

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

Approvals for Hazardous Materials
OMB Control No. 2137-0557

(Expiration Date: October 31, 2021)

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 October 31, 2021. 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 interim final rule (IFR) published on March 6, 2019, titled "Hazardous Materials: Enhanced Safety Provisions for Lithium Batteries Transported by Aircraft (FAA Reauthorization Act of 2018)." This IFR required that lithium ion batteries offered for transportation on cargo aircraft be shipped at no greater than 30 percent state of charge, unless approved by the Associate Administrator. 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.

Docket HM-224I: “Hazardous Materials: Enhanced Safety Provisions for Lithium Batteries Transported by Aircraft (FAA Reauthorization Act of 2018)”

On March 6, 2019, PHMSA published an Interim Final Rule (IFR) titled “Hazardous Materials: Enhanced Safety Provisions for Lithium Batteries Transported by Aircraft (FAA Reauthorization Act of 2018)” [84 FR 8006; HM-224I]. This IFR prohibited the transport of lithium ion cells and batteries as cargo on passenger aircraft; required lithium ion cells and batteries to be shipped at not more than a 30 percent state of charge aboard cargo-only aircraft when not packed with or contained in equipment; and limited the use of alternative provisions for small lithium cell or battery shipments to one package per consignment. The IFR did not restrict passengers or crew members from bringing personal items or electronic devices containing lithium cells or batteries aboard aircraft, or restrict cargo-only aircraft from transporting lithium ion cells or batteries at a state of charge exceeding 30 percent when packed with or contained in equipment or devices.

PHMSA anticipates an increase in this information collection due to an increase in approvals to offer lithium ion cells and batteries at a state of charge greater than 30 percent. Therefore, the burden detailed in this request, takes in to account the time required to approval for this approval.

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, 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 an Interim Final Rule under Docket No. PHMSA-2016-0014 [84 FR 8006] on March 6, 2019, requesting public comments this increase in burden. PHMSA received 23 sets of comments to the IFR, but did not receive any related to this information collection. PHMSA plans to publish a final rule under this docket 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>
15,142	15,142	48,790	\$3,931,031	\$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 submitted to PHMSA, 15 companies applied for an approval under this information collection. Each application takes approximately 4.75 hours to complete for a total of 71.25 hours (4.75 hours x 15 responses). It is estimated to cost a \$80.57² per hour in salary cost for a total of \$5,741 (71.25 burden hours x \$80.57 per hour). PHMSA does not estimate any out-of-pocket expenses.

<u>Number of Respondents</u>	<u>Response per Carrier</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>
15	1	15	4.75	71.25	\$80.57	\$5,741	\$0

Section 107.805 – Approval of cylinder and pressure receptacle requalifiers

Based on the number of cylinder qualifier approval applications submitted to PHMSA, 7,130 companies apply for this type of approval each year. Each application takes approximately 66.3 minutes to complete for a total of 7,199 burden hours (66.3 minutes x 7,130 responses). It is estimated to cost \$80.57³ per hour in salary cost for a total of \$634,791 (7,199 burden hours x \$80.57 per hour). PHMSA does not estimate any out-of-pocket expenses.

<u>Number of Respondents</u>	<u>Response per Carrier</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>	<u>Total Burden Cost</u>
7,130	1	7,130	66.3	7,199	\$80.57	\$634,791	\$0

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

Based on the number of RIN approval applications submitted to PHMSA, 3,500 companies apply for this type of approval each year. Each application takes approximately 51.12 minutes to complete for a total of 2,982 burden hours (51.12 minutes x 3,500 responses). It is estimated to cost \$80.57⁴ per hour in salary cost for a total of \$240,263 (2,982 burden hours x \$80.57 per hour).

² Occupation labor rates based on 2018 Occupational and Employment Statistics Survey (OES) for “Chemical Engineers (17-2041)” in the Chemical Manufacturing industry. The hourly mean wage for this occupation (\$55.03) 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.

⁴ Ibid.

<u>Number of Respondents</u>	<u>Response per Carrier</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>	<u>Total Burden Cost</u>
3,500	1	3,500	51.12	2,982	\$80.57	\$240,263	\$0

Section 172.101, Special provisions 5, 26, 29, 53, 55, 105, 118, 121, 125, 129, 131, 136, 147, 164, 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 number of approval applications submitted to PHMSA each year, 100 companies apply for this type of approval. Each application takes approximately 4.75 hours to complete for a total of 475 hours (4.75 hours x 100 responses). It is estimated to cost \$80.57⁵ per hour in salary cost for a total of \$38,271 (475 burden hours x \$80.57 per hour). PHMSA does not estimate any out-of-pocket expenses.

<u>Number of Respondents</u>	<u>Response per Carrier</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>
100	1	100	4.75	475	\$80.57	\$38,271	\$0

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

Based on the number of approvals expected to be submitted to PHMSA each year, PHMSA expects 468 companies to apply for this type of approval. Based on PHMSA estimates, each application is estimated to take 40 hours for a total of 18,720 hours (468 responses x 40 hours). It is estimated to cost \$80.57⁶ per hour in salary cost for a total of \$1,508,289 (18,720 burden hours x \$80.57). PHMSA does not estimate any out-of-pocket expenses.

<u>Number of Respondents</u>	<u>Response per Carrier</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>
468	1	468	40	18,720	\$80.57	\$1,508,289	\$0

⁵ Ibid.

⁶ Ibid.

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 number of alternative packaging applications submitted to PHMSA each year, 24 companies apply for this type of approval. Each application takes approximately 4.75 hours to complete for a total of 114 hours (4.75 hours x 24 responses). It is estimated to cost \$80.57⁷ per hour in salary cost for a total of \$9,185 (114 burden hours x \$80.57 per hour). PHMSA does not estimate any out-of-pocket expenses.

<u>Number of Respondents</u>	<u>Response per Carrier</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>
24	1	24	4.75	114	\$80.57	\$9,185	\$0

Sections 173.51; 173.56; 173.58; 173.59; 173.171 – Testing and assignment of the classification of explosive materials

Based on the number of explosive approval applications submitted to PHMSA, 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 hours (4.75 hours x 700 responses). It is estimated to cost \$80.57⁸ per hour in salary cost for a total of \$267,889 (3,325 burden hours x \$80.57 per hour). PHMSA does not estimate any out-of-pocket expenses.

<u>Number of Respondents</u>	<u>Response per Carrier</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>
700	1	700	4.75	3,325	\$80.57	\$267,889	\$0

Sections 173.64 – Packaging Exception/Exceptions for Division 1.4G consumer fireworks

Based on the number of approvals of fireworks packaging exceptions applied for each year, 3,200 companies apply for this type of approval. Each application takes approximately 4.75 hours to complete for a total of 15,200 hours (4.75 hours x 3,200 responses). It is estimated to cost a \$80.57⁹ per hour in salary cost for a total of \$1,224,679 (15,200 burden hours x \$80.57 per hour). PHMSA does not estimate any out-of-pocket expenses.

⁷ Ibid.

⁸ Ibid.

⁹ Ibid.

<u>Number of Respondents</u>	<u>Response per Carrier</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>
3,200	1	3,200	4.75	15,200	\$80.57	\$1,224,679	\$0

Section 173.196 – Infectious Substances.

Based on the number of infectious substance approval applications submitted to PHMSA under this information collection, five companies applied for this type of approval. Each application takes approximately 4.75 hours to complete for a total of 23.75 hours (4.75 hours x 5 responses). It is estimated to cost a \$80.57¹⁰ per hour in salary cost for a total of \$1,914 (23.75 burden hours x \$80.57 per hour). PHMSA does not estimate any out-of-pocket expenses.

<u>Number of Respondents</u>	<u>Response per Carrier</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>
5	1	5	4.75	23.75	\$80.57	\$1,914	\$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 15,142 approval applications submitted annually to PHMSA. Each review takes 30 minutes, for a total of 7,571 annual hours (15,142 approvals x 30 minutes). Review by a GS-13 in Washington, D.C. is approximately \$46.62¹¹ per hour, for a total of \$781,001.55 cost to the Federal Government.

<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>
15,142	30	7,571	\$64.84	\$490,911.51

¹⁰ Ibid.

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.

15. Explanation of program changes or adjustments

The burdens under this OMB control number are being revised due to regulatory changes associated with an interim final rule (IFR) issued by PHMSA on March 6, 2019. The IFR aligns the Hazardous Materials Regulations with current international standards for the transportation of lithium batteries. The IFR limits the transportation of lithium ion cells and batteries at a state of charge greater than 30 percent on cargo aircraft. Those persons who wish to offer lithium ion cells and batteries at great than 30 percent state of charge must apply for an approval. This change in burden accounts for the expected increase in approval applications from this new restriction.

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.