



**ASBESTOS MATERIALS SURVEY
FOR
CANADIAN COAST GUARD SERVICES**

VESSEL NAME: CCGS JOHN P. TULLY

VESSEL NO.: 804457



Prepared for:

Department of Fisheries and Oceans
Integrated Technical Support
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Pinchin LeBlanc Environmental Ltd Project No. 01-7011

PHH ARC Environmental Ltd. Project No. 2267R

February 21, 2007

EXECUTIVE SUMMARY

Pinchin LeBlanc Environmental Ltd. was retained by the Department of Fisheries and Oceans to perform asbestos surveys for asbestos-containing materials within selected Canadian Coast Guard Services (CCGS) vessels throughout Canada. To accomplish the task of surveying vessels on a national scale, PLEL utilized the Pinchin Group of companies. A total of thirty (30) selected vessels were included within the survey program. This report will provide the findings for the following vessel;

VESSEL NAME: CCGS John P. Tully

VESSEL NO.: 804457

VESSEL DESC.: Offshore Research / Survey Vessel

No friable asbestos-containing materials were identified within the vessel during the survey.

No non-friable asbestos-containing materials were identified within the vessel during the survey.

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1.0 INTRODUCTION

Pinchin LeBlanc Environmental Ltd. (PLEL) was retained by the Department of Fisheries and Oceans to perform asbestos surveys for asbestos-containing materials (ACM) within selected Canadian Coast Guard Services (CCGS) vessels throughout Canada. To accomplish the task of surveying vessels on a national scale, PLEL utilized the Pinchin Group of companies. A total of thirty (30) vessels were included within the survey program. The surveys have been conducted to address inaccurate or unavailable information regarding the presence of asbestos of CCGS vessels. This report will provide the findings for the following vessel;

VESSEL NAME: CCGS John P. Tully
VESSEL NO.: 804457
VESSEL DESC.: Offshore Research / Survey Vessel

The survey included both friable¹ and non-friable² ACM as well as suspect ACM. Both Federal and Provincial regulations and guidelines distinguish between friable and non-friable materials. All provincial regulations regarding asbestos materials distinguish between friable and non-friable materials when assigning appropriate work practices.

The most common friable ACM used in the past are surfacing materials (usually sprayed fireproofing, texture, decorative or acoustic plaster) and thermal insulations. Asbestos-containing manufactured materials include deck covering materials, deckhead and bulkhead panels, gasket materials, asbestos cement pipe or board, and asbestos textiles. Depending on the formulation these may be friable or non-friable. Note that though a product may be considered non-friable when new, if the product releases fine dust due to deterioration or during removal, the free dust is considered friable. For example, lay-in acoustic ceiling tiles may release significant dust at the time of major removal.

¹ The term friable is applied to a material that can be readily reduced to dust or powder by hand or moderate pressure. Friable ACM has a much greater potential to release airborne asbestos fibres when disturbed. The most common friable ACM used in the past are sprayed or trowelled materials (for fireproofing or thermal insulation), texture plaster (decorative or acoustic), and mechanical insulations.

² Common non-friable ACM include vinyl floor tiles, ceiling tiles, gasket materials, asbestos cement pipe or board (transite), and asbestos textiles. Although a product may be considered non-friable when new, if the product releases fine dust due to deterioration or during removal, the free dust is considered friable. For example, most lay-in or glued on acoustic ceiling tiles release significant dust during removal of large quantities of these tiles.

2.0 SURVEY AND ASSESSMENT CRITERIA

2.1 Survey Information

The vessel was located in Victoria, British Columbia and therefore the regional Pinchin Group office conducting the fieldwork was PHH ARC Environmental Ltd. The fieldwork was performed by Chris McGregor of PHH ARC Environmental Ltd. on January 31, 2007.

2.2 Survey Methodology

The collection of information was on a room-by-room basis and the approximate quantities of the ACM were noted where appropriate. In order to determine the location of the ACM and develop recommendations of the work required, the surveyor entered each room, cabin, or space where practical. Representative views were made above accessible suspended ceiling systems. Access above and within solid bulkheads and deckheads was made through existing hatches or panels. Where required, intrusive inspections were made within cavities particularly in areas where mechanical equipment was suspected to be present. The intrusive investigations involved the removal of existing bulkhead panels or deckhead panels to assess the conditions within. The survey did not include demolition of floors, ceilings or walls or other demolition to check on conditions behind.

The surveyor assigned a unique location number to each area or individual room surveyed. Where a room name was available, it was recorded along with the assigned location number (Location XX). The information from the field data collection sheets, was entered into the Pinchin Group's *Hazardous Materials Inventory System* computer database. The computer generated print-outs are included as Appendix II of this report.

2.3 Survey Scope

2.3.1 Friable Materials

The survey included the following asbestos and non-asbestos materials:

- ◆ Sprayed Materials including:
 - fireproofing
 - thermal insulation (not including mechanical)
 - texture finishes (for acoustic or decorative purposes)

(NOTE: Although usually installed by spray application the materials above may also have been installed by roller or trowel).

- ◆ Mechanical Insulation on:
 - boiler and breeching,
 - generators and exhausts,
 - ventilation trunking,
 - piping,
 - tanks and equipment
- ◆ Deckhead Tiles (suspended ceiling tiles)
 - Suspended ceiling tiles are included, as they may become friable on handling.

2.3.2 Non-Friable Materials

The survey also included the identification for the following non-friable materials:

- ◆ Deckhead and bulkhead panels
- ◆ Textiles
- ◆ Asbestos cement boards
- ◆ Firestop material
- ◆ Vinyl floor tiles and vinyl sheet flooring
- ◆ Drywall joint compound
- ◆ Plaster (walls and ceilings)
- ◆ Other (gaskets and door packings)

Some of these products (i.e. asbestos cement boards) were visually identified as asbestos containing. For the remaining materials, due to the inconsistent use of asbestos, any materials which were not sampled or visually confirmed as non-asbestos are identified in this report as suspect material (SM).

No identification was made of asbestos products used in the vessel operations (i.e. kitchens or manufacturing operations), or curricula (i.e. laboratories or trade shops). No testing of dust within supply or return ducts was performed.

2.3.3 Sampling Strategy

Asbestos samples were collected in accordance with the National Institute for Occupational Safety and Health (NIOSH) method 9002. The collection of samples was performed in sufficient frequency to obtain a general pattern of asbestos use within the vessel. It is known that inconsistencies within construction or later repair or refit may result in deviation from the general pattern however without sampling of every wall, foot of pipe, pipe fitting, HVAC unit, ductwork, etc., it is not possible to individually characterize every asbestos material present. Therefore the surveyor relies on visual identification of similar materials with asbestos content based on representative bulk samples. While our experience is that this methodology is reliable and practical, it should be noted that the possibility remains that visually similar materials may have different asbestos content.

2.3.4 Analytical Methods

During the survey, materials suspected of containing asbestos were identified visually, based on the surveyor's knowledge of the historic use of asbestos-containing products. Where these materials had not been previously sampled, visual identifications were supported by collection and analysis of a limited number of bulk samples. For this confirmation a total of eight (8) samples were collected and analyzed at the International Asbestos Testing Laboratories (IATL).

The bulk samples are analyzed using a combination of dispersion staining and polarized light microscopy. The analytical method follows the Ontario Ministry of Labour Code for the Determination of Asbestos from Bulk Samples, August 1985 and U.S. EPA Method 600/R-93/116 dated July 1993. IATL is certified under the National Voluntary Laboratory Accreditation Program (NVLAP) to perform asbestos analysis of bulk samples (Laboratory Number 1165). The analytical certificates are presented in Appendix I.

Materials which when analysed are reported as containing <1% of asbestos are considered to be non-asbestos under Provincial Regulations.

2.3.5 Field Data Collection

In each of the inspection locations the surveyor completed a field data collection sheet. On the field data sheet, the absence or presence of asbestos-containing materials was recorded in the following components.

- Floor (decks)
- Ceiling (deckheads)
- Wall (bulkheads)
- Piping
- Structure
- Duct
- Mechanical Equipment
- Other

The computer generated field data sheets found in Appendix II provide an easy reference for maintenance workers in the event of work in a particular room or area. The information, as presented on these sheets, lists all materials present as either asbestos-containing or not. The sheets list both the "condition" and "accessibility" of the asbestos material. These terms are defined in Appendix III.

The quantities shown are approximations, based on visual examination. Quantities were not provided on a consistent or reliable basis. For the quantities shown no measured take-off was performed and these quantities should not be utilized for cost estimating or budgeting purposes. Furthermore, (particularly for pipe insulation) it must also be realized that without removing all deckhead panels, bulkhead panels, etc. that not all asbestos materials present in the vessel were visually inspected or noted.

Appendix II also provides the "Guide to Survey Sheets" along with summaries of the numerical or alphabetical codes used.

2.3.6 Limitations of Survey

A number of limitations are described throughout this report. The intent of the limitations is to clearly identify to the user of this report that some limitations exist as to the possible thoroughness of a survey. Some of these limitations have been specifically identified above.

As per industry standards the field observations, measurements, and analysis are considered sufficient in detail and scope to form a reasonable basis for an asbestos hazard assessment of this property. PLEL warrants that the findings and conclusions contained herein have been promulgated in accordance with generally accepted asbestos inventory methods, for the site referenced in this report.

These evaluation methods have been developed to provide the client with information regarding apparent indications of existing or potentially hazardous conditions relating to the property and are necessarily limited to the conditions observed and information available at the time of the site visit and research. There is a distinct possibility that conditions may exist which could not be reasonably identified within the scope of the assessment or which were not apparent during the site visit. PLEL believes that the information collected during the survey period concerning the property is reliable. However, PLEL cannot warrant or guarantee that the information provided is absolutely complete or accurate beyond the current asbestos consulting industry standards. No other warranties are implied or expressed.

3.0 DISCUSSION OF ASBESTOS-CONTAINING MATERIALS

A summary of the findings for the ACM survey are discussed below under the following headings:

- 3.1 Sprayed or Trowelled Fireproofing or Thermal Insulation
- 3.2 Texture Finishes (for acoustic or decorative purposes)
- 3.3 Piping Insulation
- 3.4 Ventilation Trunking Insulation
- 3.5 High Temperature Machinery Insulation
- 3.6 Bulkheads and Deckheads
- 3.7 Deck Covering Material (i.e. Flooring products)
- 3.8 Door, Hatch, Scuttle Insulation and Packings
- 3.9 Other Asbestos-Containing Materials
- 3.10 Suspect Asbestos Materials

The sample numbers, designated by SXXXX, referenced below refer to the bulk analysis reports presented in Appendix I.

The location numbers (Location XX) are cross-referenced to the Location Table found in Appendix II-B and referred to on the Survey Data Sheets in Appendix II. The information below provides a summary of information contained in the Survey Data Sheets. Refer to Appendix II for detailed information on the observations made at each of the survey locations including estimated quantities, locations and conditions of identified ACM.

4.0 FRIABLE ASBESTOS-CONTAINING MATERIALS

4.1 Sprayed or Trowelled Fireproofing or Thermal Insulation

Fireproofing is located within the exhaust stack walls (Loc. 4), generator room (Loc. 5) and navigation bridge, scientific wireway (Loc. 45) samples (S0002, S0003 and S0008). All were determined to be non-asbestos.

4.2 Texture Finishes

No textured finish surfaces were observed in the vessel.

4.3 Piping Insulation

Piping in the vessel was observed to be insulated with fibreglass. With the exception of the funnel compartment (Loc. 43) the pipe insulation was sampled (S0007) and determined to be non-asbestos.

4.4 Ventilation Trunking Insulation

Typical bathroom exhaust ducts present are not insulated.

4.5 High Temperature Machinery Insulation

4.5.1 Main Propulsion

There are two (2) engines in the Engine Room (Loc. 4), none of which are insulated. The main propulsion exhaust (uptakes) in (Loc. 43) are insulated with fibreglass and textile jacketing.

4.5.2 Generators

The main generators, located in the Generator Room (Loc. 5), are not insulated. The port and starboard generator exhausts are insulated with fibreglass and textile jacketing.

4.5.3 Emergency Generator

The emergency generator, located in the Engine Room (Loc.4) exhaust is insulated with fibreglass and textile jacketing.

4.6 Bulkheads and Deckheads

Typical insulation of bulkheads and deckheads, with the exception of the sprayed materials discussed in Section 4.1 of this report, consist of non-asbestos fibreglass insulation.

No ceiling tiles are present in the vessel.

5.0 NON-FRIABLE ASBESTOS-CONTAINING MATERIALS

5.1 Deck Covering Materials

5.1.1 Vinyl Sheet Flooring

No vinyl sheet flooring is present within the vessel.

5.1.2 Vinyl Floor Tiles

Vinyl floor tiles are located within the auxiliary data processing area (Loc. 40) were sampled and determined to be non-asbestos (S0006).

5.2 Asbestos Cement Products

An insulating cement material is present on inside of the incinerator (Loc. 17). This material was sampled and was determined to be non-asbestos containing (S0005).

5.3 Other Asbestos-Containing Materials

Deckscreed was sampled in the crews mess (Loc.14) and was determined to be non-asbestos containing (S0004).

6.0 SUSPECT ASBESTOS-CONTAINING MATERIALS

In addition to the ACM described in the sections above, a number of other materials may be present in the vessel that can potentially contain asbestos. These materials are grouped under the heading of Suspect Asbestos-Containing Materials (the need for demolition/dismantling equipment and the lack of access limit our ability to determine the asbestos content).

Materials which are not accessible and/or can not be sampled without demolition, dismantling or causing irreparable damage include: components or wiring within motors, lights, high voltage wiring, mechanical packing and gaskets, and materials located inside electrical fixtures, light fixtures, switch gear or transformers.

7.0 CONCLUSIONS

Asbestos-containing materials were not found on the surveyed vessel.

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APPENDIX I

RESULTS OF BULK SAMPLE ANALYSIS FOR ASBESTOS

CERTIFICATE OF ANALYSIS

Client: PHH Environmental Suite 15A - 1537 Hillside Ave Victoria, BC V8T4Y2	Report Date: 2/8/2007 Project: Canadian Coast Guard Project No.: CCG Tulley;2267R
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BULK SAMPLE ANALYSIS SUMMARY

Lab No.:	2835642	Description / Location:	White Fibrous Fire Door; Pump Room; Loc 02
Client No.:	S01		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>
None Detected	None Detected	100	Synthetic
			<u>% Non-Fibrous Material</u>
			0

Lab No.:	2835643	Description / Location:	Grey Insulation Exhaust Stack; Wall; Loc 04
Client No.:	S02		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>
None Detected	None Detected	85	Mineral Wool
			<u>% Non-Fibrous Material</u>
			15

Lab No.:	2835644	Description / Location:	Grey Insulation Generator Room; Wall; Loc 05
Client No.:	S03		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>
None Detected	None Detected	40	Mineral Wool
			<u>% Non-Fibrous Material</u>
			60

Lab No.:	2835645	Description / Location:	Grey/Brown/Tan NonFibrous Crews Mess; Under Carpet; Loc 014
Client No.:	S04		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>
None Detected	None Detected	5	Synthetic
			<u>% Non-Fibrous Material</u>
			95

NIST-NVLAP No. 101165-0

NY-DOH No. 11021

AIHA Lab No. 100188

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Analysis Method: EPA 600/R-93/116

Comments: (PC) Indicates Stratified Point Count Method performed. Method not performed unless stated. Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, negative PLM results cannot be guaranteed. Electron Microscopy can be used as a confirming technique. Regulatory Limit is based upon the sample matrix. Quantification at <0.25% by volume is possible with this method. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed.

Analysis Performed By: L. Price

Approved By: _____

Date: 2/8/2007

CERTIFICATE OF ANALYSIS

Client: PHH Environmental Suite 15A - 1537 Hillside Ave Victoria, BC V8T4Y2	Report Date: 2/8/2007 Project: Canadian Coast Guard Project No.: CCG Tulley;2267R
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BULK SAMPLE ANALYSIS SUMMARY

Lab No.:	2835646	Description / Location:	Grey Cement Incinerator Door;Loc 017
Client No.:	S05		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>
None Detected	None Detected	None Detected	None Detected
			<u>% Non-Fibrous Material</u> 100

Lab No.:	2835647	Description / Location:	Tan Floor Tile Aux. Data Processing Area;Loc 040
Client No.:	S06		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>
None Detected	None Detected	None Detected	None Detected
			<u>% Non-Fibrous Material</u> 100

Lab No.:	2835647	Description / Location:	Black Mastic Aux. Data Processing Area;Loc 040	Layer No.: 2
Client No.:	S06			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

Lab No.:	2835648	Description / Location:	White Insulation Exhaust;Funnel Pipes;Loc 043	
Client No.:	S07			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	5	Fibrous Glass	90
		5	Mineral Wool	

NIST-NVLAP No. 101165-0

NY-DOH No. 11021

AIHA Lab No. 100188

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Analysis Method: EPA 600/R-93/116

Comments: (PC) Indicates Stratified Point Count Method performed. Method not performed unless stated. Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, negative PLM results cannot be guaranteed. Electron Microscopy can be used as a confirming technique. Regulatory Limit is based upon the sample matrix. Quantification at <0.25% by volume is possible with this method. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed.

Analysis Performed By: L. Price

Date: 2/8/2007



**International Asbestos
Testing Laboratories**

16000 Horizon Way Unit 100 Mt. Laurel, NJ 08054
Telephone: 856-231-9449 Fax: 856-231-9818

CERTIFICATE OF ANALYSIS

Client: PHH Environmental Suite 15A - 1537 Hillside Ave Victoria, BC V8T4Y2	Report Date: 2/8/2007 Project: Canadian Coast Guard Project No.: CCG Tulley,2267R
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BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 2835649	Description / Location: Grey Insulation;Nav Bridge Deck		
Client No.: S08	Wall;Scientific Wireway;Loc 045		
<u>% Asbestos</u>	<u>Tvoc</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>
None Detected	None Detected	75	Mineral Wool
			<u>% Non-Fibrous Material</u>
			25

NIST-NVLAP No. 101165-0

NY-DOH No. 11021

AIHA Lab No. 100188

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Analysis Method: EPA 600/R-93/116

Comments: (PC) Indicates Stratified Point Count Method performed. Method not performed unless stated. Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, negative PLM results cannot be guaranteed. Electron Microscopy can be used as a confirming technique. Regulatory Limit is based upon the sample matrix. Quantification at <0.25% by volume is possible with this method. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed.

Analysis Performed By: L. Price

Date: 2/8/2007

APPENDIX II
SURVEY DATA

APPENDIX II-A

GUIDE TO SURVEY SHEETS

GUIDE TO THE ASBESTOS SURVEY SHEETS ASBESTOS MATERIALS SURVEY

The following Appendices contain printouts from Hazardous Materials Inventory System (HMIS) computer database. The appendices include information that the majority of our clients find useful.

Each Appendix is discussed below:

Appendix II-B Locations Report	The Locations Report provides a list of all functional areas (rooms) of the vessel where the surveyor recorded information. The information recorded includes the, unique Location Number, location by floor or room number, name of the areas (if available), whether the room was accessible, the square foot area of the room (optional), the date of the survey, surveyor's name and notes specific to the location
Appendix II-B Asbestos Samples Report	The Asbestos Samples Report provides information on the materials, where they were sampled, and the results of the samples collected and analyzed during the survey. If the sample contains two distinct layers the results are reported separately. The sample numbers are referenced on the Asbestos Only Report.
Appendix II-C Asbestos Only Report	The Asbestos Only Report, is one of a multitude of customized reports available via the HMIS database. The Asbestos Only Report provides information regarding materials that have been determined to contain asbestos, either through sample analysis or based on the observations and knowledge of the surveyor.
Appendix II-D All Data Report	The All Data Report, provides information regarding all materials that have been surveyed, either through sample analysis or based on the observations and knowledge of the surveyor. This report provides both asbestos-containing as well as non-asbestos materials.

APPENDIX II-B
LOCATION AND SAMPLE TABLE

Location List

Location Report	Warning Label	Loc #	Floor	Room Prefix	Room Number	Room Suffix	Room Name	No Access	Square Feet	Survey Date	Surveyor	Notes
Open	Open	1	Lower				AFT Trust Compartment			2007-01-3 1		
Open	Open	2	Lower				FO Pump Room			2007-01-3 1		
Open	Open	3	Lower				Workshop			2007-01-3 1		
Open	Open	4	Lower				Engine Room			2007-01-3 1		
Open	Open	5	Lower				Generator Room			2007-01-3 1		
Open	Open	6	Lower				Control Room			2007-01-3 1		
Open	Open	7	Lower				Transducer Comp			2007-01-3 1		
Open	Open	8	Lower				Bow Thruster Compartment			2007-01-3 1		
Open	Open	9	Lower				Forward Machine Space			2007-01-3 1		

Location List

Location Report	Warning Label	Loc #	Floor	Room Prefix	Room Number	Room Suffix	Room Name	No Access	Square Feet	Survey Date	Surveyor	Notes
Open	Open	10	Main				Dry Store			2007-01-3 1		
Open	Open	11	Main				Cold Rooms			2007-01-3 1		No exposed pipe or duct.
Open	Open	12	Main				Galley			2007-01-3 1		
Open	Open	13	Main				Cleaning Locker			2007-01-3 1		
Open	Open	14	Main				Crew Mess			2007-01-3 1		F2 - Under all carpets on main deck.
Open	Open	15	Main				Crew Lounge			2007-01-3 1		
Open	Open	16	Main				Crew Cabins x16			2007-01-3 1		There are 16 cabins on main deck.
Open	Open	17	Main				Incinerator Room			2007-01-3 1		M - inside doors and walls of incinerator.
Open	Open	18	Main				Washrooms x4			2007-01-3 1		There are 4 washrooms on this main deck.

Location List

Location Report	Warning Label	Loc #	Floor	Room Prefix	Room Number	Room Suffix	Room Name	No Access	Square Feet	Survey Date	Surveyor	Notes
Open	Open	19	Main				Bosum Store			2007-01-3 1		
Open	Open	20	Main				Electrical Store & Workshop			2007-01-3 1		
Open	Open	21	Main				Steering Gear Compartment			2007-01-3 1		
Open	Open	22	Main				Mechanical Store			2007-01-3 1		
Open	Open	23	Upper Deck				Main Laboratory			2007-01-3 1		
Open	Open	24	Upper deck				Wet Laboratory			2007-01-3 1		
Open	Open	25	Upper Deck				Water-Tight Door Control Station			2007-01-3 1		
Open	Open	26	Upper deck				Cabins - Scientists (7)			2007-01-3 1		
Open	Open	27	Upper Deck				Washrooms (7)			2007-01-3 1		

Location List

Location Report	Warning Label	Loc #	Floor	Room Prefix	Room Number	Room Suffix	Room Name	No Access	Square Feet	Survey Date	Surveyor	Notes
Open	Open	28	Upper				Pantry			2007-01-3 1		
Open	Open	29	Upper				Bosum Store			2007-01-3 1		
Open	Open	30	Upper				Scientific Cool Room			2007-01-3 1		
Open	Open	31	Focsle				Paint Locker			2007-01-3 1		
Open	Open	32	Focsle				Bosums Workshop			2007-01-3 1		
Open	Open	33	Focsle				Halon Room			2007-01-3 1		
Open	Open	34	Focsle				Fan Room			2007-01-3 1		
Open	Open	35	Focsle				Emergency Generator Room			2007-01-3 1		
Open	Open	36	Focsle				Laundry Room			2007-01-3 1		

Location List

Location Report	Warning Label	Loc #	Floor	Room Prefix	Room Number	Room Suffix	Room Name	No Access	Square Feet	Survey Date	Surveyor	Notes
Open	Open	37	Focsle				Officers Quarters x10			2007-01-3 1		10 Quarters on this deck are visually equal.
Open	Open	38	Focsle				Lavatories x10			2007-01-3 1		
Open	Open	39	Bridge				Data Processing Area			2007-01-3 1		No electrical equipment here.
Open	Open	40	Bridge				Aux. Data Processing Area			2007-01-3 1		
Open	Open	41	Bridge				Hydrographic Chart Room			2007-01-3 1		
Open	Open	42	Bridge				Electronic Equipment Workshop			2007-01-3 1		
Open	Open	43	Funnel				Funnel Compartment			2007-01-3 1		
Open	Open	44	Bridge				Bridge (Wheelhouse)			2007-01-3 1		
Open	Open	45	Bridge				Scientific Wire Way			2007-01-3 1		

Client: Canadian Coast Guard
Project: 01-7011

Building Name: CCGS John P Tully
Building #:

Location List

Location Report	Warning Label	Loc #	Floor	Room Prefix	Room Number	Room Suffix	Room Name	No Access	Square Feet	Survey Date	Surveyor	Notes
Open	Open	46	House Top				Air Condition/Electronics Room			2007-01-3 1		
Open	Open	47	Deck				Deck (Outside)			2007-01-3 1		

Client: Canadian Coast Guard
Project: 01-7011
Building Number(s):

Bulk Sample Analysis

Building #: **Building Name:** CCGS John P Tully **Surveyor:** **Survey Date:**

Sample #	System	Material	Loc #	Asbestos	Result A	Type A	Result B	Type B	Result C	Type C	Result D	Type D	Result
0001	Other	Textile	2	<input type="checkbox"/>	N.D.	None Detected							N.D.
Description: White Fibrous, Fire Door, Pump Room, Location 2.													
0002	Walls	Fibreglass w/ Metal Jacket	4	<input type="checkbox"/>	N.D.	None Detected							N.D.
Description: Grey Insulation, Exhaust Stack, Location 4.													
0003	Walls	Fibreglass w/ Metal Jacket	5	<input type="checkbox"/>	N.D.	None Detected							N.D.
Description: Grey Insulation, Generator Room, Wall, Location 5.													
0004	Floor	Skid Proof Tile	14	<input type="checkbox"/>	N.D.	None Detected							N.D.
Description: Grey, Brown, Tan Non-Fibrous, Crews Mess, Under Carpet, Location 14.													
0005	Mechanical Equipment	Cementitious Fireproofing	17	<input type="checkbox"/>	N.D.	None Detected							N.D.
Description: Grey Cement, Incinerator Door, Location 17.													
0006	Floor	Vinyl tiles	40	<input type="checkbox"/>	N.D.	None Detected	N.D.	None Detected					N.D.
Description: Tan Floor Tile, Aux. Data Processing, Location 40.													
0007	Mechanical Equipment	Mag Block w/ Textile Jacket	43	<input type="checkbox"/>	N.D.	None Detected							N.D.
Description: White Insulation, Exhaust, Funnel Pipes, Location 43.													
0008	Walls	Fibrous Fireproofing	45	<input type="checkbox"/>	N.D.	None Detected							N.D.
Description: Grey Insulation, Nav. Bridge Deck Wall, Location 45.													

APPENDIX II-C
ASBESTOS DATA REPORT

Confirmed Asbestos and Assumed Asbestos Report

Legend:

Action		Access		Condition		Sample Number	
No calculated action	(1) Error	A	All building occupants	Good	No visible damage or exposed material	S####	Sample collected
(1) Immediate clean-up of debris or damaged ACM likely to be disturbed	(2) Type 2 precautions for entry into areas with ACM debris	B	Maintenance and operations staff without a ladder	Fair	Repairable damage with minor amounts of exposed material	V####	Material is visually identified to be identical to S###
(3) ACM removal required	(4) Type 2 precautions for entry into areas where ACM is present	C	Maintenance and operations staff with a ladder	Poor	Irreparable damage with exposed and missing material	V0000	Material is visually identified to contain no asbestos
(5) Proactive ACM removal	(6) ACM repair	D	Not accessible	NOTE: Sprayed material are only rated as Good or Poor.		V9000	Material is visually identified to contain asbestos
(7) Management program and surveillance	(8) Assumed Material					V9500	Material is assumed to contain asbestos
(9) Action not currently assigned	(?) Unknown / Unable to Calculate						Note: Vinyl tiles, vinyl sheet flooring, drywall, plaster and textured finish (coat) are considered assumed materials if not sampled.
NOTE: Actions in round brackets () are auto-calculated. Actions in square brackets [] are manual overrides.							

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

APPENDIX II-D
ALL DATA REPORT

All Data Report

Building #:		Building Name: CCGS John P Tully		Surveyor:		Survey Date: 2007-01-31		Assessment Date: 2007-01-31					
Location #: 1		Location Name: AFT Trust		Floor: Lower		Room #:		Square ft:					
System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action			Units	Sample	Hazard	Friability
							Good	Fair	Poor				
Ceiling	N/A	Steel	Not Applicable	Paint	B	Y				%	V0000	None	
Duct	Not Found	N/A	Not Applicable	N/A	NA	N				%	V0000	None	
Floor	Checker Plate	Aluminum	Not Applicable	N/A	B	Y				%	V0000	None	
Piping	Not Found	N/A	Not Applicable	N/A	NA	N				%	V0000	None	
Structure	N/A	Steel	Not Applicable	Paint	B	Y				%	V0000	None	
Walls	N/A	Steel	Not Applicable	Paint	B	Y				%	V0000	None	

Building #:		Building Name: CCGS John P Tully		Surveyor:		Survey Date: 2007-01-31		Assessment Date: 2007-01-31					
Location #: 2		Location Name: FO Pump Room		Floor: Lower		Room #:		Square ft:					
System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action			Units	Sample	Hazard	Friability
							Good	Fair	Poor				
Ceiling	N/A	Steel	Not Applicable	Paint	B	Y				%	V0000	None	
Duct	Not Found	N/A	Not Applicable	N/A	NA	N				%	V0000	None	
Floor	N/A	Steel	Not Applicable	Paint	B	Y				%	V0000	None	
Other 1	Fire door	N/A	Not Applicable	N/A	NA	N				%	V0000	None	
Other two	Fire Stop	Textile	Not Applicable	N/A	C	Y	100			%	S0001	None	
Piping	Unidentified Pipe	Not Insulated	Not Applicable	Paint	C	Y				%	V0000	None	
Structure	N/A	Steel	Not Applicable	Paint	B	Y				%	V0000	None	
Walls	N/A	Fibreglass w/ Metal Jacket	Not Applicable	N/A	B	Y				%	V0000	None	

Building Number(s):
All Data Report

Building #: Location #: 3		Building Name: CCGS John P Tully Location Name: Workshop		Surveyor:		Survey Date: 2007-01-31		Assessment Date: 2007-01-31					
System	Component	Material	Item	Covering	Access	Visible	Room #: Square ft:			Units	Sample	Hazard	Friability
							Condition, Quantity & Action						
							Good	Fair	Poor				
Ceiling	N/A	Steel	Not Applicable	Paint	B	Y				%	V0000	None	
Duct	Not Found	N/A	Not Applicable	N/A	NA	N				%	V0000	None	
Floor	N/A	Steel	Not Applicable	Paint	B	Y				%	V0000	None	
Other 1	Fire door	N/A	Not Applicable	N/A	NA	N				%	V0000	None	
Other two	Fire Stop	Textile	Not Applicable	N/A	C	Y	100			%	V0001	None	
Piping	Unidentified Pipe	Not Insulated	Not Applicable	Paint	C	Y				%	V0000	None	
Structure	N/A	Steel	Not Applicable	Paint	B	Y				%	V0000	None	
Walls	N/A	Fibreglass w/ Metal Jacket	Not Applicable	N/A	B	Y				%	V0000	None	

Building #: Location #: 4		Building Name: CCGS John P Tully Location Name: Engine Room		Surveyor:		Survey Date: 2007-01-31		Assessment Date: 2007-01-31					
System	Component	Material	Item	Covering	Access	Visible	Room #: Square ft:			Units	Sample	Hazard	Friability
							Condition, Quantity & Action						
							Good	Fair	Poor				
Ceiling	N/A	Fibreglass w/ Metal Jacket	Not Applicable	N/A	B	Y				%	V0000	None	
Duct	N/A	Not Insulated	Not Applicable	N/A	NA	N				%	V0000	None	
Floor	Checker Plate	Aluminum	Not Applicable	N/A	B	Y				%	V0000	None	
Piping	N/A	Not Insulated	Not Applicable	N/A	NA	N				%	V0000	None	
Wall one	N/A	Steel	Not Applicable	Paint	B	Y				%	V0000	None	
Wall two	N/A	Fibreglass w/ Metal Jacket	Not Applicable	Paint	B	Y				%	V0000	None	

Building Number(s):
All Data Report

Building #:		Building Name: CCGS John P Tully		Surveyor:		Survey Date: 2007-01-31		Assessment Date: 2007-01-31					
Location #: 5		Location Name: Generator Room		Floor: Lower		Room #:		Square ft:					
System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action			Units	Sample	Hazard	Friability
							Good	Fair	Poor				
Ceiling	N/A	Fibreglass w/ Metal Jacket	Not Applicable	N/A	C	Y				%	V0000	None	
Duct	N/A	Not Insulated	Not Applicable	N/A	C	Y				%	V0000	None	
Floor	Checker Plate	Aluminum	Not Applicable	N/A	B	Y				%	V0000	None	
Mechanical Equipment	Generator Exhaust	Fibreglass	Not Applicable	Textile	C	Y				%	V0000	None	
Other	Fire door	N/A	Not Applicable	N/A	NA	N				%	V0000	None	
Piping	N/A	Not Insulated	Not Applicable	N/A	C	Y				%	V0000	None	
Walls	N/A	Fibreglass w/ Metal Jacket	Not Applicable	N/A	C	Y	100			%	S0003	None	

Building #:		Building Name: CCGS John P Tully		Surveyor:		Survey Date: 2007-01-31		Assessment Date: 2007-01-31					
Location #: 6		Location Name: Control Room		Floor: Lower		Room #:		Square ft:					
System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action			Units	Sample	Hazard	Friability
							Good	Fair	Poor				
Ceiling	Large Access Panel (> 12")	Fibreglass w/ Metal Jacket	Not Applicable	N/A	B	Y				%	V0000	None	
Floor	N/A	Steel	Not Applicable	Paint	B	Y				%	V0000	None	
Walls	Large Access Panel (> 12")	Fibreglass w/ Metal Jacket	Not Applicable	Plastic Laminate	B	Y				%	V0000	None	

Building Number(s):
All Data Report

Building #: Location #: 7		Building Name: CCGS John P Tully Location Name: Transducer Comp		Surveyor: Floor: Lower		Survey Date: 2007-01-31 Room #:		Assessment Date: 2007-01-31 Square ft:					
System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action			Units	Sample	Hazard	Friability
							Good	Fair	Poor				
Ceiling	N/A	Steel	Not Applicable	Paint	C	Y				%	V0000	None	
Duct	Not Found	N/A	Not Applicable	N/A	NA	N				%	V0000	None	
Floor	Checker Plate	Aluminum	Base	N/A	B	Y				%	V0000	None	
Piping	N/A	Not Insulated	Not Applicable	Not Insulated	B	Y				%	V0000	None	
Structure	N/A	Steel	Not Applicable	Paint	B	Y				%	V0000	None	
Walls	N/A	Steel	Not Applicable	Paint	C	Y				%	V0000	None	

Building #: Location #: 8		Building Name: CCGS John P Tully Location Name: Bow Thruster Compartment		Surveyor: Floor: Lower		Survey Date: 2007-01-31 Room #:		Assessment Date: 2007-01-31 Square ft:					
System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action			Units	Sample	Hazard	Friability
							Good	Fair	Poor				
Ceiling	N/A	Steel	Not Applicable	Paint	C	Y				%	V0000	None	
Duct	Not Found	N/A	Not Applicable	N/A	NA	N				%	V0000	None	
Floor	Checker Plate	Aluminum	Not Applicable	N/A	B	Y				%	V0000	None	
Piping	N/A	Not Insulated	Not Applicable	N/A	C	Y				%	V0000	None	
Structure	N/A	Steel	Not Applicable	Paint	C	Y				%	V0000	None	
Walls	N/A	Fibreglass w/ Metal Jacket	Not Applicable	N/A	C	Y				%	V0000	None	

Building #: Location #: 9		Building Name: CCGS John P Tully Location Name: Forward Machine Space		Surveyor: Floor: Lower		Survey Date: 2007-01-31 Room #:		Assessment Date: 2007-01-31 Square ft:					
System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action			Units	Sample	Hazard	Friability
							Good	Fair	Poor				
Ceiling	N/A	Steel	Not Applicable	Paint	C	Y				%	V0000	None	
Duct	Not Found	N/A	Not Applicable	N/A	NA	N				%	V0000	None	
Floor	N/A	Steel	Not Applicable	Paint	B	Y				%	V0000	None	
Piping	N/A	Not Insulated	Not Applicable	N/A	C	Y				%	V0000	None	
Structure	N/A	Steel	Not Applicable	Paint	C	Y				%	V0000	None	
Walls	N/A	Fibreglass w/ Metal Jacket	Not Applicable	N/A	C	Y				%	V0000	None	

Building #: Location #: 10		Building Name: CCGS John P Tully Location Name: Dry Store		Surveyor: Floor: Main		Survey Date: 2007-01-31 Room #:		Assessment Date: 2007-01-31 Square ft:					
System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action			Units	Sample	Hazard	Friability
							Good	Fair	Poor				
Ceiling	N/A	Steel	Not Applicable	Paint	C	Y				%	V0000	None	
Duct	Not Found	N/A	Not Applicable	N/A	NA	N				%	V0000	None	
Floor	N/A	Steel	Not Applicable	Paint	B	Y				%	V0000	None	
Piping	N/A	Not Insulated	Not Applicable	N/A	C	Y				%	V0000	None	
Structure	N/A	Steel	Not Applicable	Paint	C	Y				%	V0000	None	
Walls	N/A	Fibreglass w/ Metal Jacket	Not Applicable	N/A	C	Y				%	V0000	None	

Building #:		Building Name: CCGS John P Tully		Surveyor:		Survey Date: 2007-01-31		Assessment Date: 2007-01-31					
Location #: 11		Location Name: Cold Rooms		Floor: Main		Room #:		Square ft:					
System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action			Units	Sample	Hazard	Friability
							Good	Fair	Poor				
Ceiling	All	Aluminum	Not Applicable	N/A	B	Y				%	V0000	None	
Floor	All	Aluminum	Not Applicable	N/A	B	Y				%	V0000	None	
Walls	All	Aluminum	Not Applicable	N/A	B	Y				%	V0000	None	

Note: No exposed pipe or duct.

Building #:		Building Name: CCGS John P Tully		Surveyor:		Survey Date: 2007-01-31		Assessment Date: 2007-01-31					
Location #: 12		Location Name: Galley		Floor: Main		Room #:		Square ft:					
System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action			Units	Sample	Hazard	Friability
							Good	Fair	Poor				
Ceiling	Large Access Panel (> 12")	Fibreglass w/ Metal Jacket	Not Applicable	N/A	C	Y				%	V0000	None	
Floor	N/A	Ceramic Tiles	Not Applicable	N/A	A	Y				%	V0000	None	
Other	Fire door	N/A	Not Applicable	N/A	NA	N				%	V0000	None	
Walls	Large Access Panel (> 12")	Fibreglass w/ Metal Jacket	Not Applicable	N/A	B	Y				%	V0000	None	

Building Number(s):
All Data Report

Building #:		Building Name: CCGS John P Tully		Surveyor:		Survey Date: 2007-01-31		Assessment Date: 2007-01-31					
Location #: 13		Location Name: Cleaning Locker		Floor: Main		Room #:		Square ft:					
System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action			Units	Sample	Hazard	Friability
							Good	Fair	Poor				
Ceiling	Large Access Panel (> 12")	Fibreglass w/ Metal Jacket	Not Applicable	N/A	C	Y				%	V0000	None	
Duct	Not Found	N/A	Not Applicable	N/A	NA	N				%	V0000	None	
Floor	N/A	Steel	Not Applicable	Paint	B	Y				%	V0000	None	
Mechanical Equipment	Not Found	N/A	Not Applicable	N/A	NA	N				%	V0000	None	
Piping	Not Found	N/A	Not Applicable	N/A	NA	N				%	V0000	None	
Structure	Beam, Deck	Steel	System	Paint	D	N				%	V0000	None	
Walls	Large Access Panel (> 12")	Fibreglass w/ Metal Jacket	Not Applicable	N/A	B	Y				%	V0000	None	

Building #:		Building Name: CCGS John P Tully		Surveyor:		Survey Date: 2007-01-31		Assessment Date: 2007-01-31					
Location #: 14		Location Name: Crew Mess		Floor: Main		Room #:		Square ft:					
System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action			Units	Sample	Hazard	Friability
							Good	Fair	Poor				
Ceiling	Large Access Panel (> 12")	Fibreglass w/ Metal Jacket	Not Applicable	N/A	C	Y				%	V0000	None	
Duct	Not Found	N/A	Not Applicable	N/A	NA	N				%	V0000	None	
Floor One	N/A	Steel	Not Applicable	N/A	B	N				%	V0000	None	
Floor Two	N/A	Unidentified Material	Not Applicable	Carpet	B	N	100			%	S0004	None	
Mechanical Equipment	Not Found	N/A	Not Applicable	N/A	NA	N				%	V0000	None	
Piping	Not Found	N/A	Not Applicable	N/A	NA	N				%	V0000	None	
Structure	Beam, Deck	Steel	System	N/A	D	N				%	V0000	None	
Walls	Large Access Panel (> 12")	Fibreglass w/ Metal Jacket	Not Applicable	N/A	B	Y				%	V0000	None	

Note: F2 - Under all carpets on main deck.

Building #: 15		Building Name: CCGS John P Tully		Surveyor:		Survey Date: 2007-01-31		Assessment Date: 2007-01-31					
Location #: 15		Location Name: Crew Lounge		Floor: Main		Room #:		Square ft:					
System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action			Units	Sample	Hazard	Friability
							Good	Fair	Poor				
Celling	Large Access Panel (> 12")	Fibreglass w/ Metal Jacket	Not Applicable	N/A	C	Y				%	V0000	None	
Duct	Not Found	N/A	Not Applicable	N/A	NA	N				%	V0000	None	
Floor One	N/A	Steel	Not Applicable	N/A	B	N				%	V0000	None	
Floor Two	N/A	Unidentified Material	Not Applicable	Carpet	B	N	100			%	V0004	None	
Mechanical Equipment	Not Found	N/A	Not Applicable	N/A	NA	N				%	V0000	None	
Piping	Not Found	N/A	Not Applicable	N/A	NA	N				%	V0000	None	
Structure	Beam, Deck	Steel	System	N/A	D	N				%	V0000	None	
Walls	Large Access Panel (> 12")	Fibreglass w/ Metal Jacket	Not Applicable	N/A	B	Y				%	V0000	None	

Building #:		Building Name: CCGS John P Tully		Surveyor:		Survey Date: 2007-01-31		Assessment Date: 2007-01-31					
Location #: 16		Location Name: Crew Cabins x16		Floor: Main		Room #:		Square ft:					
System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action			Units	Sample	Hazard	Friability
							Good	Fair	Poor				
Ceiling	Large Access Panel (> 12")	Fibreglass w/ Metal Jacket	Not Applicable	N/A	C	Y				%	V0000	None	
Duct	Not Found	N/A	Not Applicable	N/A	NA	N				%	V0000	None	
Floor One	N/A	Steel	Not Applicable	N/A	B	N				%	V0000	None	
Floor Two	N/A	Unidentified Material	Not Applicable	Carpet	B	N	100			%	V0004	None	
Mechanical Equipment	Not Found	N/A	Not Applicable	N/A	NA	N				%	V0000	None	
Piping	Not Found	N/A	Not Applicable	N/A	NA	N				%	V0000	None	
Structure	Beam, Deck	Steel	System	N/A	D	N				%	V0000	None	
Walls	Large Access Panel (> 12")	Fibreglass w/ Metal Jacket	Not Applicable	N/A	B	Y				%	V0000	None	

Note: There are 16 cabins on main deck.

Building #:		Building Name: CCGS John P Tully		Surveyor:		Survey Date: 2007-01-31		Assessment Date: 2007-01-31					
Location #: 17		Location Name: Incinerator Room		Floor: Main		Room #:		Square ft:					
System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action			Units	Sample	Hazard	Friability
							Good	Fair	Poor				
Ceiling	Large Access Panel (> 12")	Fibreglass w/ Metal Jacket	Not Applicable	N/A	C	Y				%	V0000	None	
Floor	N/A	Steel	Not Applicable	Paint	B	Y				%	V0000	None	
Mechanical Equipment	Incinerator	Parging Cement	Not Applicable	N/A	B	Y	100			%	S0005	None	
Walls	Large Access Panel (> 12")	Fibreglass w/ Metal Jacket	Not Applicable	N/A	C	Y				%	V0000	None	

Note: M - inside doors and walls of incinerator.

Building #:		Building Name: CCGS John P Tully		Surveyor:		Survey Date: 2007-01-31		Assessment Date: 2007-01-31					
Location #: 18		Location Name: Washrooms x4		Floor: Main		Room #:		Square ft:					
System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action			Units	Sample	Hazard	Friability
							Good	Fair	Poor				
Ceiling	Large Access Panel (> 12")	Fibreglass w/ Metal Jacket	Not Applicable	N/A	B	Y				%	V0000	None	
Floor	N/A	Concrete(poured)	Surface	Encapsulant	A	Y				%	V0000	None	
Walls	Large Access Panel (> 12")	Fibreglass w/ Metal Jacket	Not Applicable	N/A	B	Y				%	V0000	None	

Note: There are 4 washrooms on this main deck.

Building #:		Building Name: CCGS John P Tully		Surveyor:		Survey Date: 2007-01-31		Assessment Date: 2007-01-31					
Location #: 19		Location Name: Bosum Store		Floor: Main		Room #:		Square ft:					
System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action			Units	Sample	Hazard	Friability
							Good	Fair	Poor				
Ceiling	Large Access Panel (> 12")	Fibreglass w/ Metal Jacket	Not Applicable	N/A	A	Y				%	V0000	None	
Duct	N/A	Steel	Not Applicable	Not Insulated	A	Y				%	V0000	None	
Floor	N/A	Steel	Not Applicable	Paint	A	Y				%	V0000	None	
Mechanical Equipment	Not Found	N/A	Not Applicable	N/A	NA	N				%	V0000	None	
Other	Electrical Equipment	N/A	Not Applicable	N/A	NA	N				%	V0000	None	
Piping	N/A	Not Insulated	Not Applicable	Not Insulated	A	Y				%	V0000	None	
Structure	N/A	Steel	Not Applicable	Paint	A	Y				%	V0000	None	
Walls	Large Access Panel (> 12")	Fibreglass w/ Metal Jacket	Not Applicable	N/A	A	Y				%	V0000	None	

Building #:		Building Name: CCGS John P Tully		Surveyor:		Survey Date: 2007-01-31		Assessment Date: 2007-01-31					
Location #: 20		Location Name: Electrical Store & Workshop		Floor: Main		Room #:		Square ft:					
System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action			Units	Sample	Hazard	Friability
							Good	Fair	Poor				
Ceiling	Large Access Panel (> 12")	Fibreglass w/ Metal Jacket	Not Applicable	N/A	A	Y				%	V0000	None	
Duct	N/A	Steel	Not Applicable	Not Insulated	A	Y				%	V0000	None	
Floor	N/A	Steel	Not Applicable	Paint	A	Y				%	V0000	None	
Mechanical Equipment	Not Found	N/A	Not Applicable	N/A	NA	N				%	V0000	None	
Other	Electrical Equipment	N/A	Not Applicable	N/A	NA	N				%	V0000	None	
Piping	N/A	Not Insulated	Not Applicable	Not Insulated	A	Y				%	V0000	None	
Structure	N/A	Steel	Not Applicable	Paint	A	Y				%	V0000	None	
Walls	Large Access Panel (> 12")	Fibreglass w/ Metal Jacket	Not Applicable	N/A	A	Y				%	V0000	None	

Building Number(s):
All Data Report

Building #: 21		Building Name: CCGS John P Tully		Surveyor:		Survey Date: 2007-01-31		Assessment Date: 2007-01-31					
Location #: 21		Location Name: Steering Gear Compartment		Floor: Main		Room #:		Square ft:					
System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action			Units	Sample	Hazard	Friability
							Good	Fair	Poor				
Ceiling	Large Access Panel (> 12")	Fibreglass w/ Metal Jacket	Not Applicable	N/A	A	Y				%	V0000	None	
Duct	N/A	Steel	Not Applicable	Not Insulated	A	Y				%	V0000	None	
Floor	N/A	Steel	Not Applicable	Paint	A	Y				%	V0000	None	
Mechanical Equipment	Not Found	N/A	Not Applicable	N/A	NA	N				%	V0000	None	
Other	Electrical Equipment	N/A	Not Applicable	N/A	NA	N				%	V0000	None	
Piping	N/A	Not Insulated	Not Applicable	Not Insulated	A	Y				%	V0000	None	
Structure	N/A	Steel	Not Applicable	Paint	A	Y				%	V0000	None	
Walls	Large Access Panel (> 12")	Fibreglass w/ Metal Jacket	Not Applicable	N/A	A	Y				%	V0000	None	

Building #:		Building Name: CCGS John P Tully		Surveyor:		Survey Date: 2007-01-31		Assessment Date: 2007-01-31					
Location #: 22		Location Name: Mechanical Store		Floor: Main		Room #:		Square ft:					
System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action			Units	Sample	Hazard	Friability
							Good	Fair	Poor				
Ceiling	Large Access Panel (> 12")	Fibreglass w/ Metal Jacket	Not Applicable	N/A	A	Y				%	V0000	None	
Duct	N/A	Steel	Not Applicable	Not Insulated	A	Y				%	V0000	None	
Floor	N/A	Steel	Not Applicable	Paint	A	Y				%	V0000	None	
Mechanical Equipment	Not Found	N/A	Not Applicable	N/A	NA	N				%	V0000	None	
Other	Electrical Equipment	N/A	Not Applicable	N/A	NA	N				%	V0000	None	
Piping	N/A	Not Insulated	Not Applicable	Not Insulated	A	Y				%	V0000	None	
Structure	N/A	Steel	Not Applicable	Paint	A	Y				%	V0000	None	
Walls	Large Access Panel (> 12")	Fibreglass w/ Metal Jacket	Not Applicable	N/A	A	Y				%	V0000	None	

Building #:		Building Name: CCGS John P Tully		Surveyor:		Survey Date: 2007-01-31		Assessment Date: 2007-01-31					
Location #: 23		Location Name: Main Laboratory		Floor: Upper Deck		Room #:		Square ft:					
System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action			Units	Sample	Hazard	Friability
							Good	Fair	Poor				
Ceiling	Large Access Panel (> 12")	Fibreglass w/ Metal Jacket	Not Applicable	Paint	C	Y				%	V0000	None	
Duct	Not Accessible	N/A	Not Applicable	N/A	NA	N				%	V0000	None	
Floor	N/A	Fibreglass	Not Applicable	Paint	A	Y				%	V0000	None	
Other 1	Electrical Equipment	N/A	Not Applicable	N/A	NA	N				%	V0000	None	
Other two	Fumehood	Aluminum	Not Applicable	Paint	A	Y				%	V0000	None	
Piping	Not Accessible	N/A	Not Applicable	N/A	NA	N				%	V0000	None	
Walls	Large Access Panel (> 12")	Fibreglass w/ Metal Jacket	Not Applicable	Paint	C	Y				%	V0000	None	

Building Number(s):
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Building #: Location #: 24		Building Name: CCGS John P Tully Location Name: Wet Laboratory		Surveyor:		Floor: Upper deck		Survey Date: 2007-01-31 Room #:		Assessment Date: 2007-01-31 Square ft:			
System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action			Units	Sample	Hazard	Friability
							Good	Fair	Poor				
Ceiling	Large Access Panel (> 12")	Steel	Surface	N/A	C	Y				%	V0000	None	
Floor	N/A	Fibreglass	Not Applicable	Paint	B	Y				%	V0000	None	
Walls	N/A	Aluminum	Not Applicable	N/A	B	Y				%	V0000	None	

Building #: Location #: 25		Building Name: CCGS John P Tully Location Name: Water-Tight Door Control Station		Surveyor:		Floor: Upper Deck		Survey Date: 2007-01-31 Room #:		Assessment Date: 2007-01-31 Square ft:			
System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action			Units	Sample	Hazard	Friability
							Good	Fair	Poor				
Ceiling	N/A	Steel	Not Applicable	Paint	A	Y				%	V0000	None	
Duct	Not Found	N/A	Not Applicable	N/A	NA	N				%	V0000	None	
Floor	N/A	Steel	Not Applicable	Paint	A	Y				%	V0000	None	
Piping	N/A	Not Insulated	Not Applicable	Not Insulated	A	Y				%	V0000	None	
Walls	Large Access Panel (> 12")	Fibreglass w/ Metal Jacket	Not Applicable	N/A	NA	N				%	V0000	None	

Building #:		Building Name: CCGS John P Tully		Surveyor:		Survey Date: 2007-01-31		Assessment Date: 2007-01-31					
Location #: 26		Location Name: Cabins - Scientists (7)		Floor: Upper deck		Room #:		Square ft:					
System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action			Units	Sample	Hazard	Friability
							Good	Fair	Poor				
Ceiling	Large Access Panel (> 12")	Fibreglass w/ Metal Jacket	Not Applicable	N/A	C	Y				%	V0000	None	
Duct	Not Found	N/A	Not Applicable	N/A	NA	N				%	V0000	None	
Floor One	N/A	Steel	Not Applicable	N/A	B	N				%	V0000	None	
Floor Two	N/A	Unidentified Material	Not Applicable	Carpet	B	N	100			%	V0004	None	
Mechanical Equipment	Not Found	N/A	Not Applicable	N/A	NA	N				%	V0000	None	
Piping	Not Found	N/A	Not Applicable	N/A	NA	N				%	V0000	None	
Structure	Beam, Deck	Steel	System	N/A	D	N				%	V0000	None	
Walls	Large Access Panel (> 12")	Fibreglass w/ Metal Jacket	Not Applicable	N/A	B	Y				%	V0000	None	

Building #:		Building Name: CCGS John P Tully		Surveyor:		Survey Date: 2007-01-31		Assessment Date: 2007-01-31					
Location #: 27		Location Name: Washrooms (7)		Floor: Upper Deck		Room #:		Square ft:					
System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action			Units	Sample	Hazard	Friability
							Good	Fair	Poor				
Ceiling	Large Access Panel (> 12")	Fibreglass w/ Metal Jacket	Not Applicable	N/A	B	Y				%	V0000	None	
Floor	N/A	Concrete(poured)	Surface	Encapsulant	A	Y				%	V0000	None	
Walls	Large Access Panel (> 12")	Fibreglass w/ Metal Jacket	Not Applicable	N/A	B	Y				%	V0000	None	

Building Number(s):
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Building #: Location #: 28		Building Name: CCGS John P Tully Location Name: Pantry		Surveyor:		Survey Date: 2007-01-31 Room #:		Assessment Date: 2007-01-31 Square ft:					
System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action			Units	Sample	Hazard	Friability
							Good	Fair	Poor				
Ceiling	Large Access Panel (> 12")	Fibreglass w/ Metal Jacket	Surface	Paint	C	Y				%	V0000	None	
Duct	Not Found	N/A	Not Applicable	N/A	NA	N				%	V0000	None	
Floor	N/A	Ceramic Tiles	Surface	N/A	A	Y				%	V0000	None	
Mechanical Equipment	Not Found	N/A	Not Applicable	N/A	NA	N				%	V0000	None	
Piping	Not Found	N/A	Not Applicable	N/A	NA	N				%	V0000	None	
Walls	Large Access Panel (> 12")	Aluminum	Surface	N/A	C	Y				%	V0000	None	

Building #: Location #: 29		Building Name: CCGS John P Tully Location Name: Bosum Store		Surveyor:		Survey Date: 2007-01-31 Room #:		Assessment Date: 2007-01-31 Square ft:					
System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action			Units	Sample	Hazard	Friability
							Good	Fair	Poor				
Ceiling	Large Access Panel (> 12")	Fibreglass w/ Metal Jacket	Not Applicable	Paint	C	Y				%	V0000	None	
Floor	Checker Plate	Aluminum	Not Applicable	N/A	B	Y				%	V0000	None	
Walls	Large Access Panel (> 12")	Fibreglass w/ Metal Jacket	Not Applicable	Paint	B	Y				%	V0000	None	

Building #: Location #: 30		Building Name: CCGS John P Tully Location Name: Scientific Cool Room		Surveyor:		Survey Date: 2007-01-31 Room #:		Assessment Date: 2007-01-31 Square ft:					
System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action			Units	Sample	Hazard	Friability
							Good	Fair	Poor				
Ceiling	N/A	Aluminum	Surface	N/A	C	Y				%	V0000	None	
Floor	N/A	Aluminum	Surface	N/A	A	Y				%	V0000	None	
Walls	N/A	Aluminum	Surface	N/A	C	Y				%	V0000	None	

Building #:		Building Name: CCGS John P Tully		Surveyor:		Survey Date: 2007-01-31		Assessment Date: 2007-01-31					
Location #: 31		Location Name: Paint Locker		Floor: Focsle		Room #:		Square ft:					
System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action			Units	Sample	Hazard	Friability
							Good	Fair	Poor				
Ceiling	N/A	Steel	Not Applicable	Paint	C	Y				%	V0000	None	
Floor	N/A	Steel	Not Applicable	Paint	B	Y				%	V0000	None	
Walls	N/A	Steel	Not Applicable	Paint	C	Y				%	V0000	None	

Building #:		Building Name: CCGS John P Tully		Surveyor:		Survey Date: 2007-01-31		Assessment Date: 2007-01-31					
Location #: 32		Location Name: Bosums Workshop		Floor: Focsle		Room #:		Square ft:					
System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action			Units	Sample	Hazard	Friability
							Good	Fair	Poor				
Ceiling	N/A	Fibreglass w/ Metal Jacket	Not Applicable	Paint	C	Y				%	V0000	None	
Duct	N/A	Steel	Not Applicable	Not Insulated	C	Y				%	V0000	None	
Floor	N/A	Steel	Not Applicable	Paint	B	Y				%	V0000	None	
Piping	N/A	Not Insulated	Not Applicable	Not Insulated	C	Y				%	V0000	None	
Walls	N/A	Fibreglass w/ Metal Jacket	Not Applicable	Paint	C	Y				%	V0000	None	

Building #:		Building Name: CCGS John P Tully		Surveyor:		Survey Date: 2007-01-31		Assessment Date: 2007-01-31					
Location #: 33		Location Name: Halon Room		Floor: Focsle		Room #:		Square ft:					
System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action			Units	Sample	Hazard	Friability
							Good	Fair	Poor				
Ceiling	N/A	Fibreglass w/ Metal Jacket	Not Applicable	Paint	C	Y				%	V0000	None	
Duct	N/A	Steel	Not Applicable	Not Insulated	C	Y				%	V0000	None	
Floor	N/A	Steel	Not Applicable	Paint	B	Y				%	V0000	None	
Piping	N/A	Not Insulated	Not Applicable	Not Insulated	C	Y				%	V0000	None	
Walls	N/A	Fibreglass w/ Metal Jacket	Not Applicable	Paint	C	Y				%	V0000	None	

Building #: 34		Building Name: CCGS John P Tully		Surveyor:		Survey Date: 2007-01-31		Assessment Date: 2007-01-31					
Location #: 34		Location Name: Fan Room		Floor: Focslc		Room #:		Square ft:					
System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action			Units	Sample	Hazard	Friability
							Good	Fair	Poor				
Ceiling	N/A	Steel	Not Applicable	Paint	C	Y				%	V0000	None	
Duct	N/A	Steel	Not Applicable	Not Insulated	C	Y				%	V0000	None	
Floor	N/A	Steel	Not Applicable	Paint	A	Y				%	V0000	None	
Piping one	N/A	Not Insulated	Not Applicable	Not Insulated	C	Y				%	V0000	None	
Piping two	N/A	Steel	Not Applicable	Rubber Foam on Metal	C	Y				%	V0000	None	
Walls	Large Access Panel (> 12")	Fibreglass w/ Metal Jacket	Not Applicable	N/A	C	Y				%	V0000	None	

Building #: 35		Building Name: CCGS John P Tully		Surveyor:		Survey Date: 2007-01-31		Assessment Date: 2007-01-31					
Location #: 35		Location Name: Emergency Generator Room		Floor: Focslc		Room #:		Square ft:					
System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action			Units	Sample	Hazard	Friability
							Good	Fair	Poor				
Ceiling	Large Access Panel (> 12")	Fibreglass w/ Metal Jacket	Not Applicable	Paint	C	Y				%	V0000	None	
Floor	N/A	Steel	Not Applicable	Paint	A	Y				%	V0000	None	
Other	Electrical Equipment	N/A	Not Applicable	N/A	NA	N				%	V0000	None	
Piping one	Generator Exhaust	Fibreglass	Not Applicable	Textile	C	Y				%	V0000	None	
Piping two	Generator Exhaust	Fibreglass	Not Applicable	Textile	C	Y				%	V0000	None	
Walls	Large Access Panel (> 12")	Fibreglass w/ Metal Jacket	Not Applicable	Paint	C	Y				%	V0000	None	

Building Number(s):
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Building #:		Building Name: CCGS John P Tully		Surveyor:		Survey Date: 2007-01-31		Assessment Date: 2007-01-31					
Location #: 36		Location Name: Laundry Room		Floor: Focsle		Room #:		Square ft:					
System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action			Units	Sample	Hazard	Friability
							Good	Fair	Poor				
Ceiling	Large Access Panel (> 12")	Fibreglass w/ Metal Jacket	Not Applicable	N/A	C	Y				%	V0000	None	
Floor	N/A	Concrete(poured)	Not Applicable	Paint	A	Y				%	V0000	None	
Walls	Large Access Panel (> 12")	Fibreglass w/ Metal Jacket	Not Applicable	N/A	B	Y				%	V0000	None	

Building #:		Building Name: CCGS John P Tully		Surveyor:		Survey Date: 2007-01-31		Assessment Date: 2007-01-31					
Location #: 37		Location Name: Officers Quarters x10		Floor: Focsle		Room #:		Square ft:					
System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action			Units	Sample	Hazard	Friability
							Good	Fair	Poor				
Ceiling	Large Access Panel (> 12")	Fibreglass w/ Metal Jacket	Not Applicable	N/A	C	Y				%	V0000	None	
Duct	Not Found	N/A	Not Applicable	N/A	NA	N				%	V0000	None	
Floor	N/A	Unidentified Material	Not Applicable	Carpet	A	N	100			%	V0004	None	
Mechanical Equipment	Not Found	N/A	Not Applicable	N/A	NA	N				%	V0000	None	
Piping	Not Found	N/A	Not Applicable	N/A	NA	N				%	V0000	None	
Structure	Beam, Deck	Steel	System	N/A	D	N				%	V0000	None	
Walls	Large Access Panel (> 12")	Fibreglass w/ Metal Jacket	Not Applicable	N/A	B	Y				%	V0000	None	

Note: 10 Quarters on this deck are visually equal.

Building #:		Building Name: CCGS John P Tully		Surveyor:		Survey Date: 2007-01-31		Assessment Date: 2007-01-31					
Location #: 38		Location Name: Lavatories x10		Floor: Focslc		Room #:		Square ft:					
System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action			Units	Sample	Hazard	Friability
							Good	Fair	Poor				
Ceiling	Large Access Panel (> 12")	Fibreglass w/ Metal Jacket	Not Applicable	N/A	B	Y				%	V0000	None	
Floor	N/A	Concrete(poured)	Surface	Encapsulant	A	Y				%	V0000	None	
Walls	Large Access Panel (> 12")	Fibreglass w/ Metal Jacket	Not Applicable	N/A	B	Y				%	V0000	None	

Building #:		Building Name: CCGS John P Tully		Surveyor:		Survey Date: 2007-01-31		Assessment Date: 2007-01-31					
Location #: 39		Location Name: Data Processing Area		Floor: Bridge		Room #:		Square ft:					
System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action			Units	Sample	Hazard	Friability
							Good	Fair	Poor				
Ceiling	Large Access Panel (> 12")	Fibreglass w/ Metal Jacket	Not Applicable	Paint	C	Y				%	V0000	None	
Duct	Not Found	N/A	Not Applicable	N/A	NA	N				%	V0000	None	
Floor	N/A	Concrete(poured)	Not Applicable	Carpet	A	Y				%	V0000	None	
Piping	Not Found	N/A	Not Applicable	N/A	NA	N				%	V0000	None	
Walls	Large Access Panel (> 12")	Fibreglass w/ Metal Jacket	Not Applicable	Paint	C	Y				%	V0000	None	

Note: No electrical equipment here.

Building Number(s):
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Building #: Location #: 40		Building Name: CCGS John P Tully Location Name: Aux. Data Processing Area		Surveyor: Floor: Bridge		Survey Date: 2007-01-31 Room #:		Assessment Date: 2007-01-31 Square ft:					
System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action			Units	Sample	Hazard	Friability
							Good	Fair	Poor				
Ceiling	Large Access Panel (> 12")	Fibreglass w/ Metal Jacket	Not Applicable	Paint	C	Y				%	V0000	None	
Duct	Not Found	N/A	Not Applicable	N/A	NA	N				%	V0000	None	
Floor One	N/A	Steel	Base	Vinyl tiles	D	N				%	V0000	None	
Floor Two	N/A	Vinyl tiles	Surface	N/A	A	Y	143			SF	S0006	None	
Piping	Not Found	N/A	Not Applicable	N/A	NA	N				%	V0000	None	
Walls	Large Access Panel (> 12")	Fibreglass w/ Metal Jacket	Not Applicable	Paint	C	Y				%	V0000	None	

Building #: Location #: 41		Building Name: CCGS John P Tully Location Name: Hydrographic Chart Room		Surveyor: Floor: Bridge		Survey Date: 2007-01-31 Room #:		Assessment Date: 2007-01-31 Square ft:					
System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action			Units	Sample	Hazard	Friability
							Good	Fair	Poor				
Ceiling	Large Access Panel (> 12")	Fibreglass w/ Metal Jacket	Not Applicable	Paint	C	Y				%	V0000	None	
Duct	Not Found	N/A	Not Applicable	N/A	NA	N				%	V0000	None	
Floor	N/A	Concrete(poured)	Not Applicable	Carpet	A	Y				%	V0000	None	
Piping	Not Found	N/A	Not Applicable	N/A	NA	N				%	V0000	None	
Walls	Large Access Panel (> 12")	Fibreglass w/ Metal Jacket	Not Applicable	Paint	C	Y				%	V0000	None	

Building #:		Building Name: CCGS John P Tully		Surveyor:		Survey Date: 2007-01-31		Assessment Date: 2007-01-31					
Location #: 42		Location Name: Electronic Equipment Workshop		Floor: Bridge		Room #:		Square ft:					
System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action			Units	Sample	Hazard	Friability
							Good	Fair	Poor				
Ceiling	Large Access Panel (> 12")	Fibreglass w/ Metal Jacket	Not Applicable	Paint	C	Y				%	V0000	None	
Duct	Not Found	N/A	Not Applicable	N/A	NA	N				%	V0000	None	
Floor	N/A	Concrete(poured)	Not Applicable	Carpet	A	Y				%	V0000	None	
Mechanical Equipment	Electrical Equipment	N/A	Not Applicable	N/A	NA	N				%	V0000	None	
Piping	Not Found	N/A	Not Applicable	N/A	NA	N				%	V0000	None	
Walls	Large Access Panel (> 12")	Fibreglass w/ Metal Jacket	Not Applicable	Paint	C	Y				%	V0000	None	

Building #:		Building Name: CCGS John P Tully		Surveyor:		Survey Date: 2007-01-31		Assessment Date: 2007-01-31					
Location #: 43		Location Name: Funnel Compartment		Floor: Funnel		Room #:		Square ft:					
System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action			Units	Sample	Hazard	Friability
							Good	Fair	Poor				
Mechanical Equipment	Main Engine Exhaust	Preformed Block	Not Applicable	Textile	C	Y	100			%	S0007	None	
Wall one	N/A	Aluminum	Not Applicable	Paint	C	Y				%	V0000	None	
Wall two	Large Access Panel (> 12")	Fibreglass w/ Metal Jacket	Not Applicable	Paint	C	Y	100			%	V0003	None	

Building Number(s):
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Building #: 44		Building Name: CCGS John P Tully		Surveyor:		Survey Date: 2007-01-31		Assessment Date: 2007-01-31					
Location #: 44		Location Name: Bridge (Wheelhouse)		Floor: Bridge		Room #:		Square ft:					
System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action			Units	Sample	Hazard	Friability
							Good	Fair	Poor				
Ceiling	Large Access Panel (> 12")	Fibreglass w/ Metal Jacket	Not Applicable	Paint	C	Y				%	V0000	None	
Duct	Not Found	N/A	Not Applicable	N/A	NA	N				%	V0000	None	
Floor	N/A	Concrete(poured)	Not Applicable	Carpet	A	Y				%	V0000	None	
Piping	Not Found	N/A	Not Applicable	N/A	NA	N				%	V0000	None	
Walls	Large Access Panel (> 12")	Fibreglass w/ Metal Jacket	Not Applicable	Paint	C	Y				%	V0000	None	

Building #: 45		Building Name: CCGS John P Tully		Surveyor:		Survey Date: 2007-01-31		Assessment Date: 2007-01-31					
Location #: 45		Location Name: Scientific Wire Way		Floor: Bridge		Room #:		Square ft:					
System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action			Units	Sample	Hazard	Friability
							Good	Fair	Poor				
Structure	N/A	Steel	Base	N/A	C	N				%	V0000	None	
Walls	N/A	Fibrous Fireproofing	Not Applicable	N/A	C	L	100			%	S0008	None	

Building #: 46		Building Name: CCGS John P Tully		Surveyor:		Survey Date: 2007-01-31		Assessment Date: 2007-01-31					
Location #: 46		Location Name: Air Condition/Electronics Room		Floor: House Top		Room #:		Square ft:					
System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action			Units	Sample	Hazard	Friability
							Good	Fair	Poor				
Ceiling	Large Access Panel (> 12")	Fibreglass w/ Metal Jacket	Not Applicable	Paint	C	Y				%	V0000	None	
Floor	N/A	Steel	Not Applicable	Paint	B	Y				%	V0000	None	
Walls	Large Access Panel (> 12")	Fibreglass w/ Metal Jacket	Not Applicable	Paint	C	Y				%	V0000	None	



Client: Canadian Coast Guard

Project: 01-7011

Building Number(s):

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Building #:	Building Name: CCGS John P Tully		Surveyor:		Survey Date: 2007-01-31		Assessment Date: 2007-01-31						
Location #: 47	Location Name: Deck (Outside)			Floor: Deck		Room #:		Square ft:					
System	Component	Material	Item	Covering	Access	Visible	Condition, Quantity & Action			Units	Sample	Hazard	Friability
							Good	Fair	Poor				
Floor	N/A	Steel	Not Applicable	Paint	A	Y				%	V0000	None	

Legend:

Action		Access		Condition		Sample Number	
	No calculated action	(1) Error	A All building occupants	Good	No visible damage or exposed material	S###	Sample collected
(1)	Immediate clean-up of debris or damaged ACM likely to be disturbed	(2) Type 2 precautions for entry into areas with ACM debris	B Maintenance and operations staff without a ladder	Fair	Repairable damage with minor amounts of exposed material	V###	Material is visually identified to be identical to S##
(3)	ACM removal required	(4) Type 2 precautions for entry into areas where ACM is present	C Maintenance and operations staff with a ladder	Poor	Irreparable damage with exposed and missing material	V0000	Material is visually identified to contain no asbestos
(5)	Proactive ACM removal	(6) ACM repair	D Not accessible	NOTE: Sprayed material are only rated as Good or Poor.		V9000	Material is visually identified to contain asbestos
(7)	Management program and surveillance	(8) Assumed Material				V9500	Material is assumed to contain asbestos
(9)	Action not currently assigned	(7) Unknown / Unable to Calculate					Note: Vinyl tiles, vinyl sheet flooring, drywall, plaster and textured finish (coat) are considered assumed materials if not sampled.
NOTE: Actions in round brackets () are auto-calculated. Actions in square brackets [] are manual overrides.							

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

APPENDIX III

ASBESTOS ASSESSMENT MATRIX

EVALUATION CRITERIA AND BASIS OF RECOMMENDATIONS FOR ASBESTOS-CONTAINING MATERIALS

This reassessment provides accurate information regarding the location, condition and accessibility of the ACM used in the construction of the vessel. In order to make recommendations for compliance with current regulations, PLEL developed the following ACM evaluation criteria based on the conclusion of previous published studies, particularly the "Royal Commission on Matters of Health and Safety Arising from the Use of Asbestos in Ontario" and our experience with structures containing ACM. The same criterion that was initially employed has been utilized for the reassessment.

Evaluation of Condition

Spray Applied Fireproofing, Insulation and Texture Finishes

To evaluate the condition of ACM spray applied as fireproofing, non-mechanical thermal insulation, or texture, decorative or acoustic finishes, the following criteria is applied:

GOOD Surface of material shows no significant signs of damage, deterioration or delamination. Up to 1 percent visible damage to surface is allowed within range of **GOOD**. Evaluation of sprayed fireproofing requires the surveyor to be familiar with the irregular surface texture typical of fireproofing as installed. **GOOD** condition includes unencapsulated or unpainted fireproofing or texture finishes, where no delamination or damage is observed, and encapsulated fireproofing or texture finishes where the encapsulation has been applied after the damage or fallout occurred.

POOR Sprayed materials show signs of damage, delamination or deterioration. More than 1 percent damage to surface of ACM spray.

In observation areas where damage exists, in isolated locations, both **GOOD** and **POOR** condition may be applicable. The extent or percentage of each condition will be recorded on the room-by-room survey form. **FAIR** condition is not utilized in the evaluation of the fireproofing, non-mechanical insulation, or texture coat finishes.

The evaluation of ACM spray applied as fireproofing, non-mechanical thermal insulation, or texture, decorative or acoustic finishes which are present above ceilings, may be limited by the number of observations made, and by building components such as ducts or full height bulkheads that obstruct the above ceiling observations. Persons entering the ceiling are advised to be watchful for ACM **DEBRIS** prior to accessing or working above ceilings in areas of buildings with ACM regardless of the reported condition.

Mechanical Insulation

The evaluation of the condition of mechanical insulation (on surface of boilers, breeching, exhausts, ductwork, piping, tanks, equipment etc.) utilizes the following criteria:

- | | |
|-------------|---|
| GOOD | Insulation is completely covered in jacketing and exhibits no evidence of damage or deterioration. No insulation is exposed. Includes conditions where the jacketing has minor damage (ie., scuffs or stains), but the jacketing is not penetrated. |
| FAIR | Minor penetrating damage to jacketed insulation (cuts, tears, nicks, deterioration or delamination) or undamaged insulation that had never been jacketed. Insulation is exposed but not showing surface disintegration. The extent of missing insulation ranges from minor to none. Damage can be repaired. |
| POOR | Original insulation jacket is missing, damaged, deteriorated or delaminated. Insulation is exposed and significant areas have been dislodged. Damage cannot be readily repaired. |

The evaluation of mechanical insulation may be limited by the number of observations made and vessel components such as ducts or bulkheads that obstruct observations. It is not possible to observe each foot of mechanical insulation from all angles. Persons working in proximity to mechanical insulation or entering ceilings with mechanical insulation are advised to be watchful of ACM **DEBRIS** regardless of the reported condition.

Non-friable and Potentially Friable Materials

The condition of non-friable ACM, such as plaster finishes containing asbestos, and manufactured products such as acoustic ceiling tiles and asbestos cement products (transite), all of which have the potential to become friable when handled are evaluated as follows:

- | | |
|-------------|--|
| GOOD | No significant damage. Material may be cracked or broken but is stable and not likely to become friable upon casual contact. |
| POOR | Material is severely damaged. Loose DEBRIS is present or binder has disintegrated to the point where contact will cause the material to become friable. |

The evaluation of the condition of non-friable and potentially friable materials does not utilize a **FAIR** condition rating.

If the ACM is damaged but stable, and there is no friable **DEBRIS** present, the condition is rated as **GOOD**.

Evaluation of Accessibility

The accessibility of materials known or suspected of being ACM is rated according to the following criteria:

ACCESS (A) Areas of the vessel within reach (from deck level) of all general occupants. Includes areas such as storage areas where activities of the general occupants may result in disturbance of ACM not normally within reach from deck level.

ACCESS (B) Frequently entered maintenance and service areas of the vessel within reach of staff, without the need for a ladder (less frequently accessed than Access A areas). Includes:

- areas within reach from a fixed ladder or catwalk, ie. tops of equipment, mezzanines.
- frequently entered pipe chases, stack towers, tunnels and service areas.

ACCESS (C) Areas of the vessel above 8'-0" where use of a ladder is required to reach the ACM (less frequently accessed than Access B areas).

Refers to ACM materials that are exposed to view, from the floor or ladder, without the removal or opening of other vessel components such as deckheads/bulkheads, or service access doors or hatches. Does not include infrequently accessed service areas of the vessel.

ACCESS (D) Areas of the vessel behind inaccessible solid deckhead and/or bulkhead systems, or mechanical equipment etc. where demolition or removal of the deckhead/bulkhead or equipment etc. is required to reach the ACM. Evaluation of condition and extent of ACM is limited or impossible, depending on the surveyor's ability to visually examine materials in ACCESS D.

Evaluation of ACM DEBRIS

DEBRIS From Friable ACM

The presence of fallen ACM is noted separately from the presumed friable ACM source (sprayed fireproofing, thermal insulation, texture, decorative or acoustic finishes or mechanical insulation) and is referred to as **DEBRIS**.

DEBRIS From Damaged Non-Friable ACM

The presence of fallen ACM from damaged non-friable ACM is also reported separately from the non-friable ACM source. Only fallen non-friable ACM that has become friable is reported as **DEBRIS**.

The identification of the exact location or presence of **DEBRIS** on the top of deckhead panels is limited by the number of observations made and the presence of vessel components such as ducts or compartment bulkheads that obstruct observations. Workers are advised to be watchful for the presence of **DEBRIS** prior to accessing or working in proximity to mechanical insulation or above deckheads in areas of the vessel with ACM regardless of the reported presence or absence of **DEBRIS**.

Evaluation of SUSPECT MATERIALS

The evaluation of **SUSPECT MATERIALS** (SM), which are materials and products that may randomly contain asbestos but were not tested, is based on the assumption that these unsampled **SUSPECT MATERIALS** are asbestos-containing.

A number of potentially ACM's that are difficult to identify may be present in some areas. These materials are grouped under the heading of Suspect Asbestos-Containing Materials (the need for demolition/dismantling equipment and the lack of access limit our ability to determine the asbestos content).

Several areas of equipment base insulating materials are concealed with cladding, and every effort has been made to collect representative samples of base insulating materials. It is possible however that certain asbestos-containing base insulation is present behind solid cladding. A level of destructive testing prior to activities that may expose such materials is a standing recommendation.

Action Matrix and Definitions

PLEL's evaluation of viability of a specific asbestos control options is based on the consideration of the ACM's condition and accessibility. The logic used is that damaged ACM located in an area frequently accessed by all vessel occupants is of a higher priority than damaged ACM located in an infrequently accessed service area.

Under current regulations and guidelines, the owner is required to control all disturbance of ACM. A number of abatement options, such as repair, removal, enclosure, or encapsulation are available to comply with the regulatory requirements.

The following factors are also considered in making site-specific recommendations for compliance with the provincial regulations:

- i) ACM in **POOR** condition is not routinely repairable.
 - If an abatement action is necessary, removal is the recommended action (enclosure is a viable option in unusual circumstances).
- ii) Mechanical insulation in **FAIR** condition can be repaired or removed based on the following general recommendations applied on a case by case basis (Note: Either repair or removal are legally acceptable options for the treatment of ACM found in **FAIR** condition):
 - Repair ACM mechanical insulation found in **FAIR** condition in **ACCESS (B)** or **ACCESS (C)** areas.
 - Remove ACM mechanical insulation found in **FAIR** condition in **ACCESS (B)** and **ACCESS (C)** areas, where future damage to the ACM is likely to occur.
 - Remove ACM mechanical insulation found in **FAIR** condition with **ACCESS (A)** to eliminate the potential for re-damaging ACM by all vessel users.
- iii) ACM in **GOOD** condition present in **ACCESS (A)** at a minimum is subject to surveillance, as long as it is not disturbed by future renovation, maintenance or demolition. PLEL recommends pro-active removal of the ACM in **ACCESS (A)** where damage is possible by ongoing occupant activity (accidental or intentional). This recommendation exceeds current regulatory requirements.
- iv) Non-friable or manufactured products are consider in the action matrix as follows:
 - Non-friable and manufactured products reported in **POOR** condition or friable **DEBRIS** resulting from the deterioration of non-friable ACM are treated as friable materials and the appropriate action, depending on accessibility, is determined from the Action Matrix for friable ACM.

- o For non-friable or manufactured products reported in **GOOD** condition, Action 7 (surveillance) is recommended regardless of Accessibility.
 - o For non-friable or manufactured products **FAIR** condition is not utilized.
- v) Remove all ACM from a particular area where small quantities of asbestos are present and removal will negate the need for the use of the Asbestos Management Program in that area.

With these principles in mind, the following Action Matrix Tables establish the recommended asbestos control action. Note that factors not included in the above discussion, such as an owner's policy decision to remove material, knowledge of upcoming maintenance, etc., may result in a recommendation that differs from this table. The **ACTIONS** are defined in full following the tables.

Action Matrix Tables

FRIABLE ACM

ACCESS	CONDITION			DEBRIS	SUSPECT MATERIAL
	GOOD	FAIR	POOR		
(A)	ACTION 5/7 ¹	ACTION 5/6 ²	ACTION 3	ACTION 1	ACTION 8
(B)	ACTION 7	ACTION 6/5 ³	ACTION 3	ACTION 1	ACTION 8
(C) Exposed	ACTION 7	ACTION 6	ACTION 4	ACTION 2	ACTION 8
(C) Concealed	ACTION 7	ACTION 7	ACTION 4	ACTION 2	ACTION 8
(D)	ACTION 7	ACTION 7	ACTION 7	ACTION 7	ACTION 8

¹ If material in **ACCESS (A)/GOOD** condition is not removed **ACTION 7** is required.
² If material in **ACCESS(A)/FAIR** condition is not removed **ACTION 6** is required.
³ Remove ACM in **ACCESS (B)/FAIR** condition if ACM is likely to be disturbed.

NON-FRIABLE AND POTENTIALLY FRIABLE ACM

ACCESS	CONDITION		DEBRIS	SUSPECT MATERIAL
	GOOD	POOR		
(A)	ACTION 7	ACTION 3 ⁴	ACTION 1	ACTION 8
(B)	ACTION 7	ACTION 3 ⁴	ACTION 1	ACTION 8
(C) Exposed	ACTION 7	ACTION 4 ⁴	ACTION 2	ACTION 8
(C) Concealed	ACTION 7	ACTION 4 ⁴	ACTION 2	ACTION 8
(D)	ACTION 7	ACTION 7 ⁴	ACTION 7	ACTION 8

⁴ Non-friable and potentially friable ACM found in **POOR** condition and friable **DEBRIS** (from a non-friable ACM source) shall be treated as friable ACM.

Action Definitions

The following definitions relate to the Action Matrix Tables presented above, and as calculated by PLEL's Hazardous Materials Information System (HMIS). The corresponding Action is presented alongside the quantity in the Re-Assessment Survey Data sheets in Appendix I.

ACTION 1 Immediate Clean-Up of DEBRIS that is Likely to Be Disturbed

Restrict access that is likely to cause a disturbance of the ACM **DEBRIS** and clean up ACM **DEBRIS** immediately. Utilize correct asbestos procedures. This action is required for compliance with regulatory requirements. The surveyor will immediately notify the owner of this condition.

ACTION 2 Type 2 Precautions for Entry into Areas with ACM DEBRIS

At locations where ACM **DEBRIS** can be isolated in lieu of removal or cleaned up, use appropriate means to limit entry to the area. Restrict access to the area to persons utilizing Type 2 asbestos precautions. The precautions will be required until the ACM **DEBRIS** has been cleaned up, and the source of the **DEBRIS** has been stabilized or removed.

ACTION 3 ACM Removal Required for Compliance

Remove ACM for compliance with regulatory requirements. Utilize asbestos procedures appropriate to the scope of the removal work.

ACTION 4 Type 2 Precautions for Access into Areas Where ACM is Present and Likely to be Disturbed by Access

Use Type 2 asbestos precautions when entry or access into an area is likely to disturb the ACM. **ACTION 4** must be used until the ACM is removed (Use ACTION 1 or 2 if **DEBRIS** is present).

ACTION 5 Proactive ACM Removal

Remove ACM in lieu of repair, or at locations where the presence of asbestos in **GOOD** condition is not desirable.

ACTION 6 ACM Repair

Repair ACM found in **FAIR** condition, and not likely to be damaged again or disturbed by normal use of the area or room. Upon completion of the repair work treat ACM as material in **GOOD** condition and implement **ACTION 7**. If ACM is likely to be damaged or disturbed, during normal use of the area or room, implement **ACTION 5**.

ACTION 7 Asbestos Management Program with Routine Surveillance

Implement an Asbestos Management Program, including routine surveillance of ACM. Trained workers or contractors must use appropriate asbestos precautions (Type 1, Type 2 or Type 3) during disturbance of the remaining ACM.

ACTION 8 Suspect Material

Implement the Asbestos Management Program for materials that historically contained asbestos but cannot, or have not, been sufficiently tested for asbestos content. These materials are identified as **SUSPECT MATERIALS**. **SUSPECT MATERIALS** may include the following:

- All concealed equipment base insulating material(s)
- All inaccessible insulations on operating equipment

SUSPECT MATERIALS are to be treated as ACM and subject to the Action Matrix, until bulk sampling confirms the absence of asbestos. Bulk sampling, of **SUSPECT MATERIALS**, is recommended prior to the start of renovation, demolition, or maintenance work that will result in a significant disturbance of the **SUSPECT MATERIAL**.