

## Cargo Tank Motor Vehicles in Liquefied Compressed Gas Service

Justification #2137-0595

1. Circumstances that make the collection necessary.

This is a request for renewal with change of a current approval under OMB No. 2137-0595 regarding cargo tank motor vehicles in liquefied compressed gas service. Minor mathematical errors were discovered during the review of this justification and are being corrected at this time. Specifically, the annual number of responses was increased by 8, from 920,530 to 920,538. This increase in responses subsequently increased the annual burden hours by 299, from 200,615 to 200,914. In addition, previous IC submittals did not include the annual cost burden per directives of the former OST coordinator. This figure (\$2,456,064) is being included in this submittal. These information collection and recordkeeping requirements pertain to the manufacture, certification, inspection, repair, maintenance, and operation of DOT specification MC 330, MC 331, and certain non-specification cargo tank motor vehicles used to transport liquefied compressed gases. This information collection supports the Departmental Strategic Goal for Safety.

Information collection and recordkeeping requirements contained in this request have been determined to be essential by the Pipeline and Hazardous Materials Safety Administration (PHMSA).

As a result of a serious unloading accident in 1996, PHMSA learned that the emergency discharge control systems installed on cargo tank motor vehicles did not always function as required by the hazardous materials regulations (HMR; 49 CFR Parts 171-180) under all operating conditions. In 1997, PHMSA issued a temporary regulation designed to permit cargo tank motor vehicles with non-complying emergency discharge control systems to continue to operate. This temporary regulation expired on July 1, 1999, and a final rule (Docket No. RSPA-97-2718 (HM-225A) was issued on May 24, 1999 (64 FR 28029) to replace the temporary regulation with a comprehensive safety program that combined measures to prevent unintentional releases of liquefied compressed gases during unloading operations with measures that will assure quick identification of releases and effective mitigation.

The new rule was developed through a negotiated rulemaking. In this negotiated rulemaking, representatives of interests affected by the HMR worked together to analyze safety issues and identify potential solutions. The process gave parties the opportunity to find creative solutions, improve the information data base for decisions, produce more acceptable rules, enhance compliance, and reduce the likelihood of court challenges. The negotiated rulemaking committee included representatives from businesses that transport and deliver propane, anhydrous ammonia, and other liquefied compressed gases; manufacturers and operators of cargo tanks and vehicle components; and state and local public safety and emergency response agencies. The members agreed on the specifics of

a proposed regulatory program, and reviewed and concurred on the requirements of the new rule. After evaluation of comments, PHMSA issued a final rule on May that was based on the written agreement concurred in by the Committee.

The requirements necessitating an information collection under HM-225A included: (1) a requirement that cargo tank operators develop a comprehensive unloading operating procedure and carry it in each cargo tank motor vehicle; (2) new inspection, maintenance, marking, and testing requirements for cargo tank discharge systems, including delivery hose assemblies; and (3) new requirements for state-of-the-art emergency discharge control equipment on certain cargo tank motor vehicles transporting liquefied compressed gases that must be installed and certified by a Registered Inspector (RI). The rule provided a two-year period for development and testing of emergency discharge control technology. After two years, newly manufactured MC 331 cargo tank motor vehicles had to be equipped with emergency discharge control equipment that complies with certain performance standards; MC 330, MC 331 and certain non-specification cargo tank motor vehicles must be retrofitted at their first scheduled pressure test after the two-year period.

The HM-225A final rule was intended to reduce the risk of an unintentional release during unloading, assure prompt identification and control of an unintentional release, and make the requirements easier to understand and comply with. The information collection and recordkeeping burdens because of this rulemaking are imposed on motor carriers and on cargo tank motor vehicle manufacturers and repairers. Authority for the rulemaking and current regulations is the Federal hazardous materials transportation law, 49 U.S.C. §§ 5101-5127.

2. How, by whom and for what purpose the information is to be used.

Operating procedures. The HM-225A final rule required that operators of cargo tank motor vehicle in liquefied compressed gas service develop operating procedures applicable to unloading operations and carry them on each cargo tank motor vehicle. The operating procedures must include all information relevant to the vehicle's emergency discharge control equipment, including the type installed on the vehicle and the parameters within which it is designed to operate. This will help to assure that the person attending cargo tank unloading operations is familiar with, and understands, the features of the cargo tank's emergency discharge control equipment and how it operates.

Discharge system inspection and maintenance program. The HM-225A final rule required a new inspection, testing, and maintenance program for cargo tank motor vehicles used to transport liquefied compressed gases. For hoses and hose assemblies, the program includes tests of new and repaired hose assemblies; monthly and annual hose assembly inspections, and specific rejection criteria. For piping systems, the program includes monthly tests of a cargo tank's internal self-closing stop valve, testing of linkages designed to close the internal self-closing stop valve during an emergency, periodic visual inspections of all piping components, and specific rejection criteria. Each operator of a cargo tank motor vehicle used to transport liquefied compressed gases is required to maintain records documenting the inspections and tests, and to mark each

hose with a unique identifier. This is intended to facilitate compliance with, and enforcement of, the inspection and maintenance program.

Certification of emergency discharge control equipment. Under the HM-225A final rule, each operator of a cargo tank motor vehicle used to transport a liquefied compressed gas is required to equip the cargo tank motor vehicle with emergency discharge control equipment. The type of equipment required depends on the classification of the material being transported and the nature of the operations being conducted. Equipment must be installed under the supervision of a Registered Inspector and the installation must be certified by the Registered Inspector. In addition, the design of certain types of emergency discharge control equipment must be certified by a Design Certifying Engineer (DCE). This is intended to assure that emergency discharge control equipment is installed correctly and that it will function as required by the HMR. To facilitate compliance with, and enforcement of, the proposed requirement, each operator of a cargo tank motor vehicle subject to these requirements must keep a copy of the emergency discharge control equipment certification.

3. Consideration of improved information technology.

The information collection and recordkeeping requirements for operating procedures in are general requirements that allow motor carriers to develop procedures that are best suited for their operations. The inspection, maintenance, and testing requirements for cargo tank discharge system components are additional certifications for current industry practices to ensure cargo tank motor vehicle safety. The Government Paperwork Elimination Act directs agencies to allow the option of electronic filing and recordkeeping by October 2003, when practicable. Records documenting inspection, testing, and maintenance programs may be kept electronically; however, they are not required to be submitted to us, so it is not applicable.

4. Efforts to identify duplication.

This information collection does not duplicate any other information collection requirement.

5. Methods used to minimize burden on small businesses or other small entities.

Applicable requirements have been made as general as possible to minimize burdens on affected persons and yet provide for the safe transportation of hazardous materials in cargo tank motor vehicles. PHMSA believes standardized emergency operating procedures can be developed for use by a majority of industry members who belong to various trade associations, thus reducing the burden hours and costs to individual members of compliance with the emergency operations procedure requirements. Installation of new emergency discharge control equipment was not required for two years after the effective date of the final rule, thereby assuring sufficient time for the industry to develop and test new technologies. Retrofits of cargo tank motor vehicles in service at the time of the rule were allowed a five-year schedule to coincide with a cargo

tank's regularly scheduled periodic pressure test, thus assuring that a cargo tank subject to the requirements will be out of service only once during the five-year period and avoiding conflicts with peak periods of use.

6. Consequences to federal program or policy activities if collection were conducted less frequently.

Due to the hazards involved, it is not possible to lessen the frequency of information collection and recordkeeping. The development of an unloading operating procedure is a one-time process. Maintenance of a copy of the procedure on each cargo tank motor vehicle is a continuing requirement. New requirements for discharge system inspection and maintenance are continuing requirements that ensure that each cargo tank in liquefied compressed gas service is subject to a rigorous and systematic safety program. Certification of emergency discharge control equipment installation is a one-time requirement.

7. Special circumstances affecting conduct of information collection activity.

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

8. Efforts to consult with persons outside the agency to obtain their views.

This rule was developed through a negotiated rulemaking process. In a negotiated rulemaking, representatives of interests affected by a regulation work together to analyze safety issues and identify potential solutions. The process is intended to give parties the opportunity to find creative solutions, improve the information database for decisions, produce more acceptable rules, enhance compliance, and reduce the likelihood of court challenges. The negotiated rulemaking committee included representatives from businesses that transport and deliver propane, anhydrous ammonia, and other liquefied compressed gases; manufacturers and operators of cargo tanks and vehicle components; and state and local public safety and emergency response agencies. The Committee proposed and concurred in the information collection requirements included in the rule. A final rule under Docket HM-225A was published in the Federal Register on May 24, 1999 (64 FR 28030).

A notice and request for comments was published in the Federal Register on February 26, 2007 under Docket No. PHMSA-2007-27181 (Notice No. 07-1) (72 FR 8421) requesting comments on the renewal of this information collection. The comment period closed on April 27, 2007. No comments concerning this information collection were received.

A notice and request for comments was published in the Federal Register on May 23, 2007 under Docket No. PHMSA-2007-27181 (Notice No. 07-2) (72 FR 29033) requesting comments on the renewal of this information collection. The comment period closed on June 22, 2007. No comments concerning this information collection were

received.

9. Explanation of decision to provide any payment or gift to respondents.

There is no payment or gift to respondents associated with this collection of information.

10. Assurance of confidentiality provided to respondents.

None of the data collected contain personally identifiable information (PII) or business confidential information. Therefore, no guarantees of confidentiality are provided to applicants.

11. Additional information for questions of a sensitive nature.

Not applicable. Information is not of a sensitive nature.

12. Estimates of annual hour burden and annual cost for burden hours.

The burden hours and cost to respondents proposed and finalized under this rule are estimated as follows.

Total Annual Respondents: 6,958 (6,800 + 150 + 8)

Total Annual Responses: 920,538 (Previously 920,530: Corrected due to mathematical errors in previous IC packages) (12,227 + 400,160 + 400,140 + 12,227 + 12,227 + 36,680 + 1,899 + 4,970 + 8)

Total Annual Burden Hours: 200,914 (Previously 200,615: Corrected due to mathematical errors in previous IC packages) (1,018 + 44,016 + 80,028 + 1,018 + 4,279 + 15,283 + 15,192 + 39,760 + 320)

Total Annual Cost Burden: \$2,456,064  
(Corrected due to mathematical errors in previous IC packages) (\$12,410 + \$536,115 + \$974,741 + \$12,410 + \$52,123 + 186,151 \$ + 185,038 + \$484,276 + \$12,800)

Discharge system inspection and maintenance program for cargo tanks transporting liquefied compressed gases.

Marking new/repaired hoses with unique identifier:

Total respondents 6,800 (total number of establishments)

Annual responses	12,227	(total number of new/repaired hose assemblies)
Annual burden hours	1,018	(hose assemblies x time to create record (5 min))
Annual burden cost	\$12,410	(hose assemblies x time to create record x hourly rate (12.18))

Monthly hose inspections:

Total respondents	6,800	(total number of establishments)
Annual responses	440,160	(total number of hoses (36,680) x 12 months)
Annual burden hours	44,016	(annual responses x time to create record (5 min for test + 1 min for record))
Annual burden cost	\$536,115	(annual responses x time to create record x hourly rate (12.18))

Record of monthly piping tests:

Total respondents	6,800	(total number of establishments)
Annual responses	400,140	(total number of cargo tanks (33,345) x 12 months)
Annual burden hours	80,028	(annual responses x time to create record (11 min for test + 1 min for record))
Annual burden cost	\$974,741	(annual responses x time to create record x hourly rate (12.18))

Hose pressure test marking:

Total respondents	6,800	(total number of establishments)
Annual responses	12,227	(total number of new/repaired hose assemblies)
Annual burden hours	1,018	(total hose assemblies x time to create record (5 min))

Annual burden cost	\$12,410	(total hose assemblies x time to create record x hourly rate (12.18))
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Hose pressure test records:

Total respondents	6,800	(total number of establishments)
Annual responses	12,227	(total number of new/repaired hose assemblies)
Annual burden hours	4,279	(total hose assemblies x time to create record (20 min for test + 1 min for record))
Annual burden cost	\$52,123	(total hose assemblies x time to create record x hourly rate (12.18))

Annual hose test records:

Total respondents	6,800	(total number of establishments)
Annual responses	36,680	(total number of hoses)
Annual burden hours	2,838	(hoses x time to create record (20 min for test x 5 min for record))
Annual burden cost	\$186,151	(hoses x time to create record x hourly rate (12.18))

RI installation certification for passive systems for 5-year retrofit and new construction.

Assumptions --      Time to create record – 8 hours  
                                  Hourly rate for RI -- \$12.18

Total respondents	150	(total manufacturing/repair facilities that work on MC 331 cargo tanks)
Annual responses	1,899	(20 percent of total transports + 250 new tanks)
Annual burden hours	15,192	(annual responses x time to create record)
Annual burden cost	\$ 185,038	(annual responses x time to create

record x hourly rate)

RI installation certification for off-truck remotes for 5-year retrofit and new construction.

Total respondents	150	(total manufacturing/repair facilities that work on MC 331 cargo tanks)
Annual responses	4,970	(25,100 bobtails - 4,000 grandfathered bobtails x 20% + 750 new tanks)
Annual burden hours	39,760	(annual responses x time to create record)
Annual burden cost	\$484,276	(annual responses x time to create record x hourly rate)

RI installation certification for replacement and new construction off-truck remotes.

Total respondents	150	(total manufacturing/repair facilities that work on MC 331 cargo tanks)
Annual responses	5,770	(total number of bobtails ÷ average useful life of system + 750 new tanks)
Annual burden hours record)	46,160	(annual responses x time to create
Annual burden cost record x hourly rate)	\$562,228	(annual responses x time to create

Certification of passive system by Design Certifying Engineer.

Assumptions –8 systems certified per year

Hour cost of DCE – \$40.00  
Time to certify system – 40 hours

Total respondents	8	(DCEs certifying 8 new systems per year)
Annual responses	8	(DCEs certifying 8 new systems per



		year)
Annual burden hours	320	(8 systems x 40 hours)
Burden cost first year	\$12,800	(burden hours x 40.000)

13. Total annual cost burden to respondents resulting from collection of information.

There is no cost burden to respondents except those identified in item 12 above.

14. Estimate of annualized cost to the Federal government.

There is no cost to the Federal government.

15. Reasons for change in burden.

There is a minimal change in burden resulting from the discovery of mathematical errors in previous submittals of this information collection. Specifically, the annual number of responses was increased by 8, from 920,530 to 920,538. This increase in responses subsequently increased the annual burden hours by 299, from 200,615 to 200,914. In addition, previous IC submittals did not include the annual cost burden per directives of the former OST coordinator. This figure (\$2,456,064) is being included in this submittal.

16. Plans for tabulation, statistical analysis and publication.

There is no publication for statistical use and no statistical techniques are involved.

17. Display of expiration date of OMB Approval.

Approved OMB number is prominently displayed in the text of 49 CFR 171.6.

18. Exceptions to certification statement (OMB Form 83-I, Item 19).

There is no exception to PHMSA's certification of this request for information collection approval.