

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

**Testing Requirements for Non-Bulk Packaging**

(Expiration date: August 31, 2021)

**Introduction**

This is to request the Office of Management and Budget’s (OMB) approval with change 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 August 31, 2021.

On May 11, 2020, PHMSA published a final rule titled “Hazardous Materials: Harmonization With International Standards” [HM-215O, 85 FR 27810]. In this final rule, PHMSA added a requirement that the water temperature be marked on the test report for plastic non-bulk packagings. Based on this new requirement, PHMSA estimates an increase in estimated burden hours.

**Part A. Justification.**

1. Circumstances that make collection of information necessary

This is a request for the approval with change of an existing approval under OMB Control No. 2137-0572, applicable to the Hazardous Materials Regulations (HMR; 49 CFR parts 171-180). 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.

On May 11, 2020, PHMSA published a final rule titled “Hazardous Materials: Harmonization With International Standards” [HM-215O, 85 FR 27810]. In this final rule, PHMSA added a requirement that the water temperature be marked on the test report for plastic non-bulk packagings. Based on this new requirement, PHMSA estimates an increase in estimated burden hours.

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. Over time, 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. Efforts to identify duplication

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. Impact of less frequent collection of information

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 manufacturer 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 first created Performance-Oriented Packaging standards in HM-181, it 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. Special circumstances

This collection of information is generally 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 notice of proposed rulemaking (NPRM) under Docket HM-2150 on November 27, 2018 [83 FR 60970]. The NPRM request comment on this provision and information collection. While PHMSA received comments to the NPRM, no comments were received related to this information collection.

PHMSA published a final rule under the same docket on May 11, 2020, [HM-2150, 85 FR 27810] which codified the requirement that amended the burden in this OMB Control Number.

9. Payments or gifts to respondents

There is no payment or gift 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. There are no guarantees of confidentiality.

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>Number of Respondents</u>	<u>Number of Responses</u>	<u>Total Burden Hours</u>	<u>Total Salary Cost</u>
21,690	32,610	32,750	\$2,322,229

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 a little more than 2 hours to prepare, based on historical stakeholder feedback, for a total of 30,250 burden hours (15,000 responses x 2 hours). At a salary cost of \$70.91 per hour<sup>1</sup>, it is estimated to cost a total of \$2,144,960 in salary cost (30,250 burden hours x \$70.91). This estimate reflects the increase in burden from the HM-2150 final rule.

	<u>Information Collection</u>	<u>Number of Respondents</u>	<u>Response per Respondent</u>	<u>Number of Responses</u>	<u>Hours per Response</u>	<u>Total Burden Hours</u>	<u>Salary Cost per Hour</u>	<u>Total Salary Cost</u>
Section 178.601	Testing Requirements for Non-Bulk Packaging Report - Reporting	5,000	3	15,000	2	30,250	\$70.91	\$2,144,960

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

<sup>1</sup> Occupation labor rates based on 2017 Occupational and Employment Statistics Survey (OES) for “Transportation, Storage, and Distribution Managers (11-3071)” in the Transportation and Warehousing industry. The hourly mean wage for this occupation (\$48.43) 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).

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 \$70.91 per hour<sup>2</sup>, it is estimated to cost \$4,254 in salary cost for the additional test report requirements (60 burden hours x \$70.91).

	<u>Information Collection</u>	<u>Number of Respondents</u>	<u>Response per Respondent</u>	<u>Number of Responses</u>	<u>Hours per Response</u>	<u>Total Burden Hours</u>	<u>Salary Cost per Hour</u>	<u>Total Salary Cost</u>
Section 173.168	Additional Test Reports - Reporting	10	3	30	2	60	\$70.91	\$4,254

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). At a salary cost of \$70.91 per hour<sup>3</sup>, the estimated total salary cost is \$7,091 (100 burden hours x \$70.91).

	<u>Information Collection</u>	<u>Number of Respondents</u>	<u>Response per Respondent</u>	<u>Number of Responses</u>	<u>Minutes per Response</u>	<u>Total Burden Hours</u>	<u>Salary Cost per Hour</u>	<u>Total Salary Cost</u>
Section 178.601	Test Reports - Recordkeeping	100	10	1,000	6	100	\$70.91	\$7,091

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 \$70.91 per hour<sup>4</sup>, it is estimated the total salary cost is \$70,908 (1,000 burden hours x \$70.91).

	<u>Information Collection</u>	<u>Number of Respondents</u>	<u>Response per Respondent</u>	<u>Number of Responses</u>	<u>Hours per Response</u>	<u>Total Burden Hours</u>	<u>Salary Cost per Hour</u>	<u>Total Salary Cost</u>
Section 178.2, 178.601	Closure Instructions - Reporting	500	1	500	2	1,000	\$70.91	\$70,908

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 \$70.91 per hour<sup>5</sup>, the total salary cost

2 Ibid.

3 Ibid.

4 Ibid.

5 Ibid.

is estimated to be \$95,016 (1,340 burden hours x \$70.91).

	<u>Information Collection</u>	<u>Number of Respondents</u>	<u>Response per Respondent</u>	<u>Number of Responses</u>	<u>Minutes per Response</u>	<u>Total Burden Hours</u>	<u>Salary Cost per Hour</u>	<u>Total Salary Cost</u>
Section 178.2	Closure Instructions - Recordkeeping	16,080	1	16,080	5	1,340	\$70.91	\$95,016

13. Estimate of total annual costs to respondents

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 hour<sup>6</sup>, the total Federal Government salary cost is estimated at \$66,902.40 (1,440 recordkeeping hours x \$46.46).

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

15. Reasons for change in burden

On May 11, 2020, PHMSA published a final rule titled “Hazardous Materials: Harmonization With International Standards” [HM-2150, 85 FR 27810]. In this final rule, PHMSA added a requirement that the water temperature be marked on the test report for plastic non-bulk packagings. Based on this new requirement, PHMSA estimates an increase in estimated burden hours.

16. Plans for tabulation, statistical analysis, and publication

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

<sup>6</sup> OPM Pay Scale – Hourly Wage ([https://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/salary-tables/pdf/2018/DCB\\_h.pdf](https://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/salary-tables/pdf/2018/DCB_h.pdf))

17. Display of expiration date of OMB Approval

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.