M.S. Notice 22 of 1998

The recent sinking of m. v. "Arcadia Pride" resulting in loss of lives and damage to property, was

investigated. The investigations revealed some of the probable causes which led to capsizing of the

vessel viz.: -

The cargo of sulphur carried on board the ship from the port of Ruwaais, was determined to be fine

granular sulphur in the form of pellets (2 to 3 mm diameters). The behavior of this cargo was examined

by way of a model made to scale. It was observed that the granular sulphur behaved like grain cargo

unlike sulphur powder.

1. The stowage factor of the cargo carried on board the m.v. "Arcadia Pride" was determined as

0.787 m<sup>3</sup>/ton and angle of repose was determined as 25.

2. It was also determined that the cargo if left untrimmed, would result in 30 to 50% void spaces in

all holds. The rolling & pitching of the ship with the untrimmed cargo would initially tend to settle

the cargo and subsequently shift akin to grain cargo.

In view of the above findings, the Nautical Adviser to the Govt. of India has prohibited the loading of

granular sulphur cargo in bulk on board general cargo ships calling at Indian ports. The Indian Port

Authorities are advised to inform the concerned Principal Officers of the Mercantile Marine

Departments whenever such cargo ships call Indian ports to verify that such cargo ships comply with

the requirements of the International Grain Code and hold a document of authorization as required by

that Code. The requirements of the International Grain Code shall be treated as mandatory.

Bulk carriers whenever intending to load fine granular sulphur as stated above, would also require to

comply with the requirements of the International Grain Code.

Ship owners and Masters of ships intending to load granular sulphur cargo on board their ships for

discharge at Indian ports, are advised to take note of the above and comply in totality. The Principal

Officers/Surveyors-in Charge of Mercantile Marine Departments are to ensure that such ships have

complied with the aforementioned requirements.

Sd/-

(Capt. R. K. Awasthi)

**Nautical Surveyor**