

**Department of Transportation  
Office of the Chief Information Officer  
Supporting Statement  
Flammable Cryogenic Liquids  
OMB Control No. 2137-0542**

(Expiration Date: May 31, 2011)

## **Introduction**

This is to request the Office of Management and Budget's (OMB) renewed three-year approved clearance for the information collection entitled, "Flammable Cryogenic Liquids," OMB Control No. 2137-0542, which is currently due to expire on May 31, 2011. This information collection was originally initiated as a result of a June 16, 1983 rulemaking [48 FR 27674], entitled "Cryogenic Liquids" under HM-115, which established marking and certification requirements for tank cars designed to carry cryogenic liquids.

## **Part A. Justification.**

1. Circumstances that make collection of information necessary.

This is a request for an extension without change of an existing approval under OMB No.2137-0542. Approval is requested for the information and recordkeeping requirements prescribed in 49 CFR 173.318, 177.816, 177.840, and 180.405. These regulations are set forth under the Federal hazardous materials transportation law (49 U.S.C. 5101-5127). The purpose of these requirements is to ensure that flammable cryogenic liquids are transported in a manner that will maintain a level of safety consistent with that achieved for other hazardous materials. This information collection supports the Departmental Strategic Goal for Safety.

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

The information collected is used by motor carriers, drivers, shippers, and emergency responders. The information is used to ensure the safe transportation of flammable cryogenic liquids and that proper proactive mitigation measures are taken if necessary to preclude an uncontrolled breach of the cargo tank. The information also ensures that if conditions change (i.e. the tank is not performing as previously calculated), it will be inspected prior to re-filling for transportation.

The following special requirements are needed for flammable cryogenic liquids due to their extreme flammability and the high expansion ratio (1 to 600) and extremely low temperatures, about minus 400 °F., needed to maintain cryogenics in a liquid state:

The cargo tank pressure and temperature requirements, in §§ 173.318(g), 177.840(h) and 180.405(i), are needed for the safety of the current and subsequent trips to ensure that the driver can determine that the tank was loaded within its proper limits and that the tank or its insulation

has not been compromised, which could lead to a catastrophic release of a flammable cryogenic liquid. Requiring temperatures and pressures to be written and retained for the trip provides a ready source of information to a driver about the integrity of the shipment, e.g. that the cryogenic liquid is not being heated in an unanticipated manner, the integrity of the cargo tank has not been compromised, and that the shipment can safely be delivered within an acceptable travel time. This information also allows the driver to take appropriate remedial actions should the temperature of the cryogenic liquid begin to rise excessively or if the travel time will exceed the safe travel time. By taking proactive remedial actions, a driver can prevent a catastrophic release of the flammable cryogenic liquid.

3. Extent of automated information collection.

The burden has been made as simple as possible. The information requested is necessary to ensure safe operations. This information is considered critical in making evaluations and assuring the safe transport, loading, and unloading of flammable cryogenic liquids. The Government Paperwork Elimination Act directs agencies to allow the option of electronic filing and recordkeeping by October 2003, when practicable. Due to the hazards of flammable cryogenic liquids, written procedures are required for venting, safety, emergencies, and documentation requirements for drivers. Therefore, full electronic filing and recordkeeping is not practicable.

4. Efforts to identify duplication.

No other similar information is readily available. This information is unique to the transportation of flammable cryogenic liquids.

5. Efforts to minimize the burden on small businesses.

The burden has been made as simple as possible. It is not feasible to reduce it any further and still maintain an acceptable level of safety to protect the general public and property from the dangers inherent in the transportation of flammable cryogenic liquids.

6. Impact of less frequent collection of information.

This information is not collected for reporting purposes of the Federal government. It is being collected to ensure that flammable cryogenic liquids are safely transported. It is also an important measure to provide information to shippers and carriers about the condition of the cargo tanks used to transport these materials, thus enabling repair of these vehicles prior to catastrophic failure.

7. Special circumstances affecting conduct of information collection activity.

There are no special circumstances. 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.

We published a 60-Day Notice and Request for Comments under Docket No. PHMSA–2010–0373 (Notice No. 10–10) on December 29, 2010, in the Federal Register [75 FR 82142] requesting public comment on the renewal of this information collection. The comment period closed on February 28, 2011. No comments pertaining to this information collection were received.

We published a 30-Day Notice and Request for Comments under Docket No. PHMSA-2010-0373 (Notice No. 11-2) on March 30, 2011, in the Federal Register [76 FR 17748]. The comment period closed on April 29, 2011. No comments pertaining to this information collection were received.

9. Payments or gifts to respondents.

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

10. Assurance of confidentiality.

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. No sensitive information is required.

12. Estimates of burden hours for information collected.

Based on estimates of industry, approximately 175 cargo tanks transport flammable cryogenic liquids, with an average of 2 trips per week. The average trip is estimated to be approximately 1,200 miles. There are an estimated 18,200 annual trips.

175 cargo tanks x 2 trips per week x 52 weeks per year = 18,200 annual trips.

Estimates of annual burden hours: 1,213 hours

Based on the estimates of annual trips (18,200) and an estimate of 3.5 minutes per trip to record the required information, the estimated burden on industry is approximately 1,062 hours annually. It is estimated that approximately 151 hours year (18,200 trips x 30 sec/report & instructions) are required to reproduce the necessary report document and driver instructions for

each trip. Generally, these reports and instructions can be generated by computer. Based on these estimates the total burden to industry is 1,213 hours.

18,200 annual trips x 3.5 minutes per trip = 63,700 minutes / 60 min/hr = 1,062 annual burden hours.

18,200 annual trips x 30 seconds per report = 546,000 seconds / 60 seconds/min = 9,100 minutes / 60min/hr = 152 annual burden hours.

1,062 hours + 151 hours = 1,213 total annual burden hours.

Estimates of annual cost for burden hours: \$21,115

Based on estimates of industry, approximately 175 cargo tanks transport flammable cryogenic liquids, with an average of 2 trips per week. The average trip is estimated to be approximately 1200 miles. There are an estimated 18,200 trips annually. It is estimated that a driver's average hourly wage is approximately \$17.75. The cost of generating the instructions/report is 151 hours, estimated at a clerk's average hourly wage of \$15.00 per hour. The estimated total cost to industry of these recordkeeping requirements is \$21,115.00.

1,062 annual burden hours x \$17.75 per hour = \$18,850.50.

151 annual burden hours x \$15.00 per hour = \$2,265.00.

\$18,850.50 + \$2,265.00 = \$21,115.

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 cost 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.

16. Publication of results of data collection.

There are no plans for statistical analysis or publication of this information.

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

This information collection OMB Control number is prominently displayed in the HMR, specifically under § 171.6, entitled, "Control Numbers under the Paperwork Reduction Act."

18. Exceptions to certification statement.

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

**Part B. Collections of Information Employing Statistical Methods.**

1. Describe potential respondent universe and any sampling selection method to be used.

Not applicable.

2. Describe procedures for collecting information, including statistical methodology for stratification and sample selection, estimation procedures, degree of accuracy needed, and less than annual periodic data cycles.

Not applicable.

3. Describe methods to maximize response rate.

Not applicable.

4. Describe tests of procedures or methods.

Not applicable.

5. Provide name and telephone number of individuals who were consulted on statistical aspects of the information collection and who will actually collect and/or analyze the information.

Not applicable.