

Gulf Ahmadi (ex *Probó Bison*) and *Gulf Shagra* (ex *Probó Panda*): all sold for demolition in Bangladesh at 528 USD per tonne. The *Gulf Shagra* has arrived.

To our knowledge, from the above vessels mentioned, only the *Probó Koala* has carried out petrol refining activities onboard and generated the kind of waste delivered in Abidjan (Ivory Coast). However we advise Bangladesh authorities to verify all vessels.

Non exhaustive list of hazardous substances onboard or likely to be onboard.

The *Gulf Jash*, ex-*Probó Koala* is an Ore / Bulk / Oil carrier vessel. She had the capacity of transporting diverse liquid or solid cargo and diverse categories of hydrocarbons. Therefore, residue in the slop tanks is more hazardous than on a standard tanker.

Substances which were stored in the slop tanks in Abidjan (Ivory Coast) are still likely to be present in small quantities or large quantities if refining activities were carried out onboard the vessel since 2006.

Mercaptans:

Potential symptoms: Headaches; nausea; mucous membrane, irritation;
in animals: incoordination; weakness; pulmonary irritation; liver, kidney damage; cyanosis.

Health effects: Irritation-Nose, Throat---Mild

Organ: Respiratory system;

in animals: liver, kidneys

Hydrogen sulphide:

Hydrogen sulfide is both an irritant and a chemical asphyxiant with effects on both oxygen utilization and the central nervous system. Its health effects can vary depending on the level and duration of exposure. Repeated exposure can result in health effects occurring at levels that were previously tolerated without any effect. Low concentrations irritate the eyes, nose, throat and respiratory system (e.g., burning/ tearing of eyes, cough, shortness of breath). Asthmatics may experience breathing difficulties.

The effects can be delayed for several hours, or sometimes several days, when working in low-level concentrations. Repeated or prolonged exposures may cause eye inflammation, headache, fatigue, irritability, insomnia, digestive disturbances and weight loss.

Caustic soda:

Potential symptoms: Eye, skin mucous membrane irritation; sore throat, cough, labored breathing, shortness of breath; pulmonary edema, pneumonitis; eye, skin burns; redness, pain, blisters; blurred vision, blindness (from contact with liquid); temporary loss of hair;

Burning sensation; nausea, vomiting; abdominal pain, diarrhea; swelling of the larynx to the point of suffocation; shock or collapse.

Health Effects: Irritation-Eye, Nose, Throat, Skin---Marked; Respiratory effects; Acute high risk toxicity by ingestion or immersion.

Affected organs: Eyes, skin, respiratory system.

Even if the *Gulf Jash* did not carry out petroleum refining processes onboard, her slops tanks contain residue from regular operations which is to say oil sludge (potentially flammable or toxic through inhalation and repeated contact which is without doubt the case of the workers). This problem is not only related to the *Gulf Jash*, it is a general problem for all vessels.

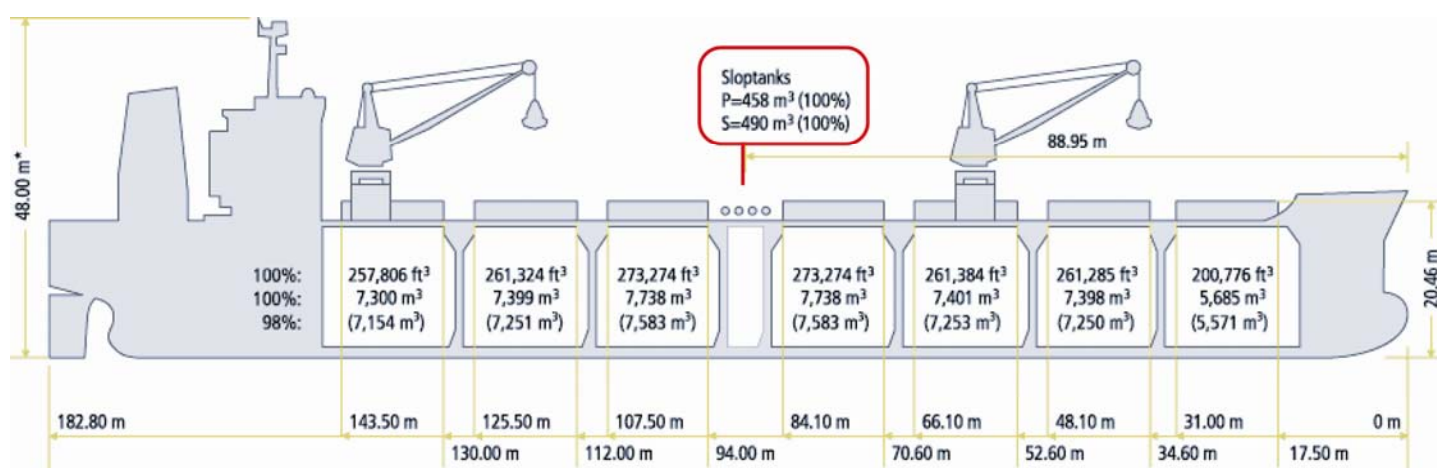
Pumps and internal pipes could also have concentrated scales containing traces of mercapan and hydrogen sulphide. Specific precautionary measures should be taken when opening this type of equipment.

Sludge on the wall and the bottom of every tank should be object to a thorough inspection when keeping in mind the history of the vessel.

Given the year of construction, hydraulic oil and lubrication oil may contain PCB's. These risks also concern the two cranes on the bridge. PCB's can also be present in the light tube capacitors. Authorities should gather information from the owner on the possible PCB contamination in other materials like paints. It is sure that asbestos is present in heat insulation. However its presence in paint has to be assessed.

Others hazardous materials such as mercury in light tubes, CFC refrigerant gases, heavy metals in the anodes and nickel, cadmium in accumulators, leads and H2SO4 in batteries.

Coupe du Probo Koala et de ses sister-ships



Robin des Bois

Association de protection de l'Homme et de l'environnement
Depuis 1985 / Since 1985

14 rue de l'Atlas 75019 Paris, France / tel : 33 (1) 48.04.09.36 - fax : 33 (1) 48.04.56.41
www.robindesbois.org – contact@robindesbois.org