

Subject: Fw: Sao Paulo

Date: Wednesday, July 20, 2022 at 9:58:19 AM Pacific Daylight Time

From: Ingvild Jenssen

To: Jim Puckett

From: Andreas Malm Justad <andreas.justad@grieggreen.com>

Sent: 20 July 2022 13:09:38

To: Ingvild Jenssen

Cc: Elin Saltkjel

Subject: RE: Sao Paulo

Hei Ingvild,

Ref earlier tlfcon and email,

Grieg Green developed the IHM part I for Sao Paulo back in Q2 2021. Since then, there has been one revision, which also includes IAPP and Anti-fouling certificate.

The IHM developed by Grieg Green is done in accordance with applicable regulations, as stipulated in the report itself:

- Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, 2009 (SR/CONF/45)
- 2015 Guidelines for the Development of the Inventory of Hazardous Materials (MEPC. 269(68))
- EU Regulation on Ship Recycling, REGULATION (EU) No 1257/2013
- EMSA's Best Practice Guidance on the Inventory of Hazardous Material, 2016-10-28
- SOLAS regulation II-1/3-5 new amendments concerning new installation of asbestos containing material, MSC.282(86)
- MSC.1/Circ.1426 Unified Interpretation of SOLAS Regulation II-1/3-5
- MSC.1/Circ.1374 Information on Prohibiting the use of asbestos onboard ships
- MSC.1/Circ.1379 Unified Interpretation of SOLAS Regulation II-1/3-5

Grieg Green is a certified IHM provider by several classification societies, backing up that our procedures and methodology has been audited and vetted by appropriate 3rd party.

There were several samples taken to test for PCB on Sao Paulo, all of which came back negative.

We usually do not test for PCB in insulation materials, as PCB is found in glue, rubber, adhesive materials, el-equipment, not as insulation material itself.

As mentioned in the IHM, we did in fact take samples of bulkheads, all of which was either without insulation or lab result came back negative.

For other bulkheads not tested is due to lack of accessibility.

The report and survey are based on the documents provided by owner available at the time to develop the VSCP.

For Sao Paulo, an old military aircraft carrier which has been laid up for more than 10 years, the documents available was very limited.

During they onboard survey, various places were sealed off and inaccessible for the surveyor. There were also lack of air-circulation in certain places, making some zones hazardous environment for our surveyor to access. Grieg Green did our utmost to reach as much as possible, but there was no way to cover everything in this

situation.

The asbestos amount reported in the IHM is only an estimate and indicative quantity, as mentioned with our calculating factors in the report. It could be a big gap from the actual amount existing on board versus the findings in the IHM.

Miscellaneous pipeline system in the IHM could not be fully covered and estimated with the few documents available back then. We do believe an extended asbestos survey is needed to cover the full scope of ACMs and properly estimate the amount on board – but that is subject to owner's decision and not necessarily regulated to perform.

To address your mentioned "Visual" samples in the IHM, is due to either:

1. No insulation/bare steel, nothing to take sample of
2. The checkpoint is referred to a sample already taken by another checkpoint

As mentioned in the report with supporting picture.

It is the recycling facilities responsibility to follow up on the IHM, and Grieg Green encourage to take further samples during the recycling.

For the purposes of import/export of Sao Paulo, Grieg Green is not involved in that process, so we cannot comment on what documents has been provided to or by either authority or entity.

In your reference to Clemenceau, each IHM is developed individually for each vessel and shall not be based upon any other vessel. We do not say that there can not be similarities, but a lot can be changed over the timeline since newbuilt until IHM inspection (abt 60 years).

In your provided Technical Report, explicitly stated not being an IHM, they estimate e.g. about 100 tonnes of ACM in Bridge Deck Insulation, whereas our samples have been negative on several checkpoints of wall, ceiling, panels, insulations as located in "I-3 Structure and hull containing hazardous materials listed in Table A and Table B of appendix 1 of the IMO guidelines and Annex II of EU SRR", significantly reducing ACMs in accommodation area / bridge deck insulation.

Again, the IHM report developed by Grieg Green is an estimate, made in our best efforts with the available information provided by the Owners at the time and report shall be used as such.

As stated in the report under Remarks, we do not guarantee the accuracy of the findings relative to total amount.

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This report states the status of hazardous materials presenting onboard the vessel at the time of inspection through document assessment, visual check and sample testing. The information provided in this statement/report gives to the best of our knowledge a fair view of the actual potentially hazardous materials situation of the vessel. However, Grieg Green does not by this report give a guarantee related to the content of potentially hazardous materials, nor does Grieg Green give a guarantee related to the accuracy and correctness of all the information in every respect. Grieg Green has no liability for any loss, damage or expense or other consequences of whatsoever nature due to information that has not been provided or information that is incorrect or inaccurate regarding the actual condition of the vessel.

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Best regards

Andreas Malm Justad

Project Manager

Grieg Green

M: +47 464 26 755

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you.

From: Ingvild Jenssen <Ingvild@shipbreakingplatform.org>
Sent: 19 July 2022 16:37
To: Andreas Malm Justad <andreas.justad@grieggreen.com>
Cc: Elin Saltkjel <elin.saltkjel@grieggreen.com>
Subject: RE: Sao Paulo

Takk, Andreas, for oppfølging.

For info finner du en rapport som ble laget for søsterskipet Clemenceau, derav mengder ble bekreftet av både franske myndigheter og ABLE UK som endte opp med skipet. Vi har også fått bekreftet fra flere hold at Sao Paulo (ex-Foch) vil være nærmest identisk, dvs helt klart inneholde enormt større mengder asbest og PCB enn det som er indikert i Grieg Green IHM.

Mvh,
Ingvild

From: Andreas Malm Justad <andreas.justad@grieggreen.com>
Sent: dinsdag 19 juli 2022 16:26
To: Ingvild Jenssen <Ingvild@shipbreakingplatform.org>
Cc: Elin Saltkjel <elin.saltkjel@grieggreen.com>
Subject: RE: Sao Paulo

Hei Ingvild,

Vi er midt i ferieavviklingen hos GG, så har ikke fått hørt med alle involverte i Sao Paulo ennå. Håper på å gi deg et utfyllende svar ila morgendagen.

Best regards

Andreas Malm Justad

Project Manager

Grieg Green

M: +47 464 26 755

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From: Ingvild Jenssen <Ingvild@shipbreakingplatform.org>
Sent: 19 July 2022 11:26
To: Andreas Malm Justad <andreas.justad@grieggreen.com>
Cc: Elin Saltkjel <elin.saltkjel@grieggreen.com>

Subject: Sao Paulo

Hei igjen Andreas,

I tillegg til asbest, sa noterer vi oss at dere ikke fant noe PCB ombord, men at dere ikke har testet følgende komponenter som sannsynelig inneholder PCB som bulkhead insulation og electrical cabling. Takk for oppklaring av dette også.

Mvh,
Ingvild