



Hazardous Materials and Gold can go together?

How can we improve dealing with Hazardous Materials?

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Kiwa vision: 3 basic rules

- No exposure to HazMats
- Skilled workers
- No harm to environment





3 basic rules will result in Compliancy:



Kiwa ladies 8 Project 2020: Go for GOLD in the Olympics



Our Mission from 3 basic rules:

- No exposure to HazMats HazMats mapped and accessible
- Skilled workers training/selected yards/supervision
- No harm to environment make it easy to work the green way





Kiwa Oesterbaai and her clients including Class lead by example:

HazMats mapped (vessels/sister vessels/unknown vessel -> big data???)

Data and report Standardization and safe practice procedures

Think globally, and still Go for GOLD





2016 Modern library : IHM Register....??????

- Challenge new and existing clients, TU Delft students, Class
- Dealing with surveys results in large amount of data
- Reports with details
- Who is responsible for data storage?
- Reports “disappeared” in drawers
- Priorities change (WBM, O&G, NOx)
- Deadline “so far away yet”
- Container lines data analyzed (GP)



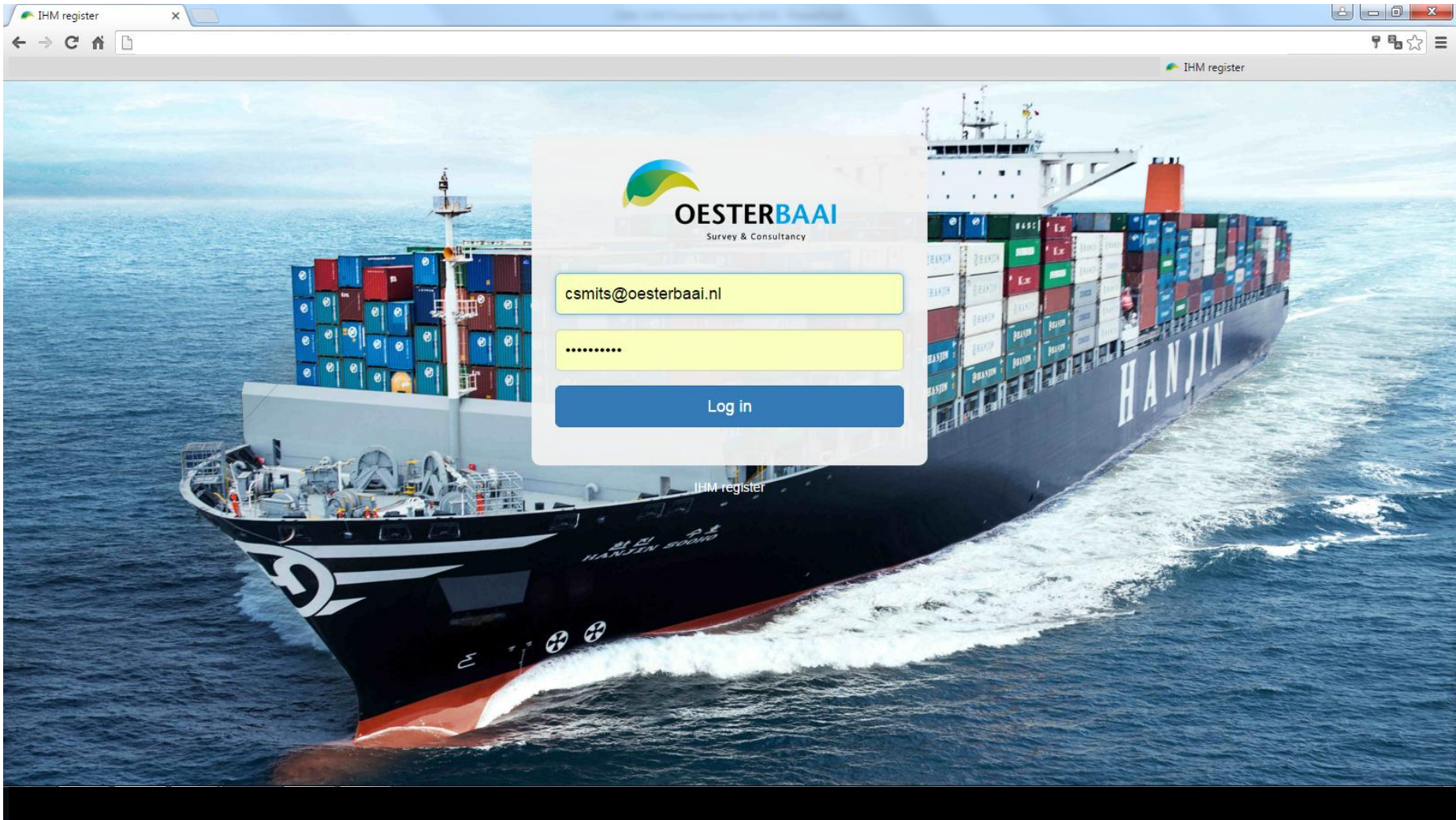


Oesterbaai IHM Database/Register

- Web based database cover approximately 122,000 vessels
- Can be used for:
 - Vessel specific Hazardous Material (HM) management
 - Database is tool for refits / recycling
 - Tool to show Class / Authorities as proof of proper HM Management



Inventory of Hazardous Materials (IHM) Database



Secure Log-in with personal password

Client specific filters available to select (part of) own fleet

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Reset filters

Operator	Vessel Name	IMO number	Vessel Type	Flag	Built	Status	Manager	Builder	IHM	ACM	PCB	TBT	ODS	PFOS	Other
CMA CGM	RANJAN	9396622	Container Ship (Fully)	Antigua & Bar	2008-07	In Service	Cor Rohden Beree	Jiangsu Yangz	No	n/a	n/a	n/a	n/a	n/a	n/a
CMA CGM	STADT BREMERHAVE	9338278	Container Ship (Fully)	Antigua & Bar	2006-12	In Service	Cor Thien & Heyer	Jiangsu Easter	No	n/a	n/a	n/a	n/a	n/a	n/a
CMA CGM	STADT FLENSBURG	9235610	Container Ship (Fully)	Antigua & Bar	2003-10	In Service	Cor Thien & Heyer	Damen Shipyc	No	n/a	n/a	n/a	n/a	n/a	n/a
CMA CGM	BF ESPERANZA	9252785	Container Ship (Fully)	Antigua & Bar	2003-03	In Service	Cor BF Shipmanag	Daewoo-Mang	No	n/a	n/a	n/a	n/a	n/a	n/a
CMA CGM	MITO STRAIT	9319571	Container Ship (Fully)	Antigua & Bar	2006-02	In Service	Cor Carsten Rehde	Aker Tulcea Si	No	n/a	n/a	n/a	n/a	n/a	n/a
CMA CGM	VICTORIA STRAIT	9265574	Container Ship (Fully)	Antigua & Bar	2002-12	In Service	Cor Carsten Rehde	Jinling Shipya	No	n/a	n/a	n/a	n/a	n/a	n/a
CMA CGM	CONESTE	9252802	Container Ship (Fully)	Antigua & Bar	2003-03	In Service	Cor COSCON	Daewoo-Mang	No	n/a	n/a	n/a	n/a	n/a	n/a
CMA CGM	SOPHIA	9433456	Container Ship (Fully)	Antigua & Bar	2008-07	In Service	Cor Draxl Schiffah	Fujian Mawei	No	n/a	n/a	n/a	n/a	n/a	n/a
CMA CGM	FRANCOISE GILOT	9295517	Container Ship (Fully)	Antigua & Bar	2005-08	In Service	Cor Harmstorf & C	Jiangsu Yangz	No	n/a	n/a	n/a	n/a	n/a	n/a
CMA CGM	PACAYA	9330276	Container Ship (Fully)	Antigua & Bar	2007-01	In Service	Cor Harren & Part	Kouen Shipbu	No	n/a	n/a	n/a	n/a	n/a	n/a
CMA CGM	URANUS	9053919	Container Ship (Fully)	Antigua & Bar	1992-05	In Service	Cor Heinz Corleis	f Sietas Kg	No	n/a	n/a	n/a	n/a	n/a	n/a
CMA CGM	TAURUS J	9248916	Container Ship (Fully)	Antigua & Bar	2002-11	In Service	Cor Jungerhans M	Peelre-Werft G	No	n/a	n/a	n/a	n/a	n/a	n/a
CMA CGM	GINA	9403360	General Cargo Ship	Antigua & Bar	2008-10	In Service	Cor Klingenberg B	Hanzhou Doi	No	n/a	n/a	n/a	n/a	n/a	n/a
CMA CGM	KIARA	9403384	General Cargo Ship	Antigua & Bar	2009-12	In Service	Cor Klingenberg B	Hanzhou Doi	No	n/a	n/a	n/a	n/a	n/a	n/a
CMA CGM	FAS DAMMAM	9160920	General Cargo Ship	Antigua & Bar	1997-08	In Service	Cor Klingenberg B	Qinshan Ship	No	n/a	n/a	n/a	n/a	n/a	n/a
CMA CGM	NICOLA	9179567	General Cargo Ship	Antigua & Bar	1999-06	In Service	Cor Klingenberg B	Qinshan Ship	No	n/a	n/a	n/a	n/a	n/a	n/a
CMA CGM	MARINA	9252864	General Cargo Ship	Antigua & Bar	2003-02	In Service	Cor Klingenberg B	Jiangxi Jiangz	No	n/a	n/a	n/a	n/a	n/a	n/a
CMA CGM	JANINA	9235385	General Cargo Ship	Antigua & Bar	2002-10	In Service	Cor Klingenberg B	Jiangxi Jiangz	No	n/a	n/a	n/a	n/a	n/a	n/a
CMA CGM	CMA CGM AGADIR	9362956	Container Ship (Fully)	Antigua & Bar	2007-04	In Service	Cor Rass Schiffahr	Yangfan Grou	No	n/a	n/a	n/a	n/a	n/a	n/a
CMA CGM	CMA CGM MEKNES	9435820	Container Ship (Fully)	Antigua & Bar	2008-03	In Service	Cor Rass Schiffahr	Yangfan Grou	No	n/a	n/a	n/a	n/a	n/a	n/a
CMA CGM	CHRISTOPHER	9359260	Container Ship (Fully)	Antigua & Bar	2008-09	In Service	Cor Rudolf Schept	Peelre-Werft G	No	n/a	n/a	n/a	n/a	n/a	n/a

Hazardous substances present

ACM	PCB
TBT	ODS
PFOS	Other

IHM norms

IHM part 1

IHM part 2/3

IHM reports available 0

Type	Name	Action
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Vessel data

NO IMAGE AVAILABLE

Operator

Vessel name

IMO number

MMSI number

Callsign

Vessel type

Client/owner specific vessel info available

Client specific filters available to select vessel specific info (CMA CGM Danube as example)

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Operator	Vessel Name	IMO number	Vessel Type	Flag	Built	Status	Manager	Builder	IHM	ACM	PCB	TBT	ODS	PFOS	Other
CMA CGM SA	CMA CGM DAN	9674517	Container Ship	Malta	2014-06	In Service/Cor	CMA CGM SA	Dalian Shipb	Yes	Yes	n/a	n/a	n/a	n/a	Yes

Hazardous substances present

ACM	Yes	PCB	Unknown
TBT	Unknown	ODS	Unknown
PFOS	Unknown	Other	Ceremic fibre

IHM norms

IHM part 1	Missing	Request
IHM part 2/3	Missing	Request

IHM reports available 3

Type	Name	Action
ACM	PAM-40523 Asbestos and RCF Survey Rep or, Tecnicas, CMA CGM Danube, v1.1.pdf	Download
ACM	PAM-42475 Asbestos and RCF updat rep or, Tecnicas, CMA CGM Danube, v1.0.pdf	Download
ACM	PAM-42475 Asbestos and RCF update rep or, Tecnicas, CMA CGM Danube, v2.0.pdf	Download

Vessel data

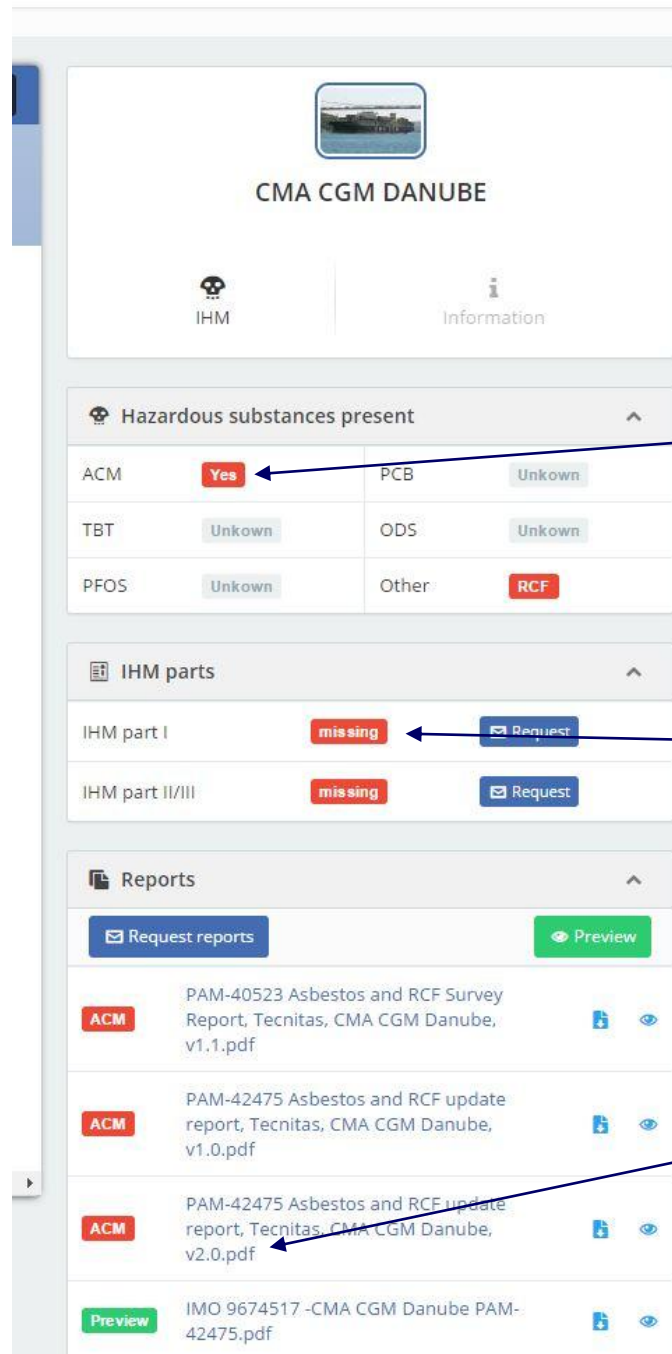
Operator	CMA CGM SA The French Line
Vessel name	CMA CGM DANUBE

Vessel specific Haz Mat info available

Existing reports can be downloaded and own data can be uploaded

Extra (general) vessel info available

**Vessel HazMat
related
information**



The screenshot shows the vessel HazMat interface for CMA CGM DANUBE. It includes sections for Hazardous substances present, IHM parts, and Reports. The Hazardous substances section shows ACM as 'Yes', PCB as 'Unkown', TBT as 'Unkown', ODS as 'Unkown', PFOS as 'Unkown', and Other as 'RCF'. The IHM parts section shows IHM part I and II/III as 'missing', with 'Request' buttons. The Reports section shows three Asbestos and RCF Survey Reports (v1.1.pdf, v1.0.pdf, v2.0.pdf) and one IMO report (v2.0.pdf).

Hazardous substances present			
ACM	Yes	PCB	Unkown
TBT	Unkown	ODS	Unkown
PFOS	Unkown	Other	RCF

IHM parts	
IHM part I	missing
IHM part II/III	missing

Reports	
Request reports	Preview
ACM	PAM-40523 Asbestos and RCF Survey Report, Tecnicas, CMA CGM Danube, v1.1.pdf
ACM	PAM-42475 Asbestos and RCF update report, Tecnicas, CMA CGM Danube, v1.0.pdf
ACM	PAM-42475 Asbestos and RCF update report, Tecnicas, CMA CGM Danube, v2.0.pdf
Preview	IMO 9674517 -CMA CGM Danube PAM-42475.pdf

**Asbestos (and RCF)
present**

No IHM reports present

**All versions of Asbestos
Survey Reports present**



Recent developments:



- clients/ships were 100% western European in 2015
- clients/ships in 2017 are now 50% non European
- transparency requests (customs, authorities, MoM, Aus, PSC)
- clients confronted with HazMat reports for not surveyed vessels lead to auditing of their purchase/docking/document filing procedures
- language English -> Chinese, Spanish
- not much interest in extra software (only internet connection)
- simplicity, overview within few pages, free or low costs
- boost in Asbestos Safety kits and e-learning



Near future Kiwa Oesterbaai: completion IHM Register

- filing all 3.000 vessel data exact data
- filing of 4.500 sister vessel data good general overview
- remaining 115.000 vessels 2 page HazMat report
- minimize ticket and travel costs

Near future HazMat Management and Recycling

- T&T DNVGL, ABS, BV, Lloyd's standard HazMat procedures
standard Recycling procedures
- SNAP???



Questions?

