

**DEPARTMENT OF TRANSPORTATION
UNITED STATES COAST GUARD**

COMMANDANT (MVI-1)
U.S. COAST GUARD
WASHINGTON, D.C. 20591

NVC 1-71
8 Jan 1971


NAVIGATION AND VESSEL INSPECTION CIRCULAR 1-71

Subj: Repair of Boiler Safety Valves

1. Purpose The purpose of this circular is to outline of conditions Coast Guard approval and acceptance when safety valves are repaired under the provisions of Section 59.01-5, Title 46 CFR, Subchapter F, Marine Engineering.
2. Cancellation This circular supersedes and cancels Navigation and Vessel Inspection Circular 1-70 dated 8 April 1970.
- 3.. Background. The history of repairs to safety valves has involved discoveries of patently unsafe conditions as well as other associated problems.. For example, safety valves have been found with decreased relieving capacity caused by improper repairs. The manufacturer's name plates had been destroyed, which resulted in an inability to determine whether or not the valve was of approved design or who. repaired the valve. If failure of the valve had occurred, there was no means of establishing responsibility. The situation resulted in the valves being rejected for further use on board Coast Guard inspected vessels.
4. Discussion. Previous history of unsatisfactory repairs to safety valves has demonstrated a need to establish uniform repair and acceptance criteria in order that safety standards will not be diminished when safety valves are repaired. In view of the hazards. that prevail when improper workmanship or improper material is used in the repair of safety valves, it is necessary that these repairs be kept under strict Coast Guard inspection so that the repaired valve performs in a manner at least equal to a new approved valve manufactured in accordance with 46 CFR 162.001.
5. Safety Valve Repairs.
 - (a) In accordance with 46 CFR 59.01-5, proposed repairs to safety valves must have the prior approval of the Officer in Charge, Marine Inspection, before. being undertaken. Safety valve repairs may be made by the original manufacturer or by a repair facility acceptable to the cognizant Officer in Charge, Marine Inspection.
 - (b) Whenever repairs require the replacement of parts, such parts whenever possible shall be made by the safety valve manufacturer. If parts cannot be obtained from the manufacturer within a reasonable time, the repair shop may make the part or purchase it from other sources. However, the workmanship must be of good quality and at least equal to that required in manufacturing the original valve. The materials used in the replacement of parts of safety valves shall have corrosion and heat resisting properties at least equal to the material used by the manufacturer in the original or initial construction. When parts are not supplied by the original manufacturer, the corrosion and heat resisting properties of

materials shall be verified by metallurgical reports covering. parts produced or used by the repair shop.

- (c) If a new valve body is supplied, a tapped drain opening of a size and location as specified in 46 CFR 162.001-4(f) shall be fitted (Specification Subpart 162.001). After the repairs have been satisfactorily completed, the safety valve shall be set under steam pressure and shall meet the prescribed blow-down and popping tolerances as given in 46 CFR 162.001-4(i) before the valve can be accepted.
 - (d) The name plate of the original manufacturer of the safety valve shall not be removed. If necessary to remove this name plate to perform repairs, it must be replaced when the work is completed.
6. Action. The following procedures outline criteria for Coast Guard acceptance of repairs of safety valves in accordance with 46 CFR 59.01-5:
- (a) Repairs effected and replacement parts used shall comply with the standards outlined in paragraph 4 above.
 - (b) The name plate of the repair shop shall be securely attached to the valve body. This corrosion resistant name plate shall show the name and address of the company or person performing the repairs, and the month and year the repairs were made.


W. F. REA, III
Rear Admiral, U.S. Coast Guard
Chief, Office of Merchant Marine
Safety

DIST: (SDL No.92)
A: None
B: n(45); c(10); q(6); eg(3); bp(1)
C: m(4); o(2)
D: i(2); k(1)
E: o(2)
F: jp(1)
LIST CG-12