Department of Transportation Office of the Chief Information Officer Supporting Statement Cargo Tank Motor Vehicles in Liquefied Compressed Gas Service OMB Control No. 2137-0595

(Expiration Date: September 30, 2017)

Introduction

This is to request the Office of Management and Budget's (OMB) renewed 3-year approved clearance for the information collection titled, "Cargo Tank Motor Vehicles in Liquefied Compressed Gas Service," OMB Control No. 2137-0595 that is currently due to expire September 30, 2017. The requirements for this information collection originated from a December 29, 1964 rulemaking [29 FR 18743], which established the regulations for liquefied compressed gas (LPG) service in cargo tank motor vehicles. The regulations established how LPG is used in both cargo tanks and portable tanks. This OMB control number was first approved in 1997.

Part A. Justification

1. <u>Circumstances that make collection of information necessary.</u>

This is a request for renewal without change of a current information collection approval under OMB Control No. 2137-0595 regarding cargo tank motor vehicles in LPG service. These information collection and recordkeeping requirements pertain to the manufacture, certification, inspection, repair, maintenance, and operation of Department of Transportation (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.

As result of a serious unloading accident in 1996, the Research and Special Programs Administration (RSPA), the predecessor to the Pipeline and Hazardous Materials Safety Administration (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, RSPA 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 July 1, 1999, and a final rule under Docket No. RSPA-97-2718 (HM-225A) was issued 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, during which 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 both reviewed and concurred on the requirements of the new rule. After evaluation of comments, RSPA issued a final rule that was based on the written agreement concurred on by the rulemaking 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 2-year period for development and testing of emergency discharge control technology. After 2 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 2-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 with which to comply. The information collection and recordkeeping burdens from 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 is the information used.

<u>Operating procedures.</u> The HM-225A final rule required that operators of cargo tank motor vehicles 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.

<u>Discharge system inspection and maintenance program.</u> 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 and certified by an RI. 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. Extent of automated information collection.

The information collection and recordkeeping requirements for operating procedures 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 for 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 PHMSA, so it is not applicable.

4. <u>Efforts to identify duplication.</u>

There is no duplication, as the information requested is not required by any other source. Each response is unique and information derived from one may not be inferred to another.

5. <u>Efforts to minimize the burden on small businesses.</u>

Applicable requirements have been made as general as possible to minimize burdens on affected persons and still 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 2 years after the effective date of the final rule to ensure 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 5-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 5-year period and avoiding conflicts with peak periods of use.

6. <u>Impact of less frequent collection of information.</u>

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. 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. <u>Special circumstances</u>

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

8. Compliance with 5 CFR 1320.8.

PHMSA published a 60-Day Notice and Request for Comments [81 FR 15785] on the renewal of this information collection in the *Federal Register* March 24, 2016, under Docket No. PHMSA-2016-0027 (Notice No. 2016-2). The comment period closed May 23, 2016. No comments were received for this information collection.

PHMSA published a 30-Day Notice and Request for Comments [81 FR 39326] in the *Federal Register* June 16, 2016, also under Docket No. PHMSA-2016-0027 (Notice No. 2016-9). No comments were received for this information collection.

9. <u>Payments or gifts to respondents.</u>

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

10. <u>Assurance of confidentiality.</u>

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

11. Justification for collection of sensitive information.

Not applicable. Information is not of a sensitive nature.

12. <u>Estimates of burden hours for information requested.</u>

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 (12,227 + 440,160 + 400,140+ 12,227 + 12.227 +

36,680 + 1,899 + 4,970 + 5,770 + 8

Total Annual Burden Hours: 200,914 (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)

<u>Discharge system inspection and maintenance program for cargo tanks transporting liquefied compressed gases.</u>

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)) |
| 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: 46,160 (annual responses x time to create

record)

Annual Burden Cost: \$562,228 (annual responses x time to create

record x hourly rate)

Certification of passive system by Design Certifying Engineer.

Assumptions – 8 systems certified per year

Hourly rate for 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

vear)

Annual Burden Hours: 320 (8 systems x 40 hours)

Burden Cost First Year: \$12,800 (burden hours x 40.000)

13. Estimate of total annual costs to respondents.

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

14. Estimate of costs to the Federal government.

There is no cost to the Federal government.

15. Explanation of program changes or adjustments.

There is no change in burden as a result of this request for renewal.

16. Publication of results of data collection.

There is no publication for statistical use.

17. Approval for not displaying the expiration date of OMB approval.

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

18. Exceptions to certification statement.

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