

TEMPORARY PORTABLE GENERATOR INSTALLATIONS

REFERENCE:

(a) MVI Policy Ltr No. 16-90 dtd 12Jul97 (CANCELLED)

**DIRECTIVES
AFFECTED:**

CIDIG MEMO #31 dated 15Jul97 is superceded.

GENERAL:

The use of portable, containerized generator sets, usually mounted on deck, is of concern since poor installation could constitute fire and electrical shock hazards. Dedicated industrial system generators that are not connected to the main switchboard and have no provision to power any ship's service loads need, from an electrical standpoint, only meet the general safety criteria of the National Electrical Code and 46 CFR Subpart 111.107. Requirements for piping, ventilation, and fire protection are contained in 46 CFR Subchapter F and the appropriate Subchapter for the vessel's service. 46 CFR 56.04-10 permits acceptance by the marine inspector of some piping systems, such as cooling water for a dedicated industrial system generating set, the failure of which would not hazard the vessel, personnel or vital systems.

SPECIFIC ITEMS:

The generator set container(s) must be securely attached to the ship's structure. The securing arrangements must be to the satisfaction of the OCMI. The location and securing arrangements should ensure shelter from boarding seas, adequate protection from the weather, and routing of engine exhaust away from ventilation air intakes.

Cables must meet recognized construction standards and be suitable for the intended application. These cables need not fully comply with the requirements of 46 CFR Subpart 111.60 for shipboard cable. The use of extra flexible stranded cable (e.g., Type W power cable) is acceptable and recommended. The generator cables must be sized per 46 CFR 111.12-9(a).

SPECIFIC ITEMS (Con't): Electrical cables connected to the portable generator container must be installed so as to minimize their susceptibility to damage and access by the crew and passengers. The cable must be securely fastened to the ship's structure, and run in overhead locations where practicable.

Nonmetallic fuel hoses within the portable generator set container must meet SAE J1942, be wire reinforced, and not exceed 30 inches in length per 46 CFR 56.60-25(c).

A self-contained fuel tank within the portable generator set container must comply, in general, with the requirements of 46 CFR 58.50-10 and 58.50-15 for independent diesel fuel tanks. Deviations from these construction requirements may be accepted by the cognizant OCMI if the fuel tank is determined to be suitable for the service intended.

The structural fire protection rating of decks and bulkheads shall not be reduced by penetrations for fuel oil transfer piping.

Final installation and testing of the portable diesel generator set(s) shall be to the satisfaction of the cognizant OCMI.