Department of Transportation Office of the Chief Information Officer Supporting Statement

Testing Requirements for Non-Bulk Packaging

(Expiration date: May 31, 2018)

Introduction

This is to request the Office of Management and Budget's (OMB) approval for a three-year extension, for the information collection titled, "Testing Requirements for Non-Bulk Packaging" (formerly Testing Requirements for Packaging) under OMB Control No. 2137-0572, which is currently due to expire on May 31, 2018. The adjustments for this reporting and recordkeeping requirement are due to a change in the way that PHMSA is reporting on this burden. Historically, PHMSA lumped the burden into a single information collection; in this extension request, PHMSA has separated one information collection into five different information collections. Because of this adjustment, there is a change in the number of respondents and responses. There is no change in the total burden hours, however, because there were no regulatory changes to this burden.

Part A. Justification.

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

This is a request for the extension of an existing approval under OMB Control No. 2137-0572, applicable to the Hazardous Materials Regulations (HMR; 49 CFR parts 100-180). This information collection supports the Departmental Strategic Goal for Safety. The HMR are promulgated in accordance with 49 U.S.C. 5110, the Federal hazardous materials transportation law. The change in this information collection request is due to an increase in the number of information collections. During review of this approval request, PHMSA noted that the burden was grouped into a single information collection; it is now identified as five different information collections. This changed the number of respondents and responses, but did not affect the number of burden hours, because there were no regulatory changes to the requirements for non-bulk package testing reporting and recordkeeping requirements.

The strength and integrity of non-bulk packaging (maximum 119-gallon capacity) is established by a series of performance tests. Depending on the HMR requirements, the packaging must pass or be capable of passing specified tests to be authorized for the carriage of hazardous materials. For example, a Class 3, Flammable liquid, packing group (PG) II

material must be placed in a packaging that has been built to certain specifications and has passed all appropriate tests, including specific tests for liquid hazardous material (such as leakproofness testing). In addition, the package must be rated to a PG I or II strength, which is related to the strength of the packaging—a higher hazard for a material, requires a high/stronger packaging integrity. The HMR allows for a variety of materials and sizes/types of packaging, such as steel drums, aluminum drums, and aluminum jerricans. Unless specifically excepted in the HMR, all hazardous materials transported in a package with a capacity less than 119 gallons must meet these standards and pass appropriate testing to ensure that the package will be capable of transporting the hazardous materials safely.

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

The HMR require proof, through testing, that packagings pass, or are capable of passing, specified testing requirements in part 178, subpart M. All non-bulk performance-oriented packagings must meet specific tests. The HMR requires that these tests be performed upon original manufacture of these packages, and every two years. These tests include:

- Drop test
- Stacking test
- Must be capable of withstanding, without rupture or leakage, the vibration test procedures.

Certain non-bulk packaging must also be capable of passing additional testing. For example, outer packaging designed to transport oxygen cylinders via aircraft must pass thermal resistance test, in accordance with appendix D or appendix E to part 178. Additional forms of testing, depending on the type of material a package will contain, includes:

- Leakproofness testing for all packages intended to contain liquid hazardous materials
- Hydrostatic pressure test for all metal, plastic, and composite packagings intended to contain liquids
- Cooperage test for bung-type wooden barrels
- Additional drop test, water spray test, -18°C (0°F) conditioning, and testing with dry ice for packaging intended to contain an infectious substance. The package may not be required to meet the additional test requirements, as these tests are also dependent on the type of outer and inner packaging material (i.e., fiberboard, plastics, others).

Following each test and periodic retest, a test report must be prepared and maintained at the location where the packaging is manufactured, certified, and where a design qualification test or periodic retest is conducted. The test report must be made available to a user of a packaging or a representative of the DOT, upon request. The test report includes information such as: the date, name, and address of the testing facility; a description of the packaging design type; the maximum capacity; characteristics of test contents; and test descriptions and results.

Lastly, in accordance with § 178.2(c), the manufacturer or other person certifying compliance with the requirements of non-bulk packaging must create closure instructions for the packaging. These instructions indicate the means of closure with which that package was tested, and ensure that any subsequent shipper maintains the equivalent level of safety when the package is closed for transportation of hazardous materials. The manufacturer or other person certifying compliance, along each subsequent distributor of the packaging, must provide closure instructions to each person to whom the packaging is transferred, as well as any representative of the DOT, for inspection.

3. Extent of automated information collection

The burden has been made as simple as possible. The information requested is necessary to ensure safe operation. On December 21, 1990, RSPA (PHMSA's predecessor agency) published a final rule titled "Performance-Oriented Packaging Standards; Changes to Classification, Hazard Communication, Packaging and Handling Requirements Based on UN Standards and Agency Initiative" [55 FR 52401; HM-181], which revised specification packaging requirements for non-bulk packagings. Previously, the HMR detailed packaging types that were too expensive to make or were too labor-intensive to pack. Because these packagings were outdated, stifled innovation, and required numerous special permits (previously called "exemptions") for alternate packaging types, PHMSA revised the HMR in this final rule to allow hazardous materials to be shipped in performance-oriented packagings, which are based on UN Recommendations. Overtime, PHMSA has revised some of these packaging types, and appropriate testing, with a goal of aligning with international standards, ensuring continued flexibility, as well as minimize the amount of information collection burden. However, the testing and packaging types have remained generally consistent since adoption in 1990.

Information is considered critical in making evaluations and assuring safe transportation of hazardous materials. 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 is permitted, and respondents may use whichever method they prefer. However, PHMSA does not require these records to be submitted to the Government, and they are maintained at the packaging firm. Based on historical stakeholder feedback, we estimate half of the respondents utilize electronic recordkeeping.

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

PHMSA has done its due diligence to ensure there is no duplication for the testing and record keeping information.

5. Efforts to minimize the burden on small businesses

This information collection provides affected entities, including small businesses, the opportunity to allow packaging manufacturers and shippers more flexibility in selecting more economical packagings for their products, customizing the design of packagings to better suit the transportation environment that they will encounter, encouraging technological innovations, decreasing packaging costs, and significantly reducing the need for special permits or exemptions. 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 parties involved. However, in order to ensure that safety is not reduced, there is no specific reduction in small business burden.

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

These requirements are necessary to ensure that packagings containing hazardous materials meet prescribed safety standards for transportation in commerce. The tests are required at the time of original manufacture. For single or composite packagings, periodic retesting on the packaging design must be completed every 12 months and for combination and infectious substance packaging, periodic retesting on the packaging design must be completed every 24 months. The periodic retesting is only required if a design type is continuing to be manufactured. For example, if a manufacture only manufactures a combination package for 12 months, they are not subject to periodic testing. This also does not limit a person from using the package to ship a hazardous material after the periodic retest date. For example, if a person can use a box that was tested 36 months ago, as long as the package was tested when manufactured and it meets all other requirements of the HMR.

When RSPA created Performance-Oriented Packaging standards in HM-181, they acknowledged that retesting was required based on the number of samples required for each test (no more than 6) and that this frequency would ensure continued quality control for packaging manufacture. Because these packagings are designed to contain and transport hazardous materials, these tests help to mimic in-transportation scenarios and ensure that the packagings would be able to withstand those circumstances. The current frequency of testing ensures that if there are lapses in manufacture quality (i.e., a packaging fails a retest) the number of manufactured packagings is more limited than if the time frame was extended further. However, PHMSA continues to work on reducing regulatory burden, within safety impacts, and may look to increase the period retest period in the future.

7. <u>Special circumstances</u>

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

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

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 one comment related to a different information collection and one comment that was outside of the scope of the notice.

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.

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. There are no guarantees of confidentiality.

11. <u>Justification for collection of sensitive information</u>

Not applicable. Information is not of a sensitive nature.

12. Estimate of burden hours for information requested

Number of	<u>Number of</u>	<u>Total Burden</u>	<u>Total Salary</u>
<u>Respondents</u>	<u>Responses</u>	<u>Hours</u>	<u>Cost</u>
21,690	32,610	32,500	\$1,290,007

Based on PHMSA historical stakeholder feedback, is estimated that there are 5,000 packaging firms that test or retest and create test reports 3 times each year, for a total of

15,000 responses (5,000 respondents x 3 annual responses). Each test report is expected to take 2 hours to prepare, based on historical stakeholder feedback, for a total of 30,000 burden hours (15,000 responses x 2 hours). At a salary cost of \$39.69 per hour¹, it is estimated to cost a total of \$1,190.775.99 in salary cost (30,000 burden hours x \$39.69).

			<u>Response</u>	<u>Number</u>		<u>Total</u>		
	<u>Information</u>	Number of	<u>per</u>	<u>of</u>	Hours per	<u>Burden</u>	Salary Cost	<u>Total Salary</u>
	<u>Collection</u>	<u>Respondents</u>	<u>Respondent</u>	Responses	<u>Response</u>	<u>Hours</u>	<u>per Hour</u>	<u>Cost</u>
Section	Test Report -							
178.601	Reporting	5,000	3	15,000	2	30,000	\$39.69	\$1,190,775.99

Based on historical stakeholder feedback, PHMSA estimates that there are 10 testing facilities that perform additional testing required for certain types of non-bulk packages, with a test report required after each test is performed. Each of these facilities are estimated to test 3 packages per year for a total of 30 responses (10 respondents x 3 responses per respondent). Each test report is estimated to take 2 hours to create for a total of 60 burden hours (30 responses x 2 hours). At a salary of \$39.69 per hour², it is estimated to cost \$1,626.60 in salary cost for the additional test report requirements (60 burden hours x \$27.11).

			Response					
			<u>per</u>	<u>Number</u>		<u>Total</u>	<u>Salary</u>	<u>Total</u>
	<u>Information</u>	Number of	<u>Responden</u>	<u>of</u>	Hours per	<u>Burden</u>	Cost per	<u>Salary</u>
	<u>Collection</u>	<u>Respondents</u>	<u>t</u>	Responses	<u>Response</u>	<u>Hours</u>	<u>Hour</u>	<u>Cost</u>
	Additional Test							
Section	Reports -							
173.168	Reporting	10	3	30	2	60	\$39.69	\$2,381.55

Each test report, whether for the original test or a more specialized test, may be requested by from a subsequent distributor, or from an entity of the DOT, during an inspection. Based on previous inspection years, it is estimated that 100 test facilities are inspected, requiring 10 responses per inspection, for a total of 1,000 responses. At an estimated 6 minutes per response, this recordkeeping requirement is 100 burden hours (1,000 responses x 6 minutes).

¹ Occupation labor rates based on 2017 Occupational and Employment Statistics Survey (OES) for "First-Line Supervisors of Transportation and Material Moving Workers, Except Aircraft Cargo Handling Supervisors (53-1048)" in the Transportation and Material Moving industry (https://www.bls.gov/oes/current/oes531048.htm). The hourly mean wage for this occupation (\$27.11) 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).

At a salary cost of \$39.69 per hour³, the estimated total salary cost is \$3,969.25 (100 burden hours x \$39.69).

			Response					
			<u>per</u>	<u>Number</u>	<u>Minutes</u>	<u>Total</u>		
	<u>Information</u>	Number of	<u>Responden</u>	<u>of</u>	<u>per</u>	<u>Burden</u>	Salary Cost	Total Salary
	<u>Collection</u>	Respondents	<u>t</u>	Responses	<u>Response</u>	<u>Hours</u>	<u>per Hour</u>	<u>Cost</u>
Section	Test Reports -							
178.601	Recordkeeping	100	10	1,000	6	100	\$39.69	\$3,969.25

Closure instructions must be created to ensure that each subsequent shipper will be able to properly close the non-bulk package as it was tested. Based on historical stakeholder feedback, it is estimated that there are 500 companies creating a closure instructions per year, for a total of 500 responses. It is estimated a closure instruction takes 2 hours to prepare for a total of 1,000 burden hours (500 responses x 2 hours). At a salary cost of \$39.69 per hour⁴, it is estimated the total salary cost is \$39,692.53 (1,000 burden hours x \$39.69).

			<u>Response</u>			<u>Total</u>		
			<u>per</u>	<u>Number</u>	<u>Hours</u>	<u>Burde</u>	<u>Salary</u>	
	<u>Information</u>	Number of	Responden	<u>of</u>	<u>per</u>	<u>n</u>	Cost per	<u>Total Salary</u>
	<u>Collection</u>	<u>Respondents</u>	<u>t</u>	Responses	<u>Response</u>	<u>Hours</u>	<u>Hour</u>	<u>Cost</u>
Section 178.2,	Closure Instructions							
178.601	- Reporting	500	1	500	2	1,000	\$39.69	\$39,692.53

Closure instructions must be provided to any subsequent distributor of the package or to a representative of the DOT, for inspection. Based on historical stakeholder feedback, it is estimated that 16,080 respondents provide closure instructions once per year, for a total of 16,080 response. At 5 minutes per response, it is estimated the total burden hours are 1,340 (16,080 responses x 5 minutes). At an estimated salary of \$39.69 per hour⁵, the total salary cost is estimated to be \$53,187.99 (1,340 burden hours x \$39.69).

	T. C	77 1 6	Response	Number	<u>Minutes</u>	<u>Total</u>	Salary	<u>Total</u>
	<u>Information</u>	<u>Number of</u>	<u>per</u>	<u>ot</u>	<u>per</u>	<u>Burden</u>	<u>Cost per</u>	<u>Salary</u>
	<u>Collection</u>	<u>Respondents</u>	<u>Respondent</u>	<u>Responses</u>	<u>Response</u>	<u>Hours</u>	<u>Hour</u>	<u>Cost</u>
Section	Closure Instructions -							
178.2	Recordkeeping	16,080	1	16,080	5	1,340	\$39.69	\$53,187.99

13. Estimate of total annual costs to respondents

³ Ibid.

⁴ Ibid.

⁵ Ibid.

PHMSA does not estimate there are any out-of-pocket expenses for these reporting or recordkeeping requirements.

14. Estimate of annualized cost to the Federal Government

PHMSA estimates that the cost to the Federal Government is related to the recordkeeping requirements of this information collection. In total, there is an estimate of 1,440 recordkeeping hours for DOT inspection. At an estimated salary of a GS13 employee of \$46.46 per hour⁶, the total Federal Government salary cost is estimated at \$66,902.40 (1,440 recordkeeping hours x \$46.46).

	Total Recordkeeping	Salary Cost - GS13	
	<u>Hours</u>	<u>per Hour</u>	Total Salary Cost
Test Reports	100	\$46.46	\$4,646.00
Closure Instructions	1,340	\$46.46	\$62,256.40
Total	1,440		\$66,902.40

15. Reasons for change in burden

There is no change to the number of burden hours for this information collection. However, 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 five different information collections. Because of this adjustment, there has been a change to the number of respondents and responses. There is no change in the number of burden hours because there was no change in the requirements for non-bulk packaging test reports and recordkeeping requirements.

16. Plans for tabulation, statistical analysis, and publication

There is no publication of these reports by PHMSA and no statistical techniques are involved.

⁶ OPM Pay Scale – Hourly Wage (https://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/salary-tables/pdf/2018/DCB_h.pdf)

17. <u>Display of expiration date of OMB Approval</u>

The approved OMB number is prominently displayed in the text of § 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.