Air Pollution Control Ordinance Cap.311 Asbestos Investigation Report

Reply date

### Wo Hop Shek Crematorium

On 29 January 2007, I received a submission from your registered asbestos consultant, Mr. James LEUNG, of a revised asbestos investigation report for the above premises.

The asbestos investigation report concluded that no asbestos containing material was found at the above premises. As a cautious measure, I would like to advise that if suspected asbestos containing material is found during your works at the premises, you should seek advice from a registered asbestos consultant before the suspected asbestos containing material is disturbed.

Moreover, with regard to the inaccessible areas identified in the report, please would you arrange a registered asbestos consultant to inspect the areas and to submit a supplementary report to us before commencement of any works on these areas.

Yours sincerely,

Environmental Protection Officer for Director of Environmental Protection

cc Director of Architectural Services (Attn.: Mr. S.W. CHOW) Fax 2523 9622 Registered Asbestos Consultant, Mr. James LEUNG Fax 2169 6300

MX070024/TX070038

Dear Sir,



安誠工程顧問有限公司

香港灣仔

皇后大道東183號

合和中心47樓

話: (852) 2911 2233 圖文傳真: (852) 2805 5028

電子郵箱: hyder.hk@hyderconsulting.com 址: www.hyderconsulting.com

Tel : (8621) 2911 2233 : (8621) 2805 5028 Fax

183 Queen's Road East, Wan Chai, Hong Kong

**Hyder Consulting Limited** 47/F Hopewell Centre,

Email : hyder.hk@hyderconsulting.com Website: www.hyderconsulting.com

**BY HAND** 

Hyder Consulting Limited is incorporated in Hong Kong with limited liability. COI Number 126012

29 January 2007

Your Ref:

**Environmental Protection Department** 27/F Southorn Centre Hennessy Road Wanchai Hong Kong

Our Ref:

1256-05/E07-04396

For the attention of:

Ms Jolitta Chan

Dear Ms Chan,

**EIA for Provision of Cremators at Wo Hop Shek Crematorium Asbestos Investigation Report** 

We refer to your letter dated on 17 August 2006 (your ref: EPAC/A/14/031/145) requesting provision of additional information on the captioned report. We hereby provide our revised report as enclosed.

Should you have any queries, please do not hesitate to contact me at 2911 2916.

Yours sincerely

Alexi Bhanja

**Principal Environmental Consultant** HYDER CONSULTING LIMITED

Enc.

CC

Mr MC Chung, PA

(ArchSD)

Ms. Lisa Chiu (FEHD)

41/F, Queensway Government Offices, 66 Queensway, Hong Kong

Administration and Development Branch Planning and

Development Section 2/F, 3 Edinburgh Place, Central, Hong Kong

AB/GM/It



# Provision of Cremators at Wo Hop Shek Crematorium

Asbestos Investigation Report and Asbestos Abatement Plan

Mr. James Leung (1002)

Registered Asbestos Consultant

Hyder

Consulting



# Contents

1	INTRO	DDUCTION	1
2	PART	ICULARS OF CONCERNED PARTIES	1
3	SCOF	PE OF WORKS	2
4	WOR	KS UNDERTAKEN	2
	4.1	Record Review	
	4.2	Field Work	
	4.3	Sampling	.7
	4.4	Laboratory Analysis	.7
5	RECO	DMMENDATIONS	9

#### **List of Tables**

Table 4-1 Summary of Survey

Table 4-2 Sampling Criteria

Table 4-3 Laboratory Analysis Results

#### **List of Figures**

Figure AIR/AAP 1 Site Location Plan

Figure AIR/AAP 2 Elevation at Coffin Crematorium

Figure AIR/AAP 3 Ground Floor Plan at Coffin Crematorium

Figure AIR/AAP 4 Roof Plan at Coffin Crematorium

#### Appendix 1

General Layout

#### Appendix 2

Manufacturer Correspondence & Material Safety Data Sheets

#### Appendix 3

Photographic Records

#### Appendix 4

Sampling Location Plan



# Appendix 5

Laboratory Report



# 1 INTRODUCTION

Hyder Consulting Limited was appointed to conduct an EIA for the provision of cremators at Wo Hop Shek Crematorium. Structures to be demolished include the coffin crematorium building, transformer room, existing coffin cremators and skeletal cremator building. The existing Wo Hop Shek Crematorium is located at Kiu Tau Road, North District. The general layout plan of the subject area is detailed in Appendix 1. In order to ascertain existence of asbestos contained material, an asbestos assessment for the captioned work is undertaken.

# 2 PARTICULARS OF CONCERNED PARTIES

Owner: Food and Environmental Hygiene Department

Client: Architectural Services Department

Representative: Mr. S W Chow, Senior Project Manager 321

Address: 37/F Queensway Government Offices, 66

Queensway, Hong Kong

Telephone: 2867 3716

Fax: 2523 9622

Registered Asbestos Consultant: Mr. James Leung (1002)

Address: G/F, B, 25 Hing Hon Road, Mid-Level West, Hong

Kong.

Tel: 9411 7975

Fax: 2169 6300

Registered Asbestos Laboratory: ETS – Testconsult Limited (4003)

Address: 8/F., Block B, Veristrong Industrial Centre, 34-36 Au

Pui Wan Street, Fo Tan, New Territories.

Tel: 2695 8318

Fax: 2695 3944



# 3 SCOPE OF WORKS

Scope of work for this asbestos assessment include:

- Conduct an asbestos survey for the existing Crematorium at Wo Hop Shek.
- Collect suspected asbestos containing materials (ACM) for further analysis.
- Prepare an Asbestos Investigation Report (AIR) and, if necessary, an Asbestos Abatement Plan (AAP).

### 4 WORKS UNDERTAKEN

### 4.1 Record Review

The following information was collected from the owner and client for preliminarily studying the existing potential ACM of the crematorium:

- Site location plan (Figure AIR/AAP-1 in Appendix 1)
- Elevation at Coffin Crematorium (Figure AIR/AAP-2 in Appendix 1)
- Manufacturer Correspondence and Material Safety Data Sheets (Appendix 2)

# 4.2 Field Work

The asbestos survey was carried out on 28th April, 10th May and 14<sup>th</sup> September 2006. The survey consisted of a visual inspection of the premises, review of material specifications for firebricks and some insulation boards used in the coffin cremator, insulation cloth/rope and other refractory (details refer to Appendix 2). The consultant did not survey any unexposed area of the premises such as concealed or underground water pipes, cables and mains, etc. Bitumen roofing felt material was observed on the roofs of the skeletal and coffin cremators. Under the Air Pollution Control Ordinance (CAP 311), Section 69(3) this is listed as an exempted item.

Interviews with representatives of the owner and client were also conducted. Material specifications for some insulating materials found in the storage room and used on both cremators have been provided by the client and manufacturers. The data sheets indicate these materials to be asbestos free and have been confirmed as such by the manufacturers. Refer to Appendix 2 for details.

The following materials were inspected during the survey and are summarized in Table 4-1. Photographic records of these materials and their discovery locations are appended in Appendix 3.



ltems Surveyed	Location	Finding	Sample Collected	Sample Code	Photo
Concrete tiles	Roof of coffin crematorium building	Suspected ACM	x <sup>(1)</sup>	Not applicable	A3-1
			<b>✓</b>	B/261/06/1	A3-2
			<b>~</b>	B/261/06/4	A3-3
			<b>~</b>	B/261/06/7	A3-4
			<b>~</b>	B/261/06/13	A3-5
			<b>~</b>	B/261/06/14	A3-6
Expansion	Roof of coffin crematorium	Suspected	<b>~</b>	B/261/06/3	A3-7
joints building		ACM	<b>~</b>	B/261/06/6	A3-8
Fibrous	Between flanges of the	Suspected	<b>✓</b>	B/261/06/9	A3-9
cloth	ducting sections located next to the air blowers	ACM	<b>/</b>	B/261/06/10	A3-10
Sound	Fish pond	Suspected	<b>/</b>	B/261/06/11	A3-11
proofing bricks		ACM	<b>✓</b>	B/261/06/12	A3-12
Flooring material	Cremation rooms, Committal Room, Plant Room and Chinese Hall.	Non ACM (Ceramic tiles, concrete, wood, vinyl sheet)	x	Not applicable	A3-13
Rockwool	Storage Room	Non ACM (synthetic fibre)	×	Not applicable	A3-14 A3-15
Superwool & Carbowool	Storage room	Non ACM (synthetic fibre)	×	Not applicable	A3-16
Glass fibre	Storage room	Non ACM (synthetic fibre)	×	Not applicable	A3-17
Shiral 60AD - Grey fire bricks	Cremators Room and Storage Room	Non ACM (refer to Appendix 2 for details)	x <sup>(3)</sup>	Not applicable	A3-18



Items Surveyed	Location	Finding	Sample Collected	Sample Code	Photo
Green fire bricks	Cremators Room and Storage Room	Suspected ACM	~	B/528/06/03 & 04	A3-19
Shiraflo SC60 – dark grey fire bricks	Cremators Room and Storage Room	Non ACM (refer to Appendix 2 for details)	× <sup>(3)</sup>	Not applicable	A3-20
JM Insulating Firebricks - white fire bricks	Cremators Room and Storage Room	Non ACM (refer to Appendix 2 for details)	× <sup>(3)</sup>	Not applicable	A3-21
JM Insulating Firebricks - Yellow fire bricks	Cremators Room and Storage Room	Non ACM (refer to Appendix 2 for details)	× <sup>(3)</sup>	Not applicable	A3-22
Shiral 60 AD - dark yellow fire bricks	Cremators Room and Storage Room	Non ACM (refer to Appendix 2 for details)	× <sup>(3)</sup>	Not applicable	A3-23
Shiral 60 AD - White dotted fire bricks	Cremators Room and Storage Room	Non ACM (refer to Appendix 2 for details)	× <sup>(3)</sup>	Not applicable	A3-24
Orange fire bricks	Cremators Room and Storage Room	Suspected ACM	<b>✓</b>	B/528/06/15 & 16	A3-25
Beige fire bricks	Cremators Room and Storage Room	Suspected ACM	<b>~</b>	B/528/06/17 & 18	A3-26
Shiraflo SC60 - Grey thin bricks	Cremators Room and Storage Room	Non ACM (refer to Appendix 2 for details)	× <sup>(3)</sup>	Not applicable	A3-27
Coating	Ducting in Plant Room	Non ACM (Epoxy)	×	Not applicable	A3-28
Insulating material for air conditioning system	Plant Room	Non ACM (Fibre glass)	x	Not applicable	A3-29



Consulting

ltems Surveyed	Location	Finding	Sample Collected	Sample Code	Photo
Flexible joint	I.D. Fan and Cremator Room	Non ACM (plastic)	×	Not applicable	A3-30 and 31
Switch box	Switch Room in Cremator Room	Non ACM (Plastic)	×	Not applicable	A3-32
Boral Plaster board	Storage Room	Non ACM (refer to Appendix 2 for details)	× <sup>(3)</sup>	Not applicable	A3-33 A3-34
Grey panel board	Storage Room	Suspected ACM	<b>/</b>	B/528/06/23 & 24	A3-35 A3-36
White cement board	Storage Room	Suspected ACM	~	B/528/06/25 & 26	A3-37 A3-38
Shiracrete 80 CR	Storage Room	Non ACM (refer to Appendix 2 for details)	x <sup>(3)</sup>	Not applicable	A3-39 A3-40
FBF Refractory Material	Storage Room	Suspected ACM	~	B/528/06/29 & 30	A3-41 A3-42
White bag	Storage Room	Suspected ACM	<b>~</b>	B/528/06/31 & 32	A3-43 A3-44
Brown bag	Storage Room	Suspected ACM	<b>~</b>	B/528/06/33 & 34	A3-45 A3-46
Resitect 190 K E13	Storage Room	Non ACM (refer to Appendix 2 for details)	× <sup>(3)</sup>	Not applicable	A3-47
Silcal HS Mortar	Storage Room	Non ACM (refer to Appendix 2 for details)	× <sup>(3)</sup>	Not applicable	A3-48
Triset Mortar	Storage Room	Non ACM (refer to Appendix 2 for details)	× <sup>(3)</sup>	Not applicable	A3-49



Consulting

Items Surveyed	Location	Finding	Sample Collected	Sample Code	Photo
Blakite Air Setting Mortar	Storage Room	Non ACM (refer to Appendix 2 for details)	x <sup>(3)</sup>	Not applicable	A3-50
Nylon bag	Storage Room	Suspected ACM	<b>~</b>	B/528/06/43 & 44	A3-51 A3-52
Coffin Cremator Room	Coffin Cremator Room	No ACM is identified	×	Not applicable	A3-53 to A3- 54
Fire Pump Building	Fire Pump Building	No ACM is identified	×	Not applicable	A3-55
Refuse Room	Refuse Room	No ACM is identified	×	Not applicable	A3-56
Flexitallic CFP1 Seal rope	Handle bar in Skeletal Room	Non ACM (refer to Appendix 2 for details)	×	Not applicable	A3-57
Bitumen roofing felt	Roof of skeletal cremator building	Bitumen roofing felt	× <sup>(2)</sup>	Not applicable	A3-58
Switch Room in Skeletal Cremator Building	Switch Room in Skeletal Cremator Building	No ACM is identified	×	Not applicable	A3-59

#### Notes:

- (1) This is a general view of the roof so no sample was collected.
- (2) Bitumen roofing felt material was observed on the roof of the skeletal cremator. Under the Air Pollution Control Ordinance (CAP 311), Section 69(3) this is listed as an exempted item. Hence samples were not taken.
- (3) Samples were collected but not analysed.

#### Table 4-1 Summary of Survey

As the incense burner, coffin and skeletal crematorium were still operational, they could not be adequately inspected or sampled. These areas contain the following materials that are suspected ACM:

- Fire bricks at lining of coffin cremator chimney
- Fire bricks at lining of skeletal cremator and its chimney (Photo A3-28 to A3-30);



- Insulation boards on the outside of the coffin cremator (Photo A3-31 to A3-32);
- Incense burner;
- I.D. fan flanges;
- Gasket at underground ducting flanges in cremator room (Photo A3-33); and
- Internal sections of the ducting that runs between the I.D. Fans and the chimney.

These areas should be thoroughly investigated prior to any demolition work commencing to ascertain the presence of any ACM. The additional findings could be submitted as supplementary information to the findings of this report.

# 4.3 Sampling

Sampling and analysis of suspected asbestos-containing materials were carried out by ETS-Test Consult Limited. Sampling locations are detailed in Figures AIR/AAP-3 & 4 as appended in Appendix 4. The following sampling criteria have been adopted:

Type of Materials	Area or Length	Number of Samples
Homogeneous surface	<100 sq.m.	At least 3
materials	100-500 sq.m.	5
	>500 sq.m.	At least 7
Thermal insulation e.g. coating, plaster etc.	Each homogenous run	At least 3
Miscellaneous materials	Each homogeneous material	At least 2

Table 4-2 Sampling Criteria

# 4.4 Laboratory Analysis

Twenty nine samples of suspected ACM were collected. These samples have been analysed for the presence and type of asbestos according to the Laboratory's HOKLAS accredited testing procedures. The results are detailed in Appendix 5 and are summarised in Table 4-3.



Items Surveyed	Location	Sample Code	Photo	Type and Content of Asbestos Present	
Concrete tiles	Roof of coffin	B/261/06/1	A3-2	Non-ACM	
	crematorium building	B/261/06/4	A3-3	Non-ACM	
		B/261/06/7	A3-4	Non-ACM	
		B/261/06/13	A3-5	Non-ACM	
		B/261/06/14	A3-6	Non-ACM	
Firebricks	Storage Room	B/528/06/03	A3-19,	Non-ACM	
		B/528/06/04	A3-25, A3-26	# 1	
		B/528/06/15			
		B/528/06/16			
		B/528/06/17	eneng secure recorder egenes constant		
		B/528/06/18			
Grey panel	Storage Room	B/528/06/23	A3-35,	Non-ACM	
board		B/528/06/24 A3-36			
White cement	Storage Room	B/528/06/25	A3-37	Non-ACM	
board		B/528/06/26	A3-38		
Refractory	Storage Room	B/528/06/31	A3-43	Non-ACM	
Material – white paper bag		B/528/06/32	A3-44		
Refractory	Storage Room	B/528/06/33	A3-45	Non-ACM	
Material – brown bag		B/528/06/34	A3-46		
Refractory	Storage Room	B/528/06/43	A3-51	Non-ACM	
Material – white nylon bag		B/528/06/44	A3-52		
FBF	Storage Room	B/528/06/29	A3-41	Non-ACM	
Refractory Material		B/528/06/30	A3-42		
Expansion	Roof of coffin	B/261/06/3	A3-7	Non-ACM	
joints	crematorium building	B/261/06/6	A3-8	Non-ACM	



Cons	ult	ing

Fibrous cloth	Between flanges of the ducting sections located	B/261/06/9	A3-9	Non-ACM
	next to the air blowers	B/261/06/10	A3-10	Non-ACM
Sound	Fish pond	B/261/06/11	A3-11	Non-ACM
proofing bricks		B/261/06/12	A3-12	Non-ACM

Table 4-3 Laboratory Analysis Results

# 5 RECOMMENDATIONS

The findings of this investigation indicate there are no ACM materials present on the premises. An Asbestos Abatement Plan is therefore not prepared.

All areas accessible to the Consultant have been visually examined and materials suspected of containing asbestos have been sampled and analysed by a HOKLAS accredited laboratory to determine the presence of asbestos. Asbestos containing materials identified in this report, if any, may not be the only ACMs within the subject area.

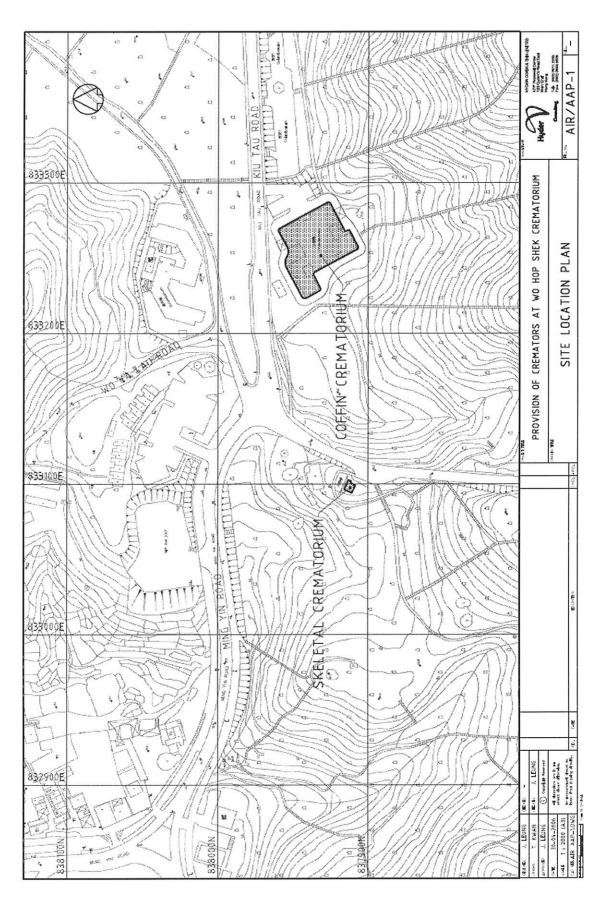
Information presented in this report is a reflection of the conditions at the premises at the time of survey. Prior to any demolition work commencing, the areas detailed in Section 4.2 should be further inspected by a registered asbestos consultant to determine the presence of any asbestos containing material.



# Appendix 1

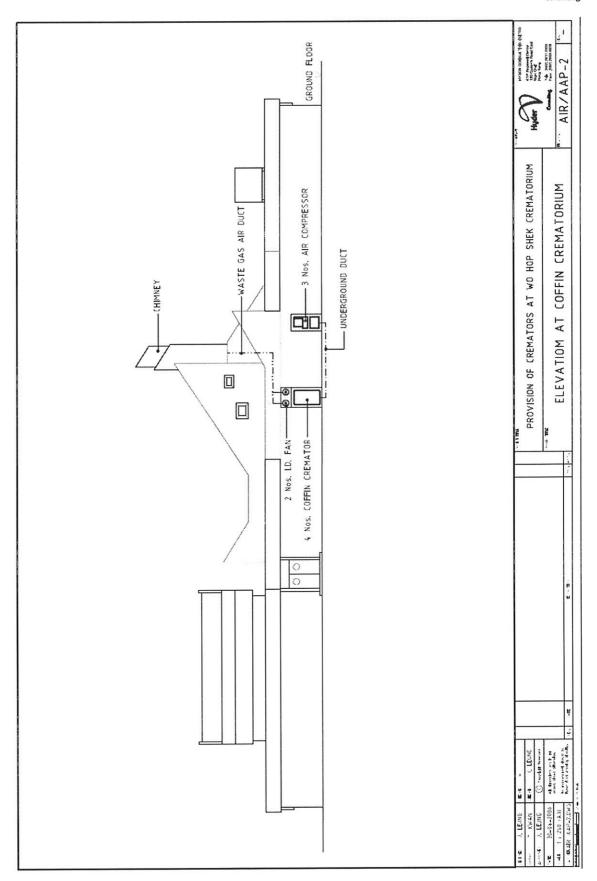
General Layout







Consulting





# Appendix 2

Manufacturer Correspondence & Material Safety Data Sheets



·		۱r	r	1:
- 1	L	"		١.

Error! Hyperlink reference not valid.

Sent:

Fri 15/09/2006 17:09

To:

Error! Hyperlink reference not valid.

Cc:

Subject:

RE: Refractory

Attachments:

Yes, we can confirm the Durital E90 and Resitecgt 190K are asbestos free.

Best Regards

Eric

"James Leung" <James@desert.com.au>

To <eric.wang@rhi-ag.com>

09/15/2006 04:11 PM

CC

Subject RE: Refractory

Eric,

Can you please confirm they are asbestos free.

Best Regards

James Leung

Desert HK

Blue Beluga Limited (Distributors)

Room 1006, 10/F., World Wide House,



19 Des Voeux Road, Central,

Hong Kong

Tel (852) 2169 6349

Fax (852) 2169 6300 www.desert.com.au

nothing conserves water like the desert™

This email and any attachments thereto may contain private, confidential, and privileged material for the sole use of the intended recipient. Any review, copying, or distribution of this email (or any attachments thereto) by others is strictly prohibited. If you are not the intended recipient, please contact the sender immediately and permanently delete the original and any copies of this email and any attachments thereto.

From: eric.wang@rhi-ag.com [mailto:eric.wang@rhi-ag.com]

Sent: Fri 15/09/2006 15:22

To: James Leung Subject: RE: Refractory

Dear James

We have only two products (Durital E90 & Resitec 190K) manufactured in China. We can't find the others which correspond with our products. Attached the two data sheets for your information.

Best Regards

Eric



#### "James Leung" <James@desert.com.au>

09/14/2006 05:45 PM

To <eric.wang@rhi-ag.com>

CC

Subject RE: Refractory

Dear Eric,

Good speaking with you.

As mentioned, we have come across some products , which we believe are manufactured by the RHI. These include:

- 1. Durital E90
- 2. Grade 23HD (Insulation Bricks)
- 1700 C Castable (Door Bricks)
- 4. Maksjcart 2 Mortar (1400 Grade)
- 5. RESITECT 190K E130-0.3 (Mortar)

Due to a tight schedule it would be much appreciated if you could confirm/provide the following details about these items at your earliest convenience:

- If they are manufactured by RHI.
- Do they contain asbestos.
- Material Safety Data Sheets.

**Best Regards** 

James Leung

Desert HK

Blue Beluga Limited (Distributors)

Room 1006, 10/F., World Wide House,

19 Des Voeux Road, Central,



Hong Kong

Tel (852) 2169 6349

Fax (852) 2169 6300 www.desert.com.au

nothing conserves water like the desert™

This email and any attachments thereto may contain private, confidential, and privileged material for the sole use of the intended recipient. Any review, copying, or distribution of this email (or any attachments thereto) by others is strictly prohibited. If you are not the intended recipient, please contact the sender immediately and permanently delete the original and any copies of this email and any attachments thereto.

From: eric.wang@rhi-ag.com [mailto:eric.wang@rhi-ag.com]

Sent: Thu 14/09/2006 15:48

To: James Leung Subject: Refractory

**Dear James** 

My name is Eric Wang the sales manager of RHI Trading Company in Dalian China. I have received your email regarding the crematorium refractory. According to your demand, we can supply such refractory material from our plant in Dalian China. Tried to called you by your office number this afternoon, but couldn't reach you.

You can contact me at your convenience by the following mobile no.

Cell phone no.: 13801997592

**Best Regards** 



#### **RESITECT 190K E13 0-0,3**

Classification Refractory wet mortar VDEh-Code 842005802798 Grain size 0-0,3 mm Main Raw Material Component Corundum, chrome oxyde Type of Bond Chemical Storage limit 6 months Packing Plastic drum Working Method Mortaring Main Aplication Sliding gates, incineration-chemicalenergyindustry Working Instruction Code NUM011 Amount of material 2.65 t/m3 Chemical composition Al2O3 SiO2 Fe2O3 MgO TiO2 Cr2O3

88.0 % 1.6 % 0.3 % 0.2 % 0.1 % 4.5 % P205

5.0 %

Note: Determination on ignited substance (1050°C) acc. to DIN 51001

Temp. limit for application 1,800 °C -

Revision: 7

Date of issue: 02.08.2005

The indicated values are standard values, i.e. values taken over a longer representative period of time according to either valid test standards or internal test methods. They may not be regarded as committed specifications and therefore not as guaranteed properties. We reserve the right to further technical developments and new editions of technical product information.



From:

Error! Hyperlink reference not valid.

Sent:

Thu 21/09/2006 4:57

To:

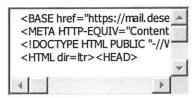
Error! Hyperlink reference not valid.

Cc:

Subject:

RE: Shiral 60 AD Refractory Brick

#### Attachments:



Dear Mr Leung,

I can confirm that SHIRAL 60 AD is manufactured by Shinagawa Refractories Australasia in our factory in Australia and is an asbestos free product. Asbestos is not used in any of the materials manufactured by our company.

If I can be of any further assistance to you, please do not hesitate to contact me.

#### Regards

James Tyler Sales & Marketing Manager Shinagawa Refractories Australasia Pty Ltd p: 02 4222 3881 m: 0419 894 304

e: james@shinagawa.biz

w: www.shinagawa.biz (Australia)

www.shinagawa.co.jp/English/ (Japan)

This message and any attachments are confidential and are intended for the personal attention of the addressee(s). If as a reader of this message you are not the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you have received this message in error, please notify the sender and delete/ destroy the original message and any copies. Thank you.

Page 10



	ron	٠.
г	ron	٦.

Error! Hyperlink reference not valid.

Sent:

Thu 14/09/2006 22:35

To:

Error! Hyperlink reference not valid.

Cc:

Subject:

RE: Confirmation of Refractory Manufactured by Thermal Ceramics Ltd.

Attachments:

Dear Mr Leung

I can confirm that both Triset Mortar and Blackite Air Setting Mortar are manufactured by Thermal Ceramics.

Neither product contains any asbestos materials.

Regards

Harold Hickling

From: James Leung [mailto:James@desert.com.au]

Sent: 14 September 2006 13:55

To: Harold Hickling

Subject: Confirmation of Refractory Manufactured by Thermal Ceramics Ltd.

Dear Mr. Hickling,

Good speaking with you.

- 1. Triset Mortar
- 2. Blakite Air Setting Mortar

Page 11



Due to a tight schedule it would be much appreciated if you could confirm the following details about these items in a separate email:

- If they are manufactured by Thermal Ceramics.
- · Do they contain asbestos.

Best Regards

James Leung

Desert HK

Blue Beluga Limited (Distributors)

Room 1006, 10/F., World Wide House,

19 Des Voeux Road, Central,

Hong Kong

Tel (852) 2169 6349

Fax (852) 2169 6300

www.desert.com.au

nothing conserves water like the desert™

This email and any attachments thereto may contain private, confidential, and privileged material for the sole use of the intended recipient. Any review, copying, or distribution of this email (or any attachments thereto) by others is strictly prohibited. If you are not the intended recipient, please contact the sender immediately and permanently delete the original and any copies of this email and any attachments thereto.

This email has been scanned by the MessageLabs Email Security System. For more information please visit http://www.messagelabs.com/email



#### Bissett, Ron < Ron. Bissett@boral.com.au>

Mailed-By: boral.com.au

To: b.beluga@gmail.com Date: 19-Sep-2006 13:00

Subject: Boral Plasterboard

Reply | Reply to all | Forward | Print | Add sender to Contacts list | Delete this message | Report phishing | Show original | Message text garbled?

Boral Plasterboard is a gypsum based product Manufactured by Boral used for the internal linings of ceilings and walls for domestic and commercial use which does **not** use asbestos in it's manufacture.Please find MSDS attached <<INFILL PANELS\_UNISPAN\_CEILI.pdf>>

Ron Bissett Boral Plasterboard PH 0401 895 475

This email and any files transmitted with it are confidential to the intended recipient and may be privileged. If you have received this email inadvertently or you are not the intended recipient, you may not disseminate, distribute, copy or in any way rely on it. Further, you should notify the sender immediately and delete the email from your computer. Whilst we have taken precautions to alert us to the presence of computer viruses, we cannot guarantee that this email and any files transmitted with it are free from such viruses.



#### Message Details

Sep 25 2006 ⊞Inquiry about Ceramic Fiber Products (Me)

Sep 25 2006 

<u>Re:Inquiry about Ceramic Fiber Prod...</u> (Mr Xinglu Jiang)

□ Subject:		Re:Inquiry about Ceramic Fiber Products
	From:	Mr Xinglu Jiang
	Date:	Mon, Sep 25 2006 19:31:14 -0700

Dear Mr. James Leung,

Thank you for your enquiry!

JM26 Bricks do not contain asbestos inside.

We have our factory to produce the insulating fire bricks and we have done the export of insulating products for eight years.

For the quotation of JM26 bricks, please kindly find as following:

1 Price

US\$0.862/PC FOB Tianjin port, China.

- 2. Quotation Valid: within 30 days.
- 3. Payment terms: 30% by T/T in advance, balance after receipt of fax copy of B/L.
- 4. Shippment time: about 40 days after receipt of 30% remittance.

Best regards

Xinglu Jiang

-----

Ore World Trade Co., Ltd. In Tangshan.

Address: Jinrong B/D. No 116 Xinhua West Road, 063000, Tangshan, Hebei, China.

Tel:86-315-232-3136 Fax:86-315-232-5379

Website: http://www.oreworld.com

Email: info@oreworld.com or info@oreworld.com.cn



Consulting

1 10111. T 002 2090 9050

Page: 3/4

Date: 2006/8/25 下午 12:34:18



ABN 81 082 371 891 23 Glastonbury Avenue Unanderra, NSW, 2526, Australia

#### **FACSIMILE**

Date: August 18, 2006

Number of Pages including cover sheet: 1

To:	Philip Shum	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	From:	James Tyler
Company:	MANDARIN COMPANY			Sales & Marketing Manager
Fax:	By email .		Phone:	+61 2 4222 3881
Re:	Your ref e-34561/06		Fax:	+61 2 4221 1795
			e-mail:	james@shinagawa.biz

Dear Philip,

We have received your requested regarding the esbestos status of products supplied by Shinagawa to Mandarin on invoices OP/1047692 and OP/1047690. Please note, asbestos has not been used in any products manufactured in Australia for many years.

The materials in question (shown below) manufactured by Shinagawa Refractories Australasia are made without any asbestos in their makeup:

SHIRACRETE 80CR
SHIRAFLO SC60
SHIRACRETE 60
SHIRABOND 50

SHIRALITE 140MW SHIRAPLAS 55 SILCAL HS MORTAR HIALEX 90P

The following products are not made by Shinagawa, however we have been informed that they are not manufactured with ashestos:

JM26 Ceramics Blkt STD

I trust that this assists. Should you require MSDS please contact Peter Harris for assistance or alternatively, you can download MSDS from our web site, <a href="www.shinagawa.biz">www.shinagawa.biz</a>

Regards,

James Tyler

SHINAGAWA REFRACTORIES AUSTRALASIA PTY. LTD.



Page '

/01/2007





PO Box 3 Marsh Works Dewsbury Road Clercheston W. Yorks 8Q19 SBT England Telephone (01274) 851273 Facsimile (01274) 831386 Web Site www.Recidallic.com VAT Rog No. OB 628 8676 84

24th August 2006

Dear Philip

Re: CFP 1 & CFP 2

Please be advised that CFP 1 and CFP 2 are products that do not contain asbestos.

Yours sincerely

Hannah Blyth Sales Co-ordinator



Registered office: P.O. Box 3 Marsh Works Dovisbusy Road Cleckheaton W. Yorks BD19 5BT England Registered in England No. 3308289

A transfer of

The Flexitallic Group

QA18 Re-0 Oct 0)



From: + 852 2695 9036

Page: 4/4

Date: 2006/8/25 下午 12:34:19



Thermal Ceramics Asia Pte Ltd 28 Jalan Kilang Barat Singapore 169362
Yel: +55 6733 5068
Fax: +95 6736 3498
E-mall: thermalcevarnics@tcasia.com.sg

Website: www.thermalceramics.com

18 Aug 06

Mandarin Company Rm 801,8/F, Technology Plaza 29-35 Sha Tsui Road, Tsuen Wan N.T. Hong Kong Ann: Mr Philip Shuin

Dear Sir

RE | SUPERWOOL SOT PRODUCT

This is to certify that Thormal Ceramics, product - Superwool 607 is asbestos free.

Thank you.

Yours faithfully, THERMAL CERAMICS ASIA PTE LTD

MIKE TAN

Sales Manager - S.E. Asia

OF ALIC DOOR 17:14

24171465

97%

P.03 TOTAL P.04



Table A2B.11

**Product Name: Flexitallic CFP1** 

PRODUCT TYPE		paseni jasa	PRODUCT NAME
GLASS PACKINGS	3800 3411 (6112)	high density packing made from continous flament '6' glass yarns	FLEXITALLIC GPI
	600 3 3-11 60-127	medium density packing made from loitted Eiglass yarns	FLEXITALLIC GP2
		n Lie Bliebe	
Tor metal	600 17 5111 60121 3	low density packing from 'S'	FLEXITALLIC GP123
doors, lumace		One in the second	
dears coal and : wood himning	31112 <b>5</b> 7, 5	very low density packing made by knitting air textured continous	FLEXITALLIC GP2\$0
snove door seals		filament E' glass yarn (only available in round section)	
CERAMIC PACKINGS	9740 3-9 (2200)	packing made from a ceramic fibre yarn seinforced with inconel	FLEXITALLIC CFP1
		wire	
	Luxonii. Juo	Packing made from a coramic yarn	FLEXITALLIC
for high- temperature	(1384)	reinforced with glass carrier thread	CFP2
crucible ild and furnace door seals			



# Appendix 3

Photographic Records



Photo A3-1 Concrete tiles, Roof of coffin crematorium building



Photo A3-2 Concrete tiles, Roof of coffin crematorium building (Sample No. B/261/06/1)



Photo A3-3 Concrete tiles, Roof of coffin crematorium building (Sample No. B/261/06/4)



Photo A3-4 Concrete tiles, Roof of coffin crematorium building (Sample No. B/261/06/7)



Photo A3-5 Concrete tiles, Roof of coffin crematorium building (Sample No.B/261/06/13)



Photo A3-6 Concrete tiles, Roof of coffin crematorium building (Sample No.B/261/06/14)

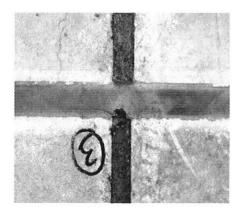


Photo A3-7 Expansion joints, Roof of coffin crematorium building (Sample No.B/261/06/3)

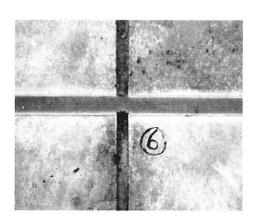


Photo A3-8 Expansion joints, Roof of coffin crematorium building (Sample No.B/261/06/6)

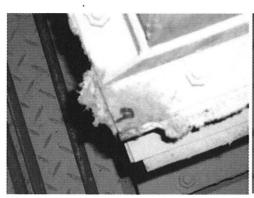


Photo A3-9 Fibrous cloth, Between flanges of the ducting sections located next to the air blowers (Sample No. B/261/06/9)

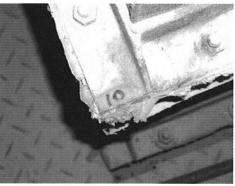


Photo A3-10 Fibrous cloth, Between flanges of the ducting sections located next to the air blowers (Sample No. B/261/06/10)

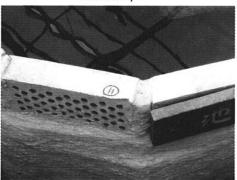


Photo A3-11 Sound proofing bricks, Fish Pond (Sample No. B/261/06/11)

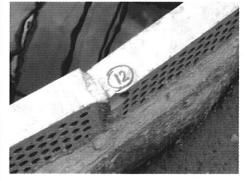


Photo A3-12 Sound proofing bricks, Fish Pond (Sample No. B/261/06/12



Photo A3-13 Flooring material, Cremation rooms, Committal Room,
Plant Room and Chinese Hall



Photo A3-14 Rockwool, Storage Room



Photo A3-15 Rockwool, Storage Room



Photo A3-16 Superwool & Carbowool , Storage Room



Photo A3-17 Glass Fibre, Storage Room



Photo A3-18 Shiral 60AD - Grey fire bricks, Cremators Room and Storage Room



Photo A3-19 Green fire bricks, Cremators
Room and Storage Room



Photo A3-20 Shiraflo SC60 – dark grey fire bricks, Cremators Room and Storage Room



Photo A3-21 JM Insulating Firebricks -Cremators Room and Storage Room



Photo A3-22 JM Insulating Firebricks Yellow fire bricks - Cremators
Room and Storage Room



Photo A3-23 Shiral 60 AD - dark yellow fire bricks - Cremators Room and Storage Room



Photo A3-24 Shiral 60 AD - White dotted fire bricks - Cremators Room and Storage Room



Photo A3-25 Orange fire bricks - Cremators Room and Storage Room



Photo A3-26 Beige fire bricks - Storage Room



Photo A3-27 Shiraflo SC60 - Grey thin bricks - Cremators Room and Storage Room



Photo A3-28 Coating, Ducting in Plant Room



Photo A3-29 Insulating material for air conditioning system, Plant Room



Photo A3-30 Flexible joint, I.D. Fan



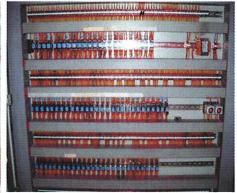


Photo A3-31 Flexible joint, Cremator Room

Photo A3-32 Switch Box, Switch Room in Cremator Room

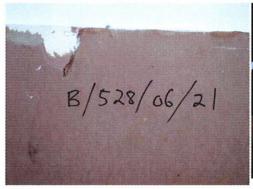


Photo A3-33 Boral Plaster board, Storage Room



Photo A3-34 Boral Plaster board, Storage Room

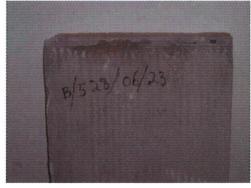


Photo A3-35 Grey panel board, Storage Room



Photo A3-36 Grey panel board, Storage Room

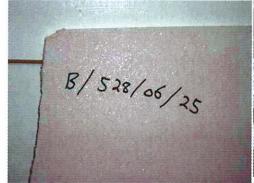


Photo A3-37 White cement board , Storage Room

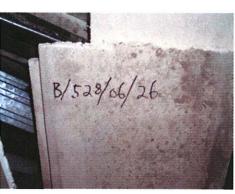


Photo A3-38 White cement board , Storage Room



Photo A3-39 Shiracrete 80 CR, Storage Room



Photo A3-40 Shiracrete 80 CR, Storage Room



Photo A3-41 FBF Refractory Material, Storage Room



Photo A3-42 FBF Refractory Material, Storage Room





Photo A3-43 White bag, Storage Room



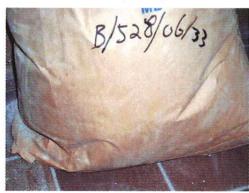
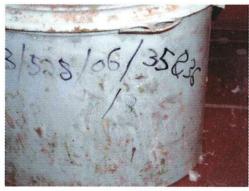




Photo A3-45 Brown bag, Storage Room

Photo A3-46 Brown bag, Storage Room



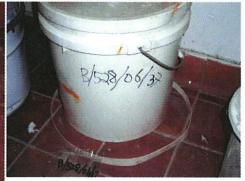


Photo A3-47 Resitect 190 K E13, Storage Room

Photo A3-48 Silcal HS Mortar, Storage Room





Photo A3-49 Triset Mortar, Storage Room

Photo A3-50 Blakite Air Setting Mortar, Storage Room



B/528/06/44

Photo A3-51 Nylon bag, Storage Room



Photo A3-52 Nylon bag, Storage Room



Photo A3-53 Coffin Cremator Room

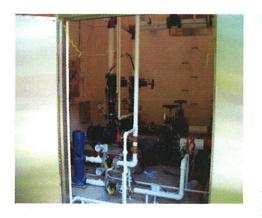


Photo A3-54 Coffin Cremator Room



Photo A3-55 Fire Pump Building

Photo A3-56 Refuse Room



Photo A3-57 Insulation cloth/rope, Handle bar in Skeletal Room.



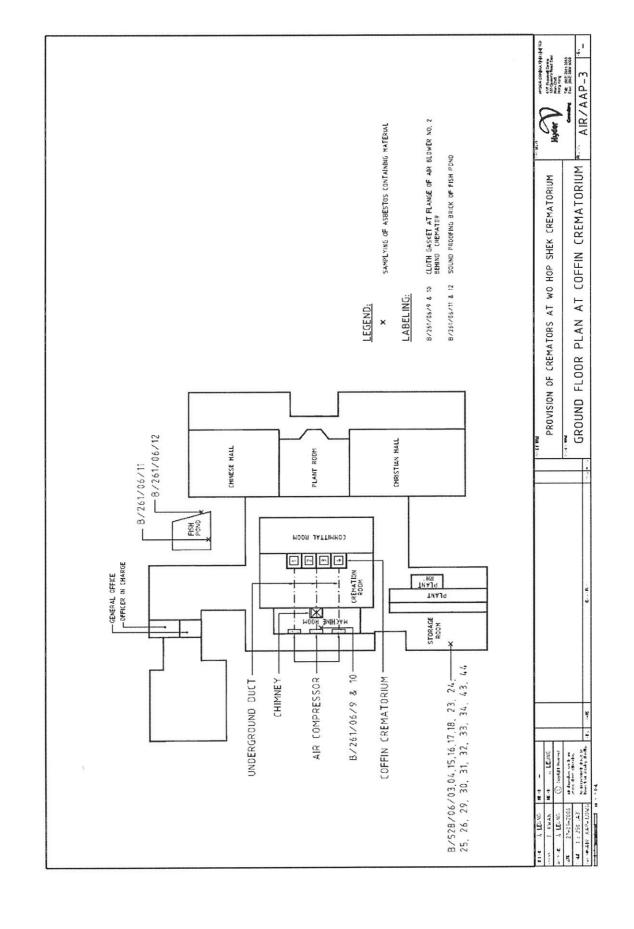
Photo A3-58 Bitumen Roof Felt, Roof of skeletal cremator building

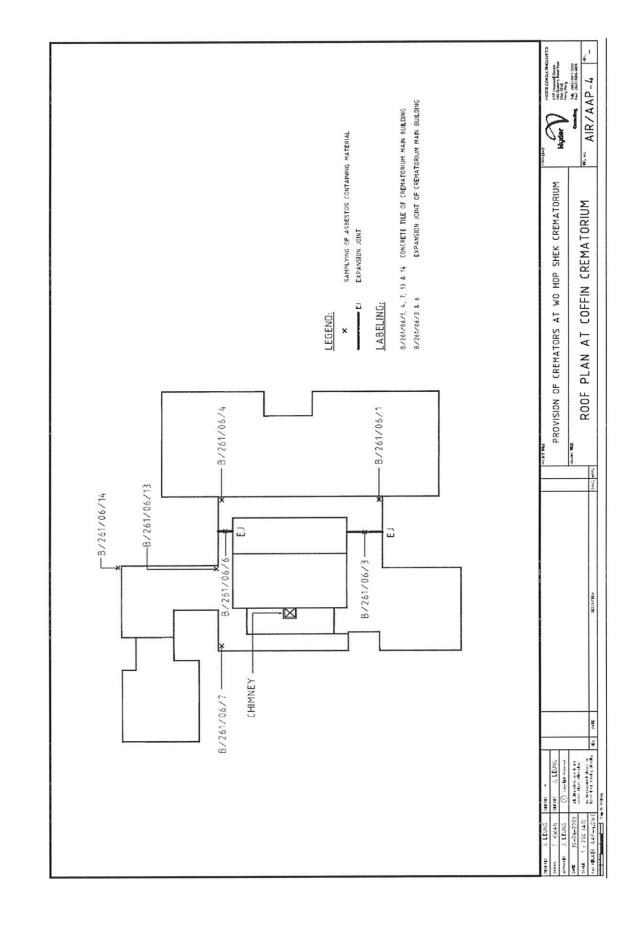


Photo A3-59 Switch Room in Skeletal Cremator Building

# Appendix 4

Sampling Location Plan





# Appendix 5

Laboratory Report



# 東業德動測試顧問有限公司 ETS-TESTCONSULT LIMITED

8/F., Block B, Veristrong Industrial Centre, 34-36 Au Pui Wan Street, Fotan, Hong Kong

Tel : 2695 8318 Fax : 2695 3944 E-mail : etl@ets-testconsult.com Web site : www.ets-testconsult.com



#### TEST REPORT

Form F/AB/R/01/Issue 7 (1/1) (08/03)

#### REPORT NO.BUA60543

# IDENTIFICATION AND DETERMINATION OF ASBESTOS CONTAINING MATERIAL

Project

: Wo Hop Shek Crematorium

Report Date

: 25 September 2006

(B/528/06)

Client

: Blue Beluga Limited

Test Method

: TPE/002/A &

TPE/004/A: Clause 5.1

Address

: Room 1006 World-Wide House

Page

1 of 2

19 Des Voeux Road C Central Hong Kong

The sample(s) referenced as shown below were taken from site and examined to determine the presence of asbestos fibres by following methods:

1. Sampling using the method set out in the In-house method TPE/001/A - Sampling of asbestos in bulk

Fibres in the samples were identified using a polarised light and dispersion staining technique as described in the In-house method TPE/002/A - Identification of asbestos bulk samples.

 Determination of asbestos-containing material (ACM) by visual estimation using the method set out in the In-house method TPE/004/A - Determination of asbestos-containing material by visual estimation, graymetric reduction & point-counting method.

#### RESULTS

Oate of sampling by ETS-Testconsult technician: 14 September 2006 The sampling was carried out in the company of: Mr James Leung

Date of identification	: 21 September 2006	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Sample Reference Number	Sample Location	Results	Conclusion (ACM/Non-ACM/ Non-Determined)
B/528/06/3	Green brick	Asbestos not detected	Non-ACM
B/528/06/4	Green brick	Asbestos not detected	Non-ACM
B/528/06/15	Orange brick	Asbestos not detected	Non-ACM
9/528/06/16	Orange brick	Asbestos not detected	Non-ACM
B/528/06/17	Beige brick	Asbestos not detected	Non-ACM
	Beige brick	Asbestos not detected	Non-ACM
B/528/06/18	Grey panel board	Asbestos not detected	Non-ACM
B/528/06/23	Grey panel board	Asbestos not detected	Non-ACM
B/528/06/24	White cement board	Asbestos not detected	Non-ACM
B/528/06/25		Asbestos not detected	Non-ACM
B/528/06/26	White cement board	Asbestos not detected	Non-ACM
B/528/06/29	FBF refactory material	Asbestos not detected	Non-ACM
B/52B/06/30	FBF refactory material	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	7.6

Hong Kong Accreditation Service (HKAS) has accredited this laboratory under the Hong Kong Laboratory Accreditation Scheme (HOKLAS) for specific laboratory activities as listed in the HOKLAS Directory of Accredited Laboratories. The results shown in this report were determined by this laboratory in accordance with its terms of accreditation. This report shall not be reproduced unless with prior written approval from this laboratory



### 東業德勤測試顧問有限公司 ETS-TESTCONSULT LIMITED

8/F., Block B, Veristrong Industrial Centre, 34-36 Au Pul Wan Street, Fotan, Hong Kong : etl@ets-testconsult.com Tel : 2695 8318 E-mail

Fax : 2695 3944

Web site : www.ets-testoonsult.com



#### TEST REPORT

Form F/AB/R/01/Issue 7 (1/1) [08/03]

Our report no. BUA60543			Page 2 of 2
Sample Reference Number	Sample Location	Results	Conclusion (ACM/Non-ACM/ Non-Determined)
B/528/06/31	Refactory material in white paper bag	Asbestos not detected	Non-ACM
B/528/06/32	Refactory material in white paper bag	Asbestos not detected	Non-ACM
B/528/06/33	Refactory material in brown paper bag (MD)	Asbestos not detected	Non-ACM
B/528/06/34	Refactory material in brown paper bag (MD)	Asbestos not detected	Non-ACM :
B/528/06/43	Refactory material in white nylon bag	Asbestos not detected	Non-ACM
B/528/06/44	Refactory material in white nylon bag	Asbestos not detected	Non-ACM
· · · · · · · · · · · · · · · · · · ·			

#### Remarks:

'ACM' refers to a sample that is found to be an asbestos containing material as defined in the Air Pollution Control Ordinance,

'Non-Determined' refers to a sample that should be further analysed by Gravimetric Reduction & Point Counting method for the determination of asbestos containing material.

"Non-ACM" refers to a sample which asbestos cannot be detected during the identification.

REPORTED BY

LEE, Siu Fung Clifford

Supervisor

APPROVED BY

FAN, Fook Shing Dennis

**Technical Director** 

Hong Kong Accreditation Service (HKAS) has accredited this laboratory under the Hong Kong Laboratory Accreditation Scheme (HOKLAS) for specific laboratory activities as listed in the HOKLAS Directory of Accredited Laboratories. The results shown in this report were determined by this. laboratory in accordance with its terms of accreditation. This report shall not be reproduced unless with prior written approval from this laboratory. FROM : JAMES LEUNG

PHONE NO.: 852 25184744

Jun. 19 2006 06:00PM P2



### 東業德勤測試顧問有限公司 ETS-TESTCONSULT LIMITED

8/F., Block B. Veristrong Industrial Centre, 34-36 Au Pui Wan Street, Fotan, Hong Kong

: 2695 8318 Tel Fax : 2695 3944

E-mail : etl@ets-testconsult.com
Web site : www.ets-testconsult.com





Form F/AB/R/01/Issue 7 (1/1) (08/03)

#### REPORT NO.BUA60259/1

# IDENTIFICATION AND DETERMINATION OF ASBESTOS CONTAINING MATERIAL

Project

: Wo Hop Shek Crematorium (B/261/06)

Report Date

: 10 May 2006

Client

: Blue Beluga Limited

Test Method

: TPE/002/A &

TPE/004/A

Address

: Room 1006 World-Wide Hosue

Sheet 1 of 2

19 Des Voeux Road C Central Hong Kong

The sample(s) referenced as shown below were taken from site and examined to determine the presence of asbestos fibres by following methods:

1. Sampling using the method set out in the In-house method TPE/001/A - Sampling of asbestos in bulk

2. Fibres in the samples were identified using a polarised light and dispersion staining technique as described in the In-house method TPE/002/A - Identification of asbestos bulk samples.

3. Determination of asbestos-containing material (ACM) by visual estimation using the method set out in the In-house method TPE/004/A - Determination of asbestos-containing material by visual estimation, gravmetric reduction & point-counting method.

#### RESULTS

Date of sampling by ETS-Testconsult technician: 9 May 2006 The sampling was carried out in the company of ; Mr James Leung

, ,			
Date of identification	: 9 May 2006		
Sample Reference Number	Sample Location	Results	Conclusion (ACM/Non-ACM/ Non-Determined)
B/261/06/1	Roof tile of crematorium main building	Asbestos not detected	Non-ACM
B/261/06/3	Expansion joint of crematorium main building	Asbestos not detected	Non-ACM
B/261/06/4	Roof tile of crematorium main building	Asbestos not detected	Non-ACM
B/261/06/6	Expansion joint of crematorium main building	Asbestos not detected	Non-ACM
B/261/06/7	Roof tile of crematorium main building	Asbestos not detected	Non-ACM
B/261/06/9	Cloth gasket at flange of air blower no. 2 behind cremator	Asbestos not detected	Non-ACM

Hong Kong Accreditation Service (HKAS) has accredited this laboratory under the Hong Kong Laboratory Accreditation Scheme (HOKLAS) for specific laboratory activities as listed in the HOKLAS Directory of Accredited Laboratories. The results shown in this report were determined by this laboratory in accordance with its terms of accreditation. This report shall not be reproduced unless with prior written approval from this laboratory. 852 25184744 98% 19-JUN-2006 17:29

FROM : JAMES LEUNG

PHONE NO. : 852 25184744

Jun. 19 2006 06:00PM P3



# 東業德勤測試顧問有限公司 ETS-TESTCONSULT LIMITED 8/F., Block B, Veristrong Industrial Centre, 34-36 Au Pui Wan Street, Fotan, Hong Keng Tel: 2695 8318 E-mail : etl@ets-testconsult.com Web site: www.ets-testconsult.com

Fax : 2695 3944



#### TEST REPORT

Form F/AB/R/01/Issue 7 (1/1) [08/03]

o	1460250/1		Page 2 of 2
Our report no. Bl Sample Reference	Sample Location	Results	Conclusion (ACM/Non-ACM/ Non-Determined)
Number B/261/06/10	Cloth gasket at flange of air blower no. 2 behind cremator	Asbestos not detected	Non-ACM
B/261/06/11	Sound proofing brick of fish pond	Asbestos not detected	Non-ACM
B/261/06/12	Sound proofing brick of fish pond	Asbestos not detected	Non-ACM
B/261/06/13	Roof tile of crematorium main building	Asbestos not detected	Non-ACM
B/261/06/14	Roof tile of crematorium main building	Asbestos not detected	Non-ACM

Remarks:

'ACM' refers to a sample that is found to be an asbestos containing material as defined in the Air Pollution Control Ordinance.

'Non-Determined' refers to a sample that should be further analysed by Gravimetric Reduction & Point Counting method for the determination of asbestos containing material.

'Non-ACM" refers to a sample which asbestos cannot be detected during the identification.

REPORTED BY

Clifford Lee

Supervisor

APPROVED BY

Dennis Fan

Technical Director

Hong Kong Accreditation Service (HKAS) has accredited this laboratory under the Hong Kong Laboratory Accreditation Scheme (HOKLAS) for specific laboratory activities as listed in the HOKLAS Directory of Accredited Laboratories. The results shown in this report were determined by this specific laboratory activities as listed in the HOKLAS Directory of Accredited Laboratories. The results shown in this report were determined by this laboratory in accordance with its terms of accreditation. This report shall not be reproduced unless with prior written approval from this faboratory. 19–JUN-2006 17:29 852 25184744 98% P. 03