

**Department of Transportation
Office of the Chief Information Officer
Supporting Statement**

Testing, Inspection and Marking Requirements for Cylinders
OMB Control No. 2137-0022

(Expiration Date: May 31, 2018)

Introduction:

This is to request that the Office of Management and Budget (OMB) approve a three-year extension of the information collection, "Testing, Inspection and Marking Requirements for Cylinders," under OMB Control No. 2137-0022, which is currently due to expire on May 31, 2018. These reporting and recordkeeping requirements pertain to manufacturers, requalifiers, and repairers of DOT Specification Cylinders. This OMB control number was initiated on July 29, 1981, and was preceded by a cylinder rulemaking on January 29, 1981 [46 FR 9880; HM-167], titled "Intermodal Portable Tanks."

Historically, PHMSA has grouped this burden into a single information collection. Upon evaluation, this information collection has been separated into nine information collections. Because of this change, there is an adjustment in the number of respondents and responses; however, the burden hours remain the same because there is no change in regulatory requirements.

Part A. Justification.

1. Circumstances that make collection of information necessary

This is a request for an extension of an existing information collection under OMB Control No. 2137-0022 for reporting and recordkeeping requirements pertaining to manufacturers, requalifiers, and repairers of DOT Specification Cylinders. This information is used to verify that cylinders meet required manufacturing standards prior to being authorized for initial use, and once in use, that the cylinders are maintained and used in compliance with applicable requirements of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) as safe packagings for hazardous materials. The HMR are promulgated in accordance with 49 U.S.C. 5110, the Federal hazardous materials transportation law. This information collection supports the Departmental Strategic Goal for Safety.

Upon evaluation, this information collection has been separated into nine information collections. Because of this change, there is an adjustment in the number of respondents and responses; however, the burden hours remain the same because there is no change in regulatory requirements.

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

Cylinder Manufacture

Part 178, subpart C of the HMR provides specifications for cylinders, including design requirements, marking, and testing requirements for the manufacturing of new cylinders.

1Specification Marking: Upon manufacture, cylinders must be marked, where applicable, with the name and address or symbol of the packaging manufacturer or approval agency. Except for marked service pressure, markings required on cylinders may not be altered or removed. The marking certifies that all requirements of the DOT specification, including performance tests, have been met and that all functions performed by, or on behalf of, the person whose name or symbol appears as part of the marking conform to the specified requirements. A packaging not conforming to the applicable specifications or standards may not be marked.

Inspector's Report: The Compressed Gas Association (CGA) Pamphlet C-11 (incorporated by reference in § 171.7) dictates requirements for the inspector's report and is required to be created for each cylinder, in accordance with § 178.35(c)(4). An inspector determines that all materials are in compliance with the specification requirements in Part 178 for that specific cylinder. After completion of the inspection, an inspector must determine that each cylinder is marked in compliance with the specification and furnish complete test reports to the maker of the cylinder, and upon request, to the purchaser. The inspector's report must be retained by the inspector and the manufacturer for 15 years from the original test date or the authorized service life of the cylinder. During this time, an entity of the DOT may request a copy of the report.

Cylinder Requalification

Part 180, subpart C of the HMR provides specifications for the requalification and maintenance of cylinders, to ensure that cylinders remain safe for transportation throughout their lifetimes. At periodic intervals, as specified in the HMR, various retesting must be conducted on a DOT Specification Cylinder to ensure that it is being properly maintained. The following details the information collection burden for these tests.

Cylinder markings: Each cylinder passing retest must be marked with the cylinder retester's identification number set in a square pattern, between the month and year of the retest date in characters not less than 1/8" high with the first character occupying the upper left corner of the square pattern. The second character must be in the upper right, the third in the lower right, and the fourth in the lower left. For example, a cylinder retested May 1984 and approved by a retester who has been issued identification number A123 would be stamped:

	A	1	
5			84
	3	2	

Variations from the marking requirements may be requested in writing, and may be implemented with PHMSA's written approval. Stamping must be in accordance with the location requirements of the cylinder specification. Dates of previous tests must not be obliterated.

No person may represent that a DOT specification cylinder has been retested under this section, unless that person holds a current retester's identification number issued by PHMSA. Each required marking on a cylinder must be maintained so that it is legible. Original and retest markings which are becoming illegible may be reproduced by stamping them on a metal plate, which must be permanently secured to the cylinder.

No cylinder required to be retested may be used for the transportation of a hazardous material unless it has been retested successfully and the retester has marked the cylinder by stamping the cylinder retester identification number and date of retest plainly and permanently into the metal of the cylinder or on a metal plate permanently secured to the cylinder.

Requalification Record: Each facility that retests or requalifies cylinders must maintain requalification records. Requalification records will differ based on the type of requalification tests the facility is authorized to conduct by PHMSA. The type of requalification tests authorized will be indicated on a requalification identification number (RIN) approval. This approval is a burden captured under OMB Control Number 2137-0557, "Approval for Hazardous Materials."

These daily records include details of visual inspection, pressure test, and ultrasonic examination, as applicable, until the expiration of the requalification period or until the cylinder is requalified, whichever occurs first. The records must also include information such as the date or retest, dimension, manufacturer's name or symbol, owner's name or symbol, and test operator. Furthermore, it must include records of the calibration test, pressure test, visual inspection, wall stress, and calibration certificates, as applicable. These records may be requested by an authorized person of the DOT, particularly during enforcement inspections.

Repair, Rebuilding, or Reheat Treatment: Section 180.215(c) details the reporting and recordkeeping requirements for facilities that repair, rebuild, or reheat treat cylinders. These specialized tests are conducted by a specific group of cylinder retest facilities, which are required to obtain approval (and a "K#") from PHMSA. This approval is a burden captured under OMB Control Number 2137-0557, "Approval for Hazardous Materials." PHMSA specifically details requirements for the record that a person who rebuilds a cylinder must maintain. These details include:

- Name and address of test facility, date of test report, and name of original manufacturer;
- Marks stamped on a cylinder, to include specification number, service pressure, serial number, symbol of manufacturer, inspector's mark, and other marks, if any;
- Cylinder outside diameter and length in inches;
- Rebuild process (e.g., welded, brazed, type seams, etc.);
- Description of assembly and any attachments replaced (e.g., neckrings, footrings);
- Chemical analysis of material for the cylinder, including seat and Code No., type of analysis (ladle, check), chemical components (Carbon (C), Phosphorous (P), Sulfur (S), Silicon (Si), Manganese (Mn), Nickel (Ni), Chromium (Cr), Molybdenum (Mo), Copper

(Cu), Aluminum (Al), Zinc (Zn)), material manufacturer, name of person performing the analysis, results of physical tests of material for cylinder (yield strength (psi), tensile strength (psi), elongation percentage (inches), reduction in area percentage, weld bend, tensile bend, name of inspector);

- Results of proof pressure test on cylinder, including test method, test pressure, total expansion, permanent expansion, elastic expansion, percent permanent expansion (permanent expansion may not exceed 10 percent of total expansion), and volumetric capacity (volumetric capacity of a rebuilt cylinder must be within ± 3 percent of the calculated capacity); and
- The certification statement: "I certify that this rebuilt cylinder is accurately represented by the data above and conforms to all of the requirements in Subchapter C of Chapter I of Title 49 of the Code of Federal Regulations." The certification must be signed by the rebuild technician and principal, officer, or partner of the rebuild facility.

These records must be maintained at the approved facility for a minimum of 15 years. During this time, these records must be provided to an official of the DOT upon request.

Changing Marked Service Pressure: The marked service pressure on a cylinder may be changed, upon approval by the Associate Administrator, in accordance with § 180.205(c)(3). This would require an adjustment of the original manufacture marking, as specified earlier in this section.

3. Extent of automated information collection

The information required is particular and unique. Industry may use any type of technology to meet information collection and recordkeeping requirements as long as the information is retrievable when requested. PHMSA encourages the use of automated technology to reduce burden.

The Government Paperwork Elimination Act directs agencies to allow the option of electronic filing and recordkeeping by October 2003, when practicable. Electronic filing and recordkeeping for tests for manufacture and inspection of cylinders is authorized; however, we do not require these records to be submitted to us, so this is not applicable.

4. Efforts to identify duplication

There is no duplication, as the information requested is not required by any other agency. Each response is unique and information derived from one source may not be obtained from another. PHMSA has done its due diligence to ensure that this information is not duplicated.

5. Efforts to minimize the burden on small businesses

Because this information is unique, similar information is unavailable. The collection of this information is reviewed periodically to ensure that the requirements involving safety in the transportation of hazardous materials are kept to the necessary standards to protect all involved.

6. Impact of less frequent collection of information

Due to the hazards involved in transporting cylinders, if collection of information or recordkeeping were required less frequently, the hazards to the public safety would increase due to the increasing probability of incidents occurring during transportation. Therefore, the benefits of reducing this burden do not outweigh the benefits of safety.

7. Special circumstances

This collection of information is generally conducted in a manner consistent with the guidelines in 5 CFR 1320.5(d)(2), with the following qualifications:

- a. The length of time between tests and inspections and the fact that results of prior tests must be kept until the next re-qualification;
- b. The fact that tests must be performed every time a cylinder is recharged or when there is evidence of damage or corrosion, and that records of re-qualification results must be maintained; and
- c. The fact that tests that must be made after repairs to verify integrity of repaired cylinders and that records must be maintained to verify repairs.

8. Compliance with 5 CFR 1320.8

PHMSA published a 60-Day Notice and Request for Comments under Docket No. PHMSA-2017-0018 (Notice No. 2017-01) on April 21, 2017, in the *Federal Register* [82 FR 18828] requesting public comment on the renewal of this information collection, along with 10 other information collections. PHMSA received two comments.

- Submitted April 25, 2017: Comment on PHMSA's request for comment on OMB Control No. 2137-0557, "Approvals for Hazardous Material." At the time of the Notice publication, PHMSA had submitted a renewal with change, based on a rulemaking action. To ensure OMB Control No. 2137-0557 did not expire, the ICR was included as a part of the 60-day notice. The commenter questioned PHMSA's decision, as they were aware of the renewal request with OMB, and requested a republication of the 60-day notice without OMB Control No. 2137-0057. Because this ICR was approved by OMB, but did not receive an extension in expiration date, a new 60-day Notice was not published and OMB Control No. 2137-0057 was included in the 30-day Notice publication.
- Submitted June 15, 2017: Comment on a pipeline rulemaking action, which was out of the scope of these information collection activities.

PHMSA published a 30-Day Notice and Request for Comments under Docket No. PHMSA-2017-0018 (Notice No. 2017-05) on September 28, 2017, in the *Federal Register* [82 FR 45356] requesting public comment on the renewal of this information collection, along with 10 other information collections. 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

The reporting and recordkeeping requirements of this information collection do not include anything of a sensitive nature or any matters considered private. Therefore, we do not foresee any need to assure the confidentiality of the information to be collected.

11. Justification for collection of sensitive information

Not applicable. Information is not of a sensitive nature.

12. Estimate of burden hours for information requested.

<u>Total Number of Respondents</u>	<u>Total Number of Annual Responses</u>	<u>Total Annual Burden Hours</u>	<u>Total Annual Burden Costs</u>
14,721	13,650,374	171,462	\$0

Cylinder Manufacture

Each time a cylinder is manufactured, it must be stamped with the appropriate marking. It is estimated that there are 150 cylinder manufactures who manufacture an average of 450 cylinders each per year, for a total of 67,500 annual responses (150 manufacturers x 450 cylinders). It takes approximately 1 minute to stamp each new cylinder, for a total annual burden hour estimate of 1,125 hours (67,500 new cylinders x 1 minute). PHMSA estimates there are no out-of-pocket expenses for the stamping requirement for new cylinders.

<u>Number of Facilities</u>	<u>New Cylinders per Facility</u>	<u>Annual Number of New Cylinders</u>	<u>Minutes per Stamp</u>	<u>Annual Burden Hours</u>	<u>Burden Cost per Hour</u>	<u>Annual Burden Costs</u>
150	450	67,500	1	1,125	\$0	\$0

Each cylinder manufacturer is estimated to build one new type of cylinder each year. An inspector's report must be created for each new cylinder type, for a total of 150 annual responses. It is estimated to take 30 minutes to create the inspector's report, for a total of 75 annual burden hours (150 new cylinders x 30 minutes per response). PHMSA estimates there are no out-of-pocket expenses to create the report.

<u>Number of Respondents</u>	<u>Response per Facility</u>	<u>Annual Number of Responses</u>	<u>Minutes per Response</u>	<u>Annual Burden Hours</u>	<u>Burden Cost per Hour</u>	<u>Annual Burden Costs</u>
150	1	150	30	75	\$0	\$0

Each inspector's report must be maintained at the inspector and manufacturer's facility for 15 years from the original test date of the cylinder. While a report is not required to be submitted to PHMSA, it may be inspected at a reasonable time and location upon request by authorized persons of the DOT. Many of these involve review during routine enforcement inspections at an inspector or manufacturer's facility. It is estimated that there are 30 recordkeeping requests per year. Each request is estimated to take 12 minutes for a total annual burden of 6 hours (30 annual responses x 12 minutes). PHMSA estimates there are no out-of-pocket expenses for this recordkeeping requirement.

<u>Number of Respondents</u>	<u>Response per Facility</u>	<u>Annual Number of Responses</u>	<u>Minutes per Response</u>	<u>Annual Burden Hours</u>	<u>Burden Cost per Hour</u>	<u>Annual Burden Costs</u>
30	1	30	12	6	\$0	\$0

Cylinder Requalification

There are approximately 7,000 authorized cylinder requalifiers. After each requalification, a cylinder must be stamped or marked with an indication of the type of requalification performed and the approval number of the requalifier. On average, 970 cylinders are requalified by each requalification facility each year for a total of 6,790,000 cylinders stamped with the requalification mark (7,000 requalifiers x 970 cylinders). On average, the requalification take 45 seconds to perform for a total of 84,875 annual burden hours (6,790,000 requalifications x 45 seconds). PHMSA estimates that there are no out-of-pocket expenses.

<u>Number of Cylinder</u>	<u>Cylinder Requalifications</u>	<u>Number of Requalifications</u>	<u>Seconds per Stamp</u>	<u>Annual Burden</u>	<u>Burden Cost per</u>	<u>Annual Burden</u>
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<u>Requalifiers</u>	<u>per Requalifier</u>			<u>Hours</u>	<u>Hour</u>	<u>Costs</u>
7,000	970	6,790,000	45	84,875	\$0	\$0

Each requalification facility must keep a record of each cylinder that it has requalified. Approximately 7,000 requalification facilities requalify 970 cylinders for a total of 6,790,000 cylinder records (7,000 respondents x 970 records). To create a record, it is estimated to take 45 seconds, for a total of 84,875 annual burden hours (6,790,000 requalifications x 45 seconds). PHMSA estimates that there are no out-of-pocket expenses for creating the requalification record.

<u>Number of Cylinder Requalifiers</u>	<u>Cylinder Requalifications per Requalifier</u>	<u>Number of Requalifications</u>	<u>Seconds per Record</u>	<u>Annual Burden Hours</u>	<u>Burden Cost per Hour</u>	<u>Annual Burden Costs</u>
7,000	970	6,790,000	45	84,875	\$0	\$0

Each of these cylinder requalification records is subject to inspection and review by a representative of the DOT, upon request. It is estimated that 330 cylinder requalification facilities are inspected annually. Each inspection is estimated to take 6 minutes, for a total of 33 annual burden hours (330 facilities x 6 minutes). PHMSA estimates that there are no out-of-pocket expenses.

<u>Number of Respondents</u>	<u>Response per Respondent</u>	<u>Number of Responses</u>	<u>Minutes per Response</u>	<u>Annual Burden Hours</u>	<u>Burden Cost per Hour</u>	<u>Annual Burden Costs</u>
330	1	330	6	33	\$0	\$0

Each time a cylinder is repaired, rebuilt, or reheat treated, a record must be created. There are 47 facilities authorized to perform these tests on approximately 50 cylinders per year, for a total of 2,350 cylinders (47 respondents x 50 responses). It is estimated to take 12 minutes per response to create these records, for a total of 470 burden hours (2,350 responses x 12 minutes). It is estimated that there are no out-of-pocket expenses for creating these records.

<u>Number of Respondents</u>	<u>Response per Respondent</u>	<u>Number of Responses</u>	<u>Minutes per Response</u>	<u>Annual Burden Hours</u>	<u>Burden Cost per Hour</u>	<u>Annual Burden Costs</u>
47	50	2,350	12	470	\$0	\$0

The records must be produced if requested by an official of the DOT. It is estimated that six facilities must provide their records each year. It takes approximately 10 minutes to produce the records for a total of 1 annual burden hour (6 responses x 10 minutes). There are no out-of-pocket expenses for this request.

<u>Number of Respondents</u>	<u>Response per Respondent</u>	<u>Number of Responses</u>	<u>Minutes per Response</u>	<u>Annual Burden Hours</u>	<u>Burden Cost per Hour</u>	<u>Annual Burden Costs</u>
6	1	6	10	1	\$0	\$0

A marked service pressure may be changed, if approved by the Associate Administrator. It is estimated that eight respondents change the marked service pressure each year. It takes approximately 15 minutes to change the marked service pressure for a total of 2 annual burden hours (8 responses x 15 minutes). PHMSA estimates there are no out-of-pocket expenses to change the marked service pressure.

<u>Number of Respondents</u>	<u>Response per Respondent</u>	<u>Number of Responses</u>	<u>Minutes per Response</u>	<u>Annual Burden Hours</u>	<u>Burden Cost per Hour</u>	<u>Annual Burden Costs</u>
8	1	8	15	2	\$0	\$0

13. Estimate of total annual costs to respondents

There is no cost burden to respondents; see question 12.

14. Estimate of cost to the Federal Government

There are no costs to the Federal Government.

15. Explanation of program changes or adjustments

There are no revisions to the total number of burden hours for the renewal of this OMB Control Number. However, there is an adjustment in the number of respondents and responses. During review of this burden, PHMSA noted it has historically consolidated all reporting and recordkeeping requirements into one information collection. As demonstrated throughout this justification, there are nine different reporting and recordkeeping requirements, which PHMSA is now identifying. These adjustments increase the number of responses and respondents. However, this did not change the number of total burden hours, because no changes were made to the cylinder requirements.

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

Approved OMB number 2137-0022 is prominently displayed in the text of 49 CFR 171.6 of the HMR.

18. Exceptions to certification statement.

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