

**Supporting Statement for
Title 46 CFR Subchapter Q: Lifesaving, Electrical, Engineering and Navigation
Equipment, Construction and Materials & Marine Sanitation Devices (33 CFR 159)**

OMB No.: 1625-0035
COLLECTION INSTRUMENTS: CGHQ-10030 & Instruction

A. Justification

1. Circumstances that make the collection of information necessary.

The authority to prescribe regulations for lifesaving, electrical, engineering, and navigation equipment, construction and materials, and its use on inspected vessels derives from 46 U.S.C. 3306. These regulations are also authorized under 46 U.S.C. 3703 and 4302. Specific Subparts of Title 46 Subchapter Q are also authorized under 46 U.S.C. 2103 and 5115, and 33 U.S.C. 1321(j), and 1903. Title 46 CFR Chapter I Subchapter Q Parts 159 through 165 (165 requirements currently found in NVIC 8-01 (Change 2))¹ contains the technical standards for approval by the Coast Guard of specific types of safety equipment and materials that are to be installed on vessels subject to Coast Guard jurisdiction. The authority to prescribe regulations for marine sanitation devices (MSD) is at 33 U.S.C. 1322(b)(1). The MSD regulations are found at 33 CFR Part 159.

a. Approval procedures for lifesaving, electrical, engineering, and navigation equipment, construction and materials, and marine sanitation devices (MSDs): The general approval procedures for the equipment and material of Subchapter Q are described in 46 CFR 159. The standards for Coast Guard approval of different equipment and material are contained in 46 CFR Parts 160-165, as described below:

Lifesaving Equipment:	46 CFR Part 160
Electrical Equipment:	46 CFR Part 161
Engineering Equipment:	46 CFR Part 162
Construction:	46 CFR Part 163
Materials:	46 CFR Part 164
Navigation Equipment	46 CFR Part 165 (NVIC 8-01, Change 2)
MSDs	33 CFR Part 159

The overall authority for the reporting and recordkeeping requirements applicable to all manufacturers of approved equipment, thus making it applicable also to the equipment and material in Subchapter Q, is described in 46 CFR 2.90 and 2.95. In general, safety equipment and material standards are intended to ensure that manufactured equipment meet minimum levels of performance and safety. To show that these have been met, manufacturers are required to submit drawings, specifications, and laboratory test reports before Coast Guard approval is given, as described in the above regulations.

When the Coast Guard approves emergency and safety equipment for use aboard commercial vessels and pleasure craft, the manufacturer is issued a Certificate of Approval (COA). This certificate and all other documents (drawings, test reports, etc.) form the basis for the certificate and must be retained for the period for which the certificate is in effect (usually five years).

Navigation equipment requirements are currently required by SOLAS V² for vessels engaged on international voyages. These requirements will be codified in a proposed rule creating 46 CFR Part 165. Currently, these approvals are being conducted in accordance with NVIC 8-01 (Change 2).

¹ Navigation and Vessel Inspection Circular (NVIC) 8-01 (Change 2) is available at—
http://www.uscg.mil/hq/cg5/nvic/pdf/2001/NVIC_8-01_CH-2.pdf .

² International Convention for the Safety of Life at Sea (SOLAS) Chapter V—Safety of Navigation.

Furthermore, the regulations in 46 CFR 160 require liferafts and certain life preservers to be serviced periodically. This servicing must be recorded so that it can be determined later that it was indeed done. Servicing records for lifesaving devices are retained by the servicing organization for use by Coast Guard inspection personnel. These records form the basis of a servicing certificate, a copy of which is retained on the vessel or drilling unit. It serves as evidence that the equipment is in operating condition and that the equipment was serviced in accordance with the applicable regulations by an authorized servicing facility. Reports by liferaft servicing facilities of deficient liferafts and deficient liferaft servicing are used to identify production problems that could affect multiple liferafts in field service, and liferaft servicing facilities requiring closer Coast Guard oversight. Such reports are occasional, only being required when a reportable deficiency is observed.

b. Instructional Materials: Manufacturers are required to produce, and vessel operators are required to use, instructional materials for certain lifesaving, fire protection, engineering and navigation equipment. For the equipment cited in Subchapter Q requiring instructional material, the manufacturers are generally required to submit the instructional materials along with the application package to the Coast Guard for approval. Instructional material is necessary because vessel crewmembers must have access to information on the proper operation of lifesaving, fire protection, engineering and navigation equipment. These materials are used during training sessions and during emergencies. Applicable parts as can be seen in the Appendix A.

c. Markings: Subchapter Q requires manufacturers to identify lifesaving, electrical, engineering and navigation equipment and some construction and materials, with the following: manufacturer, model number, capacity, approval number and other information concerning its performance. Additional markings are required in the case of certain equipment, and are outlined in the applicable requirements for the equipment in question. Generally, vessel operators and Coast Guard inspectors use this information to determine compliance with regulations. Applicable parts as can be seen in the Appendix A.

d. Production Tests and Laboratory Inspections: Subchapter Q regulations also require the manufacturer to conduct and maintain records of production tests for some of the equipment and material. These tests are mainly material tests necessary to ensure that the material being used in the construction of a lifesaving appliance meets the minimum performance requirements with regard to strength, buoyancy, and fire retardancy, as applicable. The manufacturing processes are also inspected regularly by lab inspectors – who issue their own reports to the manufacturer – from independent laboratories certified by the Coast Guard to ensure quality control. Applicable parts as can be seen in the Appendix A.

e. Independent and Recognized Laboratories: Independent Lab: Some of the production tests described above are required to be done through, or certified by, 'independent' laboratories. Thus, before laboratory test reports can be accepted, the laboratory must demonstrate its technical qualifications and independence. The laboratory can satisfy this requirement by submitting the information specified in 46 CFR 159.010-5 to the Coast Guard. This is a reporting requirement that each laboratory has to meet only once and is thus a one-time burden.

Recognized Lab: Certain Subparts in Subchapter Q, Parts 159-165, not only require that the laboratory is Coast Guard accepted, but also that it is a 'recognized laboratory' listed in the Subpart. At present, there are 4 recognized labs.

The Coast Guard established regulations, in 46 CFR 159.010 and in some Subparts of Subchapter Q, for an independent laboratory seeking to become a recognized laboratory for conducting tests and inspections. Only laboratories that enter into a Memorandum of Understanding (MOU) with the Coast Guard may perform the functions of a recognized laboratory. The MOU is a collection of information that is prepared and submitted to the Coast Guard for approval by the laboratory seeking recognition. The MOU specifies the approval functions the laboratory performs for the Coast Guard, and the laboratory's working arrangements with the Coast Guard. The establishment of the MOU will ensure that all independent laboratories that are recognized by the Coast Guard follow similar procedures. Provisions

for 'round-robin' testing in the MOU will ensure that various recognized laboratories' testing similar equipment using similar testing procedures obtain comparable results.

This information collection supports the following strategic goals:

Department of Homeland Security

- Prevention
- Protection

Coast Guard

- Maritime Safety
- Maritime Stewardship

Prevention Policy and Response Policy Directorates (CG-5P & CG-5R)

- Safety: Eliminate deaths, injuries, and property damage associated with commercial maritime operations.
- Human and Natural Environment: Eliminate environmental damage associated with maritime transportation and operations on and around the nation's waterways.

2. Purpose of the information collection.

a. Approvals, b. Instructional Materials, and c. Markings: Technical plans, drawings, specifications, instructional materials, test reports and service records are submitted to the Coast Guard to obtain and maintain approval for a variety of lifesaving and safety equipment. The submitted technical data is then reviewed to determine compliance with the technical requirements contained in specific regulations. The plans and drawings are copies of production drawings utilized by the manufacturer in making the equipment. The required instructional materials and markings are also submitted to the Coast Guard with the overall application for approval.

When Coast Guard approval is issued, a COA is sent to the manufacturer of the equipment. The certificates, plans, specifications, and laboratory test reports used to issue approval are retained by the manufacturer of the approved equipment to identify the specific equipment approved and to permit the production of equipment identical to the equipment samples originally tested. The certificates also specify an expiration date and provide the terms of the approval. Subchapter Q thus requires that these documents be filed and retained by the manufacturer.

d. Production Tests and Laboratory Inspections: Independent testing laboratories that test the materials and equipment for compliance with the applicable Coast Guard regulations issue reports. The manufacturer is required to retain laboratory or production test reports used by the manufacturer to obtain approval from the Coast Guard.

Production test reports for approved equipment are reviewed either by the independent laboratory or Coast Guard inspectors to determine that production stock will be identical to those originally tested and approved. The purpose of these reports is to enable a comparison between the construction and properties of production units to the prototypes originally evaluated prior to issuance of Coast Guard approval.

e. Independent and Recognized Laboratories: Upon being accepted by the Coast Guard, the Independent Laboratories meet the criteria for the reports they themselves issue to be accepted. The information that each laboratory must submit to gain such Coast Guard acceptance or recognition:

- Identifies the laboratory and principal person(s) to contact;
- Verifies the independence of the laboratory from the organizations whose products the laboratory will test;
- Verifies the technical qualifications of the test personnel; and
- Verifies the adequacy of equipment and facilities to conduct the testing for which application is made.

An MOU, in the form of a prepared and signed document, is submitted to the Coast Guard by an independent laboratory seeking Coast Guard 'recognition' to perform certain approval and production tests specified in 46 CFR Subchapter Q. A particular laboratory submits it only once, at the time of initial application for recognition. The MOU is used by the Coast Guard to evaluate the capabilities of the laboratory to perform the functions specified in the relevant regulations, and to document the responsibilities of the laboratory and of the Coast Guard in relation to equipment testing, inspection, and approval.

3. Consideration of the use of improved information technology.

The information may be submitted in writing or electronically via e-mail. We estimate that about 90% of the reporting and recordkeeping requirements can be done electronically. At this time, we estimate that approximately 90% of the responses are collected electronically.

4. Efforts to identify duplication.

There is no duplication, since the information is reported or kept only once for each organization and each item. There are no other Federal Agencies or States with programs dealing with the same equipment and technical requirements. On the contrary, other Federal Agencies have relied on Coast Guard approval as evidence of suitability for the purpose intended when ordering items such as lifesaving equipment.

The information is unique to each piece of equipment or material and organization, and no other information can be used in its place.

5. Methods to minimize the burden to small businesses if involved.

This information collection does not have an impact on small businesses or other small entities.

6. Consequences to the Federal program if collection were conducted less frequently.

This information is collected only once for each item manufacturer, testing, and servicing organization. The records that are submitted or retained are the minimum needed to identify the equipment and ensure that it has been tested and serviced properly. There is thus no way to reduce this frequency.

For laboratory acceptance, where the information is also collected only once, if the information is not collected the Coast Guard would be unable to evaluate the qualifications and procedures of laboratories desiring recognition to perform and/or oversee certain tests of approved equipment on behalf of the Coast Guard.

7. Special collection circumstances.

This information collection is conducted in manner consistent with the guidelines in 5 CFR 1320.5(d)(2).

8. Consultation.

A 60-day Notice (See [USCG-2015-0630], July 31, 2015, 80 FR 45671) and 30-Day Notice (October 23, 2015, 80 FR 64431) were published in the Federal Register to obtain public comment on this collection. The Coast Guard has not received any comments on this information collection.

9. Provide any payments or gifts to respondents.

There is no offer of monetary or material value for this information collection.

10. Describe any assurance of confidentiality provided to respondents.

All information collected complies with the Freedom of Information Act (FOIA) and Privacy Act. If a manufacturer considers certain information proprietary (e.g., trade secret), the Coast Guard will follow the exception permitted by FOIA (5 U.S.C. 552(b)(4)) and maintain confidentiality.

11. Additional justification for any questions of a sensitive nature.

There are no questions of sensitive language.

12. Estimate of annual hour and cost burdens to respondents.

- The estimated number of annual respondents is 958.
- The estimated number of annual responses is 711,461.
- The estimated hour burden is 118,594 hours.
- The estimated cost burden is \$4,818,786.

The burden to respondents is provided in Appendix B. The wage rates used are in accordance with the current edition of COMDTINST 7310.1(series) for "Out-Government" personnel.

a. Approvals

i) NEW APPLICATIONS: We estimate that it will take a technical specialist about 2 hours to prepare a new COA approval request. Additionally, we estimate that we will receive COA approval requests for new equipment equivalent to 3% of the total valid COAs of all type approved equipment.³ The position of a technical specialist is analogous to a GS-13.

ii) RENEWAL APPLICATIONS: We estimate that it will take a technical specialist about 0.5 hours to prepare a COA renewal request. Additionally, since a COA is generally valid for a 5-year period, we estimate that each year will receive COA renewal requests for 20% of all type approved equipment. The position of a technical specialist is analogous to a GS-13.

iii) MANUFACTURER RECORDKEEPING: We estimate that annually it will take a clerical specialist about 0.17 hours (10 min.) for each COA to prepare and file the relevant documents, plans and test reports. The manufacturer usually retains these records as business records. The position of a clerical specialist is analogous to a GS-7.

iv) SERVICING FACILITY RECORDKEEPING: We estimate that it will take a clerical specialist about 2 hours annually to prepare and file servicing facility records of lifesaving equipment. The position of a clerical specialist is analogous to a GS-7.

v) SERVICING FACILITY PROBLEM REPORTS: We estimate that it will take a technical specialist about 1 hour to prepare a lifesaving equipment problem report. We estimate that we will receive 1 problem report per servicing facility per year. The position of a technical specialist is analogous to a GS-13.

b. Instructional Materials

i) NEW EQUIPMENT: We estimate that it will take a technical specialist about 8 hours to draft the training or instructional material for Coast Guard approval and to provide the material with the equipment. Additionally, we estimate that each year will receive new instructional materials requests for 1.5% of all type approved equipment with instructional materials. The position of a technical specialist is analogous to a GS-13. Equipment approvals with this burden are shown in the Appendix A (Column F).

ii) REVISIONS: We estimate that it will take a technical specialist about 2 hours to update (revise) the training or instructional material for Coast Guard approval and to provide the material with the equipment.

³ To obtain a count of all type approved equipment, we use the CGMIX database and include all type approved equipment listed as "APPROVED", "PENDING", and "EXPIRED" (within the last 12 months)."

Additionally, since a COA is generally valid for a 5-year period, we estimate that each year we will receive instructional materials revision requests for 20% of all type approved equipment with instructional materials. The position of a technical specialist is analogous to a GS-13. Equipment approvals with this burden are shown in the Appendix A (Column F).

iii) PACKING: We estimate that it will take a workshop specialist about 0.1 hours (6 min.) to produce and pack the instructional material with each manufactured piece of type approved equipment. We estimate the number of annual responses as equal to 100% of all type approved equipment with instructional materials times 200 units per type approved equipment. The position of a workshop specialist is analogous to a GS-5.

c. Markings

i) NEW: We estimate that it will take a workshop specialist about 0.1 hours (6 min.) to stencil or stamp the required marking on each newly approved piece of type approved equipment. We estimate the number of annual responses as equal to 2.5% of all type approved equipment that require markings times 200 units per type approved equipment. The position of a workshop specialist is analogous to a GS-5.

ii) REVISIONS: We estimate that it will take a workshop specialist about 0.1 hours (6 min.) to stencil or stamp the required marking on each manufactured piece of type approved equipment. Additionally, since a COA is generally valid for a 5-year period, we estimate the number of annual responses as equal to 20% of all type approved equipment with marking requirements times 200 units per type approved equipment. The position of a workshop specialist is analogous to a GS-5. Equipment approvals with this burden are shown in the Appendix A (Column G).

d. Production Tests and Laboratory Inspections

i) PRODUCTION TEST RECORDS: We estimate that it will take a clerical specialist about 2 hours annually to prepare and file production test records of equipment. There is 1 report per equipment manufacturer. The position of a clerical specialist is analogous to a GS-7. Equipment approvals with this burden are shown in the Appendix A (Column H).

ii) LABORATORY INSPECTIONS: We estimate that it will take a clerical specialist about 24 hours annually to prepare and file laboratory inspection quality control procedure records of equipment. The position of a clerical specialist is analogous to a GS-7. Equipment approvals with this burden are shown in the Appendix A (Column H). We estimate that all manufacturers of the approved pieces of equipment that are required to maintain production test records also undergo lab inspections.

e. Independent and Recognized Laboratories.

i) INDEPENDENT LABORATORY APPLICATIONS: We estimate that it will take a technical specialist about 4 hours to prepare a new independent laboratory application request. We estimate that we will receive 2 applications per year. The position of a technical specialist is analogous to a GS-13.

ii) RECOGNIZED LABORATORY MOU APPLICATIONS: We estimate that it will take a technical specialist about 80 hours to prepare an MOU application. We estimate that we will receive 0.1 MOU applications per year (i.e., 1 per 10-year period). The position of a technical specialist is analogous to a GS-13.

iii) RECOGNIZED LABORATORY MOU UPDATES: We estimate that it will take a technical specialist 15 hours to prepare an MOU update. We estimate that we will receive 1 MOU update per year. The position of a technical specialist is analogous to a GS-13.

13. Total of annualized capital and start-up costs.

There are no capital, start-up or maintenance costs associated with this information collection.

14. Estimates of annualized Federal Government costs.

The estimated annual Federal Government cost is \$914,738 (see Appendix C). The costs consist of processing applications for product approvals, processing independent laboratory acceptances, filing lifesaving device service records, lifesaving device manufacturers' production test monitoring, and lab application reviews. The wage rates used are in accordance with the current edition of COMDTINST 7310.1(series) for "In-Government" personnel.

i) NEW EQUIPMENT APPLICATION REVIEWS: We estimate that it takes a technical specialist between 4 and 80 hours to review and process each application (including instructional materials). For calculation purposes, we use 24 hours per application. The position of a technical specialist is analogous to a GS-14.

ii) RENEWAL EQUIPMENT APPLICATION REVIEWS: We estimate that it takes a technical specialist about 4 hours to review and process each renewal application (including instructional materials). The position of a technical specialist is analogous to a GS-14.

iii) LIFESAVING DEVICE SERVICING RECORDS: We estimate that it will take a clerical specialist about 0.05 hours (3 min.) to prepare and file each copy of a servicing report at the local Coast Guard Marine Safety/Inspection Office. The position of a clerical specialist is analogous to a GS-12.

iv) SERVICING FACILITY PROBLEM REPORT REVIEWS: We estimate that it takes a field unit technical specialist about 0.5 to review a servicing facility problem report. The position of a field unit technical specialist is analogous to a Lieutenant (LT; O-3).

v) PRODUCTION TESTS AND QUALITY CONTROL PROCEDURES MONITORING (ONSITE): We estimate that it takes about 1 staff year (2,000 hours) for Coast Guard personnel to monitor the monitor production tests and quality control procedures for certain manufacturers. The 1-year estimate for a LT is shared between several Coast Guard offices. At the present time, most production tests are monitored by independent laboratories in lieu of Coast Guard personnel.

vi) PRODUCTION TESTS AND QUALITY CONTROL PROCEDURES MONITORING (VIA INDEPENDENT LAB REPORTS): We estimate that it takes a technical specialist about 2 hours to review a production test report. The position of a technical specialist is analogous to a GS-14.

vii) INDEPENDENT LABORATORY APPLICATION REVIEWS: We estimate that it takes a technical specialist about 2.5 hours to review and process each application. The position of a technical specialist is analogous to a GS-14.

viii) RECOGNIZED LABORATORY MOU APPLICATION REVIEWS: We estimate that it will take a technical specialist about 40 hours to review and process each MOU. Coast Guard engineering and legal specialists conduct the review. The position of a technical specialist is analogous to a GS-14.

ix) RECOGNIZED LABORATORY MOU APPLICATION UPDATE REVIEWS: We estimate that it will take a technical specialist about 35 hours to review and process each MOU update. Coast Guard engineering and legal specialists conduct the review. The position of a technical specialist is analogous to a GS-14.

15. Explain the reasons for the change in burden.

The change (i.e., increase) in burden hours is an ADJUSTMENT due to an increase in the estimated annual number of responses. There is no proposed change to the reporting or recordkeeping requirements of this collection. The reporting and recordkeeping requirements remain unchanged. However, the methodology for calculating responses and burden was revised for: (a) Instructional

Materials (Packing) from 20% of all type approved equipment (about 280) to 100% of all type approved equipment (about 2,870), and (b) Marking (Revisions) from all equipment manufacturers (about 300) to 20% of all type approved equipment (about 575). The revision is needed to more fully account for the activity level. Additionally, the Program decision to match the equipment subject to the "instructional materials requirements" and "marking requirements" with the type approved equipment count resulted in an increase in the number of responses (and burden) in those categories.

16. Plans for tabulation, statistical analysis and publication.

This information collection will not be published for statistical purposes.

17. Approval for not explaining the expiration date for OMB approval.

The OMB expiration date will be displayed on the Instruction sheet related to the information collection request.

18. Exception to the certification statement.

The Coast Guard does not request an exception to the certification of this information collection.

B. Collection of Information Employing Statistical Methods

This information collection does not employ statistical methods.