

DEPARTMENT OF TRANSPORTATION

Coast Guard

33 CFR Parts 154 and 155

46 CFR Parts 12, 13, 15, 30, 31, 35, 78, 90, 97, 98, 105, 151, 153, and 154

[CGD 79-116]

RIN 2115-AA03

Qualifications for Tankermen, and for Persons in Charge of Transfers of Dangerous Liquids and Liquefied Gases

AGENCY: Coast Guard, DOT.

ACTION: Interim rule.

SUMMARY: The Coast Guard is issuing an interim rule that sets out qualifications for tankermen, and for persons in charge of, and assisting in, the handling, transfer, and transport of oil and certain hazardous liquid cargoes in bulk aboard vessels. It intends the establishment of training standards, of operational requirements, and of a certification procedure to ensure that these persons are competent to perform their duties even during emergencies. Implementation of this rule will improve the handling, transfer, and transport of these cargoes and reduce the risk and severity of spillage from tank vessels.

DATES: This interim rule is effective March 31, 1996. Comments must be received by June 30, 1995.

ADDRESSES: Comments may be mailed to the Executive Secretary, Marine Safety Council (G-LRA-2, 3406) (CGD 79-116), U.S. Coast Guard Headquarters, 2100 Second Street SW., Washington, DC 20593-0001, or may be delivered to Room 3406 at the above address between 8 a.m. and 3 p.m., Monday through Friday, except Federal holidays. The telephone number is (202) 267-1477.

FOR FURTHER INFORMATION CONTACT: LCDR David C. Paxton, Project Manager, Office of Marine Safety, Security, and Environmental Protection (G-MVP), phone (202) 267-0224.

SUPPLEMENTARY INFORMATION: Although this is a rule, not a notice, it is an interim rule; changes may be made, where warranted. Therefore, interested persons may participate in evaluating this rule by submitting written data, views, or arguments. Each written comment should include the name and address of the person making it, identify this rule (CGD 79-116) and the specific section of the rule to which the comment applies, and give a reason for the comment. Please submit two copies

of each comment and attachment in an unbound format, no larger than 8½ by 11 inches, suitable for copying and electronic filing. A person desiring an acknowledgment that his or her comment has been received should enclose a stamped, self-addressed postcard or envelope. The Coast Guard will consider all comments received during the comment period before it decides whether to modify or confirm this rule.

The Executive Secretary maintains the public docket for this rulemaking. Comments will become part of this docket and will be available for inspection or copying at Room 3406, U.S. Coast Guard Headquarters.

Drafting Information

The principal persons involved in drafting this document are LCDR David C. Paxton, Project Manager, and Mr. Patrick J. Murray, Project Counsel, Office of Chief Counsel.

Regulatory History

The Coast Guard published in the **Federal Register** a supplemental notice of proposed rulemaking (SNPRM), on October 17, 1989: CGD 79-116 and CGD 79-116a (54 FR 42624), entitled, "Tankerman Requirements and Qualifications for Persons-in-Charge of Dangerous Liquid and Liquefied Gas Transfer Operations". The Coast Guard received 42 comments on this SNPRM. No public meeting was requested, nor was one held.

Before the SNPRM, the Coast Guard had published in the **Federal Register** two notices of proposed rulemaking (NPRMs), both on December 18, 1980: CGD 79-116 (45 FR 83290), with proposed rules for tankermen; and CGD 79-116a (45 FR 83268), with proposed rules for persons in charge of oil transfers. The Coast Guard combined these two rulemakings in the SNPRM, and withdrew docket 79-116a as a distinct rulemaking.

Background and Purpose

Since the early 1970s, a number of major marine casualties have occurred through human error and a lack of awareness on the part of personnel involved in the handling, transfer, and transport of dangerous liquids and liquefied gases as cargo on vessels. Among these were the explosions of the M/V VENUS in 1972 and of the SS SANSINENA in 1976.

In 1978 there occurred two events that established a legal framework for this interim rule. First, there was enacted the Port and Tanker Safety Act (PTSA) (codified as 46 U.S.C., Chapter 37) of that year, one of whose provisions

required the Secretary of Transportation to prescribe regulations on, among other things, personnel qualifications and manning standards for tank vessels of the United States. (The NPRMs published in 1980, on tankermen (45 FR 83290) and on persons in charge of oil transfers (45 FR 83268), were intended to implement, in part, that statutory mandate.) Second, there was adopted the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW), 1978, at a conference sponsored by the International Maritime Consultative Organization (IMCO; International Maritime Organization (IMO) since 1982). STCW and its associated resolutions contain a number of regulations and recommendations on training and qualifications for personnel with responsibilities related to the cargo and cargo equipment on tankers. During the 1980s the Coast Guard revised its rules on these in 46 CFR parts 10 and 15, to render them compatible with STCW.

IMO developed a number of revisions to STCW. Among these revisions was a set of amendments to Chapter V adding requirements for personnel on tankers. (The amendments were adopted by the Maritime Safety Committee in May 1994, and come into force in May 1995.) After these amendments come into force, Chapter V will contain more detailed requirements on training and qualifications than it does now; and Administrations will have to ensure either that an authorized document is issued to officers and rated personnel found qualified in accordance with the new requirements or that an appropriate existing document is endorsed. (Chapter V is undergoing a review along with the rest of STCW, which should be complete in 1995. Amendments adopted at that time will probably come into force in 1996 or 1997. If necessary, this interim rule will be revised to conform with any new requirements due to those amendments.)

Since the stranding of the M/V EXXON VALDEZ, Congress has enacted the Oil Pollution Act of 1990. This statute, too, concerns manning standards for tank vessels, including a requirement that the manning of each of these vessels take into account "the navigation, cargo handling, and maintenance functions of that vessel for protection of life, property, and the environment" (Subsection 4114(c), amending 46 U.S.C. 8101(a)(3); emphasis added). This statute gives new impetus to the development of rules for tankermen and for persons in charge of oil transfers.

In the last few years, the Coast Guard's Towing Safety Advisory Committee (TSAC) has considered many of the issues addressed in the SNPRM. TSAC has made valuable contributions to the development of these regulations.

Discussion of Comments

All of the 42 comments on the SNPRM supported the SNPRM in principle, and none recommended major changes. The Coast Guard takes this to indicate that the SNPRM addressed all of the significant issues raised by those who submitted comments on the NPRMs. The specific comments are summarized and discussed below.

1. Persons in Charge (PICs) Under 33 CFR Parts 154 and 155

One comment recommended that a definition for *Tankship* should be provided in part 154. The Coast Guard agrees and has added a definition in § 154.105.

One comment suggested that the wording of § 155.700 be revised to indicate that the person in charge (PIC) could be designated by name or by position in the crew. The Coast Guard agrees with this suggestion and has revised the wording of § 155.700.

Another comment urged that the reference to in *agent* §§ 155.700 and .710 be clarified. The Coast Guard agrees and has clarified the sections.

One comment said that § 155.710 should apply to any tankship "required to be" documented under the laws of the United States. The Coast Guard agrees and has added appropriate language to § 155.710(a).

Three comments stated that the wording of § 155.710(a)(1)(ii) was unclear, particularly with reference to Boundary Lines. The Coast Guard agrees, and has reworded the section and added a cross-reference to 46 CFR part 7, where specific Boundary Lines are described, to indicate that the Boundary Lines in that part apply to the rules in § 155.710.

One comment said the PIC should be required, under § 155.710, to be trained in and familiar with the emergency equipment aboard the vessel, the oil-transfer procedures for that vessel, and requirements and procedures for reporting spills. The Coast Guard agrees and has revised §§ 155.710(a)(1)(i), (b)(1)(i), (c)(1), and (d)(1).

One comment recommended that § 155.710(e)(1) be revised to clarify that the scope of the rule encompasses every vessel that must be operated by a licensed person and not just by a licensed officer. The Coast Guard agrees

and has revised the section to refer to "licensed person."

2. Credentials of Personnel on Foreign-Flag Vessel Under 33 CFR Part 155

One comment stated that §§ 155.710(c) and (d) should be amended to allow qualifications for a PIC aboard a foreign tankship at a shipyard or tank-cleaning facility to be satisfied by a marine chemist's certificate issued from the National Fire Protection Association. The Coast Guard agrees in substance and has added the appropriate wording in § 155.710(g).

One comment recommended that § 155.710(c)(3) indicate that, for vessels of countries signatory to STCW, a Dangerous-Cargo Endorsement or Certificate issued by the flag state is sufficient to attest the holder's qualifications. The Coast Guard agrees and has revised §§ 155.710(c)(3) and (d)(2).

One comment recommended adding a paragraph to require the operator or agent to verify that the person designated as PIC of a transfer of fuel oil aboard a foreign vessel holds a license or certificate authorizing service as master, mate, pilot, or engineer. The Coast Guard agrees and has added a paragraph to § 155.710(e)(4).

3. Language of Crewmembers Under 33 CFR Part 155

Two comments wanted §§ 155.710(c)(4) and (d)(3) revised to clarify the required ability to communicate.

One comment stated that the rule should allow PICs to use any mutually-agreed-upon language as an alternative to English. This comment also urged that, if an interpreter is used, the interpreter be fluent in the terminology of ships and of transfers. The Coast Guard agrees and has incorporated these suggestions into §§ 155.710(c)(4) and (d)(3).

The other comment recommended adding a provision to require that the PIC on a foreign vessel be able to communicate effectively with all crewmembers involved in the transfer. If an interpreter is used, the interpreter should be fluent in the terminology of ships and of transfers. The Coast Guard agrees and has added §§ 155.710(c)(5) and (d)(4).

4. Certification of Tankerman, General (46 CFR Part 13, Subpart A)

One comment noted that the phrase "grades of cargo (dangerous liquids (DL), liquefied gases (LG), or specific products)" is not a technically precise term used throughout the shipping and pollution-prevention regulations, and at

best describes categories of cargo. The Coast Guard doubts whether the lack of precision in any of these terms will result in any confusion or misinterpretation, so it has left them as they were.

One comment stated that the definition for *liquid cargo in bulk* should include a reference to portable tanks. The Coast Guard agrees and has augmented the definition in § 13.103 with a reference to portable tanks.

This comment also recommended revising the definition of *tank vessel*. The Coast Guard has revised the definition to make it consistent with the statutory definition in 46 U.S.C. 2101(39).

The Coast Guard has also added a definition of *transfer* as it applies in this rulemaking.

One comment questioned whether § 13.107(c) should require that a Tankerman-Assistant maintain contact with the PIC during a transfer. The Coast Guard agrees that it should and has added language requiring this.

Two comments recommended changes to the provision on the Tankerman-Engineer under § 13.107(d). One observed that the primary responsibility of a person with a Tankerman-Engineer endorsement on a tank vessel carrying oil or LG is to maintain the cargo systems and equipment for transfer of liquids aboard. The other urged a requirement that a licensed person serving as a chief engineer, first assistant engineer, or cargo engineer on an inspected tank vessel carrying liquid cargo in bulk or cargo residue hold the Tankerman-Engineer endorsement. The Coast Guard accepts both of these changes and has incorporated them in the revision of § 13.107(d).

One comment recommended that the rule clearly state that applicants for restricted endorsements may apply to Coast Guard Regional Examination Centers (RECs). The Coast Guard agrees and has revised § 13.111.

One comment suggested the replacement of the term *discharge* by the term *certificate of discharge*. The Coast Guard has accomplished this replacement in the appropriate paragraphs of § 13.113.

One comment stated that it would be inequitable to give full credit to a master or chief mate for service on a tankship and yet to give only half credit to second and third mates for such service. The Coast Guard agrees. Deck officers aboard tankships serve as PICs of transfers, and their names appear on Declarations of Inspection and in the deck logs upon relief of watches. The

Coast Guard has revised § 13.113(c)(iii)(B).

This comment also expressed concern over silence of the proposed rule on second or third mates' qualifying for the DL or LG endorsements on the Tankerman-PIC. The Coast Guard agrees and has changed § 13.113(c) to reflect that masters and mates aboard tankships certificated to carry DL and LG may qualify for the appropriate endorsement.

Another comment said that a tankerman certified under prior regulations should have the option of passing a Coast Guard examination to earn an endorsement as Tankerman-PIC (Barge), just as a new applicant has the option of passing one under § 13.301(f). The Coast Guard has eliminated the option for an applicant to become a Tankerman-PIC (Barge) by passing a Coast Guard examination. This is an adverse change from the SNPRM, but both of the two reports—that of the Focus Group, "Licensing 2000 and Beyond", and that of the Coast Guard, "Review of Marine Safety Issues Related to Uninspected Towing Vessels"—urge more emphasis on formalized methods of training and less on passing a Coast Guard examination. The Coast Guard invites comments on the elimination of the option. The Coast Guard has left § 13.113(d)(1)(ii) as it was and has eliminated the examination option in § 13.301.

A number of comments expressed the view that requiring service to have occurred within three years of application to be valid under §§ 13.113(c)(1)(iii)(A)(1) and (d)(1)(iii) might penalize persons with service less recent. The Coast Guard agrees and has revised these sections, and §§ 13.115(a) and (b), allowing service to be valid if it has occurred within five years of application.

One comment rationalized that all engineers in service on LNG tankships should be grandfathered because of the requirements they must already meet. These engineers, however, should have no difficulty acquiring the endorsement without grandfathering, because of those very requirements. Therefore, the Coast Guard does not agree that grandfathering is necessary or appropriate for these engineers, and has left § 13.115 as it was.

Numerous comments urged that the tankerman endorsement be subject to an expiration date. The Coast Guard agrees with the intent of these comments. The Oil Pollution Act of 1990 (OPA 90) mandated that U.S. Merchant Mariners' Documents (MMDs) themselves be limited to five years' duration, and 46 CFR 12.02-29 (59 FR 49302 (September 27, 1994)) now limits endorsements on

MMDs to the same duration. Therefore, the period of validity of the tankerman endorsement is tied to the term of the MMD in § 13.119. 46 CFR 12.02-27 now requires MMDs to expire after five years. To help manage the work load over the initial five-year renewal cycle, the Coast Guard will require individuals acting as "Tankerman-PIC", "Tankerman-PIC (Barge)", "Tankerman-Engineer", and "Tankerman-Assistant" with the first renewal date of their MMDs, under § 12.02-27, that occurs after March 31, 1997, to obtain their new tankerman endorsement. This change affects §§ 13.113(a), 13.113(b), 13.115, and 13.117. The phase-in period allows tankermen a minimum of two years to obtain a new endorsement, one year for the effective date of this publication and one year until commencing the five-year renewal cycle. A person who served as PIC for the transfer of liquid cargoes in bulk listed in subchapter O but who did not require a tankerman endorsement, because they were non-flammable or non-combustible liquids, may continue to act as a PIC for those liquid cargoes five years after the effective date of this rulemaking as discussed in the SNPRM. After that point, the PIC must have obtained his or her "Tankerman-PIC (Barge)" endorsement.

One comment suggested that licensed engineers and tankerman-assistants with service on tankships under prior rules should be able to invoke recency of service, too. The Coast Guard agrees that all applicants alike should be able to invoke recency of service for an original tankerman endorsement and has revised § 13.123 to let them; it has also revised the section to reflect that the service should occur within five, not just three, years immediately preceding application, keeping this section consistent with other sections concerning recency of service.

The Coast Guard has added § 13.127 as a general section on service, both to consolidate the requirements for a service letter and to determine the number and kinds of transfers.

5. "Tankerman-PIC" Endorsement (46 CFR Part 13, Subpart B)

One comment recommended that an applicant for an original Tankerman-PIC endorsement be capable of reading and writing English. The Coast Guard agrees that the PIC needs to be capable of understanding the information contained in Declarations of Inspection, vessel response plans, and Cargo Information Cards and it has added the requirement to §§ 13.201 and 13.301 for all PICs to demonstrate an ability to read and understand English found in these items.

A number of comments indicated that an applicant for a Tankerman-PIC endorsement should have participated in more than one commencement of loading and more than one of discharge, and in more than one completion of loading and more than one of discharge. The Coast Guard agrees and has increased the number of commencements and completions required to two each in §§ 13.203(b)(2) and (3). At the same time, however, it has left § 13.203(c) unchanged.

One comment recommended that an applicant for a Tankerman-PIC endorsement have to prove a working knowledge of a vessel's oil-transfer procedures, of its emergency procedures, and requirements for reporting oil spills. The Coast Guard agrees. Tankermen must become familiar with the relevant characteristics of each vessel, with the vessel's response plan, and with all appropriate procedures before commencing a transfer, relieving the watch or duty, or completing a transfer. The person certifying the service (signing the letter attesting the service) of an applicant for tankerman should be satisfied that the applicant is knowledgeable and able to manage liquid cargo before certifying the service.

One comment questioned whether it was necessary to require that an applicant be capable of calculating rates of loading and discharge. The Coast Guard considers the ability to calculate such rates on tankships an important aspect of ensuring safe transfers. It has required the ability to calculate rates of loading in § 13.127(a)(3)(vii). However, the corresponding ability for rates of discharge does not involve skills different in any significant way from those involved in the ability for rates of loading, so the Coast Guard has not explicitly required the ability for rates of discharge.

6. "Tankerman-PIC (Barge)" Endorsements (46 CFR Part 13, Subpart C)

One comment recommended that an applicant for an original "Tankerman-PIC (Barge)" endorsement be required both to take a training course and to pass a Coast Guard examination. The Coast Guard believes that a course, when coupled with the other standards under § 13.301, will provide satisfactory evidence that the applicant has qualified for the endorsement. The Coast Guard has eliminated the option for an applicant to become a Tankerman-PIC (Barge) by passing a Coast Guard examination or by using extended service. The Coast Guard has

revised §§ 13.303 and .309 to require formal training.

Three comments stated that the Coast Guard should require its own examination whether or not an applicant completes a course. As above, both of the two reports—that of the Focus Group, “Licensing 2000 and Beyond”, and that of the Coast Guard, “Review of Marine Safety Issues Related to Uninspected Towing Vessels”—urge more emphasis on formalized methods of training and less on passing a Coast Guard examination. The Coast Guard believes that formal training is the appropriate method without the need for an additional examination, while it effectively monitors approved training programs. The Coast Guard has revised § 13.309 to allow only formal training.

One comment suggested that the ability to read and write English should be required of each applicant for an original “Tankerman-PIC (Barge)” endorsement under § 13.301, and for an original restricted “Tankerman-PIC (Barge)” endorsement under § 13.111. The Coast Guard agrees that all PICs need to be capable of understanding the information in Declarations of Inspection, vessel response plans, and Cargo Information Cards and it has added the requirement to §§ 13.201 and .301 for all PICs to demonstrate an ability to read and understand English found in these items. It has revised § 13.111(d)(5) to require a similar ability respecting restricted “Tankerman-PIC (Barge)” endorsements.

All eight comments on service requirements indicated that a single commencement or completion of loading and a single commencement or completion of discharge was insufficient, and recommended that five commencements and five completions be required. While the Coast Guard agrees that every participation in these critical stages of a transfer enhances an individual’s qualifications, it does not consider a large number of participations necessary to establish minimal qualification for a “Tankerman-PIC (Barge)” endorsement. Therefore, it has revised § 13.303(b)(2) to require at least two commencements and two completions of loading and § 13.303(b)(3) to require at least two commencements and two completions of discharge.

One comment urged that an applicant have to prove a working knowledge of a vessel’s oil-transfer procedures, its emergency procedures, and requirements for reporting oil spills. As previously stated, the person certifying the service of an applicant for tankerman should be satisfied that the applicant is knowledgeable and able to

manage liquid cargo before certifying the service.

Three comments expressed the view that it was unnecessary to require that an applicant for a “Tankerman-PIC (Barge)” endorsement be capable of calculating rates of loading or discharge. These comments said that a tankerman could monitor such rates on barges without calculating them. The Coast Guard agrees and has eliminated these requirements for “Tankerman-PIC (Barge).”

One comment stated that the use of the term “competent person” in these regulations might create confusion with regulations developed by the Occupational Safety and Health Administration (OSHA) and the National Fire Protection Association (NFPA), and recommended that the jurisdictional boundaries between OSHA and the Coast Guard in safety of personnel be clarified. The Coast Guard partly agrees, but believes that requiring a shipyard worker to be certified by OSHA as a “competent person” to supervise gas-freeing and tank-cleaning will cause no confusion. To eliminate any lingering confusion the Coast Guard has eliminated “competent person” from the title of the endorsement and renamed the restricted endorsement “Tankerman-PIC (Barge)” restricted to a tank-cleaning and gas-freeing facility. The Coast Guard doubts whether this rulemaking provides the appropriate forum for addressing jurisdictional boundaries between agencies.

Another comment suggested that a new subpart describe requirements for restricted “Tankerman-PIC (Barge)” endorsements. The Coast Guard does not agree that such a separate subpart is needed. It considers the use of restricted endorsements adequately addressed in § 13.111 and has combined all the restricted endorsements into this section.

7. “Tankerman Assistant” Endorsement (46 CFR Part 13, Subpart D)

One comment asserted that an applicant for an original “Tankerman Assistant” endorsement should be able to read and write English. Since the “Tankerman Assistant” is not in charge of the transfer and does not have to sign the Declaration of Inspection, the Coast Guard considers reading and writing non-essential to a safe transfer. It considers the requirement that an applicant be capable of clearly understanding and speaking all necessary instructions in English adequate for qualification and, therefore, it has not revised § 13.401(f).

One comment found the requirement of recency in training restrictive in that

an applicant might have completed qualifying courses before the cutoffs imposed in these regulations and so might have to repeat the courses to satisfy the training. The Coast Guard partly agrees. If training facilities request, the Coast Guard will evaluate *bona fide* training courses in existence before the effective date of these regulations and may let the student’s completion satisfy the training.

8. “Tankerman-Engineer” Endorsement (46 CFR Part 13, Subpart E)

One comment recommended that an applicant for a “Tankerman-Engineer” endorsement be capable of reading and writing English. Since the “Tankerman-Engineer” is not in charge of the transfer and does not have to sign the Declaration of Inspection, the Coast Guard considers reading and writing non-essential to a safe transfer. It considers the requirement that an applicant be capable of clearly understanding and speaking all necessary instructions in English adequate for qualification and, therefore, it has not revised § 13.501(g).

One comment noted the use of the term “cargo engineer” for both dangerous liquid and liquefied gas in § 13.503. The Coast Guard has included the definition of this term in § 13.103 to cover both dangerous-liquid and liquefied-gas tankships.

9. Manning-Requirements (46 CFR Part 15)

One comment stated that manning should depend on a vessel’s deadweight tonnage, which relates directly to cargo capacity, rather than on gross tonnage. Because the statutes concerned with manning, and regulations like this derived from them, base manning on gross tonnage, the Coast Guard believes that it would be inappropriate to use another criterion here. Therefore, it has retained the criterion of gross tonnage in § 15.860.

One comment urged that ships in service on the Great Lakes be explicitly included in the provision relating to ships not certified for voyages beyond the Boundary Lines. The Coast Guard agrees and has revised § 15.860(d).

This comment also suggested that a table of manning-requirements would be useful and should be included in the final rule. The Coast Guard agrees and has prepared two tables. Table 15.860(a)(1) lists the minimal requirements for tankermen aboard manned tank vessels; Table 15.860(a)(2) lists the tankerman endorsements required for personnel aboard tankships.

One comment recommended a change to take into account that not every

tankship need carry a cargo engineer. The Coast Guard agrees and has revised § 15.860(f)(2) to address this possibility.

One comment urged the Coast Guard to clarify that the PIC retains authority over those crewmembers assigned duties and responsibilities during a transfer though not directly supervised by the PIC. The Coast Guard agrees that greater clarity to this effect is both possible and desirable, and has revised § 15.860(f)(4).

10. Operations of Tank Vessels (46 CFR Part 35)

One comment suggested that the "owner and managing operator" not be assigned responsibility for certain matters relating to an unmanned tank barge, since only the master or PIC of a towing vessel can oversee these matters. While the Coast Guard recognizes that, in practice, the master, operator, or PIC must see to the matters associated with the responsibility, the owner should share responsibility for these matters. This will encourage shoreside management to maintain some superintendence of and involvement in the operation of these tank barges. The Coast Guard has left § 35.05-15(b)(1) substantially as it was.

One comment recommended distinguishing leakage of cargo into the water from leakage of water into tanks, and requiring checks for both. The Coast Guard considers this a good idea and has revised §§ 35.05-15(b)(1) (i) and (iii).

One comment argued that addressing persons on duty only for any documented tankship was too permissive; it urged addressing them also for any tankship "required to be documented". The Coast Guard agrees and has made this change to § 35.35-1(a).

The same comment argued that addressing persons on duty only for any inspected tank barge was too permissive; it urged addressing them also for any tank barge "required to be inspected". The Coast Guard agrees and has made this change to § 35.35-1(b).

One comment recommended that the Declaration of Inspection Before Transfer of Bulk Liquid Cargo contain a space for the PIC to identify the product or products for transfer, by classification and kind. The Coast Guard agrees and has added such a space to the form specified by § 35.35-30.

A rule instated since the SNPRM has established a requirement of familiarity with the vessel response plan. This interim rule adds an appropriate space to the form specified by § 35.35-30.

11. Cargoes at Elevated Temperatures (46 CFR Part 36)

One comment recommended that certain sections of part 36 be deleted as obsolete or as superseded by this interim rule. Because the SNPRM did not address this issue, the Coast Guard does not consider this rule the appropriate place to revise part 36.

12. Cargo Vessels and Miscellaneous Vessels (46 CFR Part 98)

One comment suggested requiring that the person designated as PIC, for the transfer of liquid cargo in bulk to or from a portable tank on a vessel subject to part 98, hold a license authorizing service as a master, mate, pilot, operator, or engineer aboard that vessel "when liquid cargo in bulk of grade D or E is carried in limited amounts." The Coast Guard agrees and has added this phrase to § 98.30-17(b)(3)(i).

13. Commercial Fishing Vessels Dispensing Petroleum Products (46 CFR Part 105)

One comment urged that the authority of the Coast Guard over fishing vessels under this part needs to be clearly stated by reference to 46 U.S.C. 4502 (the Commercial Fishing Industry Vessel Safety Act of 1988) in the citation of authority for the part. The Coast Guard agrees and has amended the citation of authority for that part to include the appropriate statutory citation. Although the Coast Guard will no longer regulate certain fishing vessels as tank vessels, it will still regulate them as fishing vessels.

14. Barges Carrying Cargoes of Liquid Hazardous Materials in Bulk (46 CFR Part 151)

Again, one comment recommended distinguishing leakage of cargo into the water from leakage of water into tanks, and requiring checks for both. The Coast Guard considers this a good idea and has revised §§ 151.45-2(f)(1) (i) and (iii).

15. Ships Carrying Hazardous Materials of Liquid, Liquefied Gas, or Compressed Gas in Bulk (46 CFR Part 153); and Safety Standards for Self-Propelled Vessels Carrying Liquefied Gases in Bulk (46 CFR Part 154)

One comment asked whether the Coast Guard meant that an operator should communicate with the Officer in Charge, Marine Inspection (OCMI), before each transfer to inform the OCMI that the PIC is competent. The Coast Guard neither means nor believes that an operator should so communicate. It has clarified the rule in §§ 153.957(b) and 154.1831(b) to indicate that the *documentary evidence*, to the effect that

the person designated as PIC is fully trained and is competent to perform his or her duties, need be provided only when requested by the OCMI.

One comment recommended clarification of § 154.1831 to better describe the qualifications of PICs on tank vessels in LG service. The Coast Guard agrees and has modified this section to clarify the qualifications required to conduct transfers of, and preparation of tanks for, cargoes of LG.

16. Work Hours

The Coast Guard understands that the Oil Pollution Act (OPA) of 1990, section 4114, amends 46 U.S.C. 8104 as it limits hours of work for licensed persons or seamen on a tanker and limits hours of work for tankermen aboard tankers. No tankerman may perform work for more than 15 hours in any 24-hour period, or more than 36 hours in any 72-hour period, except in an emergency or a drill. The term "work" includes all administrative duties associated with the vessel whether performed aboard the vessel or ashore.

The Coast Guard is deliberating new work-hour limits due to OPA for foreign-flag vessels. These limits, under 46 U.S.C. Chapter 37, would apply to all personnel involved in transfers whatever flags the vessels fly. These limits would apply to any person serving as a tankerman during the transfer of oil and of certain hazardous liquid cargoes in bulk, when the transfer takes place in a port or other place subject to the jurisdiction of the United States. Among the issues to weigh are the definition of the class of personnel and the kind of transfer to cover; the practical difficulties of ensuring compliance with such limits in respect of a crewmember on a foreign vessel; and the cost of effectively extending the limits to vessels other than tankers. The Coast Guard invites comments on these issues and any others that bear on including such limits in the final rule that will follow from this interim rule.

17. Requirements for Training Courses

The outlines of curricula as printed in the SNPRM produced positive comments and therefore move into this interim rule. The format has changed to allow for easier reading and to reduce the length of this rule.

One comment recommended that awareness of safe entry into confined spaces be included in the curricula as acknowledgment of the hazards associated with the products being either carried in cargo tanks or transferred. The Coast Guard agrees with this recommendation and has

included the subject in each course on cargo of DL or LG.

18. Training Courses, Approval

An organization seeking approval by the Coast Guard of a course required for a tankerman endorsement will have to apply in accordance with 46 CFR 10.302 and meet the general requirement of 46 CFR 10.303. The Coast Guard expects that the instructor of each course, except the firefighting course, will hold as a minimum an MMD with a tankerman endorsement appropriate for the course, or will establish equivalent qualifications to the satisfaction of the Coast Guard. The firefighting course for tank barges must include actual practice in extinguishing fires; all other courses may include field training or simulation instead. Satisfactory completion of an approved course will be evidenced by a certificate, issued by the organization and signed by the head of the organization or a designated representative.

The Coast Guard will evaluate courses including simulated transfer of cargo to determine the credit allowed towards meeting the proposed service requirements, and the certificates will reflect the credit granted. The Coast Guard maintains a list of organizations conducting approved courses. This information is available upon request by writing to Commandant (G-MVP), U.S. Coast Guard, 2100 Second Street SW., Washington, DC 20593-0001; or by calling (202) 267-0214.

The Coast Guard has expanded the curricula for courses on cargoes of DL and LG enough to cover vapor-control systems and to satisfy the training requirements listed in 33 CFR 154.840. The course-outlines reflect current efforts of the Coast Guard and marine industry on training in vapor-control systems and on requirements for vessel response plans, as mandated by subsection 311(j) of the Federal Water Pollution Control Act (FWPCA) as amended by OPA 90.

The Coast Guard has eliminated the familiarization courses and is requiring only four liquid-cargo courses and the firefighting course for tank barges. It will evaluate for approval courses submitted for transfer credit and refresher training.

The Coast Guard invites comments on the subjects of courses; the appropriate minimal amounts of instruction; and the advisability of substituting field training or simulations for actual practice.

Tankship: Dangerous Liquids. This course consists of a training program appropriate to the duties of the Tankerman-PIC responsible for loading and discharging and for care in transit

of or handling cargo on oil and chemical tankers; the course covers safety of oil and chemical tankers, fire-safety measures and systems, pollution prevention and control, operational practice, and regulations. It is designed to take full account of STCW regulations V/1 and V/2. Successful completion of it will satisfy the training requirements of §§ 13.209, 13.309, 13.409, and 13.509 for dangerous liquids. To adequately cover the required material, the Coast Guard reckons, the course must last 40 hours.

Tankship: Liquefied Gases. This course consists of a training program appropriate to the duties of the Tankerman-PIC responsible for loading and discharging and for care in transit of or handling cargo on liquefied-gas tankers; the course covers safety of liquefied-gas tankers, fire-safety measures and systems, pollution prevention and control, operational practice, and regulations. It is designed to take full account of STCW regulation V/3. Successful completion of it will satisfy the training requirements of §§ 13.209, 13.309, 13.409, and 13.509 for liquefied gases. To adequately cover the required material, the Coast Guard reckons, the course must last 40 hours.

Tank barge: Dangerous Liquids. This course consists of a training program appropriate to the duties of the Tankerman-PIC (Barge) responsible for loading and discharging and for care in transit of or handling cargo on oil and chemical tank barges; the course covers safety of oil and chemical tank barges, fire-safety measures and systems, pollution prevention and control, operational practice, and regulations. Successful completion of it will meet the training requirements of § 13.309 for dangerous liquids. To adequately cover the required material, the Coast Guard reckons, the course must last 40 hours.

Tank barge: Liquefied gases. This course consists of a training program appropriate to the duties of the Tankerman-PIC (Barge) responsible for loading and discharging and for care in transit of or handling cargo on liquefied-gas tank barges; the course covers safety of liquefied-gas tank barges, fire-safety measures and systems, pollution prevention and control, operational practice, and regulations. Successful completion of it will meet the training requirements of § 13.309 for liquefied gases. To adequately cover the required material, the Coast Guard reckons, the course must last 40 hours.

Firefighting. The course in tank-barge firefighting consists of a training program appropriate to the duties of the Tankerman-PIC (Barge) responsible for fire-safety training. The methods must

include hands-on practice in extinguishing fires with portable fire extinguishers. Successful completion of it will meet the requirements of § 13.307 for fire-safety training. To adequately cover the required material, the Coast Guard reckons, the course must last 16 hours. Successful completion of a course approved by the Commandant and meeting the basic firefighting section of the IMO's Resolution A.437 (XI), "Training of Crews in Fire Fighting", will satisfy the requirements for §§ 13.207, 13.407, and 13.507, as well as for § 13.307.

19. Other Comments

Several comments suggested changes of an editorial nature. Because these are not of a substantive nature, the Coast Guard has not discussed them in this preamble; but it has incorporated them throughout this interim rule.

Regulatory Evaluation

This interim 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 (OMB) under that Order. It is not significant under the Regulatory Policies and Procedures of the Department of Transportation (44 FR 11040 (February 26, 1979)). In early 1980, the Coast Guard performed a Regulatory Evaluation (with an Environmental Impact Statement) on the proposed rule concerning qualifications of persons in charge of transfers of oil and hazardous material and concerning tankerman requirements and placed it in the rulemaking docket, where a full Regulatory Evaluation later joined it. They may be inspected or copied at the office of the Marine Safety Council (G-LRA) (CGD 79-116), Room 3406, U.S. Coast Guard Headquarters, 2100 Second Street SW., Washington, DC, from 8 a.m. to 3 p.m., weekdays except Federal holidays.

Although the Regulatory Evaluation was begun over 15 years ago, and was finished in August 1989, the conclusions (given some updating of the discount rates) remain valid. The costs associated with this rule arise primarily from the training of tankermen. This rule requires people serving as tankermen to obtain from the Coast Guard U.S. Merchant Mariners' Documents endorsed as "Tankerman-PIC", "Tankerman-PIC (Barge)", restricted "Tankerman-PIC", restricted "Tankerman-PIC (Barge)", "Tankerman-Assistant", or "Tankerman-Engineer". People serving as tankerman will have

to meet standards for amounts of experience, for completion of training courses, and for physical fitness.

Almost all of the costs resulting from this rule would arise from the training of tankermen in firefighting and in transfers of liquid cargoes. Firefighting training became a requirement for a license from the Coast Guard in December 1988. For 92% of the licensed personnel affected by this rule, the cost of this training is a cost of holding a license, not of becoming a qualified tankerman. This training will mainly increase the cost for unlicensed personnel applying for tankerman endorsements. These personnel applying for these endorsements will have to complete a liquid-cargo course. An applicant restricted to specific cargoes or groups of cargoes, specific vessels, specific facilities, specific employers, or the like need only take the firefighting course. Expenses to complete the firefighting and liquid-cargo courses will vary, depending on their sources; in-house courses should cost less than courses offered by independent schools. Unless their employers offer the courses, tankermen likely will bear the expense for the training, and complete it on their own time. Tuition might cost \$100.00 a day, with courses lasting up to five days. Miscellaneous expenses for travel, meals, and lodging will sometimes accrue, too, at \$20.00 to \$100.00 a day. Since the endorsement is valid for five years, the expense should spread over five years as well. If the average for tankerman is five days of training, the expense will be about \$800.00 for the first five years, or about \$160.00 a year. For subsequent five-year intervals the applicant need only show two transfers, not attend any other courses. So, for a tankerman serving 30 years, the expense will come to about \$27.00 a year. Training 10,000 people at \$27.00 a year costs \$270,000.00 a year. Since about 800 new tankermen enter the calling each year (at \$800.00 a head), \$640,000.00 must also be added each year to arrive at the total expense for the industry—\$910,000.00 a year. The public has recognized that there is a tremendous need for improving the qualification and training of personnel in transfer and in pollution prevention, to prevent accidents and pollution. This rule will go toward reducing the risks of accidents and pollution affecting the United States. Statistical research has shown that American society is willing to pay \$2.6 million to save just one life. Hence, even if this rule saves only one life each year, the benefit outweighs the expense by about \$1.7 million a year.

This rule will not increase manning, but will require personnel already in the calling to receive training and documentation related to their service. Most tank-vessel companies already require high standards of experience and training for people serving as tankermen. Since this rule does not require any large expenditures by the maritime industry, consumers, or Federal, State, or local governments, the Coast Guard does not expect it to have significant economic impact.

Small Entities

The Coast Guard certifies that this interim rule will not have a significant economic impact on a substantial number of small entities. This rule applies to U.S. Merchant Mariners' Documents endorsed as "Tankerman" issued to individuals only. The effect on training schools would be to formalize the requirements to attend such industry-specific training; now, such training is optional for individuals serving as tankermen at the discretion of the owner or operator. Therefore, the Coast Guard certifies under subsection 605(b) 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

Under the Paperwork Reduction Act [44 U.S.C. 3501 *et seq.*], OMB reviews each proposed rule that contains a collection-of-information requirement to determine whether the practical value of the information is worth the burden imposed by its collection. Collection-of-information requirements include reporting, recordkeeping, notification, and other, similar requirements.

This interim rule contains collection-of-information requirements in the following sections: 13.107, 13.109, 13.111, 13.113, 13.115, 13.117, 13.123, 13.201, 13.301, 13.401, 13.501. The following particulars apply:

DOT No.: 2115.

OMB Control No.: 2115-0514 and 2115-0111.

Administration: U.S. Coast Guard.

Title: Qualifications for Tankermen, and for Persons in Charge of Transfers of Dangerous Liquids and Liquefied Gases.

Need for Information: The Port and Tanker Safety Act (PTSA) [codified as 46 U.S.C., Chapter 37] required the Secretary of Transportation to prescribe regulations on, among other things, personnel qualifications and manning standards for tank vessels of the United States.

Proposed use of Information: This information is used by the Coast Guard licensing officer at an REC. It is used to determine the applicant's qualification to receive or continue to hold a tankerman's endorsement to an MMD.

Frequency of Response: Every five years.

Burden Estimate: The Coast Guard estimates the total annual burden on merchant mariners will be 8,900 hours.

Respondents: The regulatory impact will bear upon about 10,700 respondents.

Form(s): Application for Original, Supplemental, or Duplicate Merchant Mariner's Document, CG-719B.

Average Burden-Hours for Each Respondent: The average burden hours for each respondent is 0.83 hours (50 minutes).

The Coast Guard has submitted the requirements to OMB for review under subsection 3504(h) of the Paperwork Reduction Act. Persons submitting comments on the requirements should submit their comments both to OMB and to the Coast Guard where indicated under ADDRESSES.

Federalism

The Coast Guard has analyzed this interim rule in accordance with the principles and criteria contained in Executive Order 12612. It has determined that this rule does not have sufficient implications for federalism to warrant the preparation of a Federalism Assessment.

Environment

The overall effect of this interim rule will be to reduce the amount of oil entering the navigable waters of the United States. The adverse environmental effect of this rule will be nil. As far as the Coast Guard can determine, this rule neither accomplishes short-term environmental gains at the cost of long-term losses or the converse, nor forecloses any future options, nor entails any significant irreversible or irretrievable commitments of resources.

What little environmental impact this rule entails is positive. An Environmental Assessment and a draft Finding of No Significant Impact are available in the docket for inspection or copying where indicated under ADDRESSES.

List of Subjects

33 CFR Part 154

Environmental protection, Oil pollution, Facilities, Water pollution control, Vapor control.

33 CFR Part 155

Environmental protection, Oil pollution, Vessels, Water pollution control.

46 CFR Part 7

Boundary lines.

46 CFR Part 12

Seamen.

46 CFR Part 13

Seamen, Tank vessels, Barges.

46 CFR Part 15

Seamen, Vessels.

46 CFR Part 30

Administrative practice and procedure, Foreign relations, Hazardous materials transportation, Penalties, Tank vessels, Barges.

46 CFR Part 31

Marine safety, Tank vessels, Barges, Law enforcement, Flammable materials.

46 CFR Part 35

Marine safety, Navigation (water), Reporting requirements, Tank vessels, Barges, Seamen.

46 CFR Part 78

Passenger vessels, Marine safety, Foreign trade, Treaties.

46 CFR Part 90

Cargo vessels, Marine safety, Administrative practice and procedure, Authority delegation.

46 CFR Part 97

Cargo vessels, Marine safety, Reporting requirements.

46 CFR Part 98

Cargo vessels, Hazardous materials transportation, Marine safety.

46 CFR Part 105

Cargo vessels, Fishing vessels, Hazardous materials transportation, Marine safety, Petroleum.

46 CFR Part 151

Hazardous materials transportation, Marine safety, Flammable material, Tank vessels, Barges.

46 CFR Part 153

Hazardous materials transportation, Marine safety, Tank vessels, Barges.

46 CFR Part 154

Hazardous materials transportation, Marine safety, Tank vessels.

For the reasons set out in the preamble, the Coast Guard amends 33 CFR parts 154 and 155, and 46 CFR parts 7, 12, 13, 15, 30, 31, 35, 78, 90, 97,

98, 105, 151, 153, and 154, as set forth below:

Title 33—Navigation and Navigable Waters**SUBCHAPTER O—POLLUTION****PART 154—FACILITIES TRANSFERRING OIL OR HAZARDOUS MATERIAL IN BULK**

1. The authority citation for part 154 continues to read as follows:

Authority: 33 U.S.C. 1231, 1321(j)(1)(C), (j)(5), (j)(6), and (m)(2); Sec. 2, E.O. 12777, 56 FR 54757; 49 CFR 1.46. Subpart F is also issued under 33 U.S.C. 2735.

2. Section 154.105 is amended by adding definitions as follows:

§ 154.105 Definitions.

Boundary Line means the lines described in 46 CFR Part 7.

* * * * *

STCW means the International Convention on Standards of Training, Certification, and Watchkeeping for Seafarers, 1978.

* * * * *

Tankship means any tank vessel constructed or adapted primarily to carry oil or hazardous material in bulk as cargo or as cargo residue and propelled by power or sail.

* * * * *

PART 155—PREVENTION OF POLLUTION BY OIL OR HAZARDOUS MATERIAL FROM VESSELS

3. The authority citation for Part 155 continues to read as follows:

Authority: 33 U.S.C. 1231, 1321(j); 46 U.S.C. 3715; Sec. 2, E.O. 12777, 56 FR 54757; 49 CFR 1.46. Sections 155.100 through 155.130, 155.350 through 155.400, 155.430, 155.440, 155.470, and 155.1010 through 155.1070, are also issued under 33 U.S.C. 1903(b); and sections 155.1110 and 155.1150 are also issued under 33 U.S.C. 2735.

4. Section 155.700 is revised to read as follows:

§ 155.700 Designation of person in charge.

The operator or agent of each vessel with a capacity for 250 or more barrels of fuel oil, cargo oil, or hazardous material shall designate, either by name or by position in the crew, the person in charge (PIC) or PICs of each transfer to or from the vessel and of each tank-cleaning.

5. Section 155.710 is revised to read as follows:

§ 155.710 Qualifications of person in charge.

(a) On each tankship required to be documented under the laws of the United States, the operator or agent of

the vessel, or the person who arranges and hires a person to be in charge either of a transfer of liquid cargo in bulk or of cargo-tank cleaning, shall verify to his or her satisfaction that each person designated as a PIC—

(1) Of a transfer of liquid cargo in bulk—

(i) Has sufficient training and experience with the relevant characteristics of the vessel on which he or she is engaged, including the cargo for transfer, the cargo-containment system, the cargo system (including transfer procedures, and shipboard-emergency equipment and procedures), the control and monitoring systems, the procedures for reporting pollution incidents, and, if installed, the systems for crude-oil washing, inert gas, and vapor control, to safely conduct a transfer;

(ii) Holds a license issued under 46 CFR part 10 authorizing service aboard a vessel certified for voyages beyond the Boundary Line, as described by 46 CFR part 7, except on tankships not certified for voyages beyond the Boundary Line; and

(iii) Holds a "Tankerman-PIC" endorsement issued under 46 CFR part 13 that authorizes the holder to supervise the transfer of the particular cargo involved; and

(2) Of cargo-tank cleaning meets paragraph (a)(1) of this section, except—

(i) A Coast Guard license is not required; and

(ii) If the tankship is at a tank-cleaning facility or shipyard, he or she may hold a marine chemist's certificate issued by the National Fire Protection Association, in lieu of a "Tankerman-PIC" endorsement.

(b) On each tank barge required to be inspected under 46 U.S.C. 3703, the operator or agent of the vessel, or the person who arranges and hires a person to be in charge of a transfer of liquid cargo in bulk, shall verify to his or her satisfaction that each PIC—

(1) Of a transfer of liquid cargo in bulk—

(i) Has sufficient training and experience with the relevant characteristics of the vessel on which he or she is engaged, including the cargo for transfer, the cargo-containment system, the cargo system (including transfer procedures, and shipboard-emergency equipment and procedures), the control and monitoring systems, the procedures for reporting pollution incidents, and, if installed, the systems for crude-oil washing, inert gas, and vapor control, to safely conduct a transfer; and

(ii) Holds a "Tankerman-PIC" or "Tankerman-PIC (Barge)" endorsement

issued under 46 CFR part 13 that authorizes the holder to supervise the transfer of the particular cargo involved; and

(2) Of cargo-tank cleaning meets paragraph (b)(1) of this section, except that, if the tank barge is at a tank-cleaning facility or shipyard, he or she may hold a marine chemist's certificate issued by the National Fire Protection Association, in lieu of a "Tankerman-PIC" or "Tankerman-PIC (Barge)" endorsement.

(c) On each foreign tankship, the operator or agent of the vessel shall verify to his or her satisfaction that each PIC either of a transfer of liquid cargo in bulk or of cargo-tank cleaning—

(1) Has sufficient training and experience with the relevant characteristics of the vessel on which he or she is engaged, including the cargo for transfer, the cargo-containment system, the cargo system (including transfer procedures, and shipboard-emergency equipment and procedures), the control and monitoring systems, the procedures for reporting pollution incidents, and, if installed, the systems for crude-oil washing, inert gas, and vapor control, to safely conduct either a transfer of liquid cargo in bulk or cargo-tank cleaning;

(2) Holds a license or other document issued by the flag state or its authorized agent authorizing service as master, mate, pilot, engineer, or operator on that vessel;

(3) Holds a Dangerous-Cargo Endorsement or Certificate issued by a flag state party to STCW, or other form of evidence acceptable to the Coast Guard, attesting the PIC's meeting the requirements of Chapter V of STCW as a PIC either of the transfer of oil, chemical, or liquefied gas or of cargo-tank cleaning, as appropriate to the cargo;

(4) Is capable of reading, speaking, and understanding in English, or a language mutually-agreed-upon with the shoreside PIC of the transfer, all instructions needed to commence, conduct, and complete a transfer of cargo, except that the use of an interpreter meets this requirement if the interpreter—

(i) Fluently speaks the language spoken by each PIC;

(ii) Is immediately available to the PIC on the tankship at all times during the transfer; and

(iii) Is knowledgeable about, and conversant with terminology of, ships and transfers; and

(5) Is capable of effectively communicating with all crew-members involved in the transfer, with or without an interpreter.

(d) On each foreign tank barge, the operator or agent of the vessel shall verify to his or her satisfaction that each PIC either of the transfer of liquid cargo in bulk or of cargo-tank cleaning—

(1) Has sufficient training and experience with the relevant characteristics of the vessel on which engaged, including the cargo for transfer, the cargo-containment system, the cargo system (including transfer procedures, and shipboard-emergency equipment and procedures), the control and monitoring systems, the procedures for reporting pollution incidents, and, if installed, the systems for crude-oil washing, inert gas, and vapor control, to safely conduct a transfer;

(2) Holds a Dangerous-Cargo Endorsement or Certificate issued by a flag state party to STCW, or other form of evidence acceptable to the Coast Guard, attesting the PIC's meeting the requirements of Chapter V of STCW as a PIC either of the transfer of oil, chemical, or liquefied gas or of cargo-tank cleaning, as appropriate to the cargo;

(3) Is capable of reading, speaking, and understanding, in English or a mutually-agreed-upon language with the PIC of the transfer, all instructions needed to commence, conduct, and complete a transfer of cargo, except that the use of an interpreter meets this requirement if the interpreter—

(i) Fluently speaks the language spoken by each PIC;

(ii) Is immediately available to the PIC on the tank barge at all times during the cargo transfer; and

(iii) Is knowledgeable about, and conversant with terminology of, ships and transfers; and

(4) Is capable of effectively communicating with all crew-members involved in the transfer, with or without an interpreter.

(e) The operator or agent of each vessel to which this section applies shall verify to his or her satisfaction that the PIC of the transfer of fuel oil—

(1) On each vessel required by 46 CFR chapter I to have a licensed person aboard, holds a valid license issued under 46 CFR part 10 authorizing service as a master, mate, pilot, engineer, or operator aboard that vessel.

(2) On each uninspected vessel of 100 or more gross tons, has been instructed by the operator or agent of the vessel both in his or her duties and in the Federal statutes and regulations on water pollution that apply to the vessel.

(3) On each tank barge, for the vessel's own engine-driven pumps has been instructed both in his or her duties and in the Federal statutes and regulations on water pollution.

(4) On each foreign vessel, holds a license or certificate issued by a flag state party to STCW, or other form of evidence acceptable to the Coast Guard, attesting the qualifications of the PIC to act as master, mate, pilot, operator, engineer, or tankerman aboard that vessel.

(f) The operator or agent of each vessel carrying oil or hazardous material in bulk other than a tank vessel shall verify to his or her satisfaction that the PIC either of the transfer of oil or hazardous material in bulk to or from a vessel or of cargo-tank cleaning—

(1) For cargo of grade D or E, holds a valid license or certificate authorizing service as a master, mate, pilot, engineer, or operator aboard that vessel; and

(2) For either cargo of grade C or above, regulated under 46 CFR part 153, or liquefied gas, holds a valid license or certificate authorizing service as a master, mate, pilot, engineer, or operator aboard that vessel and a "Tankerman-PIC" endorsement, or other documents acceptable to the Coast Guard attesting the holder's qualifications to act as the PIC for the cargo carried.

(g) The PIC of cargo-tank cleaning on a vessel at a tank-cleaning facility or shipyard need not hold any of the documents required in paragraphs (a) through (f) of this section, if he or she holds a marine chemist's certificate issued by the National Fire Protection Association.

Title 46—Shipping

PART 12—CERTIFICATION OF SEAMEN

8. The authority citation for part 12 is revised to read as follows:

Authority: 31 U.S.C. 9701; 46 U.S.C. 2103, 2110, 7301, 7701; 49 CFR 1.46.

§ 12.01–5 [Amended]

9. Paragraph (d) of § 12.01–5 is removed.

§§ 12.20–1, 12.20–3, and 12.20–5 (Subpart 12.20) [Removed]

10. Subpart 12.20, consisting of §§ 12.20–1, 12.20–3, and 12.20–5, is removed.

11. Part 13 is added to read as follows:

PART 13—CERTIFICATION OF TANKERMEN

Subpart A—General

Sec.

13.101 Purpose.

13.103 Definitions.

13.105 Paperwork approval.

13.107 Tankerman endorsement: General.

13.109 Tankerman endorsement: Authorized cargoes.

- 13.111 Restricted endorsement.
- 13.113 Tankerman certified under prior regulations.
- 13.115 Licensed engineer: Endorsement as Tankerman-Engineer based on service on tankships before March 31, 1996.
- 13.117 Any person: Endorsement as Tankerman-Assistant based on unlicensed deck service before March 31, 1996.
- 13.119 Expiration of endorsement.
- 13.120 Renewal of endorsement.
- 13.121 Courses for training tankerman.
- 13.123 Recency of service or experience for original tankerman endorsement.
- 13.125 Physical requirements.
- 13.127 Service requirements: General.
- 13.129 Quick-reference table for tankerman.

Subpart B—Requirements for “Tankerman-PIC” Endorsement

- 13.201 Original application for “Tankerman-PIC” endorsement.
- 13.203 Eligibility requirements: Experience.
- 13.305 Proof of service for “Tankerman-PIC” endorsement.
- 13.207 Eligibility requirements: Firefighting course.
- 13.209 Eligibility requirements: Cargo course.

Subpart C—Requirements for “Tankerman-PIC (Barge)” Endorsement

- 13.301 Original application for “Tankerman-PIC (Barge)” endorsement.
- 13.303 Eligibility requirements: Experience.
- 13.305 Proof of service for “Tankerman-PIC (Barge)” endorsement.
- 13.307 Eligibility requirements: Firefighting course.
- 13.309 Eligibility requirements: Cargo course.

Subpart D—Requirements for “Tankerman-Assistant” Endorsement

- 13.401 Original application for “Tankerman-Assistant” endorsement.
- 13.403 Eligibility requirements: Experience.
- 13.405 Proof of service for “Tankerman-Assistant” endorsement.
- 13.407 Eligibility requirements: Firefighting course.
- 13.409 Eligibility requirements: Cargo course.

Subpart E—Requirements for “Tankerman-Engineer” Endorsement

- 13.501 Original application for “Tankerman-Engineer” endorsement.
- 13.503 Eligibility requirements: Experience.
- 13.505 Proof of service for “Tankerman-Engineer” endorsement.
- 13.507 Eligibility requirements: Firefighting course.
- 13.509 Eligibility requirements: Cargo course.

Authority: 46 U.S.C. 3703, 7317, 8105, 8703, 9102; 49 CFR 1.46.

Subpart A—General

§ 13.101 Purpose.

This part describes the various tankerman endorsements issued by the Coast Guard and prescribes the requirements for obtaining an

endorsement as a “Tankerman-PIC,” “Tankerman-PIC (Barge),” “Tankerman-Assistant,” or “Tankerman-Engineer” to a merchant mariner’s document.

§ 13.103 Definitions.

As used in this part:

Cargo Engineer means a licensed person on a dangerous-liquid tankship or a liquefied-gas tankship whose primary responsibility is maintaining the cargo system and cargo-handling equipment.

Competent person means a person designated as such in accordance with 29 CFR 1915.7.

Dangerous liquid means a liquid listed in 46 CFR 153.40 that is not a liquefied gas as defined in this part. Liquid cargoes in bulk listed in 46 CFR Part 153, Table 2, are not dangerous-liquid cargoes when carried by non-oceangoing barges.

DL means dangerous liquid.

IMO means the International Maritime Organization.

Liquefied gas means a cargo that has a vapor pressure of 172 kPa (25 psia) or more at 37.8 C (100 F).

LG means liquefied gas.

Liquid cargo in bulk means a liquid or liquefied gas listed in 46 CFR 153.40 and carried as a liquid cargo or liquid-cargo residue in integral, fixed, or portable tanks.

Marine chemist means a person certificated by the National Fire Protection Association.

MMD means a merchant mariner’s document issued by the Coast Guard.

Participation, when used with regard to the service on transfers required for tankerman by § 13.120, 13.203, or 13.303, means either actual participation in the transfers or close observation of how the transfers are conducted and supervised.

PIC means a person in charge.

Restricted Tankerman endorsement means a valid tankerman endorsement to an MMD restricted to specific cargoes or groups of cargoes, specific vessels, specific facilities, specific employers, or the like.

Simulated transfer means a transfer practiced in a course meeting the requirements of § 13.121 that uses simulation supplying part of the service on transfers required for tankerman by § 13.203 or 13.303.

Tank barge means a non-self-propelled tank vessel.

Tank vessel means a vessel constructed or adapted to carry, or a vessel that carries, oil or hazardous material in bulk as cargo or cargo residue.

Tankerman-Assistant means a person holding a valid “Tankerman-Assistant” endorsement to his or her MMD.

Tankerman-Engineer means a person holding a valid “Tankerman-Engineer” endorsement to his or her MMD.

Tankerman-PIC means a person holding a valid “Tankerman-PIC” endorsement to his or her MMD.

Tankerman-PIC (Barge) means a person holding a valid “Tankerman-PIC (Barge)” endorsement to his or her MMD.

Tankship means any tank vessel constructed or adapted primarily to carry oil or hazardous material in bulk as cargo or as cargo residue and propelled by power or sail.

Transfer means any movement of dangerous liquid or liquefied gas as cargo in bulk or as cargo residue to, from, or within a vessel by means of pumping, gravitation, or displacement. Section 13.127 describes what qualifies as participation in a creditable transfer.

§ 13.105 Paperwork approval.

(a) This section lists the control numbers assigned by the Office of Management and Budget (OMB) under the Paperwork Reduction Act of 1980 [Pub. L. 96-511] for the reporting and recordkeeping requirements in this part.

(b) OMB has assigned the following control numbers to the sections indicated:

(1) OMB 2115-0514—46 CFR 13.113, 13.115, 13.117, 13.201, 13.203, 13.205, 13.301, 13.303, 13.305, 13.401, 13.403, 13.405, 13.501, 13.503, 13.505.

(2) OMB 2115-0111—46 CFR 13.121, 13.207, 13.209, 13.307, 13.309, 13.407, 13.409, 13.507, 13.509.

§ 13.107 Tankerman endorsement: General.

(a) If an applicant meets the requirements of subpart B of this part, the Officer in Charge, Marine Inspection (OCMI), at a Regional Examination Center (REC) may endorse his or her MMD as “Tankerman-PIC” with the appropriate cargo classification or classifications. A person holding this endorsement and meeting the other requirements of 33 CFR 155.710(a) may act as a PIC of transfers of liquid cargo in bulk on either tankships or tank barges.

(b) If an applicant meets the requirements of Subpart C of this part, the OCMI may endorse his or her MMD as “Tankerman-PIC (Barge)” with the appropriate cargo classification or classifications. A person holding this endorsement and meeting the other requirements of 33 CFR 155.710(b) may act as a PIC of transfers of liquid cargo in bulk only on tank barges.

(c) If an applicant meets the requirements of subpart D of this part, the OCMI may endorse his or her MMD

as "Tankerman-Assistant" with the appropriate cargo classification or classifications. No person holding this endorsement may act as a PIC of any transfer of liquid cargo in bulk unless he or she also holds an endorsement authorizing service as PIC. He or she may, however, perform duties relative to cargo and cargo-handling equipment assigned by the PIC of transfers of liquid cargo in bulk without being under the direct supervision of the PIC. When performing these duties, he or she shall maintain continuous two-way voice communications with the PIC.

(d) If an applicant meets the requirements of subpart E of this part, the OCM I may endorse his or her MMD as "Tankerman-Engineer." No person holding this endorsement may act as a PIC or "Tankerman-Assistant" of any transfer of liquid cargo in bulk unless he or she also holds an endorsement authorizing such service. A person holding this endorsement and acting in this capacity has the primary responsibility on tank vessels carrying dangerous liquids and liquefied gases for maintaining the cargo systems and equipment for transfer of liquids in bulk aboard and for bunkering. No person licensed under part 10 of this chapter may serve as a chief engineer, first assistant engineer, or cargo engineer aboard an inspected tankship when liquid cargo in bulk or cargo residue is carried unless he or she holds this endorsement.

(e) If an applicant meets the requirements of § 13.111 of this part, the OCM I may endorse his or her MMD as a "Tankerman-PIC" with a specific restriction or restrictions. A person holding this endorsement may act as Tankerman-PIC or Tankerman-PIC (Barge) for specific cargoes or groups of cargoes, specific vessels, specific facilities, specific employers, or the like.

(f) A tankerman wishing to obtain an endorsement that he or she does not hold shall apply at an REC listed in § 10.105 of this chapter. If he or she meets all requirements for the new endorsement, the REC may issue a new MMD including the endorsement.

§ 13.109 Tankerman endorsement: Authorized cargoes.

(a) Each tankerman endorsement described in § 13.107 will expressly limit the holder's service under it to transfers involving one or both of the following cargo classifications:

- (1) Dangerous liquid (DL).
- (2) Liquefied gas (LG).

(b) No tankerman endorsement is necessary to transfer the liquid cargoes in bulk listed in Table 2 of Part 153 of this chapter when those cargoes are

carried on barges not certified for ocean service.

(c) A tankerman having qualified in one cargo classification and wishing to qualify in another shall apply at an REC listed in § 10.105 of this chapter. If he or she meets all requirements for the other, the REC may issue a new MMD including the endorsement.

§ 13.111 Restricted endorsement.

(a) An applicant may apply at an REC listed in 46 CFR 10.105 for a tankerman endorsement restricted to specific cargoes or groups of cargoes, specific vessels, specific facilities, specific employers, or the like. The OCM I will evaluate each application and may modify the applicable requirements for the endorsement, making allowance for special circumstances and for whichever restrictions the endorsement will state.

(b) To qualify for a restricted "Tankerman-PIC" endorsement, an applicant shall meet § 13.201, excluding paragraph (f).

(c) To qualify for a restricted "Tankerman-PIC (Barge)" endorsement, an applicant shall meet § 13.301, excluding paragraph (f).

(d) To qualify for a restricted "Tankerman-PIC (Barge)" endorsement restricted to a tank-cleaning and gas-freeing facility, an applicant shall—

- (1) Be at least 18 years old;
- (2) Apply on a Coast Guard form;
- (3) Present evidence of passing a physical examination in accordance with § 13.125;

(4) Present evidence in the form of a letter on company letterhead from the operator of the facility stating that OSHA considers the applicant a "competent person" for the facility and that the applicant has the knowledge necessary to supervise tank-cleaning and gas-freeing; and

(5) Be capable of speaking and understanding, in English, all instructions needed to commence, conduct, and complete a transfer of cargo, and of reading the English found in the Declaration of Inspection, vessel response plans, and Cargo Information Cards.

(e) The restricted "Tankerman-PIC (Barge)" endorsement restricted to a tank-cleaning and gas-freeing facility is valid only while the applicant is employed by the operator of the facility that provided the letter of service required by paragraph (d)(4) of this section, and this and any other appropriate restrictions will appear in the endorsement.

§ 13.113 Tankerman certified under prior regulations.

(a) A person who holds a license issued under part 10 of this chapter, and who as a PIC transferred liquid cargoes in bulk before March 31, 1996, may continue to serve as a "Tankerman-PIC" under the license until the first renewal of his or her MMD under 12.02-27 of this chapter that occurs after March 31, 1997, as follows:

(1) A person holding a current license issued under part 10 of this chapter may act as a "Tankerman-PIC" if he or she can produce a letter on company letterhead from the owner, operator, master, or chief engineer of the vessel that proves his or her qualifying service as required by paragraph (d)(1)(iii) of this section.

(2) A person that cannot produce a letter to prove his or her qualifying service may submit relevant evidence to an REC for evaluation. If the OCM I determines that the person does qualify under paragraph (a) of this section, the OCM I will issue a letter of acknowledgment as a substitute for a letter of service.

(b) A person who holds a current "Tankerman" endorsement issued before March 31, 1996, may continue to serve as a Tankerman-PIC (Barge) until the first renewal of his or her MMD under § 12.02-27 of this chapter that occurs after March 31, 1997. If a person with such an endorsement qualifies for a non-tankerman endorsement that requires a new MMD, he or she may bring the tankerman endorsement forward onto the new MMD.

(c) A person who served as PIC for the transfer of liquid cargoes in bulk listed in subchapter O but who did not require a tankerman endorsement, because they were non-flammable or non-combustible liquids, may act as a "Tankerman-PIC (Barge)" for those liquid cargoes until March 31, 2001, if he or she produces a letter—on company letterhead, from the owner or operator of a terminal or of a tank barge or from the owner, operator, or master of a tankship that proves his or her qualifying service as required by paragraph (e)(1)(iii) of this section.

(d) A person that qualifies under paragraph (a) of this section by holding a current license may apply for a "Tankerman-PIC" endorsement under this subpart.

(1) To qualify for a "Tankerman-PIC" endorsement, a licensed officer shall present—

(i) A certificate of completion from a course in shipboard firefighting approved by the Commandant and meeting the basic firefighting section of the IMO's Resolution A.437 (XI),

“Training of Crews in Fire Fighting”, or a certificate of completion from a firefighting course before March 31, 1996, that the OCMI finds in substantial compliance with that section;

(ii) A certificate of completion from a liquid-cargo course in DL or LG approved by the Commandant, appropriate to the endorsement applied for, or a certificate of completion from a liquid-cargo course in DL or LG up to ten years before March 31, 1996, that the OCMI finds acceptable under §§ 13.121(e) (1) and (2), appropriate to the endorsement applied for; and

(iii) Evidence of service as follows:

(A) A letter on company letterhead from the owner, operator, master, or chief engineer of the vessel attesting that the applicant—

(1) Acted as the PIC of the transfer of DL or LG, appropriate to the endorsement applied for, on tankships before March 31, 1996, and has so acted within five years of the date of application; or

(2) Served at least 30 days as a master or mate on tankships certified to carry DL or LG, appropriate to the endorsement applied for before March 31, 1996, and has so acted within five years of the date of application; or

(B) Certificates of Discharge proving at least 30 days of service as master or mate on tankships certified to carry DL or LG, appropriate to the endorsement applied for before March 31, 1996, with a discharge date within five years of the date of application.

(2) To qualify for a restricted “Tankerman-PIC” endorsement, based on his or her cargo-handling experience

for the grades handled, an applicant shall meet paragraphs (d)(1) (i) and (iii) of this section.

(e) A person who qualifies under paragraph (b) of this section by holding a current “Tankerman” endorsement or under paragraph (c) of this section by having served as PIC for the transfer of liquid cargoes in bulk that are listed in subchapter O but that did not require a tankerman endorsement may apply for a “Tankerman-PIC (Barge)” endorsement under this subpart.

(1) To qualify for a “Tankerman-PIC (Barge)” endorsement, an applicant shall present—

(i) Evidence of training in firefighting in the form of—

(A) A certificate of completion from a course in shipboard firefighting approved by the Commandant and meeting the basic firefighting section of the IMO’s Resolution A.437 (XI), “Training of Crews in Fire Fighting”, or a certificate of completion from such a course before March 31, 1996, that the OCMI finds in substantial compliance with that section;

(B) A certificate of completion from a training course meeting § 13.121 in tank-barge firefighting or a certificate of completion from a course in tank-barge firefighting before March 31, 1996, that the OCMI finds in substantial compliance with § 13.121; or

(C) A letter on company letterhead from the owner, operator, master, or chief engineer attesting that before March 31, 1996, the applicant received training in awareness of flammability hazards and in firefighting through a program, lecture, or seminar that

included hands-on firefighting that the OCMI finds in substantial compliance with § 13.121;

(ii) A certificate of completion from a liquid-cargo course in DL or LG approved by the Commandant, appropriate to the endorsement applied for, or a certificate of completion from a liquid-cargo course in DL or LG up to ten years before March 31, 1996, that the OCMI determines substantially covers the material required by Table 13.121(f); and

(iii) Evidence of service on company letterhead from the owner, operator, master, or chief engineer of the vessel attesting that the applicant acted as the PIC of the transfer for DL or LG, appropriate to the endorsement applied for on tank vessels, before March 31, 1996, and has so acted within five years of the date of application.

(2) To qualify for a restricted “Tankerman-PIC (Barge)” endorsement, based on his or her cargo-handling experience for the grades handled, an applicant shall meet all the requirements of paragraphs (e)(1) (i) and (iii) of this section.

(f) Each person qualifying under this section shall obtain a tankerman endorsement at the first renewal of his or her MMD under § 12.02–27 of this chapter that occurs after March 31, 1997.

(g) The following table relates the experience and training to the endorsement for tankerman certified under prior regulations. The section numbers on the table refer to the specific requirements applicable.

TABLE 13.113.—TANKERMAN CERTIFIED UNDER PRIOR REGULATIONS

| Before effective date served as— | Service after effective date but before permanent endorsement: | Requirements for permanent endorsement to an MMD: | Requirements for RESTRICTED endorsement to an MMD: |
|---|--|--|--|
| Licensed Officer | May serve as: § 13.113(a) Tankerman-PIC. Limitations: None Allowed until: First renewal of MMD | Tankerman-PIC § 13.113(d)(1) Service: Service letter from company rep as PIC of DL or LG cargo transfer, or 30 days' service as master or mate on tankships carrying DL or LG.. Courses: Liquid-cargo course in the appropriate cargo grade, & Firefighting. | Tankerman-PIC § 13.113(d)(2). Service: Service letter from company rep as PIC of DL or LG cargo transfer, or 30 days' service as master or mate on tankships carrying DL or LG. Course: Firefighting course. |
| MMD with a Tankerman's endorsement. | May serve as: § 13.113(b) Tankerman-PIC (Barge). Limitations: Grade of cargo on existing MMD. Until: First renewal of MMD Documentation: None | Tankerman-PIC (Barge) § 13.113(e)(1) Service: Service letter from company rep as Service letter PIC of DL or LG cargo transfer. Courses: Liquid-cargo course in the appropriate cargo grade, & Tank-barge firefighting. | Tankerman-PIC (Barge) § 13.113(e)(2). Service: Service letter from company rep as PIC of DL or LG cargo transfer. Course: Tank-barge firefighting. |
| PIC-Subchapter O Non-flammable and Non-combustible. | May serve as: § 13.113(c) Tankerman-PIC (Barge). | Tankerman-PIC (Barge) § 13.113(e)(1) | Tankerman-PIC (Barge) § 13.113(e)(2). |

TABLE 13.113.—TANKERMAN CERTIFIED UNDER PRIOR REGULATIONS—Continued

| Before effective date served as— | Service after effective date but before permanent endorsement: | Requirements for permanent endorsement to an MMD: | Requirements for RESTRICTED endorsement to an MMD: |
|----------------------------------|--|--|---|
| | Limited to: Subchapter-O products previously transferred. Until: 5 years after effective date Documentation: Service letter from company rep as PIC. | Service: Service letter from company rep as PIC of DL or LG cargo transfer. Courses: Liquid-cargo course in the appropriate cargo Tank-barge firefighting. | Service: Service letter from company rep as PIC of DL or LG cargo transfer Course: Tank-barge firefighting. |

§ 13.115 Licensed engineer: Endorsement as Tankerman-Engineer based on service on tankships before March 31, 1996.

A licensed person with service as chief, first assistant, or cargo engineer on at least one tankship before March 31, 1996, may, at any time until the first renewal of his or her MMD under § 12.02–27 of this chapter that occurs after March 31, 1997, apply for a “Tankerman-Engineer” endorsement under this subpart if he or she presents either—

(a) A letter on company letterhead from the owner, operator, master, or chief engineer of the vessel attesting that the applicant served at least 30 days as chief, first assistant, or cargo engineer on tankships certified to carry DL or LG, appropriate to the endorsement applied for before March 31, 1996, and has so served within five years of the date of application; or

(b) Certificates of Discharge proving at least 30 days of service as chief, first assistant, or cargo engineer on tankships certified to carry DL or LG, appropriate to the endorsement applied for before March 31, 1996, with a discharge date within five years of the date of application.

§ 13.117 Any person: Endorsement as Tankerman-Assistant based on unlicensed deck service before March 31, 1996.

A person with unlicensed deck service on tankships before March 31, 1996, may, at any time until the first renewal of his or her MMD under § 12.02–27 of this chapter that occurs after March 31, 1997, apply for a “Tankerman-Assistant” endorsement under this subpart if the applicant presents either—

(a) A letter on company letterhead from the owner, operator, or master of

the vessel attesting that the applicant served at least 30 days of deck service on tankships certified to carry DL or LG, appropriate to the endorsement applied for before March 31, 1996, and has so served within five years of the date of application; or

(b) Certificates of Discharge proving at least 30 days of deck service on tankships certified to carry DL or LG, appropriate to the endorsement applied for before March 31, 1996, with a discharge date within five years of the date of application.

§ 13.119 Expiration of endorsement.

An endorsement as tankerman is valid for the duration of the MMD.

§ 13.120 Renewal of endorsement.

An applicant wishing to renew a tankerman’s endorsement shall meet the requirements of § 12.02–27 of this chapter for renewing an MMD and provide evidence of participation in at least two transfers during the past five years in accordance with § 13.127(b) or of completion of an approved course.

§ 13.121 Courses for training tankerman.

(a) This section prescribes the requirements, beyond those in §§ 10.203 and 10.303 of this chapter, applicable to schools offering courses required for a tankerman endorsement and courses that are a substitute for experience with transfers of liquid cargo in bulk required for the endorsement.

(b) Upon satisfactory completion of an approved course, each student shall receive a certificate, signed by the head of the school offering the course or by a designated representative, indicating the title of the course, the duration, and, if appropriate, credit allowed towards meeting the transfer requirements of this part.

(c) A course that uses simulated transfers to train students in loading and discharging tank vessels may replace a specific number of the transfers required for a “Tankerman-PIC” or “Tankerman-PIC (Barge)” endorsement. The letter from the Coast Guard approving the course will state the number and kind of transfers the course replaces.

(d) The course in liquid cargo required for an endorsement as—

- (1) “Tankerman-PIC DL” is Tankship: Dangerous Liquids;
- (2) “Tankerman-PIC (Barge) DL” is Tank Barge: Dangerous Liquids;
- (3) “Tankerman-PIC LG” is Tankship: Liquefied Gases; and
- (4) “Tankerman-PIC (Barge) LG” is Tank Barge: Liquefied Gases.

(e) The course in firefighting required for an endorsement as—

- (1) “Tankerman-PIC (Barge)” is Tank Barge: Firefighting; and
- (2) “Tankerman-PIC”, “Tankerman-Assistant”, and “Tankerman-Engineer” is a firefighting course that meets the basic firefighting section of the IMO’s Resolution A.437 (XI), “Training of Crews in Fire Fighting”.

(f) No school may issue a certificate unless the student has successfully completed an approved course with the appropriate curriculum outlined in Table 13.121(f).

(g) An organization with a course in DL or LG or a course in tank-barge firefighting taught before March 31, 1996, that substantially covered the material required by Table 13.121(f) for liquid cargoes and by Table 13.121(g) for firefighting may seek approval under § 10.302 of this chapter from the Coast Guard for any course taught up to ten years before March 31, 1996.

TABLE 13.121(F)

| Course topics | 1 | 2 | 3 | 4 |
|---|-------|-------|-------|---|
| General characteristics, compatibility, reaction, firefighting procedures, and safety precautions for the cargoes of: | | | | |
| Bulk liquids defined as Dangerous Liquids in 46 CFR Part 13 | x | x | ..... |  |
| Bulk liquefied gases & their vapors defined as Liquefied Gases in 46 CFR Part 13 .... | ..... | ..... | x | x |
| Physical phenomena of liquefied gas, including: | | | | |
| Basic concept ..... | ..... | ..... | x | x |

TABLE 13.121(F)—Continued

| Course topics | 1 | 2 | 3 | 4 |
|--|---|---|---|---|
| Compression & expansion | | | X | X |
| Mechanism of heat transfer | | | X | X |
| Potential hazards of liquefied gas, including: | | | | |
| Chemical & physical properties | | | X | X |
| Combustion characteristics | | | X | X |
| Results of gas release to the atmosphere | | | X | X |
| Health hazards (skin contact, inhalation, & ingestion) | | | X | X |
| Control of flammability range with inert gas | | | X | X |
| Thermal stress in structure & piping of vessel | | | X | X |
| Cargo systems, including: | | | | |
| Principles of containment systems | X | X | X | X |
| Construction, materials, coatings, & insulation of cargo tanks | X | X | X | X |
| General arrangement of cargo tanks | X | X | X | X |
| Venting & vapor-control systems | X | X | X | X |
| Cargo-handling systems, including: | | | | |
| Piping systems, valves, pumps, & expansion systems | X | X | X | X |
| Operating characteristics | X | X | X | X |
| Instrumentation systems, including: | | | | |
| Cargo-level indicators | X | X | X | X |
| Gas-detecting systems | X | X | X | X |
| Temperature-monitoring systems, cargo | X | X | X | X |
| Temperature-monitoring systems, hull | X | X | X | X |
| Automatic-shutdown systems | X | X | X | X |
| Auxiliary systems, including: | | | | |
| Ventilation, inerting | X | X | X | X |
| Valves, including: | | | | |
| Quick-closing | X | X | X | X |
| Remote-control | X | X | X | X |
| Pneumatic | X | X | X | X |
| Excess-flow | X | X | X | X |
| Safety-relief | X | X | X | X |
| Pressure-vacuum | X | X | X | X |
| Heating-systems: cofferdams & ballast tanks | | | X | X |
| Operations connected with loading & discharging of cargo, including: | | | | |
| Lining up of cargo system and vapor-control system | X | X | X | X |
| Pre-transfer inspections | X | X | X | X |
| Pre-transfer conference and completion of the Declaration of Inspection | X | X | X | X |
| Hooking up of cargo hose, loading arms, and grounding-strap | X | X | X | X |
| Starting of liquid flow | X | X | X | X |
| Calculation of loading rates | X | X | X | X |
| Monitoring of loading rates | X | X | X | X |
| Discussion of loading | X | X | X | X |
| Ballasting & deballasting | X | X | X | X |
| Topping off of cargo tanks | X | X | X | X |
| Discussion of discharging | X | X | X | X |
| Stripping of cargo tanks | X | X | X | X |
| Monitoring of transfers | X | X | X | X |
| Gauging of cargo tanks | X | X | X | X |
| Disconnecting of cargo hoses or loading arms | X | X | X | X |
| Operating procedures & sequence for: | | | | |
| Inerting of cargo tanks & void spaces | X | X | X | X |
| Cooldown & warmup of cargo tanks | | | X | X |
| Gas-freeing | X | X | X | X |
| Loaded or ballasted voyages | X | X | X | X |
| Testing of cargo-tank atmospheres for oxygen & cargo vapor | X | X | X | X |
| Load plan, stability, & stress connected with: | | | | |
| Loading of cargo | X | X | X | X |
| Discharging of cargo | X | X | X | X |
| Ballasting & deballasting | X | | X | |
| Loadline, draft, & trim | X | X | X | X |
| Disposal of boil-off, including: | | | | |
| System design | | | X | X |
| Safety features | | | X | X |
| Stability-letter requirements | X | X | X | X |
| Rules (for tank barge & tankship, both international & Federal) pertaining to operational procedures & pollution prevention. | X | X | X | X |
| Pollution prevention, including: | | | | |
| Procedures to prevent air & water pollution | X | X | X | X |
| Measures to take in event of spillage | X | X | X | X |
| Danger from drift of vapor cloud | X | X | X | X |
| Emergency procedures for the following, including notice to appropriate authorities: | | | | |
| Fire | X | X | X | X |

TABLE 13.121(F)—Continued

| Course topics | 1 | 2 | 3 | 4 |
|--|---|---|---|---|
| Collision | X | X | X | X |
| Grounding | X | X | X | X |
| Equipment failure | X | X | X | X |
| Leaks & spills | X | X | X | X |
| Structural failure | X | X | X | X |
| Emergency discharge of cargo | X | X | X | X |
| Entering of cargo tanks | X | X | X | X |
| Emergency shutdown of cargo-handling | X | X | X | X |
| Emergency systems for closing cargo tanks | X | X | X | X |
| Safety precautions relative to: | | | | |
| Dangers of skin contact | X | X | | |
| Inhalation of vapors | X | X | | |
| Electricity & static electricity: hazards & precautions | X | X | | |
| Terminology of tankships for oil & chemicals | X | | | |
| Terminology of tank barges for oil & chemicals | X | X | | |
| Terminology of tankships for liquefied gases | | | X | |
| Terminology of tank barges for liquefied gases | | | X | |
| Principles & procedures of Crude-Oil-Washing (COW) systems, including: | | | | |
| Purpose | X | X | | |
| Equipment & design | X | X | | |
| Operations | X | X | | |
| Safety precautions | X | X | | |
| Maintenance of plant & equipment | X | X | | |
| Principles & procedures of Inert-Gas Systems (IGS), including: | | | | |
| Purpose | X | X | X | |
| Equipment & design | X | X | X | |
| Operations | X | X | X | |
| Safety precautions | X | X | X | |
| Maintenance of plant & equipment | X | X | X | |
| Cargo-tank cleaning: procedures & precautions. | X | X | | |
| Principles & procedures of vapor-control recovery systems, including: | | | | |
| Purpose | X | X | X | X |
| Principles | X | X | X | X |
| Components | X | X | X | X |
| Hazards | X | X | X | X |
| Coast Guard regulations | X | X | X | X |
| Operating procedures, including: | | | | |
| Testing & inspection requirements | X | X | X | X |
| Pre-transfer procedures | X | X | X | X |
| Connecting sequence | X | X | X | X |
| Start-up procedures | X | X | X | X |
| Normal operations | X | X | X | X |
| Emergency procedures, including notice of release | X | X | X | X |
| Information systems on hazards of cargo | X | X | X | X |
| Safe entry into confined spaces, including: | | | | |
| Definitions & hazards of confined spaces | X | X | X | X |
| Evaluation & assessment of risks & hazards | X | X | X | X |
| Safety precautions & procedures | X | X | X | X |
| Personal protective equipment (PPE) | X | X | X | X |
| Maintenance of PPE | X | X | X | X |
| Emergency procedures | X | X | X | X |
| Federal regulations, national standards, & industry guidelines | X | X | X | X |
| Inspections by marine chemists & competent persons, including hot-work permits & procedures. | X | X | X | X |
| Vessel Response Plans: | | | | |
| Purpose, content, & location of information | X | X | X | X |
| Procedures for notice & mitigation of spills | X | X | X | X |
| Geographic-specific appendices | X | X | X | X |
| Vessel-specific appendices | X | X | X | X |
| Emergency-action checklist | X | X | X | X |

- (1) Tankerman-PIC DL.
- (2) Tankerman-PIC (Barge) DL.
- (3) Tankerman-PIC LG.
- (4) Tankerman-PIC (Barge) LG.

TABLE 13.121(g)

| Course topics | 1 | 2 |
|-----------------------------------|---|---|
| Elements of fire (Fire triangle): | | |
| Fuel | X | X |

TABLE 13.121(g)—Continued

| Course topics | 1 | 2 |
|---|---|---|
| Source of ignition | X | X |
| Oxygen | X | X |
| Ignition sources (general): | | |
| Chemical | | X |
| Biological | | X |
| Physical | | X |
| Ignition sources applicable to barges | X | |
| Definitions of flammability and combustibility: | | |
| Flammability | | X |
| Ignition point | X | X |
| Burning temperature | X | X |
| Burning speed | | X |
| Thermal value | | X |
| Lower flammable limit | X | X |
| Upper flammable limit | X | X |
| Flammable range | X | X |
| Inerting | X | X |
| Static electricity | X | X |
| Flash point | X | X |
| Auto-ignition | X | X |
| Spread of fire: | | |
| By radiation | X | X |
| By convection | X | X |
| By conduction | X | X |
| Reactivity | X | X |
| Fire classifications and applicable extinguishing agents | X | X |
| Main causes of fires: | | |
| Oil leakage | X | X |
| Smoking | X | X |
| Overheating pumps | X | X |
| Galley appliances | | X |
| Spontaneous ignition | X | X |
| Hot work | X | X |
| Electrical apparatus | | X |
| Reaction, self-heating, and auto-ignition | | X |
| Fire prevention: | | |
| General | X | X |
| Fire hazards of DL and LG | X | |
| Fire detection: | | |
| Fire- and smoke-detection systems | | X |
| Automatic fire alarms | | X |
| Firefighting equipment: | | |
| Fire mains, hydrants | | X |
| International shore-connection | | X |
| Smothering-installations, carbon dioxide (CO ₂), foam... .. | | X |
| Halogenated hydrocarbons | | X |
| Pressure-water spray system in special-category spaces | | X |
| Automatic sprinkler system | | X |
| Emergency fire pump, emergency generator | | X |
| Chemical-powder applicants | | X |
| General outline of required and mobile apparatus | | X |
| Fireman's outfit, personal equipment | | X |
| Breathing apparatus | | X |
| Resuscitation apparatus | | X |
| Smoke helmet or mask | | X |
| Fireproof life-line and harness | | X |
| Fire hose, nozzles, connections, and fire axes | | X |
| Fire blankets | | X |
| Portable fire extinguishers | X | X |
| Limitations of portable and semiportable extinguishers | X | |
| Emergency procedures: | | |
| Arrangements: | | |
| Escape routes | X | X |
| Means of gas-freeing tanks | X | X |
| Class A, B, and C divisions | | X |
| Inert-gas system | | X |
| Ship firefighting organization: | | |
| General alarms | | X |
| Fire-control plans, muster stations, and duties | | X |
| Communications | | X |
| Periodic shipboard drills | | X |
| Patrol system | | X |

TABLE 13.121(g)—Continued

| Course topics | 1 | 2 |
|--|-------|-------|
| Basic firefighting techniques: | | |
| Sounding alarm | X | X |
| Locating and isolating fires | X | X |
| Stopping leakage of cargo | X | ..... |
| Jettisoning ..... | ..... | X |
| Inhibiting ..... | ..... | X |
| Cooling ..... | ..... | X |
| Smothering ..... | ..... | X |
| Sizing up situation | X | ..... |
| Locating information on cargo | X | ..... |
| Extinguishing ..... | ..... | X |
| Extinguishing with portable units | X | ..... |
| Setting reflash watch | X | X |
| Using additional personnel | X | ..... |
| Firefighting extinguishing-agents: | | |
| Water (solid jet, spray, fog, and flooding) ..... | ..... | X |
| Foam (high, medium and low expansion) ..... | ..... | X |
| Carbon dioxide (CO ₂) | X | X |
| Halon ..... | ..... | X |
| Aqueous-film-forming foam (AFFF) ..... | ..... | X |
| Dry chemicals | X | X |
| Use of extinguisher on: | | |
| Flammable and combustible liquids | X | ..... |
| Manifold-flange fire | X | ..... |
| Drip-pan fire | X | ..... |
| Pump fire | X | ..... |
| Drills for typical fires on barges | X | ..... |
| Field exercises: | | |
| Extinguish small fires using portable extinguishers: | | |
| Electrical | X | X |
| Manifold-flange | X | X |
| Drip-pan | X | X |
| Pump | X | X |
| Use self-contained breathing apparatus ..... | ..... | X |
| Extinguish extensive fires with water ..... | ..... | X |
| Extinguish fires with foam, or chemical ..... | ..... | X |
| Fight fire in smoke-filled enclosed space wearing SCBA ..... | ..... | X |
| Extinguish fire with water fog in an enclosed space with heavy smoke ..... | ..... | X |
| Extinguish oil fire with fog applicator and spray nozzles, dry-chemical, or foam applicators ..... | ..... | X |
| Effect a rescue in a smoke-filled space while wearing breathing apparatus ..... | ..... | X |

(1) Course in tank-barge firefighting.

(2) From the basic firefighting section of the IMO's Resolution A.437 (XI), "Training of Crews in Fire Fighting".

§ 13.123 Recency of service or experience for original tankerman endorsement.

An applicant for an original tankerman endorsement in subpart B, C, D, or E of this part shall have obtained at least 25% of the qualifying service and, if the endorsement requires transfers, at least two of the qualifying transfers, within five years of the date of application.

§ 13.125 Physical requirements.

Each applicant for an original tankerman endorsement shall meet the physical requirements of § 10.205(d) of this chapter, excluding paragraph (d)(2) of that section.

§ 13.127 Service requirements: general.

(a) A service letter must specify—
 (1) The classification of cargo (DL, LG, or, for a restricted endorsement, a specific product) handled while the applicant accumulated the service;

(2) The dates, the number and kinds of transfers the applicant has participated in, and the number of transfers that involved commencement or completion; and

(3) That the applicant has demonstrated to the satisfaction of the signer that he or she is fully capable of supervising transfers of liquid cargo, including

- (i) Pre-transfer inspection;
- (ii) Pre-transfer conference and execution of the Declaration of Inspection;
- (iii) Connection of cargo hoses or loading-arms;
- (iv) Line-up of the cargo system for loading and discharge;
- (v) Start of liquid flow during loading;
- (vi) Start of cargo pump and increase of pressure to normal discharge pressure;
- (vii) Calculation of loading-rates;
- (viii) Monitoring;

(ix) Topping-off of cargo tanks during loading;

(x) Stripping of cargo tanks;

(xi) Ballasting and deballasting, if appropriate;

(xii) Disconnection of the cargo hoses or loading-arms; and

(xiii) Securing of cargo systems.
 (b) In determining the numbers and kinds of transfers that the applicant has participated in under paragraph (a)(2) of this section, the following rules apply:

(1) A transfer must involve the loading or discharge from at least one of the vessel's cargo tanks to or from a shore facility or another vessel. A shift of cargo from one tank to another tank is not a transfer for this purpose.

(2) Regardless of how long the transfer lasts beyond four hours, it counts as only one transfer.

(3) A transfer must include both a commencement and a completion.

(4) Regardless of how many tanks or products are being loaded or discharged

at the same time, a person may receive credit for only one transfer, one loading, and one discharge a watch.

(5) Credit for a transfer during a watch of less than four hours accrues only if the watch includes either the connection and the commencement of transfer or the completion of transfer and the disconnection.

(6) Credit for a commencement of loading accrues only if the applicant participates in the pre-transfer inspection, the pre-transfer conference including execution of the Declaration of Inspection, the connection of cargo hoses or loading-arms, the line-up of the

cargo system for the loading, the start of liquid flow, and the calculation of loading-rates.

(7) Credit for a commencement of discharge accrues only if the applicant participates in the pre-transfer inspection, the pre-transfer conference including execution of the Declaration of Inspection, the connection of cargo hoses or loading-arms, the line-up of the cargo pump or pumps and increase of pressure to normal pressure for discharge, and the monitoring of discharge rates.

(8) Credit for a completion of transfer, whether loading or discharge, accrues only if the applicant participates in the topping-off at the loading port, or in the stripping of cargo tanks and the commencement of ballasting, if required by the vessel's transfer procedures, at the discharge port.

§ 13.129 Quick-reference table for tankerman.

Table 13.129 provides a guide to the requirements for various tankerman endorsements. Provisions in the reference sections are controlling.

TABLE 13.129

| Category | Minimum age | Physical required | Service | Recency of service | Proof of service | Firefighting certificate | Course | English language |
|--|-------------------|--------------------|--|---|-------------------------|---|--|------------------|
| Tankerman PIC Subpart B. | 18: 13.201(a) ... | Yes: 13.125 | Yes: 13.203, 30 days licensed or 60 days unlicensed and 10 cargo transfers. | Yes: 13.123, 25% of service, 2 transfers within 5 yrs. | Yes: 13.205, Letter. | Yes: 13.207, Basic F/F*. | Yes: 13.209, DL or LG. | Yes: 13.201(g). |
| Tankerman PIC (Barge) Subpart C. | 18: 13.301(a) ... | Yes: 13.125 | Yes: 13.303, 60 days on T/Vs or 6 months on T/Bs and 10 cargo transfers. | Yes: 13.123, 25% of service, 2 transfers within 5 yrs. | Yes: 13.305, Letter. | Yes: 13.307, Basic F/F* or Tank-barge F/F. | Yes: 13.309, DL or LG. | Yes: 13.301(g). |
| Tankerman Assistant Subpart D. | 18: 13.401(a) ... | Yes: 13.125 | Yes: 13.403, 90 days on tankships or attend a cargo course. | Yes: 13.123, 25% of service, within 5 yrs. | Yes: 13.405, Letter. | Yes: 13.407, Basic F/F*. | Yes: 13.409, Cargo course or 90 days service. | Yes: 13.401(f). |
| Tankerman Engineer Subpart E. | 18: 13.501(a) ... | Yes: 13.125 | Yes: 13.503, 90 days licensed or 30 days licensed and completion of a DL or LG course or 60 days unlicensed and completion of a DL or LG course. | Yes: 13.123, 25% of service, within 5 yrs. | Yes: 13.505, Letter. | Yes: 13.507, Basic F/F*. | Yes: 13.509, Cargo course or service requirements. | Yes: 13.501(g). |
| Restricted Tankerman PIC. | 18: 13.111(b) ... | Yes: 13.111(b) ... | Yes: 13.111(b), 30 days licensed or 60 days unlicensed and 10 cargo transfers. | Yes: 13.111(b), 25% of service, 2 transfers within 5 yrs. | Yes: 13.111(b), Letter. | Yes: 13.111(b), Basic F/F*. | No | Yes: 13.111(b). |
| Restricted Tankerman PIC (Barge). | 18: 13.111(c) ... | Yes: 13.111(c) ... | Yes: 13.111(c), 60 days on T/Vs or 6 months on T/Bs and 10 cargo transfers. | Yes: 13.111(c), 25% of service, 2 transfers within 5 yrs. | Yes: 13.111(c), Letter. | Yes: 13.111(c), Basic F/F* or Tank-barge F/F. | No | Yes: 13.111(c). |
| Restricted Tankerman PIC (Barge) facility. | 18: 13.111(d) ... | Yes: 13.111(d) ... | Yes: 13.111(d)(4), "Competent Person" and knowledge of tank-cleaning, gas-freeing. | No | Yes: 13.111(d), Letter. | No | No | Yes: 13.111(d). |

*From the basic firefighting section of the IMO's Resolution A.437 (XI), "Training of Crews in Fire Fighting".

Subpart B—Requirements for "Tankerman-PIC" Endorsement.

§ 13.201 Original application for "Tankerman-PIC" endorsement.

Each applicant for an original "Tankerman-PIC" endorsement shall—

- (a) Be at least 18 years old;
- (b) Apply on a Coast Guard form;

(c) Present evidence of passing a physical examination in accordance with § 13.125;

(d) Present evidence of service on tankships in accordance with § 13.203;

(e) Meet the requirement of a course on firefighting in § 13.207;

(f) Meet the requirement of a course in DL or LG appropriate for the

endorsement applied for in § 13.209; and

(g) Be capable of speaking and understanding, in English, all instructions needed to commence, conduct, and complete a transfer of cargo, and be capable of reading the English found in the Declaration of Inspection, vessel response plans, and Cargo Information Cards.

§ 13.203 Eligibility requirements: Experience.

Each applicant for a "Tankerman-PIC" endorsement for DL or LG shall meet the requirements of either paragraphs (a) and (b) or paragraph (c) of this section.

(a) Each applicant shall present evidence of—

(1) At least 30 days of service as a licensed deck officer or a licensed engineering officer on one or more tankships certified to carry DL or LG appropriate to the endorsement applied for;

(2) At least 60 days of unlicensed service on deck or in the engine department on one or more tankships certified to carry DL or LG appropriate to the endorsement applied for; or

(3) A mixture of licensed and unlicensed service on deck or in the engine department on tankships certified to carry DL or LG appropriate to the endorsement applied for equivalent to 30 days of licensed service, every 2 days of unlicensed service counting as 1 day of licensed service.

(b) Each applicant shall present evidence of participation, under the supervision of a "Tankerman-PIC," in at least ten transfers of liquid cargo in bulk of the classification desired on tankships, including at least—

(1) Five loadings and five discharges;

(2) Two commencements of loading and two completions of loading; and

(3) Two commencements of discharge and two completions of discharge.

(c) Each applicant already holding an MMD endorsed "Tankerman-PIC" for DL and seeking an endorsement for LG, or the converse, shall—

(1) Provide evidence of at least half the service required by paragraph (a) of this section; and

(2) Comply with paragraph (b) of this section, except that he or she need provide evidence of only three loadings and three discharges along with evidence of compliance with paragraphs (b)(2) and (3) of this section.

§ 13.205 Proof of service for "Tankerman-PIC" endorsement.

Service must be proved by a letter on company letterhead from the owner, operator, or master of the vessel on which the applicant obtained the service. The letter must contain the information described in § 13.127(a).

§ 13.207 Eligibility requirements: Firefighting course.

Each applicant for an original "Tankerman-PIC" endorsement shall present a certificate of successful completion from a course in shipboard

firefighting, approved by the Commandant and meeting the basic firefighting section of the IMO's Resolution A.437 (XI), "Training of Crews in Fire Fighting", completed within five years of the date of application for the endorsement, unless he or she has previously submitted such a certificate for a license or a tankerman endorsement.

§ 13.209 Eligibility requirements: Cargo course.

Each applicant for an original "Tankerman-PIC" endorsement shall present a certificate of completion from a course in DL or LG, appropriate for tankships, approved by the Commandant, appropriate to the endorsement applied for, within two years of the date of application.

Subpart C—Requirements for "Tankerman-PIC (Barge)" Endorsement**§ 13.301 Original application for "Tankerman-PIC (Barge)" endorsement.**

Each applicant for a "Tankerman-PIC (Barge)" endorsement shall—

(a) Be at least 18 years old;

(b) Apply on a Coast Guard form;

(c) Present evidence of passing a physical examination in accordance with § 13.125;

(d) Present evidence of service on tank vessels in accordance with § 13.303;

(e) Meet the requirement of a firefighting course in § 13.307;

(f) Meet the requirement of a course in DL or LG appropriate for the endorsement applied for in § 13.309; and

(g) Be capable of speaking, and understanding, in English, all instructions needed to commence, conduct, and complete a transfer of cargo, and be capable of reading the English found in the Declaration of Inspection, vessel response plans, and Cargo Information Cards.

§ 13.303 Eligibility requirements: Experience.

Each applicant for a "Tankerman-PIC (Barge)" endorsement for DL or LG shall meet the requirements of either paragraphs (a) and (b) or paragraph (c) of this section.

(a) Each applicant shall present evidence of—

(1) At least 60 days of service on one or more tank vessels certified to carry DL or LG appropriate to the endorsement applied for; or

(2) At least 6 months of closely related service directly involved with tank barges appropriate to the endorsement applied for; and

(b) Participation, under the supervision of a "Tankerman-PIC" or "Tankerman-PIC (Barge)," in at least ten transfers of liquid cargo in bulk of the classification desired on tankships or tank barges, including at least—

(1) Five loadings and five discharges;

(2) Two commencements of loading and two completions of loading; and

(3) Two commencements of discharge and two completions of discharge.

(c) Each applicant already holding an MMD endorsed "Tankerman-PIC (Barge)" for DL and seeking an endorsement for LG, or the converse, shall—

(1) Provide evidence of at least half the service required by paragraph (a) of this section; and

(2) Comply with paragraph (b) of this section, except that he or she need provide evidence of only three loadings and three discharges along with evidence of compliance with paragraphs (b)(2) and (3) of this section.

§ 13.305 Proof of service for "Tankerman-PIC (Barge)" endorsement.

Service must be proved by a letter on company letterhead from a terminal owner or operator; a tank barge owner or operator; or the owner, operator, or master of a tankship. The letter must contain the information required by § 13.127(a), excluding paragraph (a)(3)(vii).

§ 13.307 Eligibility requirements: Firefighting course.

Each applicant for a "Tankerman-PIC (Barge)" endorsement shall present a certificate of successful completion from—

(a) A course in shipboard firefighting, approved by the Commandant and meeting the basic firefighting section of the IMO's Resolution A.437 (XI), "Training of Crews in Fire Fighting", completed within five years of the date of application for the endorsement, unless he or she has previously submitted such a certificate for a license or a tankerman endorsement;

(b) A course in tank-barge firefighting, approved by the Commandant and meeting § 13.121, completed within five years of the date of application for the endorsement.

§ 13.309 Eligibility requirements: Cargo course.

Each applicant for an original "Tankerman-PIC (Barge)" endorsement shall present a certificate of completion from a course in DL or LG approved by the Commandant, appropriate to the endorsement applied for, within two years of the date of application.

Subpart D—Requirements for “Tankerman-Assistant” Endorsement**§ 13.401 Original application for “Tankerman-Assistant” endorsement.**

Each applicant for a “Tankerman-Assistant” endorsement shall—

- (a) Be at least 18 years old;
- (b) Apply on a Coast Guard form;
- (c) Present evidence of passing a physical examination in accordance with § 13.125;
- (d) Meet the requirement of a firefighting course in § 13.407;
- (e) (1) Meet the requirement of a course in DL or LG appropriate for the endorsement applied for in § 13.409; or (2) Present evidence of service on tankships in accordance with § 13.403; and
- (f) Be capable of speaking and understanding, in English, all instructions needed to commence, conduct, and complete a transfer of cargo.

§ 13.403 Eligibility requirements: Experience.

(a) Each applicant for a “Tankerman-Assistant” endorsement shall present—

- (1) Evidence of at least 90 days of deck service on tankships certified to carry DL or LG appropriate to the endorsement applied for; or
 - (2) A certificate of completion from a course in DL or LG appropriate for the endorsement applied for as prescribed in § 13.409.
- (b) Each applicant already holding an MMD endorsed “Tankerman-Assistant” for DL and seeking one for LG, or the converse, shall—
- (1) Provide evidence of at least half the service required in paragraph (a)(1) of this section; or
 - (2) Meet the requirement of a course in DL or LG appropriate for the endorsement applied for as prescribed in § 13.409.

§ 13.405 Proof of service for “Tankerman-Assistant” endorsement.

(a) Service must be proved by a letter on company letterhead from the owner, operator, or master of a tankship. The letter must specify—

- (1) The classification of cargo (DL or LG) carried while the applicant accumulated the service;
- (2) The number of days of deck service the applicant accumulated on the tankship; and
- (3) That the applicant has demonstrated an understanding of cargo transfer and a sense of responsibility that, in the opinion of the signer, will allow the applicant to safely carry out duties respecting cargo transfer and transfer equipment assigned by the PIC

of the transfer without direct supervision by the PIC; or

- (b) Service must be proved by—
 - (1) Certificates of Discharge from tankships with the appropriate classification of cargo (DL, LG, or both); and
 - (2) A letter on company letterhead from the owner, operator, or master of one of the tankships stating that he or she has demonstrated—
 - (i) An understanding of cargo transfer; and
 - (ii) A sense of responsibility that, in the opinion of the signer, will allow him or her to safely carry out duties respecting cargo and its equipment assigned by the PIC of the transfer without direct supervision by the PIC.

§ 13.407 Eligibility requirements: Firefighting course.

Each applicant for a “Tankerman-Assistant” endorsement shall present a certificate of successful completion from a course in shipboard firefighting, approved by the Commandant and meeting the basic firefighting section of the IMO’s Resolution A.437 (XI), “Training of Crews in Fire Fighting”, completed within five years of the date of application for the endorsement, unless he or she has previously submitted such a certificate from one of these courses for a license or endorsement.

§ 13.409 Eligibility requirements: Cargo course.

Each applicant for an original “Tankerman-Assistant” endorsement that has not presented the required service on tankships must present a certificate of completion from a course in DL or LG, appropriate for tankships, approved by the Commandant, appropriate to the endorsement applied for, within two years of the date of application.

Subpart E—Requirements for “Tankerman-Engineer” Endorsement**§ 13.501 Original application for “Tankerman-Engineer” endorsement.**

Each applicant for a “Tankerman-Engineer” endorsement shall—

- (a) Be at least 18 years old;
- (b) Apply on a Coast Guard form;
- (c) Present evidence of passing a physical examination in accordance with § 13.125;
- (d) Present evidence of service on tankships in accordance with § 13.503;
- (e) Meet the requirement of a firefighting course in § 13.507;
- (f) Meet the requirement of a course in DL or LG appropriate for the endorsement applied for in § 13.509; and

(g) Be capable of speaking and understanding, in English, all instructions needed to commence, conduct, and complete a transfer of cargo.

§ 13.503 Eligibility requirements: Experience.

(a) Each applicant for a “Tankerman-Engineer” endorsement shall present evidence of at least—

- (1) 90 days of service as a licensed engineering officer on tankships certified to carry DL or LG appropriate to the endorsement applied for;
 - (2) 30 days of service as a licensed engineering officer on tankships certified to carry DL or LG appropriate to the endorsement applied for, and a certificate of completion from a course in DL or LG appropriate for the endorsement applied for as prescribed by § 13.509(a); or
 - (3) 60 days of unlicensed service in the engine department on tankships certified to carry DL or LG appropriate to the endorsement applied for, and a certificate of completion from a course in DL or LG appropriate for the endorsement applied for as prescribed by § 13.509(a).
- (b) Each applicant already holding an MMD endorsed “Tankerman-Engineer” for DL and seeking one for LG, or the converse, shall provide evidence of at least half the service required by—
- (1) Paragraph (a)(1) of this section; or
 - (2) Paragraph (a)(2) or (3) of this section, and a certificate of completion from a course in DL or LG appropriate for the endorsement applied for as prescribed by § 13.509(a).

§ 13.505 Proof of service for “Tankerman-Engineer” endorsement.

(a) Service must be proved by a letter on company letterhead from the owner, operator, or master or chief engineer of a tankship. The letter must specify—

- (1) The classification of cargo (DL, LG, or both) carried while the applicant accumulated the service; and
 - (2) The number of days of licensed and unlicensed service in the engine department on tankships; or
- (b) Service must be proved by certificates of discharge from tankships with the appropriate classification of cargo (DL, LG, or both).

§ 13.507 Eligibility requirements: Firefighting course.

Each applicant for a “Tankerman-Engineer” endorsement shall present a certificate of successful completion from a course in shipboard firefighting, approved by the Commandant and meeting the basic firefighting section of the IMO’s Resolution A.437 (XI), “Training of Crews in Fire Fighting”,

completed within five years of the date of application for the endorsement, unless he or she has previously submitted such a certificate for a license or tankerman endorsement.

§ 13.509 Eligibility requirements: Cargo course.

Each applicant for an original "Tankerman-Engineer" endorsement that has not presented service prescribed by § 13.503(a)(1) must present a certificate of completion from a course in DL or LG, appropriate for tankships, approved by the Commandant, appropriate to the endorsement applied for, within two years of the date of application.

PART 15—MANNING REQUIREMENTS

12. The authority citation for part 15 continues to read as follows:

Authority: 46 U.S.C. 2103, 3703, 8105; 49 CFR 1.45, 1.46.

13. Section 15.301 is amended by revising paragraphs (a) and (c) and adding a new paragraph (d), to read as follows:

§ 15.301 Definitions of terms in this part.

(a) * * *

Tank barge means a non-self-propelled tank vessel.

Tank vessel means a vessel that is constructed or adapted to carry, or that carries, oil or hazardous material in bulk as cargo or cargo residue.

Tankship means any tank vessel constructed or adapted primarily to carry oil or hazardous material in bulk as cargo or cargo residue and propelled by power or sail.

Transfer means any movement of dangerous liquid or liquefied gas as cargo in bulk or as cargo residue to, from, or within a vessel by means of pumping, gravitation, or displacement. Section 13.127 of this chapter describes what qualifies as participation in a creditable transfer.

* * * * *

(c) The following ratings are established in part 12 of this chapter. When used in this part, terms for the ratings identify persons holding valid merchant mariners' documents for service in the ratings issued under that part:

- (1) Able seaman.
- (2) Ordinary seaman.
- (3) Qualified member of the engine department.
- (4) Lifeboatman.
- (5) Wiper.
- (6) Steward's department (F.H.).
- (d) The following ratings are established in part 13 of this chapter.

When used in this part, the terms for the ratings identify persons holding valid merchant mariners' documents for service in the ratings issued under that part:

- (1) Tankerman-PIC.
- (2) Tankerman-PIC (Barge).
- (3) Restricted Tankerman-PIC.
- (4) Restricted Tankerman-PIC (Barge).
- (5) Tankerman-Assistant.
- (6) Tankerman-Engineer.

14. Section 15.860 is added to subpart G, to read as follows:

§ 15.860 Tankerman.

(a) The Officer in Charge, Marine Inspection, enters on the Certificate of Inspection issued to each manned tank vessel subject to the regulations in this chapter the number of crewmembers required to hold valid merchant mariners' documents with the proper tankerman endorsement. Table 15.860(a)(1) provides the minimal requirements for tankermen aboard manned tank vessels; Table 15.860(a)(2) provides the tankerman endorsements required for personnel aboard tankships.

(b) For each tankship of more than 5,000 gross tons certified for voyages beyond the Boundary Line:

- (1) The number of "Tankerman-PICs" or restricted "Tankerman-PICs" carried must be not fewer than two.
- (2) The number of "Tankerman-Assistants" carried must be not fewer than three.
- (3) The number of "Tankerman-Engineers" carried must be not fewer than two.

(c) For each tankship of 5,000 gross tons or less certified for voyages beyond the Boundary Line:

- (1) The number of "Tankerman-PICs" or restricted "Tankerman-PICs" carried must be not fewer than two.
- (2) The number of "Tankerman-Engineers" carried must be not fewer than two, unless only one engineer is required, in which case the number of

"Tankerman-Engineers" carried may be just one.

(d) For each tankship not certified for voyages beyond the Boundary Line, if the total crew complement is:

- (1) One or two, the number of "Tankerman-PICs" or restricted "Tankerman-PICs" carried may be just one.
- (2) More than two, the number of "Tankerman-PICs" or restricted "Tankerman-PICs" carried must be not fewer than two.

(e) For each tank barge manned under § 31.15-5 of this chapter, if the total crew complement is:

- (1) One or two, the number of "Tankerman-PICs", restricted "Tankerman-PICs", "Tankerman-PICs (Barge)", or restricted "Tankerman-PICs (Barge)" carried may be just one.
- (2) More than two, the number of "Tankerman-PICs", restricted "Tankerman-PICs", "Tankerman-PICs (Barge)", or restricted "Tankerman-PICs (Barge)" carried must be not fewer than two.

(f) The following personnel aboard each tankship certified for voyages beyond the Boundary Line shall hold valid merchant mariners' documents, endorsed as follows:

- (1) The master and chief mate shall each hold a "Tankerman-PIC" or restricted "Tankerman-PIC" endorsement.
- (2) The chief, first assistant, and cargo engineers shall each hold a "Tankerman-Engineer" or "Tankerman (PIC)" endorsement.
- (3) Each licensed person acting as the PIC of a transfer of liquid cargo in bulk shall hold a "Tankerman-PIC" or restricted "Tankerman-PIC" endorsement.
- (4) Each licensed or unlicensed person, who is assigned by the PIC duties and responsibilities related to the cargo or cargo-handling equipment during a transfer of liquid cargo in bulk but is not directly supervised by the PIC, shall hold a "Tankerman-Assistant" endorsement.
- (g) The endorsements required by this section must be for the classification of the liquid cargo in bulk or of the cargo residue being carried.

TABLE 15.860(a)(1).—MINIMAL REQUIREMENTS FOR TANKERMEN ABOARD MANNED TANK VESSELS

| Tank vessels | Tankerman PIC | Tankerman assistant | Tankerman engineer | Tankerman PIC or tankerman PIC (barge) |
|--|---------------|---------------------|--------------------|--|
| Tankship Certified for Voyages Beyond Boundary Line: | | | | |
| Over 5000 GT | 2 | 3 | 2 | ..... |
| 5000 GT or less | 2 | ..... | *2 | ..... |

TABLE 15.860(a)(1).—MINIMAL REQUIREMENTS FOR TANKERMEN ABOARD MANNED TANK VESSELS—Continued

| Tank vessels | Tankerman PIC | Tankerman assistant | Tankerman engineer | Tankerman PIC or tankerman PIC (barge) |
|---|---------------|---------------------|--------------------|--|
| Tankship Not Certified for Voyages Beyond Boundary Line | **2 | ..... | ..... | ..... |
| Tank Barge Certified for Voyages Beyond Boundary Line ..... | ..... | ..... | ..... | ***2 |

* If only one engineer is required, then only one Tankerman Engineer is required.
 ** If the total crew complement is one or two persons, then only one Tankerman PIC is required.
 *** If the total crew complement is one or two persons, then only one Tankerman PIC or Tankerman PIC (Barge) is required.

TABLE 15.860(a)(2).—TANKERMEN ENDORSEMENTS REQUIRED FOR PERSONNEL ABOARD TANKSHIPS
 [Endorsement for the Classification of the Bulk Liquid Cargo or Residues Carried]

| Tankship certified for voyages beyond boundary line | Tankerman PIC | Tankerman engineer | Tankerman assistant |
|---|---------------|--------------------|---------------------|
| Master | ✓ | | |
| Chief Mate | ✓ | | |
| Chief Engineer | ✓ | or | ✓ |
| First Assistant Engineer | ✓ | or | ✓ |
| Cargo Engineer | ✓ | or | ✓ |
| Licensed Person Acting as PIC of Transfer of Liquid Cargo in Bulk | ✓ | | |
| Licensed or Unlicensed Person Not Directly Supervised by PIC | | | ✓ |

SUBCHAPTER D—TANK VESSELS

PART 30—GENERAL PROVISIONS

15. The authority citation for part 30 continues to read as follows:

Authority: 46 U.S.C. 3306, 3703; 49 U.S.C. App. 1804; 49 CFR 1.45, 1.46. Section 30.01–2 also issued under the authority of 44 U.S.C. 3507.

16. Section 30.10–71 is revised to read as follows:

§ 30.10–71 Tankerman—TB/ALL.

The following ratings are established in part 13 of this chapter. The terms for the ratings identify persons holding valid merchant mariners' documents for service in the ratings issued under that part:

- (a) Tankerman-PIC.
- (b) Tankerman-PIC (Barge).
- (c) Restricted Tankerman-PIC.
- (d) Restricted Tankerman-PIC (Barge).
- (e) Tankerman-Assistant.
- (f) Tankerman-Engineer.

PART 31—INSPECTION AND CERTIFICATION

17. The authority citation for part 31 is revised to read as follows:

Authority: 33 U.S.C. 1321(j); 46 U.S.C. 3306, 3703, 5115, 8105, 9101, 9102; 49 U.S.C. App. 1804; E.O. 12234, 45 FR 58801, 3 CFR, 1980 Comp., p. 277; E.O. 11735, 38 FR 21243, 3 CFR, 1971–1975 Comp., p. 793; 49 CFR 1.46.

18. Section 31.15–1 is revised to read as follows:

§ 31.15–1 Licensed officers and crews—TB/ALL.

The Officer in Charge, Marine Inspection (OCMI), that inspects the vessel enters on the Certificate of Inspection (COI) for each tank vessel the complement of officers and crew that are required by statute and regulation and that in the judgment of the OCMI are necessary for its safe operation. The OCMI may change the complement from time to time by endorsement to the COI for changes in conditions of employment.

PART 35—OPERATIONS

19. The authority citation for part 35 is revised to read as follows:

Authority: 33 U.S.C. 1321(j); 46 U.S.C. 3306, 3703, 6101, 9101, 9102; 49 U.S.C. App. 1804; E.O. 11735, 38 FR 21243, 3 CFR, 1971–1975 Comp., p. 793; E.O. 12234, 45 CFR 58801, 3 CFR, 1980 Comp., p. 277; 49 CFR 1.46.

20. Section 35.05–15 is amended by revising the section heading and paragraph (b)(1) to read as follows:

§ 35.05–15 Tank vessel security—TB/ALL.

* * * * *

(b) * * *

(1) The owner, managing operator, master, and person in charge of a vessel towing a tank barge that need not be manned, and each of them, shall be responsible for monitoring the security and integrity of the tank barge and for ensuring adherence to proper safety precautions. These responsibilities include, but are not limited to—

- (i) Ensuring that any tank barge added to the tow has all tank openings

properly secured; has its freeing-ports and scuppers, if any, unobstructed; meets any loadline or freeboard requirements; and neither leaks cargo into the water, voids, or cofferdams nor leaks water into the tanks, voids, or cofferdams;

(ii) Ensuring that every tank barge in the tow is properly secured within the tow;

(iii) Ensuring that periodic checks are made of every tank barge in the tow for leakage of cargo into the water, voids, or cofferdams and for leakage of water into the tanks, voids, or cofferdams;

(iv) Knowing the cargo of every tank barge in the tow, any hazards associated with the cargo, and what to do on discovery of a leak;

(v) Ensuring that the crew of the vessel know the cargo of every tank barge in the tow, any hazards associated with the cargo, and what to do on discovery of a leak;

(vi) Reporting to the Coast Guard any leaks from a tank barge in the tow into the water, as required by 33 CFR 151.15; and

(vii) Ensuring that the crew of the vessel and other personnel in the vicinity of the tank barges in the tow follow the proper safety precautions for tank vessels, and that no activity takes place in the vicinity of the barges that could create a hazard.

* * * * *

21. Section 35.35–1 is revised to read as follows:

§ 35.35–1 Persons on duty—TB/ALL.

- (a) On each tankship required to be documented under the laws of the

United States, the owner, managing operator, master, and person in charge of the vessel, and each of them, shall ensure that—

(1) Enough "Tankerman-PICs" or restricted "Tankerman-PICs", and "Tankerman-Assistants", authorized for the classification of cargo carried, are on duty to safely transfer liquid cargo in bulk or safely clean cargo tanks; and

(2) Each transfer of liquid cargo in bulk and each cleaning of a cargo tank is supervised by a person qualified to be the person in charge of the transfer or the cleaning under subpart C of 33 CFR part 155.

(b) On each United States tank barge subject to inspection—

(1) The owner, managing operator, master, and person in charge of the vessel, and each of them, shall ensure that no transfer of liquid cargo in bulk or cleaning of a cargo tank takes place unless under the supervision of a qualified person designated as the person in charge of the transfer or the cleaning under subpart C of 33 CFR part 155; and

(2) The person designated as the person in charge of the transfer shall ensure that—

(i) Enough qualified personnel are on duty to safely transfer liquid cargo in bulk or safely clean cargo tanks; and

(ii) The approved portable extinguishers required by Table 34.50-10(a) of this chapter are aboard and readily available before any transfer of liquid cargo in bulk or any operation of barge machinery or boilers.

(c) On each foreign tankship, the owner, managing operator, master, and person in charge of the vessel, and each of them, shall ensure that—

(1) Enough personnel, qualified for the classification of cargo carried, are on duty to safely transfer liquid cargo in bulk or safely clean cargo tanks; and

(2) Each transfer of liquid cargo in bulk and each cleaning of a cargo tank is supervised by a qualified person designated as a person in charge of the transfer or the cleaning under subpart C of 33 CFR part 155.

(d) On each foreign tank barge—

(1) The owner, managing operator, master, and person in charge of the vessel, and each of them, shall ensure that no transfer of liquid cargo in bulk or cleaning of a cargo tank takes place unless under the supervision of a qualified person designated as the person in charge of the transfer or the cleaning under subpart C of 33 CFR part 155.

(2) The person designated as the person in charge of the transfer shall ensure that enough qualified personnel

are on duty to safely transfer liquid cargo in bulk or safely clean cargo tanks.

(e) The person in charge of the transfer of liquid cargo in bulk on the tank vessel shall be responsible for the safe loading and discharge of the liquid cargo in bulk.

(f) The person in charge of the transfer of liquid cargo in bulk on each United States tank vessel, when lightering to or from a foreign tank vessel, shall ensure that the person in charge on the foreign tank vessel, or his or her interpreter, is capable of reading, speaking, and understanding the English language well enough to allow a safe transfer.

22. Section 35.35-10 is revised to read as follows:

§ 35.35-10 Closing of freeing-ports, scuppers, and sea valves—TB/ALL.

The person in charge of each transfer of liquid cargo in bulk shall ensure that all freeing-ports and scuppers are properly plugged during the transfer except on tank vessels using water for cooling decks. Although under no circumstances may sea valves be secured by locks, the valves must be closed, and lashed or sealed, to indicate that they should not be opened during the transfer.

23. Section 35.35-15 is amended by revising paragraph (b) to read as follows:

§ 35.35-15 Connecting for cargo transfer—TB/ALL.

* * * * *

(b) When cargo connections are supported by ship's tackle, the person in charge of the transfer of liquid cargo in bulk shall determine the weights involved to ensure that adequate tackle is used.

* * * * *

24. The heading and introductory text of § 35.35-20 are revised to read as follows:

§ 35.35-20 Inspection before transfer of cargo—TB/ALL.

Before the transfer of liquid cargo in bulk, the person in charge of the transfer shall inspect the vessel to ensure the following:

* * * * *

25. Section 35.35-25 is revised to read as follows:

§ 35.35-25 Approval to start transfer of cargo—TB/ALL.

When the person in charge of the transfer of liquid cargo in bulk has ensured that the requirements of §§ 35.35-20 and 35.35-30 have been met, he or she may give approval to start the transfer.

26. Section 35.35-30 is amended by revising the first sentence of paragraph

(a), the title and introductory text of the "Declaration of Inspection before Transfer of Liquid Cargo in Bulk" of paragraph (b), and by adding a new paragraph (13) to the "Declaration of Inspection" in paragraph (b) to read as follows:

§ 35.35-30 "Declaration of Inspection" for tank vessel—TB/ALL.

(a) After an inspection under § 35.35-20 but before a transfer of cargo, the person in charge of the transfer shall prepare, in duplicate, a Declaration of Inspection. * * *

(b) * * *

Declaration of Inspection Before Transfer of Liquid Cargo in Bulk

Date _____

Vessel _____

Port of _____

Product[s] being transferred—
(Classification[s] and Kind[s])

I, _____, the person in charge of the transfer of liquid cargo in bulk about to begin, do certify that I have personally inspected this vessel with reference to the following requirements set forth in 46 CFR 35.35-20, and that opposite each of the applicable items listed below I have indicated whether the vessel complies with all pertinent regulations.

* * *

(13) Have the applicable sections of the vessel response plan been reviewed before commencing transfer, and arrangements or contingencies made for implementation of the Plan should the need arise?

* * * * *

27. Section 35.35-35 is revised to read as follows:

§ 35.35-35 Duties of person in charge of transfer—TB/ALL.

The person in charge of the transfer of liquid cargo in bulk shall control the transfer as follows:

(a) Supervise the operations of cargo-system valves.

(b) Commence transfer of cargo at slow rate of cargo flow.

(c) Observe cargo connections for leakage.

(d) Observe pressure on cargo system.

(e) If transfer is loading (rather than discharging), observe rate of loading to avoid overflow of tanks.

28. Section 35.35-42 is revised to read as follows:

§ 35.35-42 Restrictions on vessels alongside a tank vessel loading or unloading cargo of Grade A, B, or C—TB/ALL.

(a) No vessel may come alongside or remain alongside a tank vessel in way of its cargo tanks while it is loading or unloading cargo of Grade A, B, or C

without permission of the person in charge of the transfer on the tank vessel.

(b) No vessel may come alongside or remain alongside a tank vessel in way of its cargo tanks while it is loading or unloading cargo of Grade A, B, or C unless the conditions then prevailing are acceptable to the persons in charge of cargo-handling on both vessels.

29. Section 35.35-55 is amended by revising paragraph (a) to read as follows:

§ 35.35-55 Transfer of other cargo or stores on tank vessels—TB/ALL.

(a) No packaged goods, freight, or ship's stores may be loaded or unloaded during the loading or unloading of cargo of Grade A, B, or C except by permission of the person in charge of the transfer of liquid cargo in bulk. No explosives may be loaded, unloaded, or carried as cargo on any tank vessel containing cargo of Grade A, B, or C.

* * * * *

SUBCHAPTER H—PASSENGER VESSELS

PART 78—OPERATIONS

30. The authority citation for part 78 continues to read as follows:

Authority: 33 U.S.C. 1321(j); 46 U.S.C. 3306, 6101, 8105; 49 U.S.C. App. 1804; E.O. 11735, 38 FR 21243; 3 CFR, 1971-1975 Comp., p. 793; E.O. 12234, 45 FR 58801, 3 CFR, 1980 Comp., p. 277; 49 CFR 1.46.

31. Subpart 78.95 consisting of § 78.95-1 is added to read as follows:

Subpart 78.95—Person in Charge of Transfer of Liquid Cargo in Bulk

§ 78.95-1 General.

A qualified person in charge of a transfer of liquid cargo in bulk shall be designated in accordance with subpart C of 33 CFR part 155.

SUBCHAPTER I—CARGO AND MISCELLANEOUS VESSELS

PART 90—GENERAL PROVISIONS

32. The authority citation for part 90 continues to read as follows:

Authority: 46 U.S.C. 3306, 3703; 49 U.S.C. App. 1804; E.O. 12234, 45 FR 58801, 3 CFR, 1980 Comp., p. 277; 49 CFR 1.46.

33. Section 90.10-42 is added to read as follows:

§ 90.10-42 Tankerman.

The following ratings are established in part 13 of this chapter. The terms for the ratings identify persons holding valid merchant mariners' documents for service in the ratings issued under that part:

- (a) Tankerman-PIC.
- (b) Tankerman-PIC (Barge).
- (c) Restricted Tankerman-PIC.

- (d) Restricted Tankerman-PIC (Barge)
- (e) Tankerman-Assistant.
- (f) Tankerman-Engineer.

PART 97—OPERATIONS

34. The authority citation for part 97 continues to read as follows:

Authority: 33 U.S.C. 1321(j); 46 U.S.C. 3306, 6101; 49 U.S.C. App. 1804; E.O. 11735, 38 FR 21243, 3 CFR, 1971-1975 Comp., p. 793; E.O. 12234, 45 FR 58801, 3 CFR, 1980 Comp., p. 277; 49 CFR 1.46.

35. Subpart 97.95 consisting of § 97.95-1 is added to read as follows:

Subpart 97.95—Person in Charge of Transfer of Liquid Cargo in Bulk

§ 97.95-1 General.

A qualified person in charge of a transfer of liquid cargo in bulk shall be designated in accordance with subpart C of 33 CFR part 155.

PART 98—SPECIAL CONSTRUCTION, ARRANGEMENT, AND OTHER PROVISIONS FOR CERTAIN DANGEROUS CARGOES IN BULK

36. The authority citation for part 98 continues to read as follows:

Authority: 33 U.S.C. 1903; 46 U.S.C. 3306, 3703; 49 U.S.C. App. 1804; E.O. 12234, 45 FR 58801, 3 CFR, 1980 Comp., p. 277; 49 CFR 1.46.

37. Section 98.30-17 is revised to read as follows:

§ 98.30-17 Qualifications of person in charge.

(a) The operator or agent of each vessel shall designate the person in charge of a transfer of liquid cargo in bulk to or from a portable tank.

(b) Each person designated as person in charge of a transfer of liquid cargo in bulk to or from a portable tank shall—

(1) On a tank barge, hold a "Tankerman-PIC", restricted "Tankerman-PIC", "Tankerman-PIC (Barge)", or restricted "Tankerman-PIC (Barge)" merchant mariner's document authorizing transfer of the classification of cargo involved;

(2) On a self-propelled tank vessel, hold—

(i) A license authorizing service as a master, mate, pilot, operator, or engineer aboard that vessel; and

(ii) A "Tankerman-PIC" or restricted "Tankerman-PIC" merchant mariner's document authorizing transfer of the classification of cargo involved; and

(3) On a vessel other than a tank vessel required by this chapter to have a licensed individual aboard, hold—

(i) If the liquid cargo in bulk is of Grade D or E and is carried in limited amounts, a license authorizing service

as a master, mate, pilot, operator, or engineer aboard that vessel; and

(ii) If the liquid cargo in bulk is of Grade C or above or is regulated under part 153 of this chapter, a "Tankerman-PIC" or restricted "Tankerman-PIC" merchant mariner's document authorizing transfer of the classification of cargo involved.

PART 105—COMMERCIAL FISHING VESSELS DISPENSING PETROLEUM PRODUCTS

38. The authority citation for part 105 is revised to read as follows:

Authority: 33 U.S.C. 1321(j); 46 U.S.C. 3306, 3703, 4502; 49 U.S.C. App. 1804; E.O. 11735, 38 FR 21243, 3 CFR, 1971-1975 Comp., p. 793; 49 CFR 1.46.

39. Section 105.45-1 is revised to read as follows:

§ 105.45-1 Loading or dispensing petroleum products.

(a) A commercial fishing vessel must have aboard a letter of compliance valid under subpart 105.15 of this part and must be in compliance with the requirements in the letter while dispensing petroleum products. This letter of compliance issued to a vessel will state—

(1) The number of crewmembers required to hold documents endorsed as tankermen under part 13 of this chapter; and

(2) For each vessel of 200 gross tons or over, the complement of officers under Title 46 U.S.C. 8304.

(b) Each person in charge of a transfer of liquid cargo in bulk to or from a cargo tank shall hold—

(1) A valid merchant mariner's document endorsed as "Tankerman-PIC" or restricted "Tankerman-PIC" authorizing transfer of the classification of cargo involved; or

(2) A valid license authorizing service as master, mate, pilot, or engineer.

40. Subparts 105.50 consisting of §§ 105.50-1 and 105.50-5 and 105.60 consisting of §§ 105.60-1, 105.60-5, and 105.60-10 are removed.

PART 151—BARGES CARRYING BULK LIQUID HAZARDOUS MATERIAL CARGOES

41. The authority citation for part 151 continues to read as follows:

Authority: 33 U.S.C. 1903; 46 U.S.C. 3703; 49 CFR 1.46.

42. Section 151.03-53 is revised to read as follows:

§ 151.03-53 Tankerman.

The following ratings are established in part 13 of this chapter. The terms for

the ratings identify persons holding valid merchant mariners' documents for service in the ratings issued under that part:

- (a) Tankerman-PIC.
- (b) Tankerman-PIC (Barge).
- (c) Restricted Tankerman-PIC.
- (d) Restricted Tankerman-PIC (Barge).
- (e) Tankerman-Assistant.
- (f) Tankerman-Engineer.

43. Paragraph (f)(1) of § 151.45-2 is revised to read as follows:

§ 151.45-2 Special operating requirements.

* * * * *

(f) * * *

(1) The licensed operator, person in command, and mate of a vessel towing a tank barge that need not be manned, and each of them, shall be responsible for monitoring the security and integrity of the tank barge and for ensuring adherence to proper safety precautions. These responsibilities include, but are not limited to—

- (i) Ensuring that every tank barge added to the tow has all tank openings properly secured; has its freeing-ports and scuppers, if any, unobstructed; meets any loadline or freeboard requirements; and neither leaks cargo into the water, voids, or cofferdams nor leaks water into the tanks, voids, or cofferdams;
- (ii) Ensuring that every tank barge in the tow is properly secured within the tow;
- (iii) Ensuring that periodic checks are made of every tank barge in the tow for leakage of cargo into the water, voids, or cofferdams and for leakage of water into the tanks, voids, or cofferdams;
- (iv) Knowing the cargo of every tank barge in the tow, all hazards associated with the cargo, and what to do on discovery of a leak;
- (v) Ensuring that the crew of the vessel know the cargo of every tank barge in the tow, all hazards associated with the cargo, and what to do on discovery of a leak;
- (vi) Reporting to the Coast Guard any leaks from a tank barge in the tow into the water, as required by 33 CFR 151.15; and
- (vii) Ensuring that the crew of the vessel and other personnel in the vicinity of the tank barges in the tow follow the proper safety precautions for tank vessels, and that no activity takes place in the vicinity of the barges that could create a hazard.

* * * * *

44. Section 151.45-4 is amended by revising its heading and paragraph (a) to read as follows:

§ 151.45-4 Cargo-handling.

- (a) On a United States tank barge subject to inspection—
 - (1) The owner and operator of the vessel, and his or her agent, and each of them, shall ensure that no transfer of liquid cargo in bulk or cleaning of a cargo tank takes place unless under the supervision of a qualified person designated as the person in charge of the transfer or the cleaning under Subpart C of 33 CFR part 155.
 - (2) The person in charge of the transfer shall ensure that enough qualified personnel are on duty to safely transfer liquid cargo in bulk or to safely clean cargo tanks.

* * * * *

PART 153—SHIPS CARRYING BULK LIQUID, LIQUEFIED GAS, OR COMPRESSED GAS HAZARDOUS MATERIALS

45. The authority citation for part 153 is revised to read as follows:

Authority: 46 U.S.C. 3703, 9101; 49 U.S.C. App. 1804; 33 U.S.C. 1903; 49 CFR 1.46.

46. Section 153.957 is revised to read as follows:

§ 153.957 Persons in charge of transferring liquid cargo in bulk or cleaning cargo tanks.

- (a) The owner and operator of the vessel, and his or her agent, and each of them, shall ensure that—
 - (1) Enough "Tankerman-PICs" or restricted "Tankerman-PICs", and "Tankerman-Assistants", authorized for the classification of cargo carried, are on duty to safely transfer liquid cargo in bulk or to safely clean cargo tanks;
 - (2) Each transfer of liquid cargo in bulk and each cleaning of a cargo tank is supervised by a qualified person designated as a person in charge of the transfer or the cleaning under Subpart C of 33 CFR part 155;
 - (3) When cargo regulated under this part is due for transfer, the person in charge of the transfer has received special training in the particular hazards associated with the cargo and in all special procedures for its handling; and
 - (4) On each foreign vessel, the person in charge understands his or her responsibilities as described in this subchapter.
- (b) Upon request by the Officer in Charge, Marine Inspection, in whose zone the transfer will take place, the owner and operator of the vessel, and his or her agent, and each of them, shall provide documentary evidence that the person in charge has received the training specified by paragraph (a)(3) of this section and is capable of

competently performing the procedures necessary for the cargo.

PART 154—SAFETY STANDARDS FOR SELF-PROPELLED VESSELS CARRYING BULK LIQUEFIED GASES

47. The authority citation for part 154 is revised to read as follows:

Authority: 46 U.S.C. 3703, 9101; 49 CFR 1.46.

48. Section 154.1831 and is revised to read as follows:

§ 154.1831 Persons in charge of transferring liquid cargo in bulk or preparing cargo tanks.

- (a) The owner and operator of the vessel, and his or her agent, and each of them, shall ensure that—
 - (1) Enough "Tankerman-PICs" or restricted "Tankerman-PICs", and "Tankerman-Assistants", authorized for the classification of cargo carried, are on duty to safely conduct a transfer of liquid cargo in bulk or a cool-down, warm-up, gas-free, or air-out of each cargo tank;
 - (2) Each transfer of liquid cargo in bulk, and each cool-down, warm-up, gas-free, or air-out of a cargo tank, is supervised by a person designated as a person in charge of the transfer that possesses the qualifications required by 33 CFR 155.710;
 - (3) On each foreign tankship, the person in charge of either a transfer of liquid cargo in bulk or a cool-down, warm-up, gas-free, or air-out of a cargo tank possesses the qualifications required by 33 CFR 155.710;
 - (4) When cargo regulated under this part is being transferred, the person in charge of the transfer has received special training in the particular hazards associated with the cargo and in all special procedures for its handling; and
 - (5) On each foreign vessel, the person in charge understands his or her responsibilities as described in this subchapter.
 - (b) Upon request by the Officer in Charge, Marine Inspection, in whose zone the transfer will take place, the owner and operator of the vessel, and his or her agent, and each of them, shall provide documentary evidence that the person in charge has received the training specified by paragraph (a)(4) of this section and is capable of competently performing the procedures necessary for the cargo.
- Dated: March 24, 1995.
- J.C. Card,**
Rear Admiral, Coast Guard, Chief, Office of Marine Safety, Security and Environmental Protection.
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