

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

Approvals for Hazardous Materials
OMB Control No. 2137-0557

(Expiration Date: December 31, 2022)

Introduction

This is to request the Office of Management and Budget’s (OMB) three-year renewal, with adjustments, for the information collection titled, “Approvals for Hazardous Materials” (OMB Control No. 2137-0557), which is currently due to expire on December 31, 2022. This information collection justification addresses the burden associated with the provisions for approvals within the Hazardous Materials Regulations (HMR; 49 CFR parts 171-180).

This information collection is being revised based on PHMSA’s final rule published on May 11, 2020, titled “Hazardous Materials: Harmonization With International Standards” [HM-215O, 85 FR 27810]. This final rule added a special provision that requires certain Division 1.4S explosive materials to pass additional testing to receive subsequent approval for classification. This increase in information collection burden reflects the increase in these approval applications from this rulemaking.

Part A. Justification

1. Circumstances that make collection of information necessary

The Pipeline and Hazardous Materials Safety Administration (PHMSA) has the primary responsibility for the issuance of Department of Transportation (DOT) Special Permits and Approvals under the Hazardous Materials Regulations (HMR; 49 CFR parts 171-180). An approval is a written authorization, including a competent authority approval, issued by the Associate Administrator, the Associate Administrator's designee, or as otherwise prescribed in the HMR, to perform a function for which prior authorization by the Associate Administrator is required under subchapter C of this chapter (49 CFR parts 171-180)¹.

There are more than 100 approval provisions in the HMR and associated procedural regulations. Responses to this information collection are required to obtain benefits, including becoming an approval or certification agency, or obtaining a variance from packaging or handling requirements based on information provided by the respondent. These benefits and variances include, but are not limited to: United Nations (UN) third-party certification; authorization to examine and test lighters; authorization to

¹ As defined in § 171.8.

examine and test explosives; and authorization to re-qualify DOT cylinders. This information collection supports the Departmental Strategic Goal for Safety. Required collections are contained in Hazardous Materials Program Procedures, 49 CFR part 107 and parts 100-185. These regulations 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-2150, 85 FR 27810]. This final rule added a special provision that requires certain Division 1.4S explosive materials to pass Test Series 6(d) of Part I of the United Nations (UN) Manual of Tests and Criteria, ultimately requiring the manufacturer to submit an approval for classification. This increase in information collection burden reflects the increase in these approval applications from this rulemaking.

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

This information is used by PHMSA to: (1) determine whether applicants who apply to become designated approval agencies are qualified to evaluate package design, test packages, classify hazardous materials, etc.; (2) verify that various containers and special loading requirements meet the requirements of the HMR; (3) assure that regulated hazardous materials pose minimal danger to life and property during transportation; and (4) allow minor variations from regulatory requirements based on information provided by respondents, without requiring the respondent to apply using less timely and more burdensome exemption procedures.

The applicable information collection requirements are discussed in the following paragraphs. The actual section citations from the various parts of the HMR referenced in item 1 above are included in this information collection in order to provide a more user-friendly format.

Affected sections of the HMR include, but are not limited to:

Sections 107.401; 107.402; 107.403; 107.404; 107.405; 107.801; 107.803; 107.805; 107.807; 173.301; 173.305; 173.314; 173.316; 173.318; and 178.35 – Designated approval agencies, independent cylinder testing agencies, and prospective foreign manufacturers of cylinders. These sections state that an approval from the Associate Administrator is required for parties desiring to become designated approval agencies, independent cylinder testing agencies, and prospective foreign manufacturers of cylinders. Designated approval agencies evaluate the design of packagings used for the shipments of hazardous materials. In addition, designated approval agencies actively engage in the testing of packagings to assure their conformance to applicable standards. Independent cylinder testing agencies perform tests and inspections on foreign-manufactured cylinders to verify that they meet the specifications set forth in the HMR. The information required of foreign packaging manufacturers permits PHMSA to perform quality control on packagings manufactured outside the United States, which

will be marked as approved by the Associate Administrator and used for the transportation of hazardous materials within the United States.

The information collected for these approvals is used to evaluate an applicant's qualifications to perform the applicable packaging function. PHMSA must exercise a reasonable amount of oversight to ensure that applicants are qualified. Without this information, PHMSA would be unable to ensure that qualified persons perform examinations and testing, which could lead to the use of packagings that fail to meet the required standard. For example, the incompetence of a testing facility would not surface until packagings began to fail in transportation, thereby endangering life and property.

Section 107.805 – Approval of cylinder and pressure receptacle requalifiers.

Approval by the Associate Administrator is required to inspect, test, certify, repair, or rebuild a DOT specification cylinder or a UN pressure receptacle under subpart C of part 178 or subpart C of part 180 of this chapter, under the terms of a special permit issued under this part, or a TC, CTC, CRC, or BTC specification cylinder or tube manufactured in accordance with Transport Canada's Transport of Dangerous Goods (TDG) Regulations (IBR, see §171.7 of this chapter).

Section 107.805 – Requalification Identification Number (RIN) Approval for Cylinders (International Shipments). Under §107.805(f)(2), RIN holders are allowed to submit an application containing all the required information prescribed in §107.705(a); identifying the TC, CTC, CRC, or BTC specification cylinder(s) or tube(s) to be inspected; certifying the requalifier will operate in compliance with the applicable TDG Regulations; and certifying the persons performing requalification have been trained and have the information contained in the TDG Regulations. This application is in addition to any existing application and burden encountered during the initial RIN application.

Section 172.101, Special provisions 5, 26, 29, 53, 55, 105, 118, 121, 125, 129, 131, 136, 147, 164, 347, A54, A55, B55, B61, B69, B77, B81, N72, TP9; Sections 173.2a(c)(4); 107.803; 173.4; 173.21; 173.22; 173.24; 173.28; 173.31; 173.32; 173.124; 173.128; 173.159; 173.166; 173.168; 173.171; 173.225; 173.245; 173.306; 173.307; 173.308; 173.340; 173.411; 173.433; 173.471; 173.472; 173.473; 173.476; 175.8; 175.9; 175.701; 176.704; 178.3; 178.503 – Safety determinations as to the adequacy of the packagings for materials with special hazards. Certain hazardous materials require further determination as to the way that they should be classified, and subsequently packaged for transportation. Some examples include:

- Tear gas and tear gas devices, which pose a special hazard when transported in a closed environment such as an airplane, and therefore require additional approval before being transported on an airplane.
- Certain organic peroxides that are thermally unstable and are required to be kept at temperatures lower than the normal ranges encountered in transportation (-20 °F to +130 °F). These thermally unstable materials require special refrigeration to keep them at a temperature well below that which causes

self-accelerating decomposition. PHMSA requires an approval for transportation of such materials.

Section 172.101, Special provision A100 – Lithium Battery State of Charge

Approval. Lithium ion cells and batteries must be offered for transportation on cargo aircraft at a state of charge not exceeding 30 percent of their rated capacity. This approval allows for lithium ion cells and batteries to be offered for transportation on cargo aircraft at a state of charge greater than 30 percent of their rated capacity.

Sections 173.7; 173.185; 173.214; 173.222; 173.305; 173.315; 173.334; 176.340; 178.47; 178.53; 178.58; 178.509; 178.601; 178.603; 178.604; 178.605; 178.606; 178.608 – Alternative packagings or test methods. An approval is required if a person wants to offer a hazardous material in transportation with alternative packaging or test methods than are currently authorized in the HMR. These approvals permit industry to make packagings not constructed as specifically detailed in the HMR, as well as permitting select testing, test methods, and test intervals.

Sections 173.51; 173.56; 173.58; 173.59; 173.171 – Testing and assignment of the classification of explosive materials. The transportation of various explosives and explosives devices, including fireworks, presents both technical difficulties and extreme hazards. The safe packaging and handling of these materials during transportation by all modes is based on correct hazard classification. An incorrect classification could result in improper packaging or handling and cause damage to property, loss of life, or both during transportation. For this reason, PHMSA approves the testing and assignment of hazard classifications of these hazardous materials.

Section 173.64 – Packaging Exception/Exceptions for Division 1.4G consumer fireworks. Under the provisions of this section, the manufacturer of consumer fireworks applies in writing to the Associate Administrator, following the applicable requirements in American Pyrotechnics Association (APA) Standard 87-1, and is notified in writing by the Associate Administrator that the fireworks have been classed, approved, and assigned an EX number. Each application must be complete and include all relevant background data and copies of all applicable drawings, test results, and any other pertinent information on each device for which approval is being requested. The manufacturer must sign the application and certify that: (1) the device for which approval is requested conforms to APA Standard 87-1; (2) the descriptions and technical information contained in the application are complete and accurate; and (3) no duplicate application has been submitted to a fireworks certification agency. If the application is denied, the manufacturer will be notified in writing of the reasons for the denial. The Associate Administrator may require that the fireworks be examined by an agency listed in §173.56(b)(1).

Section 173.196 – Infectious Substances. A live animal that contains, or is contaminated with, a genetically modified micro-organism, including a genetically modified micro-organism that also meets the definition of a Division 6.2 material, must

be transported under terms and conditions approved by the Associate Administrator for Hazardous Materials Safety.

A genetically-modified micro-organism known or suspected to be dangerous to the environment may not be transported by air unless approved by the Associate Administrator for Hazardous Materials Safety.

Live animals may not be used to transport infectious substances unless such substances cannot be sent by any other means. An animal that contains or is contaminated with an infectious substance must be transported under terms and conditions approved by the Associate Administrator for Hazardous Materials Safety.

3. Extent of automated information collection

The burden has been made as simple as possible. Some of the information submitted to PHMSA is computer-generated. PHMSA encourages the use of automation to reduce the 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 have been authorized and are operational. Currently, PHMSA receives approximately 90 percent of approval applications electronically.

4. Efforts to identify duplication

There is no duplication, as the information is unique to specific situations.

5. Efforts to minimize the burden on small businesses

Because this information is unique, similar information is unavailable. However, 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

The frequency, for the most part, is determined by the applicants requesting an approval. It is not possible to conduct the collection less frequently and still ensure the level of safety of life and property necessary in transporting hazardous materials.

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 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. No guarantees of confidentiality are provided to applicants.

11. Justification for collection of sensitive information

No sensitive information is required.

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 Salary Costs</u>	<u>Total Burden Cost</u>
15,196	15,682	51,335	\$4,060,248	\$0

Sections 107.401; 107.402; 107.403; 107.404; 107.405; 107.801; 107.803; 107.805; 107.807; 173.301; 173.305; 173.314; 173.316; 173.318; and 178.35 – Designated Approval Agencies, Independent Cylinder Testing Agencies, and Prospective Foreign Manufacturers of Cylinders

Based on the number of approval applications, PHMSA estimates 15 companies submit one application per year. Each application takes approximately 4.75 hours to complete for a total of approximately 71 hours (4.75 hours x 15 responses). It is estimated that respondents make \$79.06² per hour for a total of \$5,663 (71 burden hours x \$79.06 per hour). PHMSA does not estimate any out-of-pocket expenses.

<u>Information Collection</u>	<u>Number of Respondents</u>	<u>Responses 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>	<u>Total Burden Cost</u>
Designated approval agencies, independent cylinder testing agencies, and prospective foreign manufacturers of cylinders	15	1	15	4.75	71	\$79.06	\$5,633	\$0

Section 107.805 – Approval of Cylinder and Pressure Receptacle Requalifiers

Based on the historical number of cylinder qualifier approval applications, PHMSA estimates 7,130 companies apply for this type of approval each year. Each application takes approximately 1.105 hours to complete for a total of 7,879 burden hours (1.105 hours x 7,130 responses). At \$79.06³ per hour in salary cost, PHMSA estimates a total salary cost of \$622,909 (7,879 burden hours x \$79.06 per hour). PHMSA does not estimate any out-of-pocket expenses.

<u>Information Collection</u>	<u>Number of Respondents</u>	<u>Responses 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>	<u>Total Burden Cost</u>
Approval of cylinder and pressure receptacle requalifiers	7,130	1	7,130	1.105	7,879	\$79.06	\$622,909	\$0

Sections 107.805 – Requalification Identification Number (RIN) Approval for Cylinders (International Shipments)

Based on the historic number of RIN approval applications, PHMSA estimates 3,500 companies apply for this type of approval each year. Each application takes approximately 0.85 hours to complete for a total of 2,982 burden hours (0.852 hours x

² Occupation labor rates based on 2017 Occupational and Employment Statistics Survey (OES) for “Chemical Engineers (17-2041)” in the Chemical Manufacturing industry. The hourly mean wage for this occupation (\$54) 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).

³ Ibid.

3,500 responses). At a salary cost of \$79.06⁴ per hour, PHMSA estimates a total of \$235,766 (2,982 burden hours x \$79.06 per hour).

<u>Information Collection</u>	<u>Number of Respondents</u>	<u>Responses 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>	<u>Total Burden Cost</u>
RIN Approval for Cylinders (International Shipments)	3,500	1	3,500	0.852	2,982	\$79.06	\$235,766	\$0

Section 172.101, Special provisions 5, 26, 29, 53, 55, 105, 118, 121, 125, 129, 131, 136, 147, 164, 347, A54, A55, B55, B61, B69, B77, B81, N72, TP9; Sections 173.2a(c)(4); 107.803; 173.4; 173.21; 173.22; 173.24; 173.28; 173.31; 173.32; 173.124; 173.128; 173.159; 173.166; 173.168; 173.171; 173.225; 173.245; 173.306; 173.307; 173.308; 173.340; 173.411; 173.433; 173.471; 173.472; 173.473; 173.476; 175.8; 175.9; 175.701; 176.704; 178.3; 178.503 – Safety Determinations as to the Adequacy of the Packagings for Materials with Special Hazards

Based on the historical number of approval applications, PHMSA estimates 154 companies apply for this type of approval approximately 4 times for year, for a total of 640 responses per year (154 companies x 4 applications). Each application takes approximately 4.75 hours to complete for a total of 3,040 burden hours (4.75 hours x 640 responses). At an estimated salary cost of \$79.06⁵ per hour, PHMSA estimates a total of \$240,349 in salary cost (3,040 burden hours x \$79.06 per hour). PHMSA does not estimate any out-of-pocket expenses.

This burden estimate reflects an increase in burden from the HM-215O final rule amendments.

<u>Information Collection</u>	<u>Number of Respondents</u>	<u>Responses 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>	<u>Total Burden Cost</u>
Safety Determinations as to the Adequacy of the Packagings for Materials with Special Hazards	154	4	640	4.75	3,040	\$79.06	\$240,349	\$0

Section 172.101, Special provision A100 – Lithium Battery State of Charge Approval

Based on the historical number of approvals submitted to PHMSA, it is estimated that 468 companies apply for this type of approval each year. Based on PHMSA estimates, each application is estimated to take 40 hours to complete, for a total of 18,720 burden hours (468 responses x 40 hours). At an estimated salary of \$79.06⁶ per hour, PHMSA

⁴ Ibid.

⁵ Ibid.

⁶ Ibid.

estimates a total of \$1,480,059 in salary cost (18,720 burden hours x \$79.06). PHMSA does not estimate any out-of-pocket expenses.

<u>Information Collection</u>	<u>Number of Respondents</u>	<u>Responses 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>	<u>Total Burden Cost</u>
Lithium Battery State of Charge Approval	468	1	468	40	18,720	\$79.06	\$1,480,059	\$0

Sections 173.7; 173.185; 173.214; 173.222; 173.305; 173.315; 173.334; 176.340; 178.47; 178.53; 178.58; 178.509; 178.601; 178.603; 178.604; 178.605; 178.606; 178.608 – Alternative Packagings or Test Methods

Based on the historical annual number of approval applications, PHMSA estimates 24 companies apply for this type of approval each year. Each application takes approximately 4.75 hours to complete, for a total of 114 burden hours (4.75 hours x 24 responses). At a salary cost of \$79.06⁷ per hour, PHMSA estimates a total of \$9,013 in salary cost (114 burden hours x \$79.06 per hour). PHMSA does not estimate any out-of-pocket expenses.

<u>Information Collection</u>	<u>Number of Respondents</u>	<u>Responses 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>	<u>Total Burden Cost</u>
Alternative Packagings or Test Methods	24	1	24	4.75	114	\$79.06	\$9,013	\$0

Sections 173.51; 173.56; 173.58; 173.59; 173.171 – Testing and Assignment of the Classification of Explosive Materials

Based on the historical number of explosive approval applications, PHMSA estimates 700 companies apply for this type of approval each year. Each application takes approximately 4.75 hours to complete, for a total of 3,325 burden hours (4.75 hours x 700 responses). At a salary cost of \$79.06⁸ per hour, PHMSA estimates a total of \$262,884 in salary cost (3,325 burden hours x \$79.06 per hour). PHMSA does not estimate any out-of-pocket expenses.

<u>Information Collection</u>	<u>Number of Respondents</u>	<u>Responses 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>	<u>Total Burden Cost</u>
Testing and Assignment of the Classification of Explosive Materials	700	1	700	4.75	3,325	\$79.06	\$262,884	\$0

⁷ Ibid.

⁸ Ibid.

Sections 173.64 – Packaging Exception/Exceptions for Division 1.4G Consumer Fireworks

Based on the historical number of approvals of fireworks packaging exceptions, PHMSA estimate approximately 3,200 companies apply for this type of approval each year. Each application takes approximately 4.75 hours to complete for a total of 15,200 hours (4.75 hours x 3,200 responses). At a salary cost of \$79.06⁹ per hour, PHMSA estimates a total of \$1,201,757 in salary cost (15,200 burden hours x \$79.06 per hour). PHMSA does not estimate any out-of-pocket expenses.

<u>Information Collection</u>	<u>Number of Respondents</u>	<u>Responses 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>	<u>Total Burden Cost</u>
Packaging Exception/Exceptions for Division 1.4G Consumer Fireworks	3,200	1	3,200	4.75	15,200	\$79.06	\$1,201,757	\$0

Section 173.196 – Infectious Substances

Based on the historical number of infectious substance approval applications, PHMSA estimates five companies apply for this type of approval each year. Each application takes approximately 4.75 hours to complete, for a total of approximately 24 burden hours (4.75 hours x 5 responses). At a salary cost of \$79.06¹⁰ per hour, PHMSA estimates a total of \$1,878 in salary cost (24 burden hours x \$79.06 per hour). PHMSA does not estimate any out-of-pocket expenses.

<u>Information Collection</u>	<u>Number of Respondents</u>	<u>Responses 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>	<u>Total Burden Cost</u>
Infectious Substances	5	1	5	4.75	24	\$79.06	\$1,878	\$0

13. Estimate of total annual costs to respondents

PHMSA estimates there are no out-of-pocket expenses, and therefore there is no annual cost to respondents.

14. Estimate of cost to the Federal Government

There are approximately 15,682 approval applications submitted annually to PHMSA. Each review takes 30 minutes, for a total of 7,841 annual hours (15,682 approvals x 30 minutes). Review by a GS-13 in Washington, D.C. is approximately \$64.84¹¹ per hour, for a total cost of approximately \$508,418 to the Federal Government.

⁹ Ibid.

¹⁰ Ibid.

<u>Total Number of Approvals</u>	<u>Minutes per Review</u>	<u>Total Number of Review Hours</u>	<u>Salary Cost per Hour</u>	<u>Total Salary Cost</u>
15,682	30	7,841	\$64.84	\$508,418

15. Explanation of program changes or adjustments

The burdens under this OMB control number are being revised due to regulatory changes associated with a final rule issued by PHMSA on May 11, 2020. The final rule harmonizes the regulations with international standards. In the final rule, PHMSA added a special provision requiring additional testing and subsequent approval of certain Division 1.4S explosive materials. The increase in responses, responses, and respondents is due to this new requirement.

16. Publication of results of data collection

Approval applications are published on the PHMSA website and can be located at: <https://www.phmsa.dot.gov/approvals-and-permits/hazmat/approvals-search>. There are no statistical techniques involved in this information collection.

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

The approved OMB Control No. is prominently displayed in the text of 49 CFR 171.6.

18. Exceptions to certification statement

There are no exceptions to PHMSA's certification of this request for information collection approval.

¹¹ Cost to review and approve approvals PHMSA used annual wage data from the Office of Personnel Management (OPM) to estimate wages for its staff at the 2019 General Schedule (GS) level 13, step 1, wage class for the Washington-Baltimore-Northern Virginia metropolitan area. In accordance with the OMB Circular No. A-76 (M-07-02; 2006), PHMSA included a load factor of 36.45 percent for the Federal wage to account for fringe benefits.