



U. S. Coast Guard Sector Honolulu

Work Instruction 46



Grills on Vessels Constructed with General Purpose Resin

LCDR J. D. BALDASSINI
Chief, Inspections Division

MPS-WI-SEC-46(0)
October 16, 2023

1. **References:**

- a. Military Specification MIL-R-21607(E), Resins, Polyester, Low Pressure Laminating, Fire-Retardant, dated May 25, 1990
- b. ASTM E 84-98, Standard Test Method for Surface Burning Characteristics of Building Materials
- c. Sector Honolulu Work Instruction MPS-WI-SEC-02(5), "Standardized COI Endorsements," dated January 3, 2022

2. **Objectives:** The purpose of this instruction is to provide clarification and continuity for the inspection and certification of small passenger vessels constructed using general purpose resin with open flame cooking systems, such as propane or charcoal grills.

3. **Applicability:** This instruction applies to all small passenger vessels with open flame grills certificated by Sector Honolulu, regardless of keel laid date. While an existing vessel, per 46 CFR 177.115(a), may comply with the construction and arrangement regulations that were applicable to the vessel on March 10, 1996, 46 CFR 176.730, which applies to all vessels regardless of keel laid date, allows the Coast Guard to require any fire hazard to be corrected. On that basis, Sector Honolulu will only allow existing vessels to use grills on general purpose resin vessels if the criteria in this instruction are met.

4. **Background:** Prior to the development of affordable fire-retardant resin for use in fiber reinforced plastic (FRP) construction, many small passenger vessels were built using general purpose resin, and vessels with general purpose resin are still being brought into certificated service today. "General purpose resin," as used in this context, is specified in 46 CFR 177.410(b) to be any resin that does not either meet reference (a) or has a flame spread rating, per reference (b), of more than 100 when tested in laminate form. Due to the inherent flammability of general purpose resin, vessels constructed with it must meet more stringent structural fire protection requirements. Per 46 CFR 177.410(c)(1), open flame cooking systems are not allowed on vessels constructed with general purpose resin. However, such systems have been in widespread use on certificated small passenger vessels constructed with general purpose resin, both in Sector Honolulu and in other Sectors. Some of those vessels were issued letters giving local approval for the installation, on the condition that certain common-sense safety measures remained in place. Other vessels had no formal documentation, but also complied with those safety measures, either because of undocumented verbal instruction from past marine inspectors or discussions of

October 16, 2023

best practices with other operators. This instruction standardizes those best practices to ensure that they are universally understood, publicly distributed, and consistently applied.

5. **Action:** Vessels built with general purpose resin and a grill installation on board must meet the following requirements:

a. Grills shall only be accepted on board if located on an open deck as far outboard as practicable. Note that in many cases, it will be practicable to install the grill on the outside of the deck railing.

b. A dedicated 40-B:C portable fire extinguisher shall be provided in the immediate vicinity of the grill.

c. Each grill shall be installed so that it can be jettisoned from the vessel with a single action while on fire, such as a pull cable to detach it from the deck railing. The jettison system must be constructed of non-combustible materials. Its operation must be included in the training required by 46 CFR 185.420.

d. There must be a containment area of non-combustible material around the grill.

e. Access to the grill by passengers shall not be permitted during its use.

f. Grills shall be installed in a fixed manner. Wheeled grills secured with bungee cords or other temporary means shall not be accepted.

g. The vessel must ensure that the instruction of duties required by 46 CFR 185.420 and the drills required by 46 CFR 185.524 include fires originating from the open flame grill.

h. All grease/oil shall be removed and disposed shoreside.

i. Grills shall be covered when not in use with a waterproof cover to prevent grease/oil from entering the water. If grease or oil enters the water and causes a sheen, a report shall be made to the National Response Center at (800) 424-8802.

6. **Implementation:** Marine Inspectors will confirm the functioning of all moving parts of the jettison system at each COI inspection or annual. All previous vessel-specific approvals for grill installations are superseded by this instruction. Reference (c) will be revised to include the following standardized language to be placed in the routes and conditions: "OPEN FLAME COOKING SYSTEMS MUST COMPLY WITH WORK INSTRUCTION 46."

#