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: May 31, 2020)

Introduction

This is to request the Office of Management and Budget's (OMB) 3-year renewal 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 on May 31, 2020. The requirements for this information collection originated from a December 29, 1964, final rule [29 FR 18743], which established the regulations for liquefied compressed gas (LPG) service in cargo tank motor vehicles.

During PHMSA's review of the burden, it was noted that historically the information collections were grouped into a single collection. Following this review, PHMSA has adjusted this burden to eight different information collections. Because of this adjustment, there has been a change to the number of respondents and responses and a slight change to the amount of annual burden hours due to a better accounting of current burden hours.

Part A. Justification

1. Circumstances that make collection of information necessary.

This is a request for renewal of a current information collection approval [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 accidents in 1996, the Research and Special Programs Administration (RSPA), the Pipeline and Hazardous Materials Safety Administration's (PHMSA) predecessor, 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. This May 1999 final rule created 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 final 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.
 - 1) Marking new/repaired hoses with unique identifier § 180.416(b)

This information collection is applicable to an operator using specification MC 330, MC 331, and non-specification cargo tank motor vehicles authorized under § 173.315(k) for the transportation of liquefied compressed gases other than carbon dioxide. This information collection is applicable to delivery hose assemblies and apply only to hose assemblies installed or carried on the cargo tank. As part of this information the operator must assure that each delivery hose assembly is permanently marked with a unique identification number and maximum working pressure.

2) Monthly hose inspection records - § 180.416(d)(1)

This information collection is applicable to an operator using specification MC 330, MC 331, and non-specification cargo tank motor vehicles authorized under § 173.315(k) for the transportation of liquefied compressed gases other than carbon dioxide. This information collection is applicable to delivery hose assemblies and apply only to hose assemblies installed or carried on the cargo tank. This information collection requires the operator to visually inspect each delivery hose assembly at least once each calendar month the delivery hose assembly is in service. The operator must note each inspection in a record. That record must include the inspection date, the name of the person performing the inspection, the hose assembly identification number, the manufacturer of the hose assembly, the date the hose was assembled and tested, and an indication that the delivery hose assembly and piping system passed or failed the tests and inspections. The operator must retain a copy of each test and inspection record at its principal place of business or where the vehicle is housed or maintained until the next test of the same type is successfully completed.

3) Record of monthly piping tests - § 180.416(d)(2)

This information collection is applicable to an operator using specification MC 330, MC 331, and non-specification cargo tank motor vehicles authorized under § 173.315(k) for the transportation of liquefied compressed gases other than carbon dioxide. This information collection is applicable to delivery hose assemblies and apply only to hose assemblies installed or carried on the cargo tank. This information collection requires the operator to visually inspect the piping system at least once each calendar month the cargo tank is in service. The inspection must include fusible elements and all components of the piping system, including bolts, connections, and seals. The operator must note each inspection in a record. That record must include the inspection date, the name of the person performing the inspection, the hose assembly identification number, the manufacturer of the hose assembly, the date the hose was assembled and tested, and an indication that the delivery hose assembly and piping system passed or failed the tests and inspections. The operator must retain a copy of each test and inspection record at its principal place of business or where the vehicle is housed or maintained until the next test of the same type is successfully completed.

4)

5) **Annual hose test record - § 180.416(e)**

This information collection is applicable to an operator using specification MC 330, MC 331, and non-specification cargo tank motor vehicles authorized under § 173.315(k) for the transportation of liquefied compressed gases other than carbon dioxide. This information collection is applicable to delivery hose assemblies and apply only to hose assemblies installed or carried on the cargo tank. This information collection covers the annual hose leakage test. The owner of a delivery hose assembly that is not permanently attached to a cargo tank motor vehicle must ensure that the hose assembly is annually tested in accordance with § 180.407(h)(4). The operator must complete a record documenting the test and inspection, including the date, the signature of the inspector, the hose owner, the hose identification number, the date of original delivery hose assembly and test, notes of any defects observed and repairs made, and an indication that the delivery hose assembly passed or failed the tests and inspections. A copy of each test and inspection record must be retained by the operator at its principal place of business or where the vehicle is housed or maintained until the next test of the same type is successfully completed.

6) Hose pressure test marking - 180.416(f) §

This information collection is applicable to an operator using specification MC 330, MCA copy of each test and inspection record must be retained by the operator at its principal place of business or where the vehicle is housed or maintained until the next test of the same type is successfully completed. signature of the inspector, the hose owner, the hose identification number, the date of original delivery hose assembly and test, notes of any defects observed and repairs made, and an indication that the delivery hose assembly passed or failed the tests and inspections. he operator must complete a record documenting the test and inspection, including the date, the TThe operator must visually examine the delivery hose assembly while it is under pressure. tested at a minimum of 120 percent of the hose maximum working pressure.are s or repaired delivery hose assemblieThis information collection requires that cargo tank operators ensure that new173.315(k) for the transportation of liquefied compressed gases other than carbon dioxide. This information collection is applicable to delivery hose assemblies and apply only to hose assemblies installed or carried on the cargo tank. s authorized under § motor vehicle331, and non-specification cargo tank

7) Cargo tank motor vehicles in other than metered dselivery ervice - design certification for automatic shutoff - § 173.315(n)(2)(ii)

This information collection is applicable to cargo tank motor vehicles in other than metered delivery service. The HMR requires that a cargo tank motor vehicle in other than metered delivery service must have a means to automatically shut off the flow of product without the need for human intervention within 20 seconds of an unintentional release caused by a complete separation of a liquid delivery hose (passive shut-down

capability). This information collections requires that the design for the means to automatically shut off product flow must be certified by a Design Certifying Engineer. The certification must consider any specifications of the original component manufacturer and must explain how the passive means to shut off the flow of product operates. It must also outline the parameters (e.g., temperature, pressure, types of product) within which the passive means to shut off the flow of product is designed to operate. All components of the discharge system that are integral to the design must be included in the certification. A copy of the design certification must be provided to the owner of the cargo tank motor vehicle on which the equipment will be installed.

8) Cargo tank motor vehicles in otther han metered delivery service - installation of the shutoff system by a Registered Inspector - § 173.315(n)(2) (iii)

This information collection is applicable to cargo tank motor vehicles in other than metered delivery service. The HMR requires that a cargo tank motor vehicle in other than metered delivery service must have a means to automatically shut off the flow of product without the need for human intervention within 20 seconds of an unintentional release caused by a complete separation of a liquid delivery hose (passive shut-down capability). This information collection requires that the installation must be performed under the supervision of a RI unless the equipment is installed and removed as part of regular operation (e.g., a hose). The RI must certify that the equipment is installed and tested, if it is possible to do so without damaging the equipment, in accordance with the Design Certifying Engineer's certification. The RI must provide the certification to the owner of the cargo tank motor vehicle.

9) <u>Cargo tank motor vehicles in metered delivery service - certification of</u> remote control equipment by a Registered Inspector - § 173.315(n)(3)(ii)

This information collection is applicable to cargo tank motor vehicles in metered delivery service. This information collection requires that a cargo tank motor vehicle in meter delivered service must have an off-truck remote to close the internal self-closing stop valve and shut off all motive and auxiliary power equipment upon activation by a qualified person attending the unloading of the cargo tank motor vehicle (off-truck remote shut-off).

This information collection requires that the emergency discharge control equipment be installed under the supervision of a RI. Each wireless transmitter/receiver must be tested to demonstrate that it will close the internal self-closing stop valve and shut off all motive and auxiliary power equipment at 91.44 m (300 feet) under optimum conditions. Emergency discharge control equipment that does not employ a wireless transmitter/receiver must be tested to demonstrate its functioning at the maximum length of the delivery hose. This information collection requires that the RI certify that the remote-control equipment is installed in accordance with the original component

manufacturer's specifications. The RI must provide the owner of the cargo tank motor vehicle with this certification.

3. Extent of automated information collection.

PHMSA has made this burden as simple as possible and requests information that is necessary to ensure safe operation. 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. PHMSA authorize electronic filing and recordkeeping, nonetheless requiring these records to be available upon request.

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

There is no duplication as the information is unique to specific situations. Each response is unique, and information derived from one may not be inferred to another. PHMSA has done its best effort to avoid duplication, while still ensuring that all requirements comply with application State requirements.

5. Efforts to minimize the burden on small businesses.

6.

PHMSA periodically reviews the collection of this information to ensure that the amount of information needed is kept to a minimum.

7. <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.

8. <u>Special circumstances</u>

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

9. <u>Compliance with 5 CFR 1320.8.</u>

PHMSA published a 60-Day Notice and Request for Comments [85 FR 2809] on the renewal of this information collection in the Federal Register January 16, 2020, under Docket No. PHMSA-2019-0221 (Notice No. 2019-12). The comment period closed March 16, 2020. No comments were received for this information collection.

9. Payments or gifts to respondents.

This collection of information provides no payment or gift to respondents.

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. This collection of information requires no sensitive information.

12. Estimates of burden hours for information requested.

Total Number of Respondents			Total Salary Cost	Total Burden Cost
34,450	906,168	182,233	\$11,672,004	\$0

Section 180.416(b) - Marking new/repaired hoses with unique identifier:

Based on historical data, it is estimated that 12,172 new or repair hoses are marked with a unique identifier each year. PHMSA estimates that marking each hose will take

approximately 5 minutes for a total of 1,010 burden hours (12,172 responses x 5 minutes per response). Each person applying the hose is expected to make \$64.41 per hour, for a total salary cost of \$65,069 (\$64.41 x 1,010 burden hours). There are no out of pocket cost associated with this information collection.

			Responses	Number	<u>Minutes</u>	<u>Annual</u>	<u>Salary</u>	<u>Total</u>	<u>Total</u>
Information Collection		Number of	<u>per</u>	<u>of</u>	<u>per</u>	<u>Burden</u>	Cost per	<u>Salary</u>	<u>Burden</u>
<u>Request</u>	<u>Regulation</u>	Respondents	Respondent	Responses	<u>Response</u>	<u>Hours</u>	<u>Hour</u>	<u>Cost</u>	<u>Cost</u>
Marking new/repaired									
hoses with unique									
identifier	§ 180.416(b)	6,800	1.79	12,172	5	1,010	\$64.41	\$65,069	\$0

Section 180.416(d)(1) - Monthly hose inspection rsecord

Based on historical data, it is estimated that 439,960 monthly hose inspection records are generated annually. PHMSA estimates that each monthly inspection record will take 6 minutes to generate for a total of 43,996 burden hours (439,960 responses x 6 minutes per response). Each person generating the record is expected to make \$64.41 per hour,² for a total salary cost of \$2,833,652 (\$64.41 x 43,996 burden hours). There are no out of pocket cost associated with this information collection.

			Responses	<u>Number</u>	<u>Minutes</u>	<u>Annual</u>	<u>Salary</u>		<u>Total</u>
<u>Information</u>		Number of	<u>per</u>	<u>of</u>	<u>per</u>	<u>Burden</u>	Cost per	<u>Total</u>	<u>Burden</u>
Collection Request	<u>Regulation</u>	<u>Respondents</u>	<u>Respondent</u>	<u>Responses</u>	<u>Response</u>	<u>Hours</u>	<u>Hour</u>	Salary Cost	<u>Cost</u>
Monthly hose									
inspection records	§ 180.416(d)	6,800	64.7	439,960	6	43,996	\$64.41	\$2,833,652	\$0

Section 180.416(d)(2) - Record of monthly piping tests

Based on historical data, it is estimated that 400,112 new or repair hoses are marked with a unique identifier each year. PHMSA estimates each marking will take 12 minutes for a total of 80,022 burden hours (400,112 responses x 12 minutes per response). Each person marking hoses is expected to make \$64.41 per hour,³ for a total salary cost of \$5,154,004 (\$64.41 x 80,022 burden hours). There are no out of pocket cost associated with this information collection.

			Responses	Number	<u>Minutes</u>	Annual	Salary		<u>Total</u>
<u>Information</u>		Number of	<u>per</u>	<u>of</u>	<u>per</u>	<u>Burden</u>	Cost per	<u>Total</u>	<u>Burden</u>
Collection Request	<u>Regulation</u>	<u>Respondents</u>	Respondent	Responses	Response	<u>Hours</u>	<u>Hour</u>	Salary Cost	<u>Cost</u>

¹ Occupation labor rates based on 2018 Occupational and Employment Statistics Survey (OES) for "17-2141 Mechanical Engineers." https://www.bls.gov/oes/2017/may/oes172141.htm The hourly mean wage for this occupation (\$43.99) is adjusted to reflect the total costs of employee compensation based on the BLS Employer Costs for Employee Compensation Summary, which indicates that wages for civilian workers are 68.3 percent of total compensation (total wage = wage rate/wage % of total compensation).

² Ibid.

³ Ibid.

Record of monthly									
piping tests	§ 180.416(d)(2)	6,800	58.84	400,112	12	80,022	\$64.41	\$5,154,004	\$0

Section 180.416(e) - Annual hose test record

Based on historical data, it is estimated that annual hose test records are 36,652created each year. PHMSA estimates that will take each hose test record25 minutes to create for a total of responses x 36,652 (15,394 burden hours25 minutes per response). Each person creating the record is expected to make \$64.41 per hour,⁴ 15,39x for a total salary cost of \$991,471 (\$64.41 4 burden hours). There are no out of pocket cost associated with this information collection.

			Responses	<u>Number</u>	<u>Minutes</u>	<u>Annual</u>	<u>Salary</u>	<u>Total</u>	<u>Total</u>
<u>Information</u>		Number of	<u>per</u>	<u>of</u>	<u>per</u>	<u>Burden</u>	Cost per	<u>Salary</u>	<u>Burden</u>
Collection Request	<u>Regulation</u>	<u>Respondents</u>	<u>Respondent</u>	<u>Responses</u>	<u>Response</u>	<u>Hours</u>	<u>Hour</u>	<u>Cost</u>	<u>Cost</u>
Annual hose test									
record	§ 180.416(e)	6,800	5.39	36,652	25	15,394	\$64.41	\$991,471	\$0

Section 180.416(f) - Hose pressure test marking

Based on historical data, it is estimated that 12,172 hose pressure test markings are made each year. PHMSA estimates that each pressure test marking will take 5 minutes to make for a total of 1,010 burden hours (12,172 responses x 5 minutes per response). Each person marking a hose is expected to make \$64.41 per hour,⁵ for a total salary cost of \$65,069 (\$64.41 x 1,010 burden hours). There are no out of pocket cost associated with this information collection.

			Responses	Number	<u>Minutes</u>	Annual	<u>Salary</u>	<u>Total</u>	<u>Total</u>
<u>Information</u>		Number of	<u>per</u>	<u>of</u>	<u>per</u>	<u>Burden</u>	Cost per	<u>Salary</u>	<u>Burden</u>
Collection Request	Regulation	<u>Respondents</u>	<u>Respondent</u>	Responses	Response	<u>Hours</u>	<u>Hour</u>	<u>Cost</u>	<u>Cost</u>
Hose pressure test									
marking	§ 180.416(f)	6,800	1.79	12,172	5	1,010	\$64.41	\$65,069	\$0

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⁴ Ibid.

⁵ Ibid.

Section

173.315(n)(2)(ii) - Cargo tank motor vehicles in other than metered delivery service - design certification for automatic shutoff

Based on historical data, it is estimated that 900 design certifications for cargo tanks in other than metered service are completed each year. PHMSA estimates that each certification will take 8 hours to create for a total of 7,200 burden hours (900 responses x 8 hours per response). Each person creating the certificate is expected to make \$64.41 per hour,⁶ for a total salary cost of \$463,731 (\$64.41 x 7,200 burden hours). There are no out of pocket cost associated with this information collection.

			Responses	<u>Number</u>	<u>Hours</u>	<u>Annual</u>	<u>Salary</u>	<u>Total</u>	<u>Total</u>
Information Collection		Number of	<u>per</u>	<u>of</u>	<u>per</u>	<u>Burden</u>	Cost per	<u>Salary</u>	<u>Burden</u>
<u>Request</u>	<u>Regulation</u>	<u>Respondents</u>	<u>Respondent</u>	Responses	Response	<u>Hours</u>	<u>Hour</u>	<u>Cost</u>	<u>Cost</u>
Cargo tank motor									
vehicles in other than									
metered delivery service									
- design certification for									
automatic shutoff	§ 173.315(n)(2)(ii)	150	6	900	8	7,200	\$64.41	\$463,731	\$0

<u>Section 173.315(n)(2)(iii) - Cargo tank motor vehicles in other than metered dselivery</u> ervice - installation of the shutoff system by a Registered Inspector

Based on historical data, it is estimated that 900 shutoff systems on cargo tank motor vehicles are reviewed by a RI each year. PHMSA estimates that the paperwork associated with this burden will take 8 hours to complete for a total of 7,200 burden hours (900 responses x 8 hours per response). Each person creating the record are expected to make \$64.41 per hour, for a total salary cost of \$463,731 (\$64.41 x 7,200 burden hours). There are no out of pocket cost associated with this information collection.

			<u>Responses</u>	<u>Number</u>	<u>Hours</u>	<u>Annual</u>	<u>Salary</u>	<u>Total</u>	<u>Total</u>
Information Collection		Number of	<u>per</u>	<u>of</u>	<u>per</u>	<u>Burden</u>	Cost per	<u>Salary</u>	<u>Burden</u>
<u>Request</u>	<u>Regulation</u>	<u>Respondents</u>	<u>Respondent</u>	<u>Responses</u>	<u>Response</u>	<u>Hours</u>	<u>Hour</u>	<u>Cost</u>	<u>Cost</u>
Cargo tank motor									
vehicles in other than									
metered delivery service									
- installation of the									
shutoff system by a									
Registered Inspector	§ 173.315(n)(2)(iii)	150	6	900	8	7,200	\$64.41	\$463,731	\$0

Section 173.315(n)(3)(iii) Cargo tank motor vehicles in metered delivery service - certification of remote control equipment by a Registered Inspector

⁷ Ibid.

⁶ Ibid.

Based on historical data, it is estimated that 3,300 cargo tank motor vehicles in metered service will have their remote-control equipment certified by a register inspector each year. PHMSA estimates that this information collection will take 8 hours for a total of 26,400 burden hours (3,300 responses x 8 hours per response). Each person reporting this information will make \$64.41 per hour, for a total salary cost of \$1,700,346 (\$64.41 x 8 burden hours). There are no out of pocket cost associated with this information collection.

			Responses	<u>Number</u>	<u>Hours</u>	<u>Annual</u>	<u>Salary</u>		<u>Total</u>
Information Collection		Number of	<u>per</u>	<u>of</u>	<u>per</u>	<u>Burden</u>	Cost per	<u>Total</u>	<u>Burden</u>
<u>Request</u>	<u>Regulation</u>	<u>Respondents</u>	Respondent	Responses	<u>Response</u>	<u>Hours</u>	<u>Hour</u>	Salary Cost	<u>Cost</u>
Cargo tank motor									
vehicles in metered									
delivery service -									
certification of remote									
control equipment by a									
Registered Inspector	§ 173.315(n)(3)(ii)	150	22	3,300	8	26,400	\$64.41	\$1,700,346	\$0

13. <u>Estimate of total annual costs to respondents.</u>

PHMSA does not estimate any out-of-pocket expenses as identified above.

14. Estimate of costs to the Federal government.

There is no cost to the Federal government.

15. <u>Explanation of program changes or adjustments.</u>

During PHMSA's review of the burden, it was noted that historically the information collections were grouped into a single collection. Following this review, PHMSA has adjusted this burden to eight different information collections. Because of this adjustment, there has been a change to the number of respondents and responses and a slight change to the amount of annual burden hours due to a better accounting of current burden hours.

16. Publication of results of data collection.

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

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

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⁸ Ibid.

This information collection's OMB control number is prominently displayed in the HMR, specifically under § 171.6, and titled, "Control Numbers under the Paperwork Reduction Act."

18. Exceptions to certification statement.

There is no exception to the certification of this request for information collection approval.