location #: 116 **Location Name: Cabin** **Floor: Upper Deck** **Room #:** **Square ft: 200**

System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action						Units	Sample	Hazard	Friability
							Good		Fair		Poor					
Floor		Leveling Compou			A	Y	35	(7)					SF	V9500	Presumed Asbestos	Non-Friable

PINCHIN ENVIRONMENTAL HMIS Hazardous Material Inventory System

Client: Canadian Coast Guard **Site:** Vessels

Building Number(s): 383326

Action Report for Action

Building #: 383326 **Building Name: CCGS Pierre Radisson** **Surveyor:** **Survey Date: 2013-05-07**
Location #: 118 **Location Name: Cabin** **Floor: Upper Deck** **Room #:** **Square ft: 150**

System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action						Units	Sample	Hazard	Friability
							Good		Fair		Poor					
Floor	Floor Tile 1	VAT and Mastic Adhesive			A	Y	140	(7)					SF	V0028	Presumed Asbestos	Non-Friable
Floor	Floor Tile 1	VAT and Mastic Adhesive			A	Y	5	(7)					SF	V0029	Presumed Asbestos	Non-Friable
Floor	Floor Tile 1	VAT and Mastic Adhesive			A	Y	5	(7)					SF	V0030	Presumed Asbestos	Non-Friable

Building #: 383326 **Building Name: CCGS Pierre Radisson** **Surveyor:** **Survey Date: 2013-05-07**
Location #: 123 **Location Name: Cabin** **Floor: Upper Deck** **Room #:** **Square ft: 150**

System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action						Units	Sample	Hazard	Friability
							Good		Fair		Poor					
Floor	Floor Tile 1	VAT and Mastic Adhesive			A	Y	120	(7)					SF	V0028	Presumed Asbestos	Non-Friable
Floor	Floor Tile 1	VAT and Mastic Adhesive			A	Y	10	(7)					SF	V0033	Presumed Asbestos	Non-Friable
Floor	Floor Tile 1	VAT and Mastic Adhesive			A	Y	10	(7)					SF	V0030	Presumed Asbestos	Non-Friable
Floor	Floor Tile 1	VAT and Mastic Adhesive			A	Y	100	(7)					SF	V0029	Presumed Asbestos	Non-Friable

Building #: 383326 **Building Name: CCGS Pierre Radisson** **Surveyor:** **Survey Date: 2013-05-07**
Location #: 125 **Location Name: Corridor** **Floor: Boat Deck** **Room #:** **Square ft: 200**

System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action						Units	Sample	Hazard	Friability
							Good		Fair		Poor					
Floor	Floor Tile 1	VAT and Mastic Adhesive			A	Y	200	(7)					SF	V0030	Presumed Asbestos	Non-Friable

PINCHIN ENVIRONMENTAL HMIS Hazardous Material Inventory System

Client: Canadian Coast Guard **Site:** Vessels

Building Number(s): 383326

Action Report for Action

Building #: 383326 **Building Name: CCGS Pierre Radisson** **Surveyor:** **Survey Date: 2013-05-07**
Location #: 137 **Location Name: Cabin** **Floor: Officer De** **Room #:** **Square ft: 200**

System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action						Units	Sample	Hazard	Friability
							Good		Fair		Poor					
Floor		Leveling Compou			A	Y	100	(7)					SF	V9500	Presumed Asbestos	Non-Friable

Building #: 383326 **Building Name: CCGS Pierre Radisson** **Surveyor:** **Survey Date: 2013-05-07**
Location #: 140 **Location Name: Cabin** **Floor: Officer De** **Room #:** **Square ft: 300**

System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action						Units	Sample	Hazard	Friability
							Good		Fair		Poor					
Floor		Leveling Compou			A	Y	150	(7)					SF	V9500	Presumed Asbestos	Non-Friable

Building #: 383326 **Building Name: CCGS Pierre Radisson** **Surveyor:** **Survey Date: 2013-05-07**
Location #: 141 **Location Name: Office** **Floor: Officer De** **Room #:** **Square ft: 100**

System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action						Units	Sample	Hazard	Friability
							Good		Fair		Poor					
Floor	Floor Tile 1	VAT and Mastic Adhesive			A	Y	100	(7)					SF	V0033	Presumed Asbestos	Non-Friable

Building #: 383326 **Building Name: CCGS Pierre Radisson** **Surveyor:** **Survey Date: 2013-05-07**
Location #: 142 **Location Name: Corridor** **Floor: Officer De** **Room #:** **Square ft: 200**

System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action						Units	Sample	Hazard	Friability
							Good		Fair		Poor					
Floor	Floor Tile 1	VAT and Mastic Adhesive			A	Y	200	(7)					SF	V0030	Presumed Asbestos	Non-Friable

PINCHIN ENVIRONMENTAL HMIS Hazardous Material Inventory System

Client: Canadian Coast Guard **Site:** Vessels

Building Number(s): 383326

Action Report for Action

Building #: 383326 **Building Name: CCGS Pierre Radisson** **Surveyor:** **Survey Date: 2013-05-07**
Location #: 144 **Location Name: Locker** **Floor: Bridge Dec** **Room #:** **Square ft: 16**

System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action						Units	Sample	Hazard	Friability
							Good		Fair		Poor					
Floor	Floor Tile 1	VAT and Mastic Adhesive			A	Y	16	(7)					SF	V0031	Confirmed Asbestos	Non-Friable

Building #: 383326 **Building Name: CCGS Pierre Radisson** **Surveyor:** **Survey Date: 2013-05-07**
Location #: 145 **Location Name: Electronics Workshop** **Floor: Bridge Dec** **Room #:** **Square ft: 300**

System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action						Units	Sample	Hazard	Friability
							Good		Fair		Poor					
Floor	Floor Tile 1	VAT and Mastic Adhesive			A	Y	300	(7)					SF	V0028	Presumed Asbestos	Non-Friable

Building #: 383326 **Building Name: CCGS Pierre Radisson** **Surveyor:** **Survey Date: 2013-05-07**
Location #: 146 **Location Name: Chart Room** **Floor: Bridge Dec** **Room #:** **Square ft: 300**

System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action						Units	Sample	Hazard	Friability
							Good		Fair		Poor					
Floor	Floor Tile 1	VAT and Mastic Adhesive			A	Y	300	(7)					SF	V0030	Presumed Asbestos	Non-Friable

Building #: 383326 **Building Name: CCGS Pierre Radisson** **Surveyor:** **Survey Date: 2013-05-07**
Location #: 148 **Location Name: Office** **Floor: Bridge Dec** **Room #:** **Square ft: 144**

System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action						Units	Sample	Hazard	Friability
							Good		Fair		Poor					
Floor	Floor Tile 1	VAT and Mastic Adhesive			A	Y	144	(7)					SF	V0030	Presumed Asbestos	Non-Friable

PINCHIN ENVIRONMENTAL HMIS Hazardous Material Inventory System

Client: Canadian Coast Guard **Site:** Vessels

Building Number(s): 383326

Action Report for Action

Building #: 383326 **Building Name: CCGS Pierre Radisson** **Surveyor:** **Survey Date: 2013-05-07**
Location #: 149 **Location Name: Corridor** **Floor: Bridge Dec** **Room #:** **Square ft: 200**

System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action						Units	Sample	Hazard	Friability
							Good		Fair		Poor					
Floor	Floor Tile 1	VAT and Mastic Adhesive			A	Y	200	(7)					SF	V0030	Presumed Asbestos	Non-Friable

Building #: 383326 **Building Name: CCGS Pierre Radisson** **Surveyor:** **Survey Date: 2013-05-07**
Location #: 150 **Location Name: Wheelhouse** **Floor: Bridge Dec** **Room #:** **Square ft: 800**

System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action						Units	Sample	Hazard	Friability
							Good		Fair		Poor					
Floor	Floor Tile 1	VAT and Mastic Adhesive			A	Y	800	(7)					SF	V0028	Presumed Asbestos	Non-Friable

PINCHIN ENVIRONMENTAL HMIS Hazardous Material Inventory System

Client: Canadian Coast Guard **Site:** Vessels

Building Number(s): 383326

Action Report for Action

Legend:

Action				Access		Condition		Sample Number	
(1)	Clean Up of ACM Debris	(2)	Precautions for Access Which may Disturb ACM Debris	A	Accessible to all building occupants	Good	No visible damage or deterioration.	S####	Sample collected
(3)	ACM removal	(4)	Precautions for Work Which may Disturb ACM in Poor Condition	B	Accessible to maintenance and operations staff without a ladder	Fair	Minor, repairable damage, cracking or deterioration.	V####	Material is visually identified to be identical to S###
(5)	Proactive ACM removal (Minimum repair required for fair condition)	(6)	ACM repair	C	Accessible to maintenance and operations staff with a ladder. Also rarely entered, locked	Poor	Irreparable damage or deterioration with exposed and missing material	V0000	Known non-asbestos material
(7)	Management program and surveillance			D	Not normally accessible or without demolition	NOTE: See report for full definitions of action, access and condition		V9000	Material is visually identified to contain asbestos
								V9500	Material is presumed to contain asbestos
NOTE: Actions in round brackets ( ) are auto-calculated. Actions in square brackets [ ] are manual								Note: Presumed various materials identified in the report are ACM if not sampled.	

Units SF - Square feet LF - Linear feet EA - Each % - Percentage