

APPENDIX 7

VENTILATION PROCEDURES

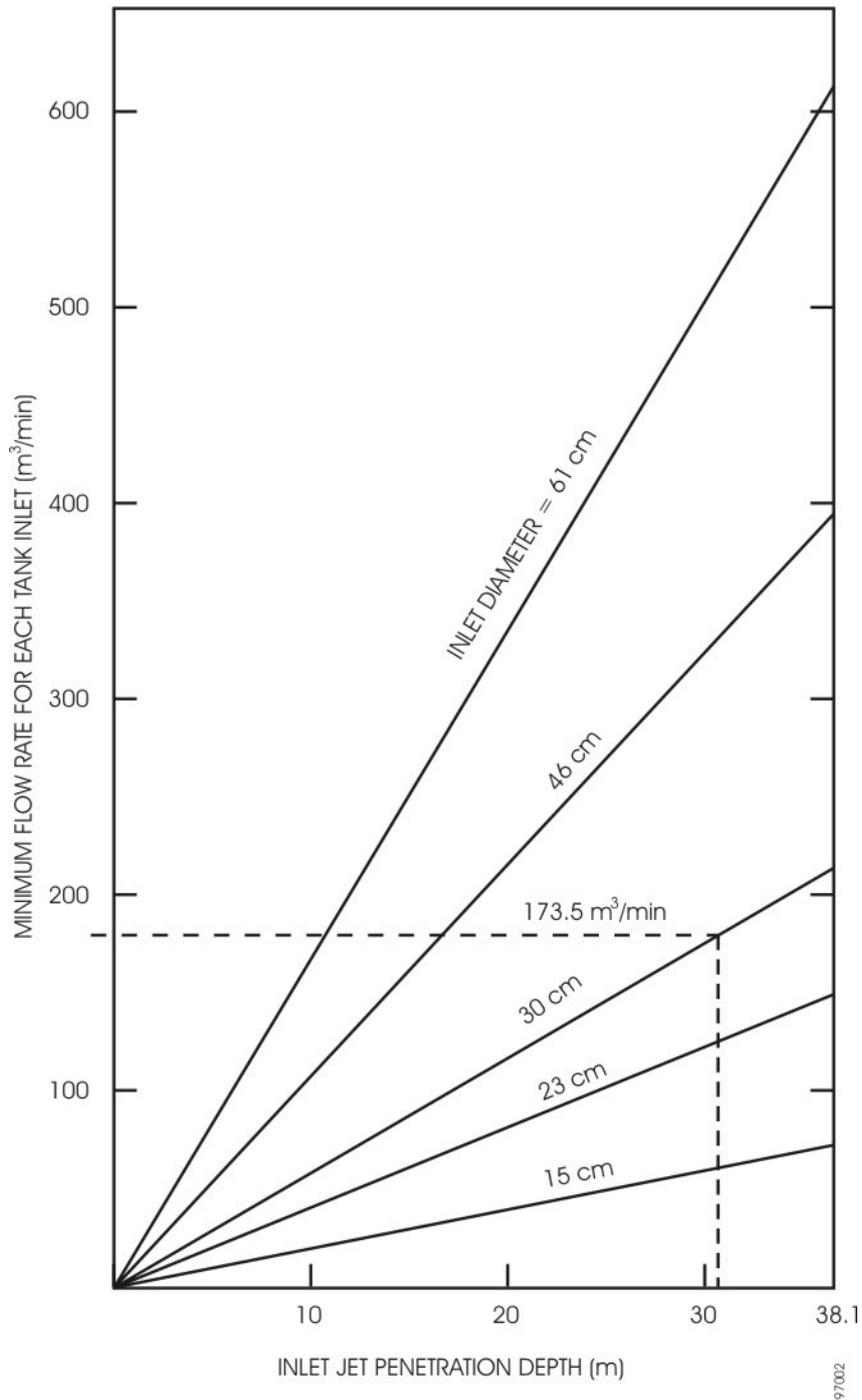
1 Cargo residues of substances with a vapour pressure greater than 5 KPa at 20°C may be removed from a cargo tank by ventilation.

2 Before residues of Noxious Liquid Substances are ventilated from a tank the safety hazards relating to cargo flammability and toxicity shall be considered. With regard to safety aspects, the operational requirements for openings in cargo tanks in SOLAS 74, as amended, the International Bulk Chemical Code, the Bulk Chemical Code, and the ventilation procedures in the International Chamber of Shipping (ICS) Tanker Safety Guide (Chemicals) should be consulted.

3 Port authorities may also have regulations on cargo tank ventilation.

4 The procedures for ventilation of cargo residues from a tank are as follows:

- .1 the pipelines shall be drained and further cleared of liquid by means of ventilation equipment;
- .2 the list and trim shall be adjusted to the minimum levels possible so that evaporation of residues in the tank is enhanced;
- .3 ventilation equipment producing an airjet which can reach the tank bottom shall be used. Figure 7-1 could be used to evaluate the adequacy of ventilation equipment used for ventilating a tank of a given depth;
- .4 ventilation equipment shall be placed in the tank opening closest to the tank sump or suction point;
- .5 ventilation equipment shall, when practicable, be positioned so that the airjet is directed at the tank sump or suction point and impingement of the airjet on tank structural members is to be avoided as much as possible; and
- .6 ventilation shall continue until no visible remains of liquid can be observed in the tank. This shall be verified by a visual examination or an equivalent method.



**Figure 7-1. Minimum flow rate as a function of jet penetration depth.
Jet penetration depth shall be compared against tank height.**
