

north to a point on land located approximately at Latitude 33-59.2 N., Longitude 119.35.5 W., then returning along the shore to the beginning point.

(b) No person may swim, skin dive or scuba dive in the waters within the safety zone without prior permission of the Captain of the Port.

(c) No vessel may navigate, transit, fish, anchor or drift in the waters within the safety zone without prior permission of the Captain of the Port.

(d) Any vessel within the zone shall follow the directions of the patrolling Coast Guard cutter. If instructed to leave, the vessel will do so immediately.

(e) Vessels may obtain a numbered clearance from the Marine Safety Office to enter the zone at times when operations permit. Any vessel may request, at least 24 hours in advance, permission to enter the area using the clearance. The Captain of the Port will grant permission, as operations permit, on a daily basis. Any person interested in obtaining permits should contact one of the following Coast Guard units for details:

- (1) Port Operations Department, Coast Guard Marine Safety Office Los Angeles/Long Beach, Phone: (213) 590-2315
 - (2) Coast Guard Station Channel Island, Harbor Oxnard, California, Phone: (805) 985-9822
 - (3) Coast Guard Marine Safety Detachment, Santa Barbara, California, Phone: (805) 962-7430
- (f) This regulation is effective on 25 February 1985 and remains continuously in force until 1 June 1985.

(33 U.S.C. 1225, 1231, 49 CFR 1.46; and 33 CFR 165.3)

Dated: February 25, 1985.

L.E. Beaudin,

Captain, U.S. Coast Guard, Captain of the Port, U.S. Coast Guard.

[FR Doc. 85-5614 Filed 3-7-85; 8:45 am]

BILLING CODE 4910-14-M

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 271

[SW-3-FRL-2793-1]

District of Columbia; Final Authorization of State Hazardous Waste Management Program

AGENCY: Environmental Protection Agency.

ACTION: Notice of Final Determination on the District of Columbia's Application for Final Authorization.

SUMMARY: The District of Columbia has applied for Final Authorization under the authority of the Resource Conservation and Recovery Act (RCRA). EPA has reviewed the District's application and has reached a final determination that the District's hazardous waste program satisfies all of the requirements necessary to qualify for final authorization. Thus, EPA is granting final authorization to the District to operate its program, subject to the limitations on its authority imposed by the Hazardous and Solid Waste Amendments of 1984.

EFFECTIVE DATE: Final authorization for the District of Columbia shall be effective at 1:00 pm on March 22, 1985.

FOR FURTHER INFORMATION CONTACT: Wayne Naylor, Program Manager, State Programs Section (3HW31), U.S. EPA Region III, 6th and Walnut Streets, Philadelphia, Pennsylvania 19106, (215) 597-3884.

SUPPLEMENTARY INFORMATION:

Background

Section 3006 of the Resource Conservation and Recovery Act (RCRA) allows EPA to authorize State hazardous waste programs to operate in lieu of the Federal hazardous waste program. To qualify for Final Authorization, a State's program must (1) be "equivalent" to the Federal program, (2) be consistent with the Federal and other State programs, and (3) provide for adequate enforcement (section 3006(b) of 42 U.S.C. 6926(c)).

On August 6, 1984, the District of Columbia submitted a complete application to obtain Final Authorization to administer the RCRA program. On November 26, 1984, EPA published a tentative decision announcing that the District's hazardous waste program would satisfy all of the requirements necessary for Final Authorization. Further background information appeared in EPA's tentative determination notice (Vol. 49, No. 288 FR 46443, November 26, 1984). Along with the tentative determination, EPA announced the availability of the District's application for public comment and a hearing was scheduled. The public hearing was not held as scheduled on December 27, 1984 since neither EPA nor the District received significant interest in holding the hearing. Therefore, EPA has determined that the District's hazardous waste program satisfies all necessary requirements for Final Authorization.

Decision

I conclude that the District's application for Final Authorization

meets all of the statutory and regulatory requirements established by RCRA. Accordingly, the District of Columbia is granted Final Authorization to operate its hazardous waste programs subject to the limitations on its authority imposed by the Hazardous and Solid Waste Amendments of 1984 (Pub. L. 98-616, November 8, 1984) (HSWA). The District now has the responsibility for permitting treatment, storage and disposal facilities within its borders and for carrying out other aspects of the RCRA program, subject to the HSWA. The District also has the primary enforcement responsibility, although EPA maintains the right to conduct inspections under section 3007 of RCRA and to take enforcement actions under section 3008, 3013 and 7003 of RCRA.

Prior to the HSWA amending RCRA, a State with final authorization administered its hazardous waste program entirely in lieu of the EPA. The Federal requirements no longer applied in the authorized State, and EPA could not issue permits for any facilities the State was authorized to permit. When new, more stringent Federal requirements were promulgated or enacted the State was obligated to enact equivalent authority within specified timeframes. New Federal requirements did not take effect in the authorized State until the State adopted the requirements as State law.

Any District requirement that is more stringent than an HSWA provision remains in effect; thus, the universe of the more stringent provisions in the HSWA and the approved State program define the applicable requirements in the District. (The District is not being authorized for any requirement implementing the HSWA.)

EPA will be publishing a **Federal Register** notice that explains in detail the HSWA and its effect on authorized States. That notice should be referred to for further information.

EPA Region III and the District are currently reviewing the Memorandum of Agreement (MOA) to revise it to address the requirements of the HSWA. The current MOA contains some language that does not reflect the provisions of the HSWA and will be revised to reflect EPA's and the District's respective responsibilities under the new Federal/State regulatory scheme.

Compliance With Executive Order 12291

The Office of Management and Budget has exempted this rule from the requirements of Section 3 of Executive Order 12291.

Certification Under the Regulatory Flexibility Act

Pursuant to the provisions of 5 U.S.C. 605(b), I hereby certify that this authorization will not have a significant economic impact on a substantial number of small entities. This authorization effectively suspends the applicability of certain Federal regulations in favor of the District's program, thereby eliminating duplicative requirements for handlers of hazardous waste in the District. This rule, therefore, does not require a regulatory flexibility analysis.

List of Subjects in 40 CFR Part 271

Hazardous materials, Indian lands, Reporting and record keeping requirements, Waste treatment and disposal, Intergovernmental relations, Penalties, Confidential business information.

Authority

This notice is issued under the authority of Sections 2002(a), 3006, and 7004(b) of the Solid Waste Disposal Act as amended, 42 U.S.C. 6912(a), 6926, and 6974(b).

Dated: February 14, 1985.

Stanley L. Laskowski,
Acting Regional Administrator.

[FR Doc. 85-5581 Filed 3-7-85; 8:45 am]
BILLING CODE 6560-50-M

DEPARTMENT OF THE INTERIOR**Bureau of Land Management****43 CFR Public Land Order 6589**

(NM 42705, NM 42706, NM 42707)

NM; Public Land Order 6459; Correction

AGENCY: Bureau of Land Management, Interior.

ACTION: Public Land Order.

SUMMARY: This document will correct an error in the land description in Public Land Order 6459 of August 16, 1983.

EFFECTIVE DATE: March 8, 1985.

FOR FURTHER INFORMATION CONTACT:

Pauline Brown, Bureau of Land Management, New Mexico State Office, P.O. Box 1449, Santa Fe, New Mexico 87501, 505-988-8635.

SUPPLEMENTARY INFORMATION: By virtue of the authority vested in the Secretary of the Interior by section 204 of the Federal Land Policy and Management Act of 1976, 90 Stat. 2751; 43 U.S.C. 1714, it is ordered as follows:

The land description in Public Land Order 6459 of August 16, 1983, in FR

Doc. 83-24687 published at page 40725 in the issue of September 9, 1983, is corrected as follows: "On page 40725, second column, the last line of the land description reading 'T. 30 S., R. 21 W.' should read 'T. 30S., R. 22W.'"

Robert N. Broadbent,

Assistant Secretary of the Interior.

February 28, 1985.

[FR Doc. 85-5475 Filed 3-7-85; 8:45 am]

BILLING CODE 4310-04-M

DEPARTMENT OF TRANSPORTATION**Coast Guard****46 CFR Parts 50, 52, 53, 54, 58, 63 and 162**

(CGD 81-079)

Marine Engineering Regulations for Merchant Vessels; Acceptance of ASME S, E, A and H Symbol Stamps for Power and Heating Boilers

AGENCY: Coast Guard, DOT.

ACTION: Final rule.

SUMMARY: These regulations replace the current Coast Guard requirements for plan approved and shop inspection of boilers with requirements that boilers be inspected and stamped in accordance with the American Society of Mechanical Engineers' Boiler and Pressure Vessel Code. These regulations bring Coast Guard requirements for boilers in line with current industry practice and take maximum advantage of an industry safety standard which is recognized throughout the world and an inspection system already in existence. Several boiler and pressure vessel manufacturers have requested a changeover to ASME inspection and stamping because of frequent delays involved in having plan approval and shop inspections performed by the Coast Guard. ASME inspectors are more readily available to perform shop inspections in a timely manner, and the use of registered professional engineers to certify plans will minimize the time needed for Coast Guard pre-installation inspections.

EFFECTIVE DATE: These rules become effective May 7, 1985.

ADDRESSES: A copy of the final evaluation may be obtained from Commandant (G-CMC/44), (CGD 81-079), U.S. Coast Guard, Washington, D.C. 20593.

FOR FURTHER INFORMATION CONTACT:

Mr. Howard L. Hime, Office of Merchant Marine Safety, (202) 426-2160.

SUPPLEMENTARY INFORMATION: On August 18, 1983 the Coast Guard

published a proposal in the **Federal Register** (48 FR 37441) concerning these regulations. Interested persons were given an opportunity to submit written comments and 12 comments were received. Two of the comments have been adopted and the regulations have been changed to reflect these comments. These changes to the regulations are discussed under the Specific Comments section below.

Drafting Information

The principal persons involved in drafting this document are Mr. Howard Hime, Project Manager, Office of Merchant Marine Safety, and Lieutenant Commander William B. Short, Project Attorney, Office of Chief Counsel.

Discussion of Comments**General**

1. One commenter objected to the proposed regulations citing the lack of requirements for an independent review of the design and that the entire design, construction, and inspection would be under the control of persons not required to have any marine experience. Since 1968, Coast Guard regulations have incorporated the design, construction, and inspection requirements of the ASME Code, modifying the requirements where necessary to account for the marine environment. These regulations extend the adoption of the ASME Code to include certification of boiler plans by a registered professional engineer, inspection by an ASME authorized inspector, and stamping by an ASME accredited manufacturer. Independent review is retained by the requirement for the plans to be certified by a registered professional engineer and submitted to the Coast Guard for review. During the review, those aspects of the boiler design which are peculiar to the marine environment will be analyzed to assure compliance with the regulations. Further, the marine inspector at the shipyard will inspect the boiler to assure compliance with the regulations. The commenter further stated that there is no provision in the proposed rule change for the Coast Guard to receive a copy of the Manufacturer's Data Report Forms. Sections 52.01-145 and 53.10-15 require these forms to be made available to the marine inspector for review.

2. One commenter suggested that certification by The American Bureau of Shipping (ABS) be included as an alternative to ASME inspection and stamping of boilers. This suggestion was not adopted since ABS is permitted to

inspect boilers and pressure vessels under the ASME Code through its wholly owned subsidiary, The ABS Boiler Marine Insurance Company.

3. One commenter suggested that boilers be registered with the National Board of Boiler and Pressure Vessel Inspectors and the Manufacturer's Data Report Forms be filed with them to provide a permanent location for future retrieval. This suggestion was not adopted. Manufacturer's Data Report Forms are required to be made available to the marine inspector for review at time of boiler installation. This provides sufficient information to determine compliance with the regulations. Further, the American Bureau of Shipping and other classification societies maintain extensive files on vessels they class. This information can be retrieved if required for future alterations or repairs to the boilers.

4. One comment was received from another government agency which expressed concern that the use of the term "marine platform" in paragraph 1 of the preamble in the Notice of Proposed Rulemaking (NPRM) was too vague and could be interpreted to apply to marine structures outside the Coast Guard's jurisdiction. As stated in paragraph 1 and 4 of the NPRM, these regulations apply only to vessels certificated by the Coast Guard. Taken in the context of the paragraph, the term "marine platform" was used as a generic phrase to indicate that additional forces act on boilers mounted on floating supports rather than stationary foundations. There was no intent to imply that the regulations applied to items outside the Coast Guard's jurisdiction.

5. One commenter suggested that the regulations be extended to require safety valve repairs by a facility that is certified by and holds the "VR" stamp from the National Board of Boiler and Pressure Vessel Inspectors. This suggestion was not adopted. § 59.01-5 requires safety valve repairs to be approved by the Officer in Charge, Marine Inspection (OCMI). Accordingly, repairs made by facilities holding the "VR" stamp may be permitted as well as other facilities which can demonstrate to the satisfaction of the OCMI that they are capable of repairing safety valves.

6. One commenter questioned the savings for the manufacturers claimed in the Draft Evaluation. The commenter stated that, since design review and shop inspection would still be performed, the cost to the manufacturer should be the same regardless of who performs these functions. As stated in the Draft Evaluation, much of the cost incurred by the manufacturer for Coast

Guard plan approval and shop inspection is a result of the additional time required for the Coast Guard to perform these functions. Due to limited resources, Coast Guard plan approval takes from four to six weeks. Further, several submittals may be required before all necessary information is obtained and the boiler plans are accepted. Also, the manufacturer's shop may be located a hundred or more miles from the nearest marine inspector resulting in costly delays during fabrication. These costs are greatly reduced by the use of registered professional engineers who may be in the employ of the manufacturer and ASME authorized inspectors who make routine visits to the manufacturer's shops. Since many marine boilers are presently stamped with the appropriate ASME symbol, no additional inspection costs are incurred for these boilers as a result of these regulations.

Specific Comments

Nine comments received related to specific sections of the proposed rules. These comments are discussed below. The specific sections of the regulations to which the comments apply are identified and discussed in ascending order.

1. *Section 50.20-1*—One commenter noted that the proposed revision to § 50.20-1 eliminated the requirement for boiler plans to be approved while § 63.05-5(a) requires plans for boiler automatic control systems to be submitted for approval in accordance with § 50.20-1. This confusion has been eliminated. Section 50.20-1 is revised to retain the requirement that plans for boiler automatic controls be submitted for approval.

2. *Section 50.20-1(b)*—One commenter questioned the need to have boiler plans submitted for review. The plans are required to be submitted because they contain vital information necessary to assure that steam piping and other equipment are adequately designed for the boiler steam generating capacity and safety valve capacity. The plans will be reviewed to assure compliance with the regulations with particular emphasis on those details which are peculiar to the marine environment.

3. *Section 52.01-5(a)*—One commenter questioned the merits of requiring the boiler plans to be certified by a registered professional engineer who will normally be in the employ of the manufacturer. The commenter further stated that this requirement may put small manufacturers, who may not have ready access to a professional engineer, at a disadvantage. The requirement to have the plans certified by a registered

professional engineer would assure that the boiler design has been reviewed by a competent engineer who is skilled in the art of boiler design. A registered professional engineer is an engineer who is licensed by one of the 50 states of the United States or the District of Columbia. While the specific licensing requirements may vary among the different states, the requirements are similar and generally follow the guidelines of the National Society of Professional Engineers. A registered professional engineer must meet certain minimum combinations of education and experience and pass a rigorous exam. Further, a professional engineer must adhere to a strict code of ethics which does not permit the engineer to certify designs outside the engineer's area of knowledge. Also, since the professional engineer certifies the boiler plans as an individual, this provides an independent review of the design. There are over 400,000 registered professional engineers, many who work for consulting firms who contract out their services. With this large number of professional engineers it should not be difficult for a manufacturer to retain the service of one skilled in the art of boiler design. Another commenter stated that this requirement would cause problems because registration requirements vary in the different states and suggested that boiler plans be certified by the manufacturer instead. We do not concur with this suggestion based on the above comments.

4. *Section 52.01-50(a) and Subpart 162.014*. In the NPRM, proposed § 50.01-50(a) would require fusible plugs to be installed only on boilers fired with solid fuel not in suspension or not equipped for unattended waterbed operation. The requirement that fusible plugs be from acceptable heats manufactured in accordance with Subpart 162.014 of Subchapter Q was retained. We have reconsidered this requirement due to recent difficulties experienced by several operations in obtaining fusible plugs meeting Subpart 162.014. Several manufacturers of approved fusible plugs have deleted them from their product list and other manufacturers are unwilling to maintain an inventory of approved fusible plugs for relatively few users. To alleviate these problems and assure an adequate supply of fusible plugs, § 52.01-50(a) is revised to require fusible plugs to comply with the fabrication and marking requirements of the ASME Code. Subpart 162.014 is removed.

5. *Section 52.01-100(b)(3)*—One commenter suggested that the size and pressure limitations for threaded

connections in § 52.01-100(b)(3) be increased. The commenter stated that the present limitations are impractical. The suggestion has not been adopted. These size and pressure limitations for threaded connections have been in our rules for over 25 years. During this time we have never received any indication that these rules have caused the marine industry any problems nor have we received any complaints on the size and pressure limitations for threaded connections in the past.

8. Sections 52.01-135 and 53.10-3—

Two commenters suggested that additional requirements for experience, examination, and oversight be placed on the ASME Authorized Inspectors to ensure a minimum level of competency. One commenter recommended that the Authorized Inspectors be required to hold a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors. This suggestion has been adopted. The National Board administers a licensing program for boiler and pressure vessel inspectors. Commissioned inspectors must have a minimum combination of education and experience and pass a rigorous twelve hour exam. In addition, supervisors of commissioned inspectors must meet additional experience and examination requirements. If a National Board Inspector fails to carry out his duties, he and his supervisor are subject to disciplinary action as determined by a hearing committee. The action of the hearing committee can vary from the dismissal of the charges to permanent (life time) revocation of the inspector's National Board Commission. Accordingly, §§ 52.01-135(b), 52.01-145(a), 53.10-3(a), and 53.10-15 have been revised to require ASME Authorized Inspectors to hold a valid National Board Commission and to include their commission number on the Manufacturer's Data Report Forms. The cost to comply with this requirement is minimal. The majority (over 98%) of ASME Authorized Inspectors hold a valid National Board Commission. Currently there are over 3600 National Board Commissioned inspectors located throughout the world.

7. Sections 52.01-135 and 53.10-3—

One commenter raised a concern that the requirement for shop inspections be carried out by an "Authorized Inspector" as defined in the ASME Code is exclusionary since not everybody can meet the qualification requirements. The ASME Code is an industry standard which is recognized throughout the world and is adopted into many of the boiler laws of the United States and Canada. ASME qualification

requirements for inspectors ensure that inspections are performed by competent individuals who are well versed in the design and construction of boilers. These requirements are not unreasonable restraints to protect the lives of persons on board certificated vessels, property, and the marine environment. Further, alternative inspection procedures could be authorized by an Officer in Charge, Marine Inspection (OCMI) under other regulations in Title 46, CFR that allow equivalencies. The Title 46 regulations that allow equivalencies include §§ 30.15-1, 70.15-1, 90-15-1, 108.105, 175.15-1, and 188.15-1.

8. Section 52.05-5—One commenter suggested that weld procedures and welder performance qualifications approved by ABS be included as an alternative to qualifying weld procedures and welders to the ASME Code. This suggestion was not adopted. In order to stamp a boiler with the appropriate ASME Code symbol, welders and weld procedures must be qualified in accordance with the ASME Code. This is a basic requirement of the ASME Code and cannot be waived. Existing Coast Guard and ABS welding requirements parallel those of the ASME Code. Accordingly, most of the weld procedures and welders qualified to USCG and ABS requirements already meet qualification requirements of the ASME Code.

Economic Evaluation and Record Keeping

These regulations have been reviewed under Executive Order 12291 and the Department of Transportation's Order 2100.5 "Policies and Procedures for Simplification, Analysis and Review of Regulations" dated May 22, 1980, and have been determined to be neither major nor significant. A final evaluation has been prepared and placed in the public docket. As stated in the final evaluation, these rules would result in an estimated annual savings of 3848 staff hours and \$126,690.00 for manufacturers plus 3976 staff hours and \$99,400.00 for the Coast Guard. These savings result from the reduced amount of paperwork required to be submitted, the substantial amount of time saved by manufacturers in obtaining required inspections of boilers, and the time saved by the Coast Guard in performing inspections.

These regulations have been evaluated in accordance with the Regulatory Flexibility Act (94 Stat. 1164). It is certified that these regulations will not have a significant economic impact on a substantial number of small entities. For the purposes of this rule

making, "small entities" consist of small boiler manufacturers. As explained in the final evaluation, most manufacturers, both large and small, already hold the ASME stamp. The cost to obtain this stamp (\$5,000 for small manufacturers, up to approximately \$20,000 for large manufacturers) is marginal compared to overall business costs. Also, some small manufacturers who, unlike large concerns, do not have a registered professional engineer (PE) in their organization will incur some increased costs to hire a registered PE to review and certify design drawings in accordance with these regulations. However, the total time and dollar costs for manufacturers, both large and small, resulting from these regulations is expected to be less than the time and money involved to obtain Coast Guard plan approval and shop inspection under the old requirements.

Paperwork Reduction Act

An analysis of the recordkeeping requirements in these regulations was conducted under the Paperwork Reduction Act of 1980 (44 U.S.C. 3501-3520). The analysis shows that 475 documents were required to be submitted annually to the Coast Guard under the old requirements. These reporting and recordkeeping requirements have been approved by the Office of Management and Budget and issued OMB control number 2115-0142. The requirements as revised in this rulemaking will reduce the annual reporting burden from 475 documents down to 400 documents.

List of Subjects 46 CFR Part 50, 52, 53, 54, 63, and 162

Vessels, Marine safety.

In consideration of the foregoing, the Marine Engineering Regulations in Subchapter F of Title 46, Code of Federal Regulations, are amended as follows:

1. The authority citation for Parts 50, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, and 64 in Subchapter F of Title 46, is revised to read as follows:

Authority: 46 U.S.C. 3306, 3703; 49 CFR 1.46(b).

PART 50-GENERAL PROVISIONS

2. In § 50.05-5 a new paragraph (d) is added to read as follows:

§ 50.05-5 Existing boilers, pressure vessels or piping systems.

(d) For the purpose of this section, existing equipment includes only items which have previously met all Coast Guard requirements for installation

aboard a vessel certificated by the Coast Guard, including requirements for design, fabrication, testing, and inspection at the time the equipment was new.

3. In § 50.15-5 paragraph (c) is revised to read as follows:

§ 50.15-5 ASME Boiler and Pressure Vessel Code.

(c) Except as required in § 52.01-1(a), § 52.01-120(a)(2), § 53.01-1, and § 54.01-5 of this chapter, manufacturers constructing boilers, pressure vessels, and safety valves for installation on vessels subject to the regulations in this subchapter need not hold the applicable ASME Code symbol stamps.

4. § 50.20-1(b) is revised to read as follows:

§ 50.20-1 General.

(b) Manufacturers of pressure vessels and other components, which require specific fabrication inspection in accordance with the requirements of this subchapter, shall submit and obtain approval of the applicable construction plans prior to the commencement of such fabrication. Manufacturers of automatically controlled boilers shall submit and obtain approval of the applicable control system plans prior to installation of the boiler. Manufacturers of boilers which must meet the requirements of Part 52 of this subchapter shall submit the applicable construction plans for review prior to installation.

5. § 50.30-1(a) is revised to read as follows:

§ 50.30-1 Scope.

(a) The manufacturer shall notify the Officer in Charge, Marine Inspection, of the intended fabrication of pressure vessels that will require Coast Guard inspection.

§ 50.30-5 [Removed]

6. § 50.30-5 is removed.

PART 52—POWER BOILERS

7. The table of contents is revised to read as follows:

Subpart 52.01—General Requirements

- Sec.
- 52.01-1 Adoption of section I of the ASME Code.
 - 52.01-3 Definitions of terms used in this part.
 - 52.01-5 Plans.
 - 52.01-10 Automatic controls.

Sec.

- 52.01-35 Auxiliary, donkey, fired thermal fluid heater, and heating boilers.
- 52.01-40 Materials and workmanship.
- 52.01-50 Fusible plugs (modifies A-19 through A-21).
- 52.01-50 Increase in maximum allowable working pressure.
- 52.01-90 Materials (modifies PG-5 through PG-13).
- 52.01-95 Design (modifies PG-16 through PG-31 and PG-100).
- 52.01-100 Openings and compensation (modifies PG-32 through PG-39, PG-42 through PG-55).
- 52.01-105 Piping, valves and fittings (modifies PG-58 and PG-59).
- 52.01-110 Water level indicators, water columns, gage glass connections, gage cocks, and pressure gages (modifies PG-60).
- 52.01-115 Feedwater supply (modifies PG-61).
- 52.01-120 Safety valves and safety relief valves (modifies PG-67 through PG-73).
- 52.01-130 Installation.
- 52.01-135 Inspection and tests (modifies PG-90 through PG-100).
- 52.01-140 Certification by stamping (modifies PG-104 through PG-113).
- 52.01-145 Manufacturers' data report forms (modifies PG-112 and PG-113).

Subpart 52.05—Requirements for Boilers Fabricated by Welding

- 52.05-1 General (modifies PW-1 through PW-54).
- 52.05-15 Heat treatment (modifies PW-10).
- 52.05-20 Radiographic and ultrasonic examination (modifies PW-11 and PW-41.1).
- 52.05-30 Minimum requirements for attachment welds (modifies PW-16).
- 52.05-45 Circumferential joints in pipes, tubes and headers (modifies PW-41).

Subpart 52.15—Requirements for Watertube Boilers

- 52.15-1 General (modifies PWT-1 through PWT-15).
- 52.15-5 Tube connections (modifies PWT-9 and PWT-11).

Subpart 52.20—Requirements for Firetube Boilers

- 52.20-1 General (modifies PFT-1 through PFT-49).
- 52.20-17 Opening between boiler and safety valve (modifies PFT-44).
- 52.20-25 Setting (modifies PFT-46).

Subpart 52.25—Other Boiler Types

- 52.25-1 General
- 52.25-3 Feedwater heaters (modifies PFH-1).
- 52.25-5 Miniature boiler (modifies PMB-1 through PMB-21).
- 52.25-7 Electric boilers (modifies PEB-1 through PEB-19).
- 52.25-10 Organic fluid vaporizer generators (modifies PVG-1 through PVG-12).
- 52.25-15 Fired thermal fluid heaters.
- 52.25-20 Exhaust gas boilers.

8. In § 52.01-1 paragraph (a) introductory text, and Table 52-01-1(a) are revised to read as follows:

§ 52.01-1 Adoption of section I of the ASME Code.

(a) Main power boilers and auxiliary boilers shall be designed, constructed, inspected, tested, and stamped in accordance with section I of the ASME (American Society of Mechanical Engineers) Code, as limited, modified, or replaced by specific requirements in this part. The provisions in the appendix to section I of the ASME Code are adopted and shall be followed when the requirements in section I make them mandatory. For general information Table 52.01-1(a) lists the various paragraphs in section I of the ASME Code which are limited, modified, or replaced by regulations in this part.

TABLE 52.01-1(a)—LIMITATIONS AND MODIFICATIONS IN THE ADOPTION OF SECTION I OF THE ASME CODE

Paragraphs in section I, ASME Code ¹ and disposition	Unit of this part
PG-1 replaced by	54.01-5(a)
PG-5 through PG-13 modified by	52.01-90
PG-16 through PG-31 modified by	52.01-95
PG-32 through PG-39 modified by	52.01-100
PG-42 through PG-55 modified by	52.01-100
PG-58 and PG-59 modified by	52.01-105
PG-60 modified by	52.01-110
PG-61 modified by	52.01-115
	(56.50-30)
PG-67 through PG-73 modified by	52.01-120
PG-90 through PG-100 modified by	52.01-135
	(52.01-95)
PG-81 modified by	52.01-135(b)
PG-99 modified by	52.01-135(c)
PG-100 modified by	52.01-95(a)
PG-104 through PG-113 modified by	52.01-140(a)
PG-112 and PG-113 modified by	52.01-145
PW-1 through PW-54 modified by	52.05-1
PW-10 modified by	52.05-15
PW-11.1 modified by	52.05-20
PW-16 modified by	52.05-30
PW-41 modified by	52.05-20, 52.05-45
PWT-1 through PWT-15 modified by	52.15-1
PWT-9 modified by	52.15-5
PWT-9.2 replaced by	52.15-5(b)
PWT-11 modified by	52.15-5
PWT-11.3 replaced by	52.15-5(b)
PFT-1 through PFT-49 modified by	52.20-1
PFT-44 modified by	52.20-17
PFT-46 modified by	52.20-25
PFH-1 modified by	52.25-3
PMB-1 through PMB-21 modified by	52.25-5
PEB-1 through PEB-19 modified by	52.25-7
PVG-1 through PVG-12 modified by	52.25-10
A-19 through A-21 modified by	52.01-50

¹ The references to specific provisions in the ASME Code are coded. The first letter "P" refers to section I, while the letter "A" refers to the appendix to section I. The letter or letters following "P" refer to a specific subsection of section I. The number following the letter or letters refers to the paragraph so numbered in the text.

9. In § 52.01-3 paragraph (b)(9) is revised to read as follows:

§ 52.01-3 Definitions of terms used in this part.

(b)(9) *Furnace*. A furnace is a firebox or a large flue in which the fuel is burned.

(i) *Corrugated furnace*. A corrugated furnace is a cylindrical shell wherein corrugations are formed

circumferentially for additional strength and to provide for expansion.

(ii) *Plain furnace.* A plain furnace is a cylindrical shell usually made in sections joined by means of riveting or welding.

10. § 52.01-5 is revised to read as follows:

§ 52.01-5 Plans.

(a) Manufacturers intending to fabricate boilers to be installed on vessels shall submit detailed plans as required by Subpart 50.20 of this subchapter. The plans, including design calculations, must be certified by a registered professional engineer as meeting the design requirements in this part and in section I of the ASME Code.

(b) The following information must be included:

(1) Calculations for all pressure containment components including the maximum allowable working pressure and temperature, the hydrostatic or pneumatic test pressure, the maximum steam generating capacity and the intended safety valve settings.

(2) Joint design and methods of attachment of all pressure containment components.

(3) A bill of material meeting the requirements of section I of the ASME Code, as modified by this subpart.

(4) A diagrammatic arrangement drawing of the assembled unit indicating the location of internal and external components including any interconnecting piping.

(Reporting and recordkeeping requirements approved by the Office of Management and Budget under Control No. 2115-0142)

11. In § 52.01-35 paragraph (b) is revised to read as follows:

§ 52.01-35 Auxiliary, donkey, fired thermal fluid heater, and heating boilers.

(b) Fired vessels in which steam is generated at pressures exceeding 103 kPa gage (15 psig) shall meet the requirements of this part.

12. Section 52.01-50 is amended by revising paragraphs (a) and (g), by removing and reserving paragraph (j), and by removing paragraph (l) as follows:

§ 52.01-50 Fusible plugs (replaces A-19 through A-21).

(a) All boilers, except watertube boilers, with a maximum allowable working pressure in excess of 206 kPa gage (30 psig), if fired with solid fuel not in suspension, or if not equipped for unattended waterbed operation, must be fitted with fusible plugs. Fusible plugs

must comply with only the requirements of A19 and A20 of the ASME Code and be stamped on the casing with the name of the manufacturer, and on the water end of the fusible metal "ASME Std.". Fusible plugs are not permitted where the maximum steam temperature to which they are exposed exceeds 218 °C (425 °F).

(g) Boilers of types not provided for in this section shall be fitted with at least one fusible plug of such dimensions and located in a part of the boiler as will best meet the purposes for which it is intended.

(j) [Reserved]

(l) [Removed]

§ 52.01-90 [Amended]

13. § 52.01-90 is amended as follows:

a. Paragraphs (c), (e), (g) and (i) are removed.

b. Paragraphs (d), (f), and (h) are redesignated as paragraphs (c), (d), and (e) respectively.

14. § 52.01-95 is amended as follows:

a. Paragraphs (b)(1) and (2) are revised.

b. Paragraph (e) is removed.

c. Paragraphs (f) and (g) are redesignated as paragraphs (e) and (f) respectively.

As revised the text of paragraphs (b)(1) and (b)(2) read as follows:

§ 52.01-95 Design (modifies PG-16 through PG-31 and PG-100).

(b) *Superheater.* (1) The design pressure of a superheater integral with the boiler shall not be less than the lowest setting of the drum safety valve.

(2) Controls shall be provided to insure that the maximum temperature at the superheater outlets does not exceed the allowable temperature limit of the material used in the superheater outlet, in the steam piping, and in the associated machinery under all operating conditions including boiler overload. Controls need not be provided if the operating superheater characteristic is demonstrated to be such that the temperature limits of the material will not be exceeded. Visible and audible alarms indicating excessive superheat shall be provided in any installation in which the superheater outlet temperature exceeds 454 °C (850 °F). The setting of the excessive superheat alarms must not exceed the maximum allowable temperature of the superheater outlet, which may be limited by the boiler design, the main steam piping design, or the temperature

limits of other equipment subjected to the temperature of the steam.

15. § 52.01-100 is revised to read as follows:

§ 52.01-100 Openings and compensation (modifies PG-32 through PG-39, PG-42 through PG-55).

(a) The rules for openings and compensation shall be as indicated in PG-32 through PG-55 of the ASME Code except as noted otherwise in this section.

(b) (Modifies PG-39.) Pipe and nozzle necks shall be attached to vessel walls as indicated in PG-39 except that threaded connections shall not be used under any of the following conditions:

(1) Pressures greater than 4137 kPa (600 psig);

(2) Nominal diameters greater than 51mm (2 in.); or

(3) Nominal diameters greater than 19mm (0.75 in.) and pressures above 1034 kPa (150 psig).

(c) (Modifies PG-42.) Butt welding flanges and fittings must be used when full radiography is required by § 56.95-10.

16. § 52.01-105 is revised to read as follows:

§ 52.01-105 Piping, valves and fittings (modifies PG-58 and PG-59).

(a) Boiler external piping within the jurisdiction of the ASME Code must be as indicated in PG-58 and PG-59 of the ASME Code except as noted otherwise in this section. Piping outside the jurisdiction of the ASME Code must meet the appropriate requirements of Part 56 of this subchapter.

(b) In addition to the requirements in PG-58 and PG-59 of the ASME Code, boiler external piping must:

(1) meet the design conditions and criteria in § 56.07-10 of this subchapter, except § 56.07-10(b);

(2) be included in the pipe stress calculations required by § 56.31-1 of this subchapter;

(3) meet the nondestructive examination requirements in § 56.95-10 of this subchapter;

(4) have butt welding flanges and fittings when full radiography is required; and

(5) meet the requirements for threaded joints in § 56.30-20 of this subchapter.

(c) Steam stop valves, in sizes exceeding 152mm (6 inch) NPS, must be fitted with bypasses for heating the line and equalizing the pressure before the valve is opened.

(d) *Feed connections.* (1) Feed water shall not be discharged into a boiler

against surfaces exposed to hot gases or radiant heat of the fire.

(2) Feed water nozzles of boilers designed for pressures of 2758 kPa (400 psi), or over, shall be fitted with sleeves or other suitable means employed to reduce the effects of metal temperature differentials.

(e) *Blowoff connections.* (1) Firetube and drum type boilers shall be fitted with a surface and a bottom blowoff valve or cock attached directly to the boiler or to a short distance piece. The surface blowoff valve shall be located within the permissible range of the water level, or fitted with a scum pan or pipe at this level. The bottom blowoff valve shall be attached to the lowest part of the boiler or fitted with an internal pipe leading to the lowest point inside the boiler. Watertube boilers designed for pressures of 2413 kPa (350 psig) or over are not required to be fitted with a surface blowoff valve. Boilers equipped with a continuous blowdown valve on the steam drum are not required to be fitted with an additional surface blowoff connection.

(2) Where blowoff pipes are exposed to radiant heat of the fire, they must be protected by fire brick or other suitable heat-resisting material.

(f) *Dry pipes.* Internal dry pipes may be fitted to the steam drum outlet provided the dry pipes have a diameter equal to the steam drum outlet and a wall thickness at least equal to standard commercial pipe of the same diameter. Openings in dry pipes must be as near as practicable to the drum outlet and must be slotted or drilled. The width of the slots must not be less than 6mm (0.25 in.). The diameter of the holes must not be less than 10mm (0.375 in.). Where dry pipes are used, they must be provided with drains at each end to prevent an accumulation of water.

17. In § 52.01-110 paragraph (b)(1) is revised to read as follows:

§ 52.01-100 Water level indicators, water columns, gage glass connections, gage cocks, and pressure gages (modifies PG-60).

(b) *Water level indicators (modifies PG-60.1).* (1) Each boiler, except those of the forced circulation type with no fixed water line and steam line, shall have two independent means of indicating the water level in the boiler connected directly to the head or shell. One shall be a gage lighted by the emergency electrical system (See Subpart 112.15 of Subchapter J (Electrical Engineering) of this chapter) which will insure illumination of the gages under all normal and emergency conditions. The secondary indicator may consist of a

gage glass, or other acceptable device. Where the allowance pressure exceeds 1724 kPa (250 psi), the gage glasses shall be of the flat type instead of the common tubular type.

§ 52.01-110 [Amended]

18. In § 52.01-110 paragraph (h) is removed.

19. Section 52.01-115 is revised to read as follows:

§ 52.01-115 Feedwater supply (modifies PG-61).

Boiler feedwater supply must meet the requirements of PG-61 of the ASME Code and § 56.50-30 of this subchapter.

20. In § 52.01-120, the heading, paragraphs (a) (1), (2), (6), and (7) are revised, paragraph (a)(10) is added, paragraphs (b)(3) and (d)(2) are revised to read as follows:

§ 52.01-120 Safety valves and safety relief valves (modifies PG-67 through PG-73).

(a)(1) Boiler safety valves and safety relief valves must be as indicated in PG-67 through PG-73 of the ASME Code except as noted otherwise in this section.

(2) A safety valve must:

(i) Be stamped in accordance with PG-110 of the ASME Code;

(ii) Have its capacity certified by the National Board of Boiler and Pressure Vessel Inspectors;

(iii) Have a drain opening tapped for not less than 6mm (¼ in.) NPS; and

(iv) Not have threaded inlets for valves larger than 51mm (2 in.) NPS.

(6) (Modifies PG-67). Drum safety valves shall be set to relieve at a pressure not in excess of that allowed by the Certificate of Inspection. Where for any reason this is lower than the pressure for which the boiler was originally designed and the revised safety valve capacity cannot be recomputed and certified by the valve manufacturer, one of the tests described in PG-70(3) of the ASME Code shall be conducted in the presence of the Inspector to insure that the relieving capacity is sufficient at the lower pressure.

(7) On new installations the safety valve nominal size for propulsion boilers and superheaters must not be less than 38mm (1½ in.) nor more than 102mm (4 in.). Safety valves 38mm (1½ in.) to 114mm (4½ in.) may be used for replacements on existing boilers. The safety valve size for auxiliary boilers must be between 19mm (¾ in.) and 102mm (4 in.) NPS. The nominal size of a safety valve is the nominal diameter (as

defined in 56.07-5(b)) of the inlet opening.

(10) (Modifies PG-73.2). Cast iron may be used only for caps and lifting bars. When used for these parts, the elongation must be at least 5 percent in 51mm (2 inch) gage length. Nonmetallic material may be used only for gaskets and packing.

(b) * * *

(3) Drum pilot actuated superheater safety valves are permitted provided the setting of the pilot valve and superheater safety valve is such that the superheater safety valve will open before the drum safety valve.

(d) * * *

(2) (Modifies PG-73). The lifting device required by PG-73.1.3. of the ASME Code shall be fitted with suitable relieving gear so arranged that the controls may be operated from the fireroom or engineroom floor.

§ 52.01-125 [Removed]

21. Section 52.01-125 is removed.

22. In § 52.01-135 paragraphs (b) and (c) are revised to read as follows:

§ 52.01-135 Inspection and tests (modifies PG-90 through PG-100).

(b) The inspections required by PG-90 through PG-100 of the ASME Code shall be performed by the "Authorized Inspector" as defined in PG-91 of the ASME Code. The Authorized Inspector shall hold a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors. After installation, boilers will be inspected for compliance with this Part by the "Marine Inspector" as defined in § 50.10-15 of this subchapter.

(c) *Hydrostatic test (modifies PG-99).* Each new boiler shall be hydrostatically tested after installation to 1½ times the maximum allowable working pressure as indicated in PG-99 of the ASME Code. Before the boilers are insulated, accessible parts of the boiler shall be emptied, opened up and all interior surfaces shall be examined by the marine inspector to ascertain that no defects have occurred due to the hydrostatic test.

23. Section 52.01-140 is revised to read as follows:

§ 52.01-140 Certification by stamping (modifies PG-104 through PG-113).

(a) All boilers built in accordance with this part must be stamped with the appropriate ASME Code symbol as

required by PG-104 through PG-113 of the ASME Code.

(b)(1) Upon satisfactory completion of the tests and Coast Guard inspections, boilers must be stamped with the following:

- (i) Manufacturer's name and serial number;
- (ii) ASME Code Symbol;
- (iii) Coast Guard symbol, which is affixed only by marine inspector (see § 50.10-15 of this subchapter);
- (iv) Maximum allowable working pressure — at — °C (°F); and
- (v) Boiler rated steaming capacity in kilograms (pounds) per hour (rated joules (B.T.U.) per hour output for high temperature water boilers).

(2) The information required in paragraph (b)(1) of this section must be located on:

- (i) The front head or shell near the normal waterline and within 610 mm (24 inches) of the front of firetube boilers; and
- (ii) The drum head of water tube boilers.

(3) Those heating boilers which are built to section I of the ASME Code, as permitted by § 53.01-10(e) of this subchapter, do not require Coast Guard stamping and must receive full ASME stamping including the appropriate code symbol.

(c) The data shall be legibly stamped and shall not be obliterated during the life of the boiler. In the event that the portion of the boiler upon which the data is stamped is to be insulated or otherwise covered, a metal nameplate as described in PG-106.6 of the ASME Code shall be furnished and mounted. The nameplate is to be maintained in a legible condition so that the data may be easily read.

(d) Safety valves shall be stamped as indicated in PG-110 of the ASME Code.

24. § 52.01-145 is revised to read as follows:

§ 52.01-145 Manufacturers' data report forms (modifies PG-112 and PG-113).

The manufacturers' data report forms required by PG-112 and PG-113 of the ASME Code must be made available to the marine inspector for review. The Authorized Inspector's National Board commission number must be included on the manufacturers' data report forms.

§§ 52.05-5, 52.05-5, 52.05-10, 52.05-35, 52.05-40, 52.05-50, 52.05-55 [Removed]

25. In Subpart 52.05-5, §§ 52.05-5, 52.05-10, 52.05-35, 52.05-40, 52.05-50 and 52.05-55 are removed and §§ 52.05-20 and 52.05-45 (b) and (c) are revised to read as follows:

§ 52.05-20 Radiographic and ultrasonic examination (modifies PW-11 and PW-41.1).

Radiographic and ultrasonic examination of welded joints shall be as described in PW-11 of the ASME Code except that parts of boilers fabricated of pipe material, such as drums, shells, downcomers, risers, cross pipes, headers and tubes containing only circumferentially welded butt joints, shall be nondestructively examined as required by § 56.95-10 of this subchapter even though they may be exempted by the size limitations specified in PW-11.1.2 and PW-41.1 of the ASME Code.

§ 52.05-45 Circumferential joints in pipes, tubes and headers (modifies PW-41).

(b) (Modifies PW-41.1)

Circumferential welded joints in pipes, tubes, and headers of pipe material must be nondestructively examined as required by § 56.95-10 of this subchapter and PW-41 of the ASME Code.

(c) (Modifies PW-41.5) Butt welded connections shall be provided whenever radiography is required by § 56.95-10 of this subchapter for the piping system in which the connection is to be made. When radiography is not required, welded socket or sleeve type joints meeting the requirements of PW-41.5 of the ASME Code may be provided.

§§ 52.10-1—52.10-15 Subpart 52.10 [Removed]

26. Subpart 52.10 is removed.

27. § 52.15-1 is revised to read as follows:

§ 52.15-1 General (modifies PWT-1 through PWT-15).

Watertube boilers and parts thereof shall be as indicated in PWT-1 through PWT-15 of the ASME Code except as noted otherwise in this subpart.

28. Section 52.15-5 is amended by removing paragraphs (c) and (e), and by revising and redesignating paragraphs (d) and (f) as paragraphs (c) and (d), respectively to read as follows:

§ 52.15-5 Tube connections (modifies PWT-9 and PWT-11).

(c) In welded wall construction employing stub and welded wall panels which are field welded, approximately 10 percent of the field welds shall be checked using any acceptable nondestructive test method.

(d) Nondestructive testing of the butt welded joints shall meet the requirements of § 56.95-10 of this subchapter.

29. Figure 52.15-5 is removed.

§§ 52.20-5, 52.20-10, 52.20-15, 52.20-20 [Removed]

30. In subpart 52.20, §§ 52.20-5, 52.20-10, 52.20-15, and 52.20-20 are removed.

§ 52.20-10 [Amended]

31. Figure 52.20-10 is removed.

32. § 52.20-17 is revised to read as follows:

§ 52.20-17 Opening between boiler and safety valve (modifies PFT-44).

When a discharge pipe is used, it must be installed in accordance with the requirements of § 52.01-105.

33. Subpart 52.25 is revised to read as follows:

Subpart 52.25—Other Boiler Types

Sec.

- 52.25-1 General.
- 52.25-3 Feedwater heaters (modifies PFH-1).
- 52.25-5 Miniature boilers (modifies PMB-1 through PMB-21).
- 52.25-7 Electric Boiler (modifies PEB-1 through PEB-19).
- 52.25-10 Organic fluid vaporizer generators (modifies PVG-1 through PVG-12).
- 52.25-15 Fired thermal fluid heaters.
- 52.25-20 Exhaust gas boilers.

Subpart 52.25—Other Boiler Types

§ 52.25-1 General.

Requirements for fired boilers of various sizes and uses are referenced in Table 54.01-5(a) of this subchapter.

§ 52.25-3 Feedwater heaters (modifies PFH-1).

In addition to the requirements in PFH-1 of the ASME Code, feedwater heaters must meet the requirements in this Part or the requirements in Part 54.

§ 52.25-5 Miniature boilers (modifies PMB-1 through PMB-21).

Miniature boilers must meet the applicable provisions in this Part for the boiler type involved and the mandatory requirements in PMB-1 through PMB-21 of the ASME Code.

§ 52.25-7 Electric Boiler (modifies PEB-1 through PEB-19).

Electric boilers required to comply with this part must meet the applicable provisions in this Part and the mandatory requirements in PEB-1 through PEB-19 except PEB-3 of the ASME Code.

§ 52.25-10 Organic fluid vaporizer generators (modifies PVG-1 through PVG-12).

(a) Organic fluid vaporizer generators and parts thereof shall meet the requirements of PVG-1 through PVG-12 of the ASME Code except as noted otherwise in this section.

(b) The application and end use of organic fluid vaporizer generators shall be approved by the Commandant.

§ 52.25-15 Fired thermal fluid heaters.

(a) Fired thermal fluid heaters shall be designed, constructed, inspected, tested, and stamped in accordance with the applicable provisions in this Part.

(b) Each fired thermal fluid heater must be fitted with a control which prevents the heat transfer fluid from being heated above its flash point.

(c) The heat transfer fluid must be chemically compatible with any cargo carried in the cargo tanks serviced by the heat transfer system.

§ 52.25-20 Exhaust gas boilers.

Exhaust gas type boilers with a maximum allowable working pressure greater than 103 kPa gage (15 psig) or an operating temperature greater than 454°C (850°F) shall be designed, constructed, inspected, tested, and stamped in accordance with the applicable provisions in this Part. The design temperature of parts exposed to the exhaust gas must be the maximum temperature that could normally be produced by the source of the exhaust gas. This temperature shall be verified by testing or by the manufacturer of the engine or other equipment producing the exhaust.

PART 53—HEATING BOILERS

34. The Table of Contents is revised to read as follows:

Subpart 53.01—General Requirements

Sec.
53.01-1 Adoption of section IV of the ASME Code.

53.01-5 Scope (modifies HG-100).

53.01-10 Service restrictions and exceptions (replaces HG-101).

Subpart 53.05—Pressure Relieving Devices (Article 4)

53.05-1 Safety valve requirements for steam boilers (modifies HG-400 and HG-401).

53.05-2 Relief valve requirements for hot water boilers (modifies HG-400.2).

53.05-5 Discharge capacities and valve markings.

Subpart 53.10—Tests, Inspections, Stamping, and Reporting (Article 5)

53.10-1 General.

53.10-3 Tests and shop inspections (modifies HG-500 through HG-540).

53.10-10 Certification by stamping (modifies HG-530).

53.10-15 Manufacturers' data report forms (modifies HG-520).

Subpart 53.12—Instruments, Fittings, and Controls

53.12-1 General (modifies HG-600 through HG-640).

§ 53.01-1 [Amended]

35. § 53.01-1(a) introductory tests and Table 53.01-1(a) are revised to read as follows:

(a) Heating boilers shall be designed, constructed, inspected, tested, and stamped in accordance with section IV of the ASME (American Society of Mechanical Engineers) Code as limited, modified, or replaced by specific requirements in this part. The provisions in the appendices to section IV of the ASME Code are adopted and shall be followed when the requirements in section IV make them mandatory. For general information Table 53.01-1(a) lists the various paragraphs in section IV of the ASME Code which are limited, modified, or replaced by regulations in this part.

TABLE 53.01-1(A).—LIMITATIONS AND MODIFICATIONS IN THE ADOPTION OF SECTION IV OF THE ASME CODE

Paragraphs in section IV, ASME Code ¹ and disposition	Unit of this part
HG-100 modified by	53.01-5(b)
HG-101 replaced by	53.01-10
HG-400 modified by	53.05-1
HG-400.2 modified by	53.05-2
HG-401 modified by	53.05-1
HG-401.2 modified by	53.05-3
HG-500 through HG-540 modified by	53.10-3
HG-600 through HG-640 modified by	53.12-1

¹The references to specific provisions in the ASME Code are coded. The first letter "H" refers to section IV. The letter following "H" refers to a part or subpart in section IV. The number following the letter refers to the paragraph so numbered in the text of the part or subpart in section IV.

§ 53.01-5 [Amended]

36. In § 53.01-5 paragraph (a) is revised by adding a period after the word "Code".

37. § 53.01-5 is amended by removing paragraph (c).

38. Section 53.01-10 is amended by revising paragraphs (b), (c) and (d), and by adding paragraphs (e) and (f) to read as follows:

§ 53.01-10 Service restrictions and exceptions (replaces HG-101).

(b) *Service restrictions.* (1) Boilers of wrought materials shall be restricted to a maximum of 103 kPa gage (15 psig) for steam and a maximum of 689 kPa (100 psig) or 121°C (250°F) for hot water. If operating conditions exceed these limits, design and fabrications shall be in accordance with Part 52 of this subchapter.

(2) Boilers of cast iron materials shall be restricted to a maximum of 103 kPa gage (15 psig) for steam and to a maximum of 206 kPa gage (30 psig) or 121°C (250°F) for hot water.

(c) *Hot water supply boilers.* (1) Electrically fired hot water supply boilers which have a capacity not

greater than 454 liters (120 gallons), a heat input not greater than 58.6 kilowatts (200,000 B.t.u. per hour), and are listed as approved under Underwriters' Laboratories Standard 174 or 1453 are exempted from the requirements of this part provided they are protected by a pressure relief device. This relief device need not comply with § 53.05-2.

(2) Oil fired hot water supply boilers shall not be exempted from the requirements of this part on the basis of size or heat input.

(d) Exhaust gas type boilers shall be restricted to a working pressure equal to or less than 103 kPa gage (15 psig) and an operating temperature equal to or less than 454°C (850°F). The design temperature of parts exposed to the exhaust gas must be the maximum temperature that could normally be produced by the source of exhaust gas. This temperature shall be verified by testing or by the manufacturer of the engine or other equipment producing the exhaust.

(e) Heating boilers whose operating conditions are within the service restrictions of § 53.01-10(b)(1) may be constructed in accordance with section I of the ASME Code. In addition, these heating boilers must:

(1) be stamped with the appropriate ASME Code symbol in accordance with PG-104 through PG-113 of the ASME Code;

(2) meet the service restrictions of § 53.01-10(b)(2) if made of cast iron;

(3) have safety valves which meet the requirements of § 52.01-120 of this subchapter;

(4) if a hot water supply boiler, have a temperature relief valve or a pressure-temperature relief valve in accordance with § 53.05-2(c);

(5) if automatically controlled, meet the applicable requirements in Part 63 of this subchapter; and

(6) meet the inspection and test requirements of § 53.10-3.

(f) *Controls and miscellaneous accessories.* Refer to Part 63 of this subchapter for the requirements governing controls and miscellaneous accessories.

39. Subpart 53.05 is revised to read as follows:

Subpart 53.05—Pressure Relieving Devices (Article 4)

Sec.

53.05-1 Safety valve requirements for steam boilers (modifies HG-400 and HG-401).

53.05-2 Relief valve requirements for hot water boilers (modifies HG-400.2).

53.05-3 Materials (modifies JG-401.2).

53.05-5 Discharge capacities and valve markings.

Subpart 53.05—Pressure Relieving Devices (Article 4)**§ 53.05-1 Safety valve requirements for steam boilers (modifies HG-400 and HG-401).**

(a) The pressure relief valve requirements and the safety valve requirements for steam boilers must be as indicated in HG-400 and HG-401 except as noted otherwise in this section.

(b) Each steam boiler must have at least one safety valve.

§ 53.05-2 Relief valve requirements for hot water boilers (modifies HG-400.2).

(a) The relief valve requirements for hot water boilers must be as indicated in article 4 of section IV of the ASME Code except as noted otherwise in this section.

(b) *Hot water heating boilers.* Each hot water heating boiler must have at least one safety relief valve.

(c) *Hot water supply boilers.* Each hot water supply boiler must have at least one safety relief valve and a temperature relief valve or a pressure-temperature relief valve. The valve temperature setting must not be more than 99°C (210°F).

§ 53.05-3 Materials (modifies HG-401.2).

(a) Materials for valves must be in accordance with HG-401.2 of the ASME Code except nonmetallic materials may be used only for gaskets and packing.

§ 53.05-5 Discharge capacities and valve markings.

(a) The discharge capacities and valve markings must be as indicated in HG-402 of the ASME Code. The discharge capacities must be certified by the National Board of Boiler and Pressure Vessel Inspectors.

40. Section 53.10-3 is revised to read as follows:

§ 53.10-3 Inspection and tests (modifies HG-500 through HG-540).

(a) The inspections required by HG-500 through HG-540 must be performed by the "Authorized Inspector" as defined in HG-575 of the ASME Code. The Authorized Inspector shall hold a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors. After installation, heating boilers must be inspected for compliance with this Part by a marine inspector.

(b) Automatically controlled boilers must be subjected to the operating tests prescribed in Part 63 of this subchapter.

(c) All heating boilers must have the operation of their pressure relieving devices checked after the final installation.

§ 53.10-5 [Removed]

41. Section 53.10-5 is removed.

42. Section 53.10-10 is revised to read as follows:

§ 53.10-10 Certification by stamping

Stamping of heating boilers shall be as indicated in HG-530 of the ASME Code.

43. Section 53.10-15 is revised to read as follows:

§ 53.10-15 Manufacturers' data report forms.

The manufacturers' data report forms required by HG-520 of the ASME Code must be made available to the marine inspector for review. The Authorized Inspector's National Board commission number must be included on the manufacturers' data report forms.

§ 53.13-1 Subpart 93.13 [Removed]

44. Subpart 53.13 is removed.

§ 53.15-1—53.15.5 Subpart 53.15 [Removed]

45. Subpart 53.15 is removed.

PART 54—PRESSURE VESSELS**§ 54.01-5 [Amended]**

46. In § 54.01-5, Table 54.01-5(a) is revised to read as follows:

TABLE 54.01-5(A)—REGULATION REFERENCE FOR BOILERS, PRESSURE VESSELS, AND THERMAL UNITS

Service and pressure temperature boundaries	Part of subchapter regulating mechanical design	Part of subchapter regulating automatic control
Main (power) boiler: All	52	
Pressure vessel: All	54	NA
Fired auxiliary boiler* (combustion products or electricity):		
(a) Steam:		
More than 103 kPa (15 psig)	52	63
Equal to or less than 103 kPa (15 psig)	53	63
(b) Hot water heating:		
More than 689 kPa (100 psig) or 121°C (250°F)	52	63
Equal to or less than 689 kPa (100 psig) and 121°C (250°F)	53	63
(c) Hot water supply:		
More than 689 kPa (100 psig) or 121°C (250°F)	52	63
Equal to or less than 689 kPa (100 psig) and 121°C (250°F)	53	63
Other:		
(a) Fired thermal fluid heaters: All	52	63
(b) Unfired steam boiler:		
More than 206 kPa (30 psig) or 454°C (850°F)*	52	NA
Equal to or less than 206 kPa (30 psig) and 454°C (850°F)*	54	NA
(c) Evaporators and heat exchangers: More than 103 kPa (15 psig)*	54	NA

TABLE 54.01-5(A)—REGULATION REFERENCE FOR BOILERS, PRESSURE VESSELS, AND THERMAL UNITS—Continued

Service and pressure temperature boundaries	Part of subchapter regulating mechanical design	Part of subchapter regulating automatic control
(d) Unfired hot water supply or heating boiler: More than 103 kPa (15 psig)*	54	NA

*Including exhaust gas types.
*Temperature of working fluid.
*Relief device is required even if designed for less than 103 kPa (15 psig).

47. In § 54.01-10 paragraph (a) is revised to read as follows:

§ 54.01-10 Steam generating pressure vessels (modifies U-1(e)).

(a) Pressure vessels in which steam is generated, such as steam generators in the secondary system of a nuclear plant, are classed as "Unfired Steam Boilers" except as required otherwise by paragraph (b) of this section. Unfired steam boilers must be fitted with an efficient water level indicator, a pressure gage, a blowdown valve, and an approved safety valve as required by § 54.15-15. Unfired steam boilers must be constructed in accordance with this part other than when the pressures are more than 206 kPa (30 psig) or the temperatures of the working fluid are more than 454 °C (850 °F) when such boilers must be constructed in accordance with Part 52 of this subchapter.

48. In § 54.15-10 paragraph (a) is revised to read as follows:

§ 54.15-10 Safety and relief valves (modifies UG-126).

(a) All safety and relief valves for use on pressure vessels or piping systems shall be designed to meet the protection and service requirements for which they are intended and shall be set to relieve at a pressure which does not exceed the "maximum allowable working pressure" of the pressure vessel or piping system. Relief valves are not required to have huddling chambers for other than steam service. In addition, safety valves used on vessels in which steam is generated shall meet § 52.01-120 of this subchapter except § 52.01-120(a)(9). For steam service below 206 kPa (30 psig), bodies of safety valves may be made of cast iron. Safety-relief valves used in liquefied compressed gas service shall meet Subpart 162.017 or 162.018 in Subchapter Q (Specifications) of this chapter as appropriate.

PART 58—MAIN AND AUXILIARY MACHINERY AND RELATED SYSTEMS

49. Section 58.01-15 is revised to read as follows:

§ 58.01-15 Fuel oil for boilers.

Oil to be used as fuel to be burned under boilers on vessels subject to inspection by the Coast Guard shall have a flashpoint of not less than 60°C (140°F), (Pensky-Martens Closed Cup Method, ASTM-D93). Fuels having a lower flashpoint will be considered in those cases where the complete fuel system has been approved by the Commandant. Piping for fuel oil transfer or service systems conveying oil that does not need to be heated for service must not have fuel oil heaters installed and must not be interconnected in such a manner that the oil can be heated in other fuel oil systems.

PART 63—CONTROL SYSTEMS FOR AUTOMATIC AUXILIARY HEATING EQUIPMENT

50. In § 63.05-90 paragraph (a) is revised to read as follows:

§ 63.05-90 Inspection and tests.

(a) Each heating unit shall be carefully examined by a marine inspector to determine compliance with the regulations and approved drawings.

51. In § 63.15-5 paragraph (a) is revised to read as follows:

§ 63.15-5 Plan approval.

(a) Except for electric water supply boilers listed by Underwriters Laboratories as meeting UL 174 or UL 1453, plans shall be submitted for approval prior to the assembly or manufacture of the equipment. (Refer to Subpart 50.20 of this subchapter for procedures to follow in submitting plans.) Sufficient information shall be submitted to enable determination of compliance with the regulations of this and other parts of this chapter.

52. In § 63.15-30 is revised to read as follows:

§ 63.15-30 Temperature-pressure relief devices.

Electric hot water supply boilers must have at least one safety relief valve and a temperature relief valve or a pressure-temperature relief valve. These pressure and temperature relief valves must meet Subpart 53.05 of this chapter. Electric hot water supply boilers listed by Underwriters Laboratories as meeting UL 174 may have temperature-pressure relief valves meeting the requirements of

ANSI Standard Z 21.22 in lieu of Subpart 53.05 of this chapter.

53. Section 63.15-35 is revised to read as follows:

§ 63.15-35 Unspecified details.

Unspecified details such as electric supply connections, wiring terminals, and wiring shall be in accordance with Underwriters' Laboratories, Inc. UL-174—Electric Storage Tank Water Heaters or UL-1453—Electric Booster and Commercial Storage Tank Water Heaters as applicable.

54. In § 63.15-40 paragraph (b) is revised to read as follows:

§ 63.15-40 Operating test.

(b) For heaters not listed by Underwriters' Laboratories, Inc., all operating, limit, and safety devices and controls shall be tested by the marine inspector. Such tests shall be conducted aboard the vessel after installation. The pressure relief valve shall be tested as required by Part 52 or Part 53 of this subchapter as applicable.

PART 162—ENGINEERING EQUIPMENT

55. The authority citation for Part 162 reads as follows:

Authority: 46 U.S.C. 3306, 3703; 49 CFR 1.46(b).

- 56. Subpart 162.001 is removed.
- 57. Subpart 162.002 is removed.
- 58. Subpart 162.012 is removed.
- 59. Subpart 162.013 is removed.
- 60. Subpart 162.014 is removed.

Clyde T. Lusk, Jr.,

Rear Admiral, U.S. Coast Guard, Chief, Office of Merchant Marine Safety.

February 27, 1985.

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Maritime Administration**46 CFR Part 298****Obligation Guarantees**

AGENCY: Maritime Administration, DOT.
ACTION: Final rule.

SUMMARY: The regulation, 46 CFR Part 298, implements provisions of Title XI of the Merchant Marine Act, 1936, as amended (Act) (46 U.S.C. 1271-1279), prescribing conditions, terms and procedures for applying for and administering Federal ship financing assistance in the form of "obligation guarantees." [An "obligation guarantee" is a pledge of the full faith and credit of

the United States to the payment of the unpaid principal and interest on the guarantee of a note, bond, debenture, or other evidence of indebtedness as defined in section 1101(c) of the Act (46 U.S.C. 1271(c)).] The amendments adopted in this final rulemaking will: (1) Streamline procedures for processing applications for assistance under Title XI of the Act and make those procedures more efficient and responsive; (2) clarify the criteria that the Maritime Administration (MARAD) will apply in evaluating Title XI applications; (3) provide more detailed financial requirements; and (4) establish specific criteria and procedures for reviewing and evaluating requests by Title XI obligors for advances for debt service, insurance payments and other vessel-related expenses. The amendments in this final rulemaking also make certain technical changes to the existing regulation. A notice of proposed rulemaking is also being issued on this date to solicit comments on the calculation method for an internal rate of return (IRR) requirement that is included in the final rule.

EFFECTIVE DATE: April 8, 1985.

FOR FURTHER INFORMATION CONTACT:

James L. Westcott, Director, Office of Ship Financing, Maritime Administration, 400 Seventh Street, SW., Washington, D.C. 20590, telephone number (202) 382-0389.

SUPPLEMENTARY INFORMATION:**Background**

Title XI of the Act authorizes the Maritime Administrator, based upon delegation of authority by the Secretary of Transportation (Secretary), upon application by a United States citizen, to enter into a commitment to guarantee, and to guarantee the payment of the interest and the unpaid balance of principal on any obligation that is eligible to be guaranteed. The Act limits obligation guarantees to 87.5 percent of the actual cost of certain vessels, constructed, reconstructed or reconconditioned without construction-differential subsidy (CDS), or 75 percent of the actual cost of a vessel built with the aid of CDS. [A "vessel" includes a cargo or passenger vessel, tanker, tug, towboat, barge or special purpose vessel, as defined in section 1101(b) of the Act (46 U.S.C. 1271(b)). The "actual cost" of a vessel is the aggregate of all amounts paid by or for the account of the obligor and all amounts which the obligor is obligated to pay for the construction, reconstruction, or reconconditioning of the vessel, inclusive of designing, inspecting, outfitting or