Measures to be taken in the case of danger to ship's crews through radiation (supplement)

Following numerous queries on the subject of protection against radiation/radioactive contamination of crew members on board merchant vessels, the Port Health Authority of Hamburg in cooperation with TMAS-Germany and Dienststelle Schiffssicherheit, Seeärztlicher Dienst der BG Verkehr (Port State Control) is issuing the following information and advice, which make no claim to be exhaustive.

(For informations about the position and extension of the area considered to be endangered by radiation, consult the local official administration and use the following link by the BMU ((German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety)).: http://www.bmu.de/atomenergie_sicherheit/doc/47088.php)

- 1. Avoid all activities outside the air-conditioned superstructures.
- 2. In the sea area endangered by radiation, exterior work, maintenance work, paint work outside the ship's superstructures should be reduced to a minimum that meets the safety requirements on board.
- 3. Sailing within the evacuation zone, which also applies to the sea area around a damaged reactor, is strongly disadvised.
- 4. After leaving a sea area considered to be endangered by radiation, all ship's superstructures especially those housing the living quarters should be decontaminated with sea water (fire hose) as a temporary measure, starting with the sundeck or bridge. During these activities, the wearing of masks, protective goggles, rubber boots and, possibly, disposable protective suits must be observed. All persons participating in cleaning measures must shower several times directly afterwards under running water, using fresh water and liquid soap.
- 5. Any necessary replenishment of ship's supplies should not be carried out in the sea area regarded as endangered, particularly no fresh fruit, fresh vegetables, freshwater seafood, fish, milk or mushrooms. It should be abstained from the production of drinking water in the sea area considered to be endangered; a sufficient amount of fresh water should already be produced in sea areas considered to be safe and then bunkered. Naturally, the subsequent economical use of this bunkered fresh water should be a matter of course.
- 6. Whether and, if so, in what quantities, iodine (iodine tablets) as a protection against consequential damage to the thyroid gland through radiation should be stored on board the ships concerned depends on the availability of such medication and the directive still to be issued by the BMU (German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety). The intake of any iodine medication is not recommended without having checked the radiation in surrounding area and only under strength medical criterias. In Germany a protective intake of iodine tablets is required for a special group of people like children and pregnant women in a radius of 100km around an avereraged nuclear power plant.
- 7. Ballastwater loaded in a sea area considered to be endangered by radiation has to be changed at open sea while the ship is sailing please consider the ships stability while doing these activities.

You will find further information in the appendix and at the following links:

http://www.bmu.de/atomenergie_sicherheit/doc/47094.php

http://www.jodblockade.de/