by adding a new authority delegation from the Assistant Secretary for Health to the Commissioner of Food and Drugs for certain authorities delegated to the Assistant Secretary for Health under the Controlled Substances Act (as amended). The delegation excludes the authority to submit reports to Congress.

EFFECTIVE DATE: May 10, 1995.

FOR FURTHER INFORMATION CONTACT: Ellen R. Rawlings, Division of Management Systems and Policy (HFA–340), Food and Drug Administration, 5600 Fishers Lane, Rockville, MD 20857, 301–443–4976.

SUPPLEMENTARY INFORMATION: On June 22, 1993, the Secretary of Health and Human Services delegated to the Assistant Secretary for Health authorities vested in the Secretary under the Controlled Substances Act (Title II of the Comprehensive Drug Abuse Prevention and Control Act of 1970 (21 U.S.C. 811(h)(4)), as amended). On May 16, 1994, the Assistant Secretary for Health delegated to the Commissioner of Food and Drugs these same authorities. These authorities concern providing responses to the Drug Enforcement Administration's temporary scheduling notices made under the Controlled Substances Act, as amended. This delegation excludes the authority to submit reports to Congress.

Further redelegation of the authority delegated may only be authorized with the Commissioner's approval. Authority delegated to a position by title may be exercised by a person officially designated to serve in such position in an acting capacity or on a temporary basis.

List of Subjects in 21 CFR Part 5

Authority delegations (Government agencies), Imports, Organization and functions (Government agencies).

Therefore, under the Federal Food, Drug, and Cosmetic Act and the Public Health Service Act and under authority delegated to the Commissioner of Food and Drugs, 21 CFR part 5 is amended as follows:

PART 5—DELEGATIONS OF AUTHORITY AND ORGANIZATION

1. The authority citation for 21 CFR part 5 continues to read as follows:

Authority: 5 U.S.C. 504, 552, App. 2; 7 U.S.C. 138a, 2271; 15 U.S.C. 638, 1261–1282, 3701–3711a; secs. 2–12 of the Fair Packaging and Labeling Act (15 U.S.C. 1451–1461); 21 U.S.C. 41–50, 61–63, 141–149, 467f, 679(b), 801–886, 1031–1309; secs. 201–903 of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 321–394); 35 U.S.C. 156; secs. 301, 302, 303, 307, 310, 311, 351, 352, 354, 361, 362, 1701–1706, 2101, 2125, 2127, 2128 of the Public Health Service Act (42 U.S.C. 241, 242, 242a, 242l, 242n, 243, 262, 263, 263b, 264, 265, 300u–300u–5, 300aa–1, 300aa–25, 300aa–27, 300aa–28); 42 U.S.C. 1395y, 3246b, 4332, 4831(a), 10007–10008; E.O. 11490, 11921, and 12591; secs. 312, 313, 314 of the National Childhood Vaccine Injury Act of 1986, Pub. L. 99–660 (42 U.S.C. 300aa–1 note).

2. Section 5.10 is amended by adding new paragraph (a)(37) to read as follows:

§ 5.10 Delegations from the Secretary, the Assistant Secretary for Health, and Public Health Service Officials.

(a) * * *

(37) Functions vested in the Secretary under section 811(h)(4) of the Controlled Substances Act (Title II of the Comprehensive Drug Abuse Prevention and Control Act of 1970, as amended) to provide responses to the Drug Enforcement Administration's temporary scheduling notices. The delegation excludes the authority to submit reports to Congress.

* * * * *

Dated: May 2, 1995.

William B. Schultz,

Deputy Commissioner for Policy.

[FR Doc. 95–11525 Filed 5–9–95; 8:45 am]

BILLING CODE 4160–01–F

DEPARTMENT OF TRANSPORTATION

Coast Guard

33 CFR Part 164

46 CFR Parts 50, 52, 56, 58, 61, and 111

[CGD 83–043]

RIN 2115–AB41

Incorporation of Amendments to the International Convention for Safety of Life at Sea, 1974

AGENCY: Coast Guard, DOT.

ACTION: Final rule.

SUMMARY: The Coast Guard is modifying its regulations on navigational safety and marine engineering to harmonize them with the International Convention for the Safety of Life at Sea, 1974 (SOLAS 74), as amended, and to allow the use of current technology. This final rule is necessary because changes have been made to SOLAS 74 and new technology has become available. The incorporation of SOLAS 74 as amended will enhance the safety of personnel and vessels, protect the natural environment, and contribute to domestic carriers' improved competitiveness in the global market.

DATES: This final rule is effective on June 9, 1995. The Director of the Federal Register approves as of June 9, 1995 the incorporation by reference of certain materials listed in this rule.

FOR FURTHER INFORMATION CONTACT: Lieutenant Commander R.K. Butturini, Engineering Branch, Marine Technical and Hazardous Materials Division, Office of Marine Safety, Security and Environmental Protection, (202) 267–2206.

SUPPLEMENTARY INFORMATION:

Drafting Information: The principal persons involved in drafting this final rule are Lieutenant Commander R.K. Butturini, Project Manager, and Mr. Patrick J. Murray, Project Counsel, Office of Chief Counsel.

Regulatory History.

On September 28, 1990, the Coast Guard published a notice of proposed rulemaking (NPRM) entitled ''Incorporation of Amendments to the International Convention for Safety of Life at Sea, 1974'' (55 FR 39638). The Coast Guard received three letters commenting on the NPRM. No public hearing was requested, and none was held.

Background and Purpose

On November 1, 1974, the Assembly of the Inter-Governmental Maritime Consultative Organization (IMCO) adopted SOLAS 74. In May 1982 IMCO was renamed the International Maritime Organization (IMO). Invoking Article VIII of SOLAS 74, which contained procedures for amending SOLAS 74, IMO adopted further resolutions; these resolutions recommended areas of SOLAS 74 in need of improvement. The United States was instrumental in the development of SOLAS 74 and its amendments.

To date, three sets of amendments have been adopted. The first set of amendments was approved by the Maritime Safety Committee (MSC) of IMO on November 20, 1981, and became effective on September 1, 1984. These amendments deal primarily with subdivision and stability, machinery and electrical installations, periodically unattended machinery spaces, and measures for fire safety. The second set of amendments was approved by the MSC on June 17, 1983, and became effective on July 1, 1986. These amendments deal primarily with appliances and arrangements for lifesaving and with the carriage of dangerous goods. The third set of amendments was approved by the MSC on April 11, 1989, and became effective on February 1, 1992. These amendments address amendments to SOLAS 74 that could not be included in the 1983 SOLAS amendments, and include

changes to requirements for bilge systems and fuel systems for machinery.

Since the U.S. is signatory to this international treaty, periodic upgrades of domestic regulations for the safety of personnel, and of vessels inspected by the Coast Guard, are necessary to align our regulations with SOLAS 74, as amended. Through such upgrades, these regulations will come to comprise the international standards for the safety of personnel and vessels at large. Generally, the amendments to SOLAS 74 impose higher standards than our current regulations, and these standards should lead to fewer casualties among vessels. Therefore, the Coast Guard is applying the standards to all new inspected vessels subject to Subchapter F, regardless of size or type of voyage, except as otherwise specified in this final rule.

This final rule adopts standards from Chapters II–1, II–2, and V of SOLAS 74 contained in the first set of amendments (1981) and third set of amendments (1989). This rule does not adopt standards contained in the second set of amendments (1983), because they are the subject of a separate rulemaking. When discussing SOLAS 74, as amended, this rule will cite the applicable numbers of paragraph and regulation. For example, SOLAS II–1/29.6 is the reference for Paragraph 6 of Regulation 29 of SOLAS Chapter II–1.

The Coast Guard compared the SOLAS 74 amendments to 46 CFR subchapter F, ''Marine Engineering''. The results appear in the following table. An asterisk (*) in the table means that a requirement appearing in SOLAS 74, as amended, is not now covered by subchapter F but is addressed in this final rule. Since certain requirements of SOLAS 74, as amended, tabulated below have already been adopted into 46 CFR part 62—VITAL SYSTEM AUTOMATION, they are not included in this final rule.

1981 SOLAS amendments	Corresponding U.S. regulation
Chapter II–1.	(Cites to Title 46, Code of Federal Regulations, unless otherwise specified).
3	§§ 58.25*, 62.30–5.
20.2	§ 56.50–85*.
21	§§ 56.50–50, 56.50–55, 62.30–5.
26.1	Parts 52, 54, 56; §§ 58.01–20, 58.05–1, 62.25–30.
26.2	§§ 58.01–35, 62.25–1, 62.30–5.
26.3	§§ 52.01–10, 56.50–30, 56.50–35, 56.50–45, 56.50–65, 56.50–80, 58.05–1, 58.01–35, 62.25–1, 62.30–5, 111.10–3, 111.10–5, 111.35–1, 112.05–1.
26.4	§§ 58.01–35, 62.30–5, 111.10–76.
26.5	§§ 52.01–135, 54.10, 56.95, 56.97.
26.6	§§ 58.01–40*, 62.20–5, 62.25–30.
26.8	§ 58.05–1.
27.1	§§ 58.05–1, 58.10–15, 62.25–1, 62.25–15, 111.12–1.
27.2	§§ 52.01–120, 54.15, 56.07–10, 58.05–1.
27.3	§ 58.05–1.
27.4	§ 58.05–1.
27.5	§§ 56.50–80, 58.05–1, 58.05–10*, 58.10–15, 62.25–1, 62.25–15, 62.30–5, 62.35–5, 111.12–1.
28.1	§ 58.05–5.
28.2–28.4	33 CFR 164.35; 46 CFR 35.20–40, 78.21, 97.19.
29 & 30	33 CFR 164.11*, 33 CFR 164.39*; 46 CFR § 58.25*.
31	§§ 61.40–1, 62.01–1, 62.01–3, 62.01–5, 62.20–1, 62.20–3, 62.25–1, 62.25–5, 62.25–10, 62.25–20, 62.30–5, 62.30–15, 62.35–5, 62.35–10, 62.50–1, 62.50–20.
32.1	§ 52.01–120.
32.2	§§ 62.25–1, 62.35–20.
32.3	§ 52.01–110*.
32.4	§ 56.50–30.
32.5	§§ 52.01–115, 56.50–30.
32.6	§ 52.01–110.
33.1	§ 56.07–10.
33.2	§ 56.50–15*.
33.3	§§ 56.07–10, 56.50–10, 56.50–15.
34.1	§ 58.30–5.
34.2	§§ 58.05–1, 58.30–534.3 § 58.05–1.
34.4	§ 58.30–5*.
35	§ 58.01–45*.
36	§ 58.01–50*.
37	§§ 62.35–5, 113.30–5, 113.35–3.
38	§ 113.27–1.
39	§ 56.50–55.
46—54	§§ 61.40–1, 62.01–1, 62.01–3, 62.20–1, 62.20–3, 62.25–1, 62.25–15, 62.25–20, 62.30–1, 62.30–5, 62.30–15, 62.35–5, 62.35–10, 62.50–1, 62.50–20, 62.50–30.
Chapter II–2:	
15.1	§§ 58.01–10*, 58.01–15*, 112.50–1.
15.2	§§ 56.10, 56.15, 56.20, 56.25, 56.30, 56.50–60*, 56.50–65, 56.50–70, 56.50–75, 56.50–85*, 56.50–90*, 58.01–55*.
15.3	§§ 56.50–60*, 56.50–90*, 58.01–55*.
15.4	§ 56.50–60*.
15.5	§§ 62.35–40, 62.50–30.
15.6	33 CFR 155.470.
18.1 & 18.2.	§§ 56.50–1, 56.50–5, 56.50–95.
51	§ 58.16.
54.2.5	§ 56.50–50*.
59.1.6	§ 56.50–85*.
Chapter V:	
19	§ 58.25–85*.

1989 SOLAS amendments	Corresponding U.S. regulation
Chapter II–1.	(Cites to Title 46, Code of Federal Regulations, unless otherwise specified).
21.1.6	§ 56.50–50*.
21.2.9	§ 56.50–50*.
Chapter II–2:	
15.2.6	§§ 56.50–60*, 56.50–90*.
15.3	§§ 56.50–80*, 56.50–90*.
Chapter V:	
12	33 CFR 164.35*.

A final rule concerning Intervals for Drydocking and Tailshaft Examination on Inspected Vessels [CGD 84–024] went into effect on September 23, 1988. It changed the interval for drydocking vessels from one inspection every two years to inspections in multiples of thirty months (i.e., two inspections within any five-year period, except that no more than three years may elapse between any inspection and its immediate predecessor). But it left the interval for inspecting major machinery at two years. Because of this continued misalignment of inspection intervals for drydockings and major machinery, that rule causes a hardship for owners of some vessels. The most opportune time for inspecting major machinery—boilers and pressure vessels—is during drydocking, when the machinery is secured. This final rule allows intervals for inspecting major machinery to coincide with those for drydocking. The inspection interval has not been changed for those cases where inspection of machinery does not depend on the vessels' being drydocked.

There have been continuing proposals by designers of vessels, by shipyards, and by shipowners for the use of nonmetallic piping in concealed spaces aboard ship. Current domestic regulations prohibit this use of nonmetallic piping unless the piping is within trunks completely surrounded by ''A'' class divisions. SOLAS 74, as amended, does not preclude this use of nonmetallic piping, while classification societies, as well as the International Association of Classification Societies, permit it. Therefore, this final rule provides alternative requirements for piping in concealed spaces and permits the installation of nonmetallic piping under certain restrictions. The change

will reduce the costs of constructing vessels.

Current domestic regulations require certain cargo ships to have three powered bilge pumps. SOLAS 74, as amended, and many classification societies have successfully permitted these ships to have only two powered bilge pumps. This final rule aligns domestic regulations with SOLAS 74. The change will reduce the costs of outfitting U.S.-flag vessels.

For many years domestic regulations have also required each individual bilge suction to be led from one or more manifolds located within the same space as the bilge pump. In the early 1970s, the Coast Guard developed regulations permitting common-rail bilge and ballast systems for cargo spaces on multi-purpose bulk carriers that can lift combinations of both liquid and dry bulk cargoes (O/B/O) and that ply the Great Lakes. Since then, several designers of vessels have asked to install common-rail bilge systems on cargo and passenger vessels. The Coast Guard has, by policy, accepted all of these systems provided they satisfied certain other design restrictions. The main concern with accepting any of them is the risk of losing suction for the entire system if the common line fails or leaks. The additional criteria reduce that risk and make the system equivalent to the conventional manifold system. Such a common-rail system is acceptable under SOLAS 74, as amended. This final rule permits these systems on all vessels as an equivalent alternative to the existing requirements for manifold systems.

Until now, domestic regulations have required, for all vessels subject to 46 CFR subchapter F and not fitted with an auxiliary means of steering, dual-power hydraulic steering apparatus having two independent pumps and connections. Each independent steering-gear power unit must be capable of meeting the rudder-movement standard of 35° on one side to 30° on the other side in not more than 28 seconds. These regulations are not consistent with the 1981 amendments to SOLAS 74. For passenger vessels without auxiliary steering systems, SOLAS 74, as amended, requires that main steering gear, consisting of two or more identical power units, be capable of meeting the same rudder-movement standard with any one unit out of service. For cargo vessels without auxiliary steering systems, SOLAS 74, as amended, requires that main steering gear be capable of meeting the same rudder-movement standard with all power units in service. The Coast Guard does not consider the 1981 amendments to SOLAS 74 to compromise the safety of the vessel, and therefore, by this final rule, modifies current regulations for dual-power hydraulic steering apparatus to coincide with SOLAS 74, as amended.

Discussion of Comments and Changes

A total of three comment letters were received. The letters were supportive of the efforts by the Coast Guard to incorporate industry standards by reference. Two letters also offered specified comments on individual sections of the proposed rule. The third letter simply endorsed the comments of one of the first two letters. Additionally, the Coast Guard received recommendations from the National Transportation Safety Board (NTSB) asking for clarification of one of the regulations modified in the proposed rules. The sections of the proposed rule to which comments were addressed are discussed below, as are each comment and the Coast Guard's response.

1. 33 CFR 164.11(t)

The proposed rule implements the standards of SOLAS 74 II–1/29.6 and II–1/29.15. Current paragraph (t) requires that, while a vessel is under way on the navigable waters of the U.S., except the St. Lawrence Seaway, at least two of the steering-gear power units be in operation when the units are capable of simultaneous operation. That paragraph embodies SOLAS 74 V/19–1. SOLAS 74 II–1/29.6 and II–1/29.15 impose a performance standard on steering-gear systems. A combination of power units may be operated simultaneously to meet the performance standard of moving the rudder from 35° on one side to 30° on the other side in not more than 28 seconds.

The NTSB's recommendations arose from the grounding of the MOBILOIL in 1985 and the collision of the MANDAN with moored barges in 1990. Both casualties involved loss of steering. The recommendations called for clarification of current § 164.11(t).

The Coast Guard agrees with the need for clarity and therefore both revises proposed § 164.11(t) and adds § 164.11(u). Revised § 164.11(t) applies to both foreign and domestic vessels and requires the operation of at least two steering-gear power units when the power units are designed for simultaneous operation. Excepted from this requirement are vessels on the Great Lakes and vessels covered by § 164.11(u). New § 164.11(u) applies to newer foreign and domestic vessels and, consistent with SOLAS 74, as amended, imposes a standard of performance instead of a specification of design.

2. 46 CFR 56.50–50

This section was intended by the proposed rule to implement the standards of SOLAS 74 II–2/54.2.5. Paragraph (a)(4) requires that bilge systems, when they serve enclosed cargo spaces carrying flammable or toxic liquids, be designed to prevent the inadvertent pumping of flammable or toxic liquids through machinery-space piping or pumps.

One comment suggested that the final rule also address Class 8 dangerous goods because SOLAS 74 II–2/54.2.5 applies to these goods as well.

The Coast Guard agrees with the comment as consistent with the intent of the proposed rule and has included the reference to Class 8 dangerous liquids with a flashpoint below 23°C (74°F) in this final rule. In addition, since SOLAS applies the flashpoint limit to the Class 3 flammable liquids, the Coast Guard also applies it to them.

One comment suggested stipulating a specific minimal quantity of dangerous goods, which would require invoking the proposed change to this section.

The Coast Guard disagrees with this comment since there is no similar approach in the standard of SOLAS on which it is based. Further, it would be difficult to stipulate a specific minimal quantity of dangerous goods that would not need regulation.

One comment suggested calling the machinery space the ''main machinery'' space.

The Coast Guard disagrees with the comment since this would change the applicability of the section. Such a narrow interpretation of SOLAS 74 in this regard is unwarranted. The rules will continue to use the terminology of SOLAS 74.

3. 46 CFR 56.60–25

This section was intended by the proposed rule to codify current Coast Guard policy. Paragraph (a) allows the use of nonmetallic piping for nonvital freshwater and saltwater service, to run in concealed spaces. The Coast Guard has allowed this use, considering further design criteria, such as the fire integrity of bulkheads, the proper maintenance of decks and draft stops, or the installation in the concealed space of an approved smoke-detection system. Current regulations require this piping to be of metallic construction or to be nonmetallic piping surrounded by ''A'' class divisions. SOLAS 74, as amended, does not preclude nonmetallic piping for this use.

One comment suggested recognizing CPVC and polybutylene as acceptable materials under this section because of their extensive use elsewhere.

The Coast Guard agrees that much progress is being made in the evaluation and testing of plastic materials for piping and that expanding the acceptance of these materials in Coast Guard regulations should be addressed. The Coast Guard feels, however, that this comment goes beyond the scope of this final rule. CPVC and polybutylene will be further evaluated, and addressed in a future rulemaking. Moreover, IMO is currently working on specific guidelines for the acceptance of these materials, and further developments on the topic will affect Coast Guard policy on these materials. Current regulations do not preclude the use of materials not meeting ASTM F1173. The requirements for the use of these materials appear in current § 56.60–25(a)(10).

One comment suggested that the use, along with plastic piping, of metallic spool pieces at all bulkhead penetrations would be equivalent to requiring a smoke-detection system in concealed accommodation or service spaces.

The Coast Guard disagrees with this comment. The early detection of fires or smoke in concealed spaces is vital, and metallic spool pieces do not enable it.

One comment suggested clarification of § 56.60–25(a)(3)(i) to clearly allow the use of plastic piping outside trunks or ducts if inside a concealed space within ''A'' class boundaries.

The Coast Guard disagrees with this comment. Under the comment's definition, a concealed space spanning several ''B'' class boundaries could have plastic piping as long as ''A'' class boundaries surround the overall space. The wording in the proposed rule has not been changed.

One comment suggested allowing smoke detectors, located adjacent to but not in the concealed space, to replace required detectors in the space.

The Coast Guard disagrees with this comment, which assumes that a fire would never start in a concealed space with plastic piping but that any fire would come from the adjacent space. The burning of the plastic piping in a concealed space is the concern, and the sensors should be located so as to most readily detect the concealed fire. The requirement for sensors in the concealed space as stated in the proposed rule remains.

4. 46 CFR 58.25–65

This section was intended by the proposed rule to move, from subchapter J to subchapter F, requirements applicable to steering systems. Paragraphs (a) through (d) simply restate requirements from current 46 CFR 111.93–7 that cover feeder circuits serving electric-driven steering-gear power units. This section reflects interpretations by the Coast Guard of applicable requirements in SOLAS 74 II–1/29.14 and II–1/30.2.

One comment suggested that use of the size of the rudder stock as a criterion for determining whether one of the electrical feeders should be supplied from an alternative source of power was ambiguous. The comment further suggested use of some other, more definite criterion, such as number of passengers or gross tonnage.

The size of the rudder stock closely correlates with the overall size and speed of the vessel, and use of it as a criterion comes from SOLAS 74 II–1/29.14. Because this regulation applies to both cargo and passenger vessels, making the number of passengers the criterion would be inappropriate.

The Coast Guard has found gross tonnage to be unreliable when used for drawing regulatory lines. Besides, the intent of the final rule is to harmonize regulations of the Coast Guard with standards of SOLAS, not to impose requirements that exceed those of SOLAS. Since this part of the proposed rule does not deviate from current regulations and will not cause a burden on industry, it has not been changed.

5. 46 CFR 61.05–10

This section was intended by the proposed rule to change Table 61.05–10 and § § 61.05–10, 61.05–15, 61.05–20, 61.10–5, and 61.15–5, aligning intervals for inspections and tests of major machinery with new intervals for drydockings of vessels. Generally, current regulations require inspections of major machinery, such as pressure vessels and boilers, in two-year multiples, to coincide with a vessel's regular inspection for certification. Numerous owners and operators have insisted that such scheduling creates an economic hardship since an inspection for certification is not always the appropriate time for an inspection of a boiler or a pressure vessel. Rather, these owners and operators suggest, the intervals for drydockings are more appropriate as the intervals also for such inspections and tests of major machinery. The Coast Guard agrees and has proposed that inspections of major machinery occur, like drydockings, at a rate of two inspections in any five-year period, with no more than three years between any inspection and its immediate predecessor. Also, a new Table 61.05–10 collects into a single table the intervals for all inspections and tests of boilers, except of automation controls. Since this should decrease a vessel's time out of service, the owners and operators should realize economic savings.

One comment suggested defining ''hybrid boilers'' as used in Note 3 to Table 61.05–10.

The Coast Guard defines ''hybrid boilers'' as boilers that employ design features from both traditional watertube and firetube boilers. This final rule defines them so in § 52.01–3.

Incorporation by Reference

The Director of the Federal Register has approved the materials listed in 33 CFR 164.03 and 46 CFR 58.03–1(b) for incorporation by reference under 5 U.S.C. 552 and 1 CFR part 51. The materials are available as indicated in those sections.

Regulatory Evaluation

This final rule is not a significant regulatory action under section 3(f) of Executive Order 12866 and does not require an assessment of potential costs and benefits under section 6(a)(3) of that Order. It has not been reviewed by the Office of Management and Budget under that Order. It is not significant under the regulatory policies and procedures of the Department of Transportation (44 FR 11034 (February 26, 1979)). The Coast Guard expects the economic impact of this final rule to be so minimal that a full Regulatory Assessment is unnecessary. The net benefits due to savings from this rule should outweigh the burden.

As discussed in *Background and Purpose*, above, the main purpose of this final rule is to incorporate into domestic regulations amendments to the International Convention for Safety of Life at Sea, 1974, addressing issues of marine engineering. U.S.-flag cargo and tank vessels of 500 gross tons and more, and passenger vessels carrying more than twelve passengers and engaged on international voyages, already must comply with SOLAS 74, as amended. Thus, this rule will have no economic impact on these vessels. This rule does, however, affect vessels that need not yet comply with SOLAS 74, as amended, as such, since the Coast Guard, in general, is applying the standards of the treaty to all new domestic vessels subject to subchapter F.

Although some of the changes due to SOLAS 74 will result in minor increases in cost, others will result in savings that more than offset these increases. Many of the changes reflect current practice of the marine industry or can be integrated readily into the design of the vessel before construction and will place no direct burden on the industry. The changes that will place the greatest

economic burden upon the industry affect steering gear. However, the increase in cost associated with accomplishing the changes represents a small fraction of the total cost for a steering system and should be offset by the savings anticipated from the reduction in the number and cost of casualties.

The remaining changes in this final rule are not due to SOLAS 74: Greater use of common-rail bilge systems, an increase in the inspection interval for major machinery, and greater use of plastic piping in concealed spaces. These changes will bring only savings to the marine industry. On the bilge system and on plastic piping, this rule permits, without reducing safety, attractive alternatives to the expensive means required by the current regulations. Also, by enlarging the interval for inspection of major machinery, to make the inspection coincide with the vessel's drydocking, this rule will reduce the number of inspections over a vessel's life and reduce the vessel's time out of service, all resulting in long-term savings to the owner.

Small Entities

This final rule will apply to owners and operators of commercial vessels registered in the U.S. Few of these, if any, qualify as small entities. Again, the economic impact of this rule on individual owners and operators should be minimal. Therefore, the Coast Guard certifies under section 605 of the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*) that this rule will not have a significant economic impact on a substantial number of small entities.

Collection of Information

This final rule imposes on the public no new or added requirements for collecting information under the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*). In particular, it does not change any such requirements in 33 CFR part 164 or 46 CFR part 50, 52, 56, 58, 61, or 111.

Environment

The Coast Guard has considered the environmental impact of this final rule and concluded that, under section 2.B.2.c of Commandant Instruction M16475.1B, this rule is categorically excluded from further treatment in environmental documents. A Categorical-Exclusion Determination is available in the docket for inspection or copying where indicated under **ADDRESSES**.

Federalism

The Coast Guard has analyzed this final rule in accordance with the principles and criteria of Executive Order 12612 and has determined that this rule does not have sufficient implications for federalism to warrant the preparation of a Federalism Assessment. The authority to issue regulations on the navigational safety of the vessels covered by this rule is committed to the Coast Guard by Federal statute. Therefore, the Coast Guard intends to preempt State or local laws on the navigational safety of these vessels.

List of Subjects

33 CFR Part 164

Incorporation by reference, Marine safety, Navigation (water), Reporting and recordkeeping requirements, Waterways.

46 CFR Part 50

Reporting and recordkeeping requirements, Vessels.

46 CFR Part 52

Reporting and recordkeeping requirements, Vessels.

46 CFR Part 56

Reporting and recordkeeping requirements, Vessels.

46 CFR Part 58

Incorporation by reference, Reporting and recordkeeping requirements, Vessels.

46 CFR Part 61

Reporting and recordkeeping requirements, Vessels.

46 CFR Part 111

Reporting and recordkeeping requirements, Vessels.

For the reasons set out in the preamble, the Coast Guard amends Title 33, part 164, and Title 46, parts 50, 52, 56, 58, 61, and 111, of the Code of Federal Regulations, as follows:

Title 33—[Amended]

PART 164—NAVIGATION SAFETY REGULATIONS

1. The authority citation for part 164 continues to read as follows:

Authority: 33 U.S.C. 1223, 46 U.S.C. 3703; 49 CFR 1.46(n). Sec. 164.61 also issued under 46 U.S.C. 6101.

2. Section 164.03 is amended by revising paragraph (b) to read as follows:

§ 164.03 Incorporation by reference.

* * * * *

(b) The materials approved for incorporation by reference in this part, and the sections affected, are:

Radio Technical Commission for Marine Services, P.O. Box 19087, Washington, DC 20036, Paper 12/78/DO–100 Minimum Performance Standards, Loran C Receiving Equipment, 1977—164.41

International Maritime Organization, 4 Albert Embankment, London SE1 7SR U.K., IMO Resolution A.342(IX), Recommendation on Performance Standards for Automatic Pilots, adopted November 12, 1975—164.13.

3. Section 164.11 is amended by revising its heading and paragraph (t) and by adding paragraph (u) to read as follows:

§ 164.11 Navigation under way: General.

* * * * *

(t) At least two of the steering-gear power units on the vessel are in operation when such units are capable of simultaneous operation, except when the vessel is sailing on the Great Lakes and their connecting and tributary waters, and except as required by paragraph (u) of this section.

(u) On each passenger vessel meeting the requirements of the International Convention for the Safety of Life at Sea, 1960 (SOLAS 60) and on each cargo vessel meeting the requirements of SOLAS 74 as amended in 1981, the number of steering-gear power units necessary to move the rudder from 35° on either side to 30° on the other in not more than 28 seconds must be in simultaneous operation.

4. Section 164.35 is amended by adding paragraph (o) to read as follows:

§ 164.35 Equipment: All vessels.

* * * * *

(o) A telephone or other means of communication for relaying headings to the emergency steering station. Also, each vessel of 500 gross tons and over and constructed on or after June 9, 1991 must be provided with arrangements for supplying visual compass-readings to the emergency steering station.

5. Section 164.39 is revised to read as follows:

§ 164.39 Steering gear: Foreign tankers.

(a) This section applies to each foreign tanker of 10,000 gross tons or more, except a public vessel, that—

(1) Transfers oil at a port or place subject to the jurisdiction of the United States; or

(2) Otherwise enters or operates in the navigable waters of the United States, except a vessel described by § 164.02 of this part.

(b) *Definitions.* The terms used in this section are as follows:

Constructed means the same as in Chapter II–1, Regulations 1.1.2 and 1.1.3.1, of SOLAS 74.

Existing tanker means a tanker—

(1) For which the building contract is placed on or after June 1, 1979;

(2) In the absence of a building contract, the keel of which is laid or which is at a similar stage of construction on or after January 1, 1980;

(3) The delivery of which occurs on or after June 1, 1982; or

(4) That has undergone a major conversion contracted for on or after June 1, 1979; or construction of which was begun on or after January 1, 1980, or completed on or after June 1, 1982.

Public vessel, oil, hazardous materials, and *foreign vessel* mean the same as in 46 U.S.C. 2101.

SOLAS 74 means the International Convention for the Safety of Life at Sea, 1974, as amended.

Tanker means a self-propelled vessel defined as a tanker by 46 U.S.C. 2101(38) or as a tank vessel by 46 U.S.C. 2101(39).

(c) Each tanker constructed on or after September 1, 1984, must meet the applicable requirements of Chapter II–1, Regulations 29 and 30, of SOLAS 74.

(d) Each tanker constructed before September 1, 1984, must meet the requirements of Chapter II–1, Regulation 29.19, of SOLAS 74.

(e) Each tanker of 40,000 gross tons or more, constructed before September 1, 1984, that does not meet the single-failure criterion of Chapter II–1, Regulation 29.16, of SOLAS 74, must meet the requirements of Chapter II–1, Regulation 29.20, of SOLAS 74.

(f) Each tanker constructed before September 1, 1984, must meet the applicable requirements of Chapter II–1, Regulations 29.14 and 29.15, of SOLAS 74.

Title 46—[Amended]

PART 50—GENERAL PROVISIONS

6. The authority citation for part 50 is revised to read as follows:

Authority: 43 U.S.C. 1333; 46 U.S.C. 2103, 3306, 3703; E.O. 12234, 45 FR 58801, 3 CFR, 1980 Comp., p. 277; 49 CFR 1.45, 1.46. Section 50.01–20 also issued under the authority of 44 U.S.C. 3507.

7. Subpart 50.10 is amended by adding § 50.10–35 to read as follows:

§ 50.10–35 Constructed.

The term *constructed* means the keel has been laid or, for vessels with no keel, assembly of at least 50 tons or 1% of the estimated mass of all structural material, whichever is less, has been completed.

PART 52—POWER BOILERS

8. The authority citation for part 52 continues to read as follows:

Authority: 46 U.S.C. 3306, 2103, 3703; E.O. 12234, 45 FR 58801, 3 CFR, 1980 Comp., p. 277; 49 CFR 1.46.

9. Section 52.01–3 is amended by adding paragraph (a)(10) to read as follows:

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

(a) * * *

(10) *Hybrid boiler.* A hybrid boiler is a steam boiler whose design employs features from both watertube and firetube boilers.

* * * * *

10. Section 52.01–110 is amended by revising its heading and adding paragraph (h) to read as follows:

§ 52.01–110 Water-level indicators, water columns, gauge-glass connections, gauge cocks, and pressure gauges (modifies PG–60).

* * * * *

(h) *High-water-level alarm.* Each watertube boiler for propulsion must have an audible and a visible high-water-level alarm. The alarm indicators must be located where the boiler is controlled.

PART 56—PIPING SYSTEMS AND APPURTENANCES

11. The authority citation for part 56 is revised to read as follows:

Authority: 33 U.S.C. 1321(j), 1509; 43 U.S.C. 1333; 46 U.S.C. 2103, 3306, 3703; E.O. 12234, 45 FR 58801, 3 CFR, 1980 Comp., p. 277; E.O. 12777, 56 FR 54757; 49 CFR 1.46.

12. Section 56.15–5 is amended by revising its heading and paragraph (c)(1)(ii) to read as follows:

§ 56.15–5 Fluid-conditioner fittings.

* * * * *

(c) * * *

(1) * * *

(ii) Nonstandard fluid-conditioner fittings that have an internal diameter exceeding 15 centimeters (6 inches) and that are rated for temperatures and pressures exceeding those specified as minimums for Class I piping systems.

* * * * *

13. Section 56.30–25 is amended by adding a note after paragraph (f)(2) to read as follows:

§ 56.30–25 Flared, flareless, and compression joints.

* * * * *

(f) * * *

(2) * * *

Note—See § 58.25–20(d) of this subchapter for limitations on the use of compression fittings in hydraulic systems for steering gear.

14. Section 56.50–15 is amended by adding paragraph (k) to read as follows:

§ 56.50–15 Steam and exhaust piping.

* * * * *

(k) Means must be provided for draining every steam pipe in which dangerous water hammer might otherwise occur.

15. Section 56.50–50 is amended by adding paragraphs (a)(4), (a)(5), and (c)(4), revising paragraphs (c)(1), (c)(2), and the definition for ''D'' and adding a Note 6 in paragraph (d)(2), and revising the last sentence of paragraph (h) to read as follows:

§ 56.50–50 Bilge and ballast piping.

(a) * * *

(4) Where the vessel is to carry Class 3 flammable liquids with a flashpoint below 23°C (74°F), Class 6, Division 6.1, poisonous liquids, or Class 8 corrosive liquids with a flashpoint below 23°C (74°F) as defined in 49 CFR part 173, in enclosed cargo spaces, the bilge-pumping system must be designed to ensure against inadvertent pumping of such liquids through machinery-space piping or pumps.

(5) For each vessel constructed on or after June 9, 1995, and on an international voyage, arrangements must be made to drain the enclosed cargo spaces on either the bulkhead deck of a passenger vessel or the freeboard deck of a cargo vessel.

(i) If the deck edge, at the bulkhead deck of a passenger vessel or the freeboard deck of a cargo vessel, is immersed when the vessel heels 5° or less, the drainage of the enclosed cargo spaces must discharge to a space, or spaces, of adequate capacity, each of which has a high-water-level alarm and a means to discharge overboard. The number, size and arrangement of the drains must prevent unreasonable accumulation of water. The pumping arrangements must take into account the requirements for any fixed manual or automatic sprinkling system. In enclosed cargo spaces fitted with carbon-dioxide extinguishing systems, the drains must have traps or other means to prevent escape of the smothering gas. The enclosed cargo spaces must not drain to machinery spaces or other spaces where sources of ignition may be present if water may be contaminated with Class 3 flammable liquids; Class 6, Division 6.1, poisonous liquids; or Class 8 corrosive liquids with a flashpoint below 23°C (74°F).

(ii) If the deck edge, at the bulkhead deck of a passenger vessel or the

freeboard deck of a cargo vessel, is immersed only when the vessel heels more than 5°, the drainage of the enclosed cargo spaces may be by means of a sufficient number of scuppers discharging overboard. The installation of scuppers must comply with § 42.15–60 of this chapter.

* * * * *

(c)(1) Each bilge suction must lead from a manifold except as otherwise approved by the Commanding Officer, Marine Safety Center. As far as practicable, each manifold must be in, or be capable of remote operation from, the same space as the bilge pump that normally takes suction on that manifold. In either case, the manifold must be capable of being locally controlled from above the floorplates and must be easily accessible at all times. As far as practicable, each overboard-discharge valve for a bilge system must comply with the requirements governing location and accessibility for suction manifolds. Except as otherwise permitted by paragraph (c)(4) of this section for a vessel employing a common-rail bilge system, each bilge-manifold valve controlling a bilge suction from any compartment must be of the stop-check type.

(2) Each passenger vessel on an international voyage must have manifolds, where installed, and valves in the bilge-pumping system arranged so that, in case of flooding, one of the bilge pumps can take suction from any compartment and, further, so that damage to a pump or its piping connecting to the bilge main outboard of a line drawn at one-fifth of the beam of the vessel will not render the bilge system inoperative.

* * * * *

(4) A common-rail bilge system may be installed as an acceptable alternative to the system required by paragraph (c)(1) of this section, provided it satisfies all of the following criteria:

(i) The common-rail main runs inboard at least one-fifth of the beam of the vessel.

(ii) A stop-check valve or both a stop valve and a check valve are provided in each branch line and located inboard at least one-fifth of the beam of the vessel.

(iii) The stop valve or the stop-check valve is power-driven, is capable of remote operation from the space where the pump is, and, regardless of the status of the power system, is capable of manual operation to both open and close the valve.

(iv) The stop valve or the stop-check valve is accessible for both manual operation and repair under all operating conditions, and the space used for access contains no expansion joint or flexible coupling that, upon failure, would cause flooding and prevent access to the valve.

(v) A port and a starboard suction serve each space protected unless, under the worst conditions of list and trim and with liquid remaining after pumping, the vessel's stability remains acceptable, in accordance with subchapter S of this chapter.

(vi) For each vessel designed for the carriage of combinations of both liquid and dry bulk cargoes (O/B/O), no bilge pump or piping is located in a machinery space other than in a pump room for cargo, and no liquid and other cargoes are carried simultaneously.

(vii) For each cargo vessel in Great Lakes service, each common-rail piping for the bilge and ballast system serving cargo spaces, if installed and if connected to a dedicated common-rail bilge system, must lead separately from a valved manifold located at the pump.

* * * * *

(d) * * *

D=Molded depth (in feet) to the bulkhead deck.(6)

* * * * *

Note 6—For each passenger vessel constructed on or after June 9, 1995, and being on an international voyage, D must be measured to the next deck above the bulkhead deck if an enclosed cargo space on the bulkhead deck that is internally drained in accordance with paragraph (a)(4) of this section extends the entire length of the vessel. Where the enclosed cargo space extends a lesser length, D must be taken as the sum of the molded depth (in feet) to the bulkhead deck plus lh/L where l and h are the aggregate length and height (in feet) of the enclosed cargo space.

* * * * *

(h) Except as allowed by paragraph (c)(4)(vii) of this section, piping for draining a cargo hold or machinery space must be separate from piping used for filling or emptying any tank where water or oil is carried. Piping for bilge and ballast must be arranged so as to prevent, by the appropriate installation of stop and non-return valves, oil or water from the sea or ballast spaces from passing into a cargo hold or machinery space, or from passing from one compartment to another, regardless of the source. The bilge and ballast mains must be fitted with separate control valves at the pumps.

* * * * *

16. Section 56.50–55 is amended by revising paragraph (a) and Table 56.50–55(a) to read as follows:

§ 56.50–55 Bilge pumps.

(a) *Self-propelled vessels.* (1) Each self-propelled vessel must be provided with a power-driven pump or pumps connected to the bilge main as required by Table 56.50–55(a).

TABLE 56.50–55(a).—POWER BILGE PUMPS REQUIRED FOR SELF-PROPELLED VESSELS

Vessel length, in feet	Passenger vessels[1]			Dry-cargo vessels[2]		Tank vessels	Mobile offshore drilling units
	International voyages[3]	Ocean, coastwise and Great Lakes	All other waters	Ocean, coastwise and Great Lakes	All waters	All waters	All waters
180′ or more	[4]3	[4]3	2	2	2	2	2
Below 180′ and exceeding 65′	[4]3	[5]2	[5]2	[5]2	[5]2	2	2
65′ or less	3	1	1	1	1	1	.....

[1] Small passenger vessels under 100 gross tons refer to Subpart 182.25 of Subchapter T (Small Passenger Vessel) of this chapter.

[2] Dry-bulk carriers having ballast pumps connected to the tanks outside the engineroom and to the cargo hold may substitute the appropriate requirements for tank vessels.

[3] Not applicable to passenger vessels which do not proceed more than 20 mile from the nearest land, or which are employed in the carriage of large numbers of unberthed passengers in special trades.

[4] When the criterion numeral exceeds 30, an additional independent power-driven pump is required. (See Part 171 of this chapter for determination of criterion numeral.)

[5] Vessels operating on lakes (including Great Lakes), bays, sounds, or rivers where steam is always available, or where a suitable water supply is available from a power-driven pump of adequate pressure and capacity, may substitute siphons or eductors for one of the required power-driven pumps, provided a siphon or eductor is permanently installed in each hold or compartment.

* * * * *

17. Section 56.50–60 is amended by revising paragraphs (b) and (l) and by adding paragraphs (d)(1) (i), (m), and (n) to read as follows:

§ 56.50–60 Systems containing oil.

* * * * *

(b) When oil needs to be heated to lower its viscosity, heating coils must be properly installed in each tank.

(1) Each drain from a heating coil as well as each drain from an oil heater must run to an open inspection tank or other suitable oil detector before returning to the feed system.

(2) As far as practicable, no part of the fuel-oil system containing heated oil under pressure exceeding 180 KPa (26 psi) may be placed in a concealed position so that defects and leakage cannot be readily observed. Each machinery space containing a part of the system must be adequately illuminated.

* * * * *

(d) * * *

(1) * * *

(i) In the special case of a deep tank in any shaft tunnel, piping tunnel, or similar space, one or more valves must be fitted on the tank, but control in the event of fire may be effected by means of an additional valve on the piping outside the tunnel or similar space. Any such additional valve installed inside a machinery space must be capable of being operated from outside this space.

(ii) [Reserved]

* * * * *

(l) Where oil piping passes through a non-oil tank without stop valves complying with paragraph (d) of this section installed at all tank penetrations, the piping must comply with § 56.50–50(k).

(m) Each arrangement for the storage, distribution, and use of oil in a pressure-lubrication system must—

(1) As well as comply with § 56.50–80, be such as to ensure the safety of the vessel and all persons aboard; and

(2) In a machinery space, meet the applicable requirements of §§ 56.50–60 (b)(2) and (d), 56.50–85(a)(11), 56.50–90 (c) and (d), and 58.01–55(f) of this subchapter. No arrangement need comply with § 58.50–90 (c)(1) and (c)(3) of this subchapter if the sounding pipe is fitted with an effective means of closure, such as a threaded cap or plug or other means acceptable to the Officer in Charge, Marine Inspection. The use of flexible piping or hose is permitted in accordance with the applicable requirements of §§ 56.35–10, 56.35–15, and 56.60–25(c).

(n) Each arrangement for the storage, distribution, and use of any other flammable oil employed under pressure in a power transmission-system, control and activating system, or heating system must be such as to ensure the safety of the vessel and all persons aboard by—

(1) Complying with Subpart 58.30 of this subchapter; and,

(2) Where means of ignition are present, meeting the applicable requirements of §§ 56.50–85(a)(11), 56.50–90 (c) and (d), and 58.01–55(f) of this subchapter. Each pipe and its valves and fittings must be of steel or other approved material, except that the use of flexible piping or hose is permitted in accordance with the applicable requirements of §§ 56.35–10, 56.35–15, and 56.60–25(c).

18. Section 56.50–65 is amended by revising its heading and paragraph (h) to read as follows:

§ 56.50–65 Burner fuel-oil service systems.

* * * * *

(h) Each fuel-oil service pump must be equipped with controls as required by § 58.01–25 of this subchapter.

19. Section 56.50–70 is amended by revising paragraph (j) to read as follows:

§ 56.50–70 Gasoline fuel systems.

* * * * *

(j) *Fuel pumps.* Each fuel pump must be equipped with controls as required by § 58.01–25 of this subchapter.

20. Section 56.50–80 is amended by revising its heading and paragraph (h) to read as follows:

§ 56.50–80 Lubricating-oil systems.

* * * * *

(h) Sight-flow glasses may be used in lubricating-oil systems provided it has been demonstrated, to the satisfaction of the Commanding Officer, Marine Safety Center, that they can withstand exposure to a flame at a temperature of 927°C (1700°F) for one hour, without failure or appreciable leakage.

* * * * *

21. Section 56.50–85 is amended by removing paragraphs (a)(7) (iii) and (iv), by redesignating paragraph (a)(7)(v) as (a)(7)(iii), and by revising the heading and paragraph (a)(7)(ii), newly redesignated paragraph (a)(7)(iii), and paragraph (a)(11) to read as follows:

§ 56.50–85 Tank-vent piping.

(a) * * *

(7) * * *

* * * * *

(ii) A hinged closure normally open on the outlet of the return bend, which must close automatically by the force of a submerging wave; or

(iii) Another suitable device acceptable to the Commanding Officer, Marine Safety Center.

* * * * *

(11)(i) If a tank may be filled by a pressure head exceeding that for which the tank is designed, the aggregate cross-sectional area of the vents in each tank must be not less than the cross-sectional area of the filling line unless the tank is protected by overflows, in which case the aggregate cross-sectional area of the overflows must be not less than the cross-sectional area of the filling line.

(ii) Provision must be made to guard against liquids rising in the venting system to a height that would exceed the design head of a cargo tank or fuel-oil tank. It may be made by high-level alarms or overflow-control systems or other, equivalent means, together with gauging devices and procedures for filling cargo tanks.

* * * * *

22. Section 56.50–90 is amended by revising paragraph (a), redesignating existing paragraphs (c) and (d) as paragraphs (e) and (f), and adding paragraphs (c) and (d) to read as follows:

§ 56.50–90 Sounding devices.

(a) Each tank must be provided with a suitable means of determining liquid level. Except for a main cargo tank on a tank vessel, each integral hull tank and compartment, unless at all times accessible while the vessel is operating, must be fitted with a sounding pipe.

* * * * *

(c) Except as allowed by this paragraph, on each vessel constructed on or after June 9, 1995, no sounding pipe used in a fuel-oil tank may terminate in any space where the risk of ignition of spillage from the pipe might arise. None may terminate in a space for passengers or crew. When practicable, none may terminate in a machinery space. When the Commanding Officer, Marine Safety Center, determines it impracticable to avoid terminating a pipe in a machinery space, a sounding pipe may terminate in a machinery space if all the following requirements are met:

(1) In addition to the sounding pipe, the fuel-oil tank has an oil-level gauge complying with paragraph (d) of this section.

(2) The pipe terminates in a place remote from ignition hazards unless precautions are taken such as fitting an effective screen (shield) to prevent the fuel oil, in case of spillage through the end of the pipe, from coming into contact with a source of ignition.

(3) The end of the pipe is fitted with a self-closing blanking device and a small-diameter, self-closing control cock located below the blanking device for the purpose of ascertaining before the blanking device is opened that no fuel

oil is present. Provision must be made to ensure that no spillage of fuel oil through the control cock involves an ignition hazard.

(d) On each vessel constructed on or after June 9, 1995, other oil-level gauges may be used instead of sounding pipes if all the following requirements are met:

(1) In a passenger vessel, no such gauge may require penetration below the top of the tank, and neither the failure of a gauge nor an overfilling of the tank may permit release of fuel into the space.

(2) In a cargo vessel, neither the failure of such a gauge nor an overfilling of the tank may permit release of fuel into the space. The use of cylindrical gauge-glasses is prohibited. The use of oil-level gauges with flat glasses and self-closing valves between the gauges and fuel tanks is acceptable.

* * * * *

23. Section 56.50–105 is amended by revising its heading and paragraphs (a)(5) and (b)(5) to read as follows:

§ 56.50–105 Low-temperature piping.

(a) * * *

(5) *Other requirements.* All other requirements of this part for Class I piping apply to Class I–L piping. Pressure testing must comply with subpart 56.97 of this part, and nondestructive testing of circumferentially welded joints must comply with § 56.95–10. Seamless tubular products must be used except that, when the service pressure does not exceed 1724 KPa (250 psi), the Commanding Officer, Marine Safety Center, may give special consideration to appropriate grades of piping and tubing that are welded without the addition of filler metal in the root pass. Each production procedure and quality-control program for welded products must be acceptable to the Officer in Charge, Marine Inspection.

(b) * * *

(5) Pressure testing must comply with Subpart 56.97, and nondestructive testing of welded joints must comply with § 56.95–10.

* * * * *

24. Section 56.60–25 is amended by revising paragraphs (a)(3) and (b)(1) and by adding paragraph (a)(11) to read as follows:

§ 56.60–25 Nonmetallic materials.

(a) * * *

(3) No use of plastic piping within a concealed space in an accommodation or service area is permitted unless—

(i) Each trunk or duct containing such piping is completely surrounded by ''A'' class divisions; or

(ii) An approved smoke-detection system is fitted in the concealed space, and each penetration of a bulkhead or deck, and each installation of a draft stop, is made in accordance with paragraph (a)(2) of this section to maintain the integrity of fire divisions.

* * * * *

(11) Plastic piping intended for an accommodation area, a service area, or a control station must comply with the standard for the spread of flame or smoke established by Commandant (G–MTH).

(b) * * *

(1) Vital machinery served by plastic piping must be duplicated by equivalent machinery served entirely by conventional metallic piping unless allowed otherwise by this section. When such machinery is in separate watertight compartments, or is located or insulated so that damage to both by a single localized fire is unlikely, both may be fitted with plastic piping. (The Marine Inspector will make the final determination as to the adequacy of the separation between duplicate machinery installed in the same watertight compartment.) In no case may failure of plastic piping on one set of machinery affect the operation of the other machinery. Alternatively, a single set of machinery may be installed with parallel, but independent, piping systems, one of plastic and the other of metallic materials. Where metallic piping is required to duplicate or parallel plastic piping, failure of the plastic piping must not interfere with the proper operation of the metallic piping or of the machinery it serves.

* * * * *

PART 58—MAIN AND AUXILIARY MACHINERY AND RELATED SYSTEMS

25. The authority citation for part 58 is revised to read as follows:

Authority: 43 U.S.C. 1333; 46 U.S.C. 2103, 3306, 3703; E.O. 12234, 45 FR 58801, 3 CFR, 1980 Comp., p. 277; 49 CFR 1.46.

26. Section 58.01–10 is revised to read as follows:

§ 58.01–10 Fuel oil.

(a) The following limits apply to the use of oil as fuel:

(1) Except as otherwise permitted by this section, no fuel oil with a flashpoint of less than 60°C (140°F) may be used.

(2) Except as otherwise permitted by § 58.50–1(b), fuel oil with a flashpoint of not less than 43°C (110°F) may be used in emergency generators.

(3) Subject to such additional precautions as the Commanding Officer, Marine Safety Center, considers necessary, and provided that the ambient temperature of the space in which such fuel oil is stored or used does not rise to within 10°C (50°F) below the flashpoint of the fuel oil, fuel oil having a flashpoint of less than 60°C (140°F) but not less than 43°C (110°F) may be used in general.

(4) In a cargo vessel, fuel having a lower flashpoint than otherwise specified in this section—for example, crude oil—may be used provided that such fuel is not stored in any machinery space and that the Commanding Officer, Marine Safety Center, approves the complete installation.

(b) The flashpoint of oil must be determined by the Pensky-Martens Closed Tester, ASTM–D93–80.

§ 58.01–15 [Removed]

27. Section 58.01–15 is removed.

28. Section 58.01–25 is revised to read as follows:

§ 58.01–25 Means of stopping machinery.

Machinery driving forced-draft and induced-draft fans, fuel-oil transfer pumps, fuel-oil unit and service pumps, and similar fuel-oil pumps must be fitted with remote controls from a readily accessible position outside the space concerned so that the fans or pumps may be stopped in case of fire in the compartment in which they are located. The controls must be suitably protected against accidental operation and against tampering and must be suitably marked.

29. Sections 58.01–40, 58.01–45, 58.01–50, and 58.01–55 are added to read as follows:

§ 58.01–40 Machinery, angles of inclination.

(a) Propulsion machinery and all auxiliary machinery essential to the propulsion and safety of the vessel must be designed to operate when the vessel is upright, when the vessel is inclined under static conditions at any angle of list up to and including 15°, and when the vessel is inclined under dynamic conditions (rolling) at any angle of list up to and including 22.5° and, simultaneously, at any angle of trim (pitching) up to and including 7.5° by bow or stern.

(b) Deviations from these angles of inclination may be permitted by the Commanding Officer, Marine Safety Center, considering the type, size, and service of the vessel.

§ 58.01–45 Machinery space, ventilation.

Each machinery space must be ventilated to ensure that, when machinery or boilers are operating at full power in all weather including heavy weather, an adequate supply of air is maintained for the operation of the

machinery and for the safety, efficiency, and comfort of the crew.

§ 58.01–50 Machinery space, noise.

(a) Each machinery space must be designed to minimize the exposure of personnel to noise in accordance with IMO Assembly Resolution A.468(XII), Code on Noise Levels on Board Ships, 1981. No person may encounter a 24-hour effective noise level greater than 82 dB(A) when noise is measured using a sound-level meter and an A-weighting filter.

(b) Except as allowed by paragraph (c) of this section, no machinery space may exceed the following noise levels:

(1) Machinery control room—75 dB(A)
(2) Manned machinery space—90 dB(A)
(3) Unmanned machinery space—110 dB(A)
(4) Periodically unattended machinery space—110 dB(A)
(5) Workshop—85 dB(A)
(6) Any other work space around machinery—90 dB(A)

(c) If adding a source of noise would cause a machinery space to exceed the noise level permitted by paragraph (b) of this section, the new source must be suitably insulated or isolated so that the space does not exceed that noise level. If the space is manned, a refuge from noise must be provided within the space.

(d) Ear protection must be provided for any person entering any space with a noise level greater than 85 dB(A).

(e) Each entrance to a machinery space with a noise level greater than 85 dB(A) must have a warning sign stating that each person entering the space must wear ear protection.

§ 58.01–55 Tanks for flammable and combustible oil.

(a) For the purposes of this section, a machinery space of category A is a space that contains any of the following:

(1) Internal-combustion machinery used for main propulsion.

(2) Internal-combustion machinery used for other than main propulsion, whose power output is equal to or greater than 500 HP (375 kw).

(3) Any oil-fired boiler.

(4) Any equipment used to prepare fuel oil for delivery to an oil-fired boiler, or equipment used to prepare heated oil for delivery to an internal-combustion engine, including any oil-pressure pumps, filters, and heaters dealing with oil pressures above 26 psi.

(b) As far as practicable, each fuel-oil tank must be part of the vessel's structure and be located outside a machinery space of category A.

(c) If a fuel-oil tank, other than a double-bottom tank, must be located adjacent to or within a machinery space of category A—

(1) At least one of its vertical sides must be contiguous to the boundary of the machinery space;

(2) The tank must have a common boundary with the double-bottom tanks; and

(3) The area of the tank boundary common with the machinery spaces must be kept as small as practicable.

(d) If a fuel-oil tank must be located within a machinery space of category A, it must not contain fuel oil with a flashpoint of less than 60°C (140°F).

(e) In general, no freestanding fuel-oil tank is permitted in any machinery space of Category A on a passenger vessel. A freestanding fuel-oil tank is permitted in other spaces only if authorized by the Commanding Officer, Marine Safety Center. If so authorized, each freestanding fuel-oil tank must—

(i) Comply with Subpart 58.50 of this subchapter; and

(ii) Be placed in an oil-tight spill tray with a drain pipe leading to a spill-oil tank.

(f) No fuel-oil tank may be located where spillage or leakage from it can constitute a hazard by falling on heated surfaces. The design must also prevent any oil that may escape under pressure from any pump, filter, or heater from coming into contact with heated surfaces.

§ 58.03–1 [Amended]

30. Section 58.03–1(b) is amended by adding, in alphabetical order, two publications of the International Maritime Organization to read as follows:

* * * * *

(b) * * *

International Maritime Organization (IMO) 4 Albert Embankment, London SE1 7SR, England

A.467(XII), Guidelines for Acceptance of Non-Duplicated Rudder Actuators for Tankers, Chemical Tankers and Gas Carriers of 10,000 Tons Gross Tonnage and Above But Less Than 100,000 Tonnes Deadweight, 1981—58.25–60

A.468(XII), Code on Noise Levels on Board Ships, 1981—58.01–50

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Subpart 58.05—Main Propulsion Machinery

31–32. Subpart 58.05 is amended by revising paragraph (a) of § 58.05–1 and adding § 58.05–10 to read as follows:

§ 58.05–1 Material, design, and construction.

(a) The material, design, construction, workmanship, and arrangement of main propulsion machinery and of each auxiliary, directly connected to the engine and supplied as such, must be at least equivalent to the standards established by the American Bureau of Shipping or other recognized classification society, except as otherwise provided by this subchapter.

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§ 58.05–10 Automatic shut-off.

Main propulsion machinery must be provided with automatic shut-off controls in accordance with part 62 of this subchapter. These controls must shut down main propulsion machinery in case of a failure, such as failure of the lubricating-oil supply, that could lead rapidly to complete breakdown, serious damage, or explosion.

§ 58.10–15 [Amended]

33. Section 58.10–15 is amended by removing paragraph (e) and by redesignating paragraphs (f), (g), (h), (i), and (j), respectively, as (e), (f), (g), (h), and (i).

34. Subpart 58.25 is revised to read as follows:

Subpart 58.25—Steering Gear

Sec.
58.25–1 Applicability.
58.25–5 General.
58.25–10 Main and auxiliary steering gear.
58.25–15 Voice communications.
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58.25–85 Special requirements for tank vessels.

Subpart 58.25—Steering Gear

§ 58.25–1 Applicability.

(a) Except as specified otherwise, this subpart applies to—

(1) Each vessel or installation of steering gear contracted for on or after June 9, 1995; and

(2) Each vessel on an international voyage with an installation of steering gear contracted for on or after September 1, 1984.

(b) Each vessel not on an international voyage with an installation of steering gear contracted for before June 9, 1995, and each vessel on an international voyage with such an installation

contracted for before September 1, 1984, may meet either the requirements of this subpart or those in effect on the date of the installation.

§ 58.25–5 General.

(a) Definitions.

Ancillary steering equipment means steering equipment, other than the required control systems and power actuating systems, that either is not required, such as automatic pilot or non-followup control from the pilothouse, or is necessary to perform a specific required function, such as the automatic detection and isolation of a defective section of a tanker's hydraulic steering gear.

Auxiliary steering gear means the equipment, other than any part of the main steering gear, necessary to steer the vessel in case of failure of the main steering gear, not including a tiller, quadrant, or other component serving the same purpose. Control system means the equipment by which orders for rudder movement are transmitted from the pilothouse to the steering-gear power units. A control system for steering gear includes, but is not limited to, one or more—

(1) Transmitters;

(2) Receivers;

(3) Feedback devices;

(4) Hydraulic servo-control pumps, with associated motors and motor controllers;

(5) Differential units, hunting gear, and similar devices;

(6) All gearing, piping, shafting, cables, circuitry, and ancillary devices for controlling the output of power units; and

(7) Means of bringing steering-gear power units into operation.

Fast-acting valve, as used in this subpart, means a ball, plug, spool, or similar valve with a handle connected for quick manual operation.

Followup control means closed-loop (feedback) control that relates the position of the helm to a specific rudder angle by transmitting the helm-angle order to the power actuating system and, by means of feedback, automatically stopping the rudder when the angle selected by the helm is reached.

Main steering gear means the machinery, including power actuating systems, and the means of applying torque to the rudder stock, such as a tiller or quadrant, necessary for moving the rudder to steer the vessel in normal service.

Maximum ahead service speed means the greatest speed that a vessel is designed to maintain in service at sea at the deepest loadline draft.

Maximum astern speed means the speed that it is estimated the vessel can attain at the maximum designed power astern at the deepest loadline draft.

Power actuating system means the hydraulic equipment for applying torque to the rudder stock. It includes, but is not limited to—

(1) Rudder actuators;

(2) Steering-gear power units; and

(3) Pipes, valves, fittings, linkages, and cables for transmitting power from the power unit or units to the rudder actuator or actuators.

Speedily regained, as used in this subpart, refers to the time it takes one qualified crewmember, after arriving in the steering-gear compartment, and without the use of tools, to respond to a failure of the steering gear and take the necessary corrective action.

Steering capability means steering equivalent to that required of auxiliary steering gear by § 58.25–10(c)(2).

Steering gear means the machinery, including power actuating systems, control systems, and ancillary equipment, necessary for moving the rudder to steer the vessel.

Steering-gear power unit means:

(1) In the case of electric steering gear, an electric motor and its associated electrical equipment, including motor controller, disconnect switch, and feeder circuit.

(2) In the case of an electro-hydraulic steering gear, an electric motor, connected pump, and associated electrical equipment such as the motor controller, disconnect switch, and feeder circuit.

(3) In the case of hydraulic steering gear, the pump and its prime mover.

Tank vessel, as used in this subpart, means a self-propelled vessel, including a chemical tanker or a gas carrier, defined either as a tanker by 46 U.S.C. 2101(38) or as a tank vessel by 46 U.S.C. 2101(39).

(b) Unless it otherwise complies with this subpart, each self-propelled vessel must be provided with a main steering gear and an auxiliary steering gear. These gear must be arranged so that—

(1) The failure of one will not render the other inoperative; and

(2) Transfer from the main to the auxiliary can be effected quickly.

(c) Each substantial replacement of steering-gear components or reconfiguration of steering-gear arrangements on an existing vessel must comply with the requirements of this subpart for new installations to the satisfaction of the cognizant Officer in Charge, Marine Inspection.

(d) Each non-pressure-containing steering-gear component and each rudder stock must be of sound and reliable construction, meet the minimum material requirements of § 58.25–75, and be designed to standards at least equal to those established by the American Bureau of Shipping or other recognized classification society.

(e) The suitability of any essential steering-gear component not duplicated must be specifically approved by the Commanding Officer, Marine Safety Center. Where a steering-gear component is shared by—

(1) A control system (e.g., a control-system transfer switch located in the steering-gear compartment);

(2) The main and auxiliary steering gear (e.g., an isolation valve); or

(3) A power actuating system and its control system (e.g., a directional control valve)—the requirements for both systems apply, to provide the safest and most reliable arrangement.

(f) Steering gear must be separate and independent of all other shipboard systems, except—

(1) Electrical switchboards from which they are powered;

(2) Automatic pilots and similar navigational equipment; and

(3) Propulsion machinery for an integrated system of propulsion and steering.

(g) Except on a vessel with an integrated system of propulsion and steering, no thruster may count as part of a vessel's required steering capability.

(h) Except for a tank vessel subject to § 58.25–85(e), each oceangoing vessel required to have power-operated steering gear must be provided with arrangements for steadying the rudder both in an emergency and during a shift from one steering gear to another. On hydraulic steering gear, a suitable arrangement of stop valves in the main piping is an acceptable means of steadying the rudder.

(i) General arrangement plans for the main and auxiliary steering gear and their piping must be submitted for approval in accordance with subpart 50.20 of this subchapter.

§ 58.25–10 Main and auxiliary steering gear.

(a) Power-operated main and auxiliary steering gear must be separate systems that are independent throughout their length. Other systems and arrangements of steering gear will be acceptable if the Commanding Officer, Marine Safety Center, determines that they comply with, or exceed the requirements of, this subpart.

(b) The main steering gear and rudder stock must be—

(1) Of adequate strength for and capable of steering the vessel at

maximum ahead service speed, which must be demonstrated to the satisfaction of the cognizant Officer in Charge, Marine Inspection;

(2) Capable of moving the rudder from 35° on either side to 35° on the other with the vessel at its deepest loadline draft and running at maximum ahead service speed, and from 35° on either side to 30° on the other in not more than 28 seconds under the same conditions;

(3) Operated by power when necessary to comply with paragraph (b)(2) of this section or when the diameter of the rudder stock is over 12 centimeters (4.7 inches) in way of the tiller, excluding strengthening for navigation in ice; and

(4) Designed so that they will not be damaged when operating at maximum astern speed; however, this requirement need not be proved by trials at maximum astern speed and maximum rudder angle.

(c) The auxiliary steering gear must be—

(1) Of adequate strength for and capable of steering the vessel at navigable speed and of being brought speedily into action in an emergency;

(2) Capable of moving the rudder from 15° on either side to 15° on the other in not more than 60 seconds with the vessel at its deepest loadline draft and running at one-half maximum ahead service speed or 7 knots, whichever is greater; and

(3) Operated by power when necessary to comply with paragraph (c)(2) of this section or when the diameter of the rudder stock is over 23 centimeters (9 inches) in way of the tiller, excluding strengthening for navigation in ice.

(d) No auxiliary means of steering is required on a double-ended ferryboat with independent main steering gear fitted at each end of the vessel.

(e) When the main steering gear includes two or more identical power units, no auxiliary steering gear need be fitted, if—

(1) In a passenger vessel, the main steering gear is capable of moving the rudder as required by paragraph (b)(2) of this section while any one of the power units is not operating;

(2) In a cargo vessel, the main steering gear is capable of moving the rudder as required by paragraph (b)(2) of this section while all the power units are operating;

(3) In a vessel with an installation completed on or after September 1, 1984, and on an international voyage, and in any other vessel with an installation completed after June 9, 1995, the main steering gear is arranged so that, after a single failure in its piping system (if hydraulic), or in one of the power units, the defect can be isolated so that steering capability can be maintained or speedily regained in less than ten minutes; or

(4) In a vessel with an installation completed before September 1, 1986, and on an international voyage, with steering gear not complying with paragraph (e)(3) of this section, the installed steering gear has a proved record of reliability and is in good repair.

Note.—The place where isolation valves join the piping system, as by a flange, constitutes a single-failure point. The valve itself need not constitute a single-failure point if it has a double seal to prevent substantial loss of fluid under pressure. Means to purge air that enters the system as a result of the piping failure must be provided, if necessary, so that steering capability can be maintained or speedily regained in less than ten minutes.

(f) In each vessel of 70,000 gross tons or over, the main steering gear must have two or more identical power units complying with paragraph (e) of this section.

§ 58.25–15 Voice communications.

Each vessel must be provided with a sound-powered telephone system, complying with subpart 113.30 of this chapter, to communicate between the pilothouse and the steering-gear compartment, unless an alternative means of communication between them has been approved by the Commanding Officer, Marine Safety Center.

§ 58.25–20 Piping for steering gear.

(a) Pressure piping must comply with subpart 58.30 of this part.

(b) Relief valves must be fitted in any part of a hydraulic system that can be isolated and in which pressure can be generated from the power units or from external forces such as wave action. The valves must be of adequate size, and must be set to limit the maximum pressure to which the system may be exposed, in accordance with § 56.07–10(b) of this subchapter.

(c) Each hydraulic system must be provided with—

(1) Arrangements to maintain the cleanliness of the hydraulic fluid, appropriate to the type and design of the hydraulic system; and

(2) For a vessel on an ocean, coastwise, or Great Lakes voyage, a fixed storage tank having sufficient capacity to recharge at least one power actuating system including the reservoir. The storage tank must be permanently connected by piping so that the hydraulic system can be readily recharged from within the steering-gear compartment and must be fitted with a device to indicate liquid level that complies with § 56.50–90 of this subchapter.

(d) Neither a split flange nor a flareless fitting of the grip or bite type, addressed by § 56.30–25 of this subchapter, may be used in hydraulic piping for steering gear.

§ 58.25–25 Indicating and alarm systems.

(a) Indication of the rudder angle must be provided both at the main steering station in the pilothouse and in the steering-gear compartment. The rudder-angle indicator must be independent of control systems for steering gear.

(b) Each electric-type rudder-angle indicator must comply with § 113.40–10 of this chapter and, in accordance with § 112.15–5(h) of this chapter, draw its power from the source of emergency power.

(c) On each vessel of 1,600 gross tons or over, a steering-failure alarm must be provided in the pilothouse in accordance with §§ 113.43–3 and 113.43–5 of this chapter.

(d) An audible and a visible alarm must activate in the pilothouse upon—

(1) Failure of the electric power to the control system of any steering gear;

(2) Failure of that power to the power unit of any steering gear; or

(3) Occurrence of a low oil level in any oil reservoir of a hydraulic, power-operated steering-gear system.

(e) An audible and a visible alarm must activate in the machinery space upon—

(1) Failure of any phase of a three-phase power supply;

(2) Overload of any motor described by § 58.25–55(c); or

(3) Occurrence of a low oil level in any oil reservoir of a hydraulic, power-operated steering-gear system.

Note.—See § 62.50–30(f) of this subchapter regarding extension of alarms to the navigating bridge on vessels with periodically unattended machinery spaces.

(f) Each power motor for the main and auxiliary steering gear must have a ''motor running'' indicator light in the pilothouse, and in the machinery space, that activates when the motor is energized.

§ 58.25–30 Automatic restart.

Each control system for main and auxiliary steering gear and each power actuating system must restart automatically when electrical power is restored after it has failed.

§ 58.25–35 Helm arrangements.

(a) The arrangement of each steering station, other than in the steering-gear

compartment, must be such that the helmsman is abaft the wheel. The rim of the wheel must be plainly marked with arrows and lettering for right and left rudder, or a suitable notice indicating these directions must be posted directly in the helmsman's line of sight.

(b) Each steering wheel must turn clockwise for ''right rudder'' and counterclockwise for ''left rudder.'' When the vessel is running ahead, after clockwise movement of the wheel the vessel's heading must change to the right.

(c) If a lever-type control is provided, it must be installed and marked so that its movement clearly indicates both the direction of the rudder's movement and, if followup control is also provided, the amount of the rudder's movement.

(d) Markings in the pilothouse must not interfere with the helmsman's vision, but must be clearly visible at night.

Note.—See § 113.40–10 of this chapter for the arrangement of rudder-angle indicators at steering stations.

§ 58.25–40 Arrangement of the steering-gear compartment.

(a) The steering-gear compartment must—

(1) Be readily accessible and, as far as practicable, separated from any machinery space;

(2) Ensure working access to machinery and controls in the compartment; and

(3) Include handrails and either gratings or other non-slip surfaces to ensure a safe working environment if hydraulic fluid leaks.

Note.—Where practicable, all steering gear should be located in the steering-gear compartment.

(b) [Reserved]

§ 58.25–45 Buffers.

For each vessel on an ocean, coastwise, or Great Lakes voyage, steering gear other than hydraulic must be designed with suitable buffering arrangements to relieve the gear from shocks to the rudder.

§ 58.25–50 Rudder stops.

(a) Power-operated steering gear must have arrangements for cutting off power to the gear before the rudder reaches the stops. These arrangements must be synchronized with the rudder stock or with the gear itself rather than be within the control system for the steering gear, and must work by limit switches that interrupt output of the control system or by other means acceptable to the Commanding Officer, Marine Safety Center.

(b) Strong and effective structural rudder stops must be fitted; except that, where adequate positive stops are provided within the steering gear, such structural stops need not be fitted.

§ 58.25–55 Overcurrent protection for steering-gear systems.

(a) Each feeder circuit for steering must be protected by a circuit breaker on the switchboard that supplies it and must have an instantaneous trip set at a current of at least—

(1) 300% and not more than 375% of the rated full-load current of one steering-gear motor for a direct-current motor; or

(2) 175% and not more than 200% of the locked-rotor current of one steering-gear motor for an alternating-current motor.

(b) No feeder circuit for steering may have any overcurrent protection, except that required by paragraph (a) of this section.

(c) Neither a main or an auxiliary steering-gear motor, nor a motor for a steering-gear control system, may be protected by an overload protective device. The motor must have a device that activates an audible and a visible alarm at the main machinery-control station if there is an overload that would cause overheating of the motor.

(d) No control circuit of a motor controller, steering-gear control system, or indicating or alarm system may have overcurrent protection except short-circuit protection that is instantaneous and rated at 400% to 500% of—

(1) The current-carrying capacity of the conductor; or

(2) The normal load of the system.

(e) The short-circuit protective device for each steering-gear control system must be in the steering-gear compartment and in the control circuit immediately following the disconnect switch for the system.

(f) When, in a vessel of less than 1,600 gross tons, an auxiliary steering gear, which § 58.25–10(c)(3) requires to be operated by power, is not operated by electric power or is operated by an electric motor primarily intended for other service, the main steering gear may be fed by one circuit from the main switchboard. When such an electric motor is arranged to operate an auxiliary steering gear, neither § 58.25–25(e) nor paragraphs (a) through (c) of this section need be complied with if both the overcurrent protection and compliance with §§ 58.25–25(d), 58.25–30, and 58.25–70 (j) and (k) satisfy the Commanding Officer, Marine Safety Center.

§ 58.25–60 Non-duplicated hydraulic rudder actuators.

Non-duplicated hydraulic rudder actuators may be installed in the steering-gear control systems on each vessel of less than 100,000 deadweight tons. These actuators must meet IMO Assembly Resolution A.467(XII), Guidelines for Acceptance of Non-Duplicated Rudder Actuators for Tankers, Chemical Tankers, and Gas Carriers of 10,000 Tons Gross Tonnage and Above But Less Than 100,000 Tonnes Deadweight, 1981, and be acceptable to the Commanding Officer, Marine Safety Center. Also, the piping for the main gear must comply with § 58.25–10(e)(3).

§ 58.25–65 Feeder circuits.

(a) Each vessel with one or more electric-driven steering-gear power units must have at least two feeder circuits, which must be separated as widely as practicable. One or more of these circuits must be supplied from the vessel's service switchboard. On a vessel where the rudder stock is over 23 centimeters (9 inches) in diameter in way of the tiller, excluding strengthening for navigation in ice, and where a final source of emergency power is required by § 112.05–5(a) of this chapter, one or more of these circuits must be supplied from the emergency switchboard, or from an alternative source of power that—

(1) Is available automatically within 45 seconds of loss of power from the vessel's service switchboard;

(2) Comes from an independent source of power in the steering-gear compartment;

(3) Is used for no other purpose; and

(4) Has a capacity for one half-hour of continuous operation, to move the rudder from 15° on either side to 15° on the other in not more than 60 seconds with the vessel at its deepest loadline draft and running at one-half maximum ahead service speed or 7 knots, whichever is greater.

(b) Each vessel that has a steering gear with multiple electric-driven power units must be arranged so that each power unit is supplied by a separate feeder.

(c) Each feeder circuit must have a disconnect switch in the steering-gear compartment.

(d) Each feeder circuit must have a current-carrying capacity of—

(1) 125% of the rated full-load current rating of the electric steering-gear motor or power unit; and

(2) 100% of the normal current of one steering-gear control system including all associated motors.

§ 58.25–70 Steering-gear control systems.

(a) Each power-driven steering-gear system must be provided with at least one steering-gear control system.

(b) The main steering gear must be operable from the pilothouse by mechanical, hydraulic, electrical, or other means acceptable to the Commanding Officer, Marine Safety Center. This gear and its components must give full followup control of the rudder. Supplementary steering-gear control not giving full followup may also be provided from the pilothouse.

(c) Each steering-gear control system must have in the pilothouse a switch arranged so that one operation of the switch's lever automatically supplies power to a complete system and its associated power unit or units. This switch must be—

(1) Operated by one lever;

(2) Arranged so that not more than one control system and its associated power unit or units can be energized from the pilothouse at any one time;

(3) Arranged so that the lever passes through ''off'' during transfer of control from one control system to another; and

(4) Arranged so that the switches for each control system are in separate enclosures or are separated by fire-resistant barriers.

(d) Each steering-gear control system must receive its power from—

(1) The feeder circuit supplying power to its steering-gear power unit or units in the steering-gear compartment; or

(2) A direct connection to the busbars supplying the circuit for its steering-gear power unit or units from a point on the switchboard adjacent to that supply.

(e) Each steering-gear control system must have a switch that—

(1) Is in the steering-gear compartment; and

(2) Disconnects the system from its power source and from the steering gear that the system serves.

(f) Each motor controller for a steering gear must be in the steering-gear compartment.

(g) A means of starting and stopping each motor for a steering gear must be in the steering-gear compartment.

(h) When the main steering gear is arranged in accordance with § 58.25–10(e), two separate and independent systems for full followup control must be provided in the pilothouse; except that—

(1) The steering wheel or lever need not be duplicated; and

(2) If the system consists of a hydraulic telemotor, no second separate and independent system need be provided other than on each tank vessel subject to § 58.25–85.

(i) When only the main steering gear is power-driven, two separate and independent systems for full followup control must be provided in the pilothouse; except that the steering wheel or lever need not be duplicated.

(j) When the auxiliary steering gear is power-driven, a control system for the auxiliary steering gear must be provided in the pilothouse that is separate and independent from the control system for the main steering gear; except that the steering wheel or lever need not be duplicated.

(k) On a vessel of 500 gross tons or above, each main steering gear and auxiliary steering gear must be arranged so that its power unit or units are operable by controls from the steering-gear compartment. These controls must not be rendered inoperable by failure of the controls in the pilothouse.

§ 58.25–75 Materials.

(a) Materials used for the mechanical or hydraulic transmission of power to the rudder stock must have an elongation of at least 15% in 5 centimeters (2 inches); otherwise, components used for this purpose must be shock-tested in accordance with subpart 58.30 of this part.

(b) No materials with low melting-points, including such materials as aluminum and nonmetallic seals, may be used in control systems for steering gear or in power actuating systems unless—

(1) The materials are within a compartment having little or no risk of fire;

(2) Because of redundancy in the system, damage by fire to any component would not prevent immediate restoration of steering capability; or

(3) The materials are within a steering-gear power actuating system.

§ 58.25–80 Automatic pilots and ancillary steering gear.

(a) Automatic pilots and ancillary steering gear, and steering-gear control systems, must be arranged to allow immediate resumption of manual operation of the steering-gear control system required in the pilothouse. A switch must be provided, at the primary steering position in the pilothouse, to completely disconnect the automatic equipment from the steering-gear controls.

(b) Automatic pilots and ancillary steering gear must be arranged so that no single failure affects proper operation and independence of the main or auxiliary steering gear, required controls, rudder-angle indicators, or steering-failure alarm.

§ 58.25–85 Special requirements for tank vessels.

(a) Each tank vessel must meet the applicable requirements of §§ 58.25–1 through 58.25–80.

(b) On each tank vessel of 10,000 gross tons or over, the main steering gear must comprise two or more identical power units that comply with § 58.25–10(e)(2).

(c) Each tank vessel of 10,000 gross tons or over constructed on or after September 1, 1984, must comply with the following:

(1) The main steering gear must be arranged so that, in case of loss of steering capability due to a single failure in any part of the power actuating system of the main steering gear, excluding seizure of a rudder actuator or failure of the tiller, quadrant, or components serving the same purpose, steering capability can be regained not more than 45 seconds after the loss of one power actuating system.

(2) The main steering gear must include either—

(i) Two separate and independent power actuating systems, complying with § 58.25–10(b)(2); or

(ii) At least two identical hydraulic-power actuating systems, which, acting simultaneously in normal operation, must comply with § 58.25–10(b)(2). (When they must so comply, these systems must be connected. Loss of hydraulic fluid from one system must be capable of being detected, and the defective system automatically isolated, so the other system or systems remain fully operational.)

(3) Steering gear other than hydraulic must meet equivalent standards to the satisfaction of the Commanding Officer, Marine Safety Center.

(d) On each tank vessel of 10,000 gross tons or over, but less than 100,000 deadweight tons, the main steering gear need not comply with paragraph (c) of this section if the rudder actuator or actuators installed are non-duplicated hydraulic and if—

(1) The actuators comply with § 58.25–60; and

(2) In case of loss of steering capability due to a single failure either of any part of the piping systems or in one of the power units, steering capability can be regained in not more than 45 seconds.

(e) On each tank vessel of less than 70,000 deadweight tons, constructed before, and with a steering-gear installation before, September 1, 1986, and on an international voyage, the steering gear not complying with paragraph (c) (1), (2), or (3) of this section, as applicable, may continue in service if the steering gear has a proved

record of reliability and is in good repair.

(f) Each tank vessel of 10,000 gross tons or over, constructed before, and with a steering-gear installation before, September 1, 1984, must—

(1) Meet the applicable requirements in §§ 58.25–15, 58.25–20(c), 58.25–25 (a), (d), and (e), and 58.25–70 (e), (h), (i), and (j);

(2) Ensure working access to machinery and controls in the steering-gear compartment (which must include handrails and either gratings or other non-slip surfaces to ensure a safe working environment in case hydraulic fluid leaks);

(3) Have two separate and independent steering-gear control systems, each of which can be operated from the pilothouse; except that it need not have separate steering wheels or steering levers;

(4) Arrange each system required by paragraph (f)(3) of this section so that, if the one in operation fails, the other can be operated from the pilothouse immediately; and

(5) Supply each system required by paragraph (f)(3) of this section, if electric, with power by a circuit that is—

(i) Used for no other purpose; and either—

(ii) Connected in the steering-gear compartment to the circuit supplying power to the power unit or units operated by that system; or

(iii) Connected directly to the busbars supplying the circuit for its steering-gear power unit or units at a point on the switchboard adjacent to that supply.

(g) Each tank vessel of 40,000 gross tons or over, constructed before, and with a steering-gear installation before, September 1, 1984, and on an international voyage, must have the steering gear arranged so that, in case of a single failure of the piping or of one of the power units, either steering capability equivalent to that required of the auxiliary steering gear by § 58.25–10(c)(2) can be maintained or the rudder's movement can be limited so that steering capability can be speedily regained in less than 10 minutes. This arrangement must be achieved by—

(1) An independent means of restraining the rudder;

(2) Fast-acting valves that may be manually operated to isolate the actuator or actuators from the external hydraulic piping, together with a means of directly refilling the actuators by a fixed, independent, power-operated pump and piping; or

(3) An arrangement such that, if hydraulic-power actuating systems are connected, loss of hydraulic fluid from one system must be detected and the defective system isolated either automatically or from within the pilothouse so that the other system remains fully operational.

Note.—The term ''piping or * * * one of the power units'' in paragraph (g) of this section refers to the pressure-containing components in hydraulic or electro-hydraulic steering gear. It does not include rudder actuators or hydraulic-control servo piping and pumps used to stroke the pump or valves of the power unit, unless their failure would result in failure of the unit or of the piping to the actuator.

35. Section 58.30–5 is amended by adding paragraph (d) to read as follows:

§ 58.30–5 Design requirements.

* * * * *

(d) Each pneumatic system must minimize the entry of oil into the system and must drain the system of liquids.

PART 61—PERIODIC TESTS AND INSPECTIONS

36. The authority citation for part 61 is revised to read as follows:

Authority: 43 U.S.C. 1333; 46 U.S.C. 2103, 3306, 3703; E.O. 12234, 45 FR 58801, 3 CFR, 1980 Comp., p. 277; 49 CFR 1.46.

37. Section 61.05–10 is amended by revising paragraphs (a) and (b), removing current Table 61.05–10, and adding new Table 61.05–10 after current paragraph (g) to read as follows:

§ 61.05–10 Boilers in service.

(a) Each boiler, including superheater, reheater, economizer, auxiliary boiler, low-pressure heating boiler, and unfired steam boiler, must be available for examination by the marine inspector at intervals specified by Table 61.05–10, and more often if necessary, to determine that the complete unit is in a safe and satisfactory condition. When a hydrostatic test is required, the marine inspector may examine all accessible parts of the boiler while it is under pressure.

(b) The owner, master, or person in charge of the vessel shall give ample notice to the cognizant Officer in Charge, Marine Inspection, so that a marine inspector may witness the tests and make the required inspections.

* * * * *

TABLE 61.05–10.—INSPECTION INTERVALS FOR BOILERS [1] [2] [3]

	Firetube boiler ≥ 150 psi	Watertube boiler	Any firetube boiler for propulsion	Firetube boiler < 150 psi
Hydro Test:				
Passenger Vessel	2.5	2.5	1	2.5
Other Vessel	2.5	5	1	5
Fireside Inspection	1	2.5	1	2.5
Waterside Inspection	1	2.5	1	2.5
Boiler Safety-Valve Test	1	COI	1	1
Valves Inspection	5	5	5	5
Studs and Bolts Inspection	10	10	10	10
Mountings Inspection	10	10	10	10
Steam Gauge Test	COI	COI	COI	COI
Fusible Plug Inspection	2.5	.....	COI	2.5

[1] All intervals are in years; where COI is used, the intervals coincide with the applicable vessel's inspection for certification.

[2] Where the 2.5-year interval is indicated: two tests or inspections must occur within any five-year period, and no more than three years may elapse between any test or inspection and its immediate predecessor.

[3] Intervals for hybrid boilers are the same as for firetube boilers.

38. Section 61.05–15 is amended by revising paragraphs (a), (b), (c)(1), (f), and (g) to read as follows:

§ 61.05–15 Boiler mountings and attachments.

(a) Each valve shall be opened and examined by the marine inspector at the interval specified in Table 61.05–10.

(b) Each stud or bolt for each boiler mounting that paragraph (c) of this section requires to be removed may be examined by the marine inspector.

(c)(1) Each boiler mounting may be removed from the boiler and be examined by the marine inspector at the interval specified by Table 61.05–10 when any of the following conditions exist:

* * * * *

(f) Each steam gauge for a boiler or a main steam line may be examined and checked for accuracy by the marine inspector at the interval specified by Table 61.05–10.

(g) Each fusible plug may be examined by the marine inspector at the interval specified by Table 61.05–10.

39. Section 61.05–20 is revised to read as follows:

§ 61.05–20 Boiler safety valves.

Each safety valve for a drum, superheater, or reheater of a boiler shall be tested and resealed in the presence of the marine inspector at the interval specified by Table 61.05–10.

40. Section 61.10–5 is amended by revising the heading and paragraphs (a), (b), (d), and (g) to read as follows:

§ 61.10–5 Pressure vessels in service.

(a) *Basic requirement.* Each pressure vessel must be examined or tested twice within any five-year period, except that no more than three years may elapse between any test or examination and its immediate predecessor. The extent of the test or examination should be that necessary to determine that the pressure vessel's condition is satisfactory and that the pressure vessel is fit for the service intended.

(b) *Internal and external tests and inspections.* Each pressure vessel stamped with the Coast Guard symbol, and each pressure vessel in a system regulated under subpart 58.60 of this subchapter that is fitted with a manhole or other inspection opening so it can be satisfactorily examined internally, must be opened twice within any five-year period, except that no more than three years may elapse between any examination and its immediate predecessor. Each pressure vessel must be thoroughly examined internally and externally. No pressure vessel need be hydrostatically tested except when any defect in a pressure vessel is found that, in the marine inspector's opinion, may affect the safety of the pressure vessel; in this case, the pressure vessel should be hydrostatically tested at a pressure of 1½ times the maximum allowable working pressure.

* * * * *

(d) *Hydrostatic tests under pressure.* Each pressure vessel, other than one exempted by this section, must be subjected to a hydrostatic test at a pressure of 1¼ times the maximum allowable working pressure twice within any five-year period, except that no more than three years may elapse between any test and its immediate predecessor.

* * * * *

(g) *Bulk storage tanks.* Each bulk storage tank containing refrigerated liquefied CO_2 for use aboard a vessel as a fire-extinguishing agent shall be subjected to a hydrostatic test of 1½ times the maximum allowable working pressure in the tenth year of the installation and at ten-year intervals thereafter. After the test, the tank should be drained and an internal examination made. Parts of the jacket and lagging on the underside of the tank designated by the marine inspector must be removed at the time of the test so the marine inspector may determine the external condition of the tank.

* * * * *

41. Section 61.15–5 is amended by revising paragraph (b) to read as follows:

§ 61.15–5 Steam piping.

* * * * *

(b) All steam piping subject to pressure from the main boiler should be subjected to a hydrostatic test at a pressure of 1¼ times the maximum allowable working pressure of the boiler after every five years of service except as otherwise provided for in paragraph (a) of this section. Unless the covering of the piping is removed, the test pressure must be maintained on the piping for ten minutes. If any evidence of moisture or leakage is detected, the covering should be removed and the piping thoroughly examined. No piping with a nominal size of 3 inches or less need be hydrostatically tested.

* * * * *

PART 111—ELECTRIC SYSTEMS—GENERAL REQUIREMENTS

42. The authority citation for part 111 is revised to read as follows:

Authority: 46 U.S.C. 2103, 3306, 3703; 49 CFR 1.46.

43. Subpart 111.93 (consisting of §§ 111.93–1, 111.93–3, 111.93–5, 111.93–7, 111.93–9, 111.93–11, and 111.93–13) is removed.

§§ 111.93–1, 111.93–3, 111.93–5, 111.93–7, 111.93–9, 111.93–11, and 111.93–13 (Subpart 111.93) [Removed]

Dated: April 13, 1995.

G.N. Naccara,

Acting Chief, Office of Marine Safety, Security and Environmental Protectoin.

[FR Doc. 95–10921 Filed 5–9–95; 8:45 am]

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ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 180

[OPP–300379A; FRL–4941–7]

RIN 2070–AB78

Imidacloprid; Extended Tolerance on Dried Hops

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This document extends the tolerance for residues of the insecticide 1-[(6-chloro-3-pyridinyl) methyl]-*N*-nitro-2-imidazolidinimine and its metabolites (common name ''imidacloprid'') in or on dried hops at 3.0 parts per million (ppm). On its own inititative, EPA is extending the tolerance to allow time to review a petition from the Interregional Research Project No. 4 (IR-4).

EFFECTIVE DATE: This regulation becomes effective May 10, 1995.

ADDRESSES: Written objections, identified by the document control number, [OPP-300379A], may be submitted to: Hearing Clerk (1900), Environmental Protection Agency, Rm. M3708, 401 M St., SW., Washington, DC 20460. Fees accompanying objections shall be labeled ''Tolerance Petition Fees'' and forwarded to: EPA Headquarters Accounting Operations Branch, OPP (Tolerance Fees), P.O. Box 360277M, Pittsburgh, PA 15251. A copy of any objections and hearing requests filed with the Hearing Clerk should be identified by the document control number and submitted to: Public Response and Program Resources Branch, Field Operations Division (7506C), Office of Pesticide Programs, Environmental Protection Agency, 401 M St., SW., Washington, DC 20460. In person, bring copy of objections and hearing requests to: Rm. 1132, CM #2, 1921 Jefferson Davis Hwy., Arlington, VA 22202.

A copy of objections and requests for hearings filed with the Hearing Clerk