

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

Requirements for United Nations (UN) Cylinder  
OMB Control No. 2137-0621

(Expiration Date: August 31, 2021)

**1 Introduction**

This is to request approval with change from the Office of Management and Budget (OMB) for renewal of the information collection titled, “Requirements for United Nations (UN) Cylinders,” OMB Control No. 2137-0621, which is due to expire on August 31, 2021. This information collection was initiated from a June 12, 2006, rulemaking [71 FR 33858; HM-220E], titled “Hazardous Materials: Requirements for UN Cylinders.” This rulemaking aligned standards for the design, construction, maintenance, and use of cylinders and multiple-element gas containers based on the standards contained in the United Nations Recommendations on the Transport of Dangerous Goods (UN Recommendations).

This request includes a change in agency discretion based on PHMSA’s efforts to better account for this burden. Specifically, PHMSA is differentiating between new and modification approval requests for UN cylinder manufacturers, instead of combining them into a single IC. In addition, PHMSA is reducing the amount of recordkeeping burden to better estimate this information collection burden.

**Part A. Justification**

1. Circumstances that make the collection of information necessary

This is a request for three-year renewal with change of the information collection reporting and recordkeeping burden under OMB No. 2137-0621, “Requirements for United Nations (UN) Cylinders.” This information collection results from the alignment of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) with the design, construction, maintenance, and use of cylinders and multiple-element gas containers (MEGCs) based on the standards contained in the UN Recommendations on the Transport of Dangerous Goods. Harmonization promotes flexibility, permits the use of technological advances for the manufacture of these pressure receptacles, provides for a broader selection of pressure receptacles, reduces the need for special permits, and facilitates international commerce in the transportation of compressed gases. Furthermore, this information is necessary because it ensures that a UN pressure receptacle is manufactured to the correct safety and engineering standards equivalent to DOT Specification Cylinders. In order to receive approval to manufacture a UN pressure receptacle, a manufacturer must have an Independent Inspection Agency (IIA) pre-audit as well as the approval of the Associate Administrator for initial design type. This ensures that UN pressure receptacles are manufactured to a standard designed to not rupture in transportation.

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 is due to PHMSA's efforts to better account for this burden, including differentiating between new and modified approval reporting requirements and more realistic burden associated with recordkeeping requirements.

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

The UN Recommendations establish international standards for the safe transportation of hazardous materials. The UN Recommendations are not regulations, but rather recommendations issued by the UN Committee of Experts on the Transport of Dangerous Goods (UN Committee of Experts). These recommendations are amended and updated biennially by the UN Committee of Experts. They serve as the basis for national, regional, and international modal regulations, including the International Maritime Dangerous Goods (IMDG) Code issued by the International Maritime Organization (IMO) and the International Civil Aviation Organization (ICAO) Technical Instructions for the Safe Transport of Dangerous Goods by Air (ICAO Technical Instructions) issued by the ICAO Dangerous Goods Panel (DGP). The HMR authorize domestic transportation of hazardous materials shipments prepared in accordance with the IMDG Code if all or part of the transportation is by vessel and hazardous materials shipments prepared in accordance with the ICAO Technical Instructions for transportation by aircraft, subject to certain conditions.

Since 1999, the UN Committee of Experts has been working to develop international standards for the design, construction, inspection, and testing for cylinders and other pressure receptacles for inclusion in the UN Recommendations. The objective was to develop requirements that can be globally accepted for international transportation, storage, and use. The UN Committee of Experts includes representatives from the European Industrial Gases Association, the Compressed Gas Association, the European Cylinder Makers Association, the International Standards Organization Technical Committee 58 (ISO/TC 58), and many specialist government officials, including cylinder experts from the Department of Transportation (DOT), who participate in the UN Sub-Committee of Experts' efforts.

The sub-committee developed standards for cylinders and other gas receptacles that address manufacture, approval, filling, and use. The cylinders and other gas receptacles must be constructed according to ISO standards for design, manufacture, and testing; constructed of materials that are compatible with the gas to be contained in the cylinder, as established in ISO standards; and periodically inspected according to ISO standards. The standards were adopted by the UN Committee of Experts in 2001 and 2004 and are included in the UN Recommendations.

The continually increasing amount of hazardous materials transported in international commerce warrants the harmonization of domestic and international requirements to the greatest extent

possible. Harmonization serves to facilitate international transportation and at the same time ensures the safety of people, property, and the environment. While the intent of the harmonization rulemakings is to align the HMR with international standards, PHMSA reviews and considers each amendment on its own merit. Each amendment is considered on the basis of the overall impact on transportation safety and the economic implications associated with its adoption into the HMR. PHMSA's goal is to harmonize without sacrificing the current HMR level of safety and without imposing undue burdens on the regulated public. To this end, PHMSA has adopted UN standards for cylinders (seamless pressure receptacles limited to a water capacity of 150 L), tubes (seamless pressure receptacles with a water capacity between 150 L and 3,000 L), cylinder bundles (cylinders held together in a frame and manifolded together up to a total water capacity of 3,000 L, or 1,000 L for toxic gases), and MEGCs into the HMR. In order to facilitate the maximum regulatory flexibility, PHMSA authorizes both DOT specification cylinders and UN standard cylinders.

This information collection burden is specific to the design of UN pressure receptacles. In accordance with § 178.70, PHMSA requires that manufacturers of UN pressure receptacles obtain an initial design type approval from the Associate Administrator. For this approval, the manufacturer must have an Independent Inspection Agency (IIA) conduct a pre-audit. Following approval of the pre-audit, the manufacturer will submit an application for the design type approval, including: a letter of recommendation from the IIA; name and location of the manufacturing facility; design specification; manufacturing procedures; and design type approval test reports. Furthermore, PHMSA will conduct a production inspection audit to certify the production, in order to ensure the UN pressure receptacles are manufactured in accordance with all appropriate requirements. All other information collection activities associated with UN pressure receptacles are addressed in other OMB Control Numbers.

### 3. Extent of automated information collection

The information required is particular and unique. Industry is encouraged to use any type of technology to meet the information collection and recordkeeping requirements, provided the required information can be retrieved when necessary. 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 authorized. PHMSA authorizes the application to be submitted via electronic form, but also allows for paper submission, at the discretion of the requestor.

### 4. Efforts to identify duplication

PHMSA has done its due diligence to ensure that the information requested is not required by any other agency. Each response is unique, and information derived from one may not be inferred from another.

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 minimum necessary standards to protect all involved. Because the benefits to safety outweigh a reduction in small business burden, the approval requirement for UN pressure receptacles or MEGC requalification is based on business function, not business size.

6. Impact of less frequent collection of information

Due to the hazards involved, if collection of information and recordkeeping was required less frequently, there is the potential for less safe manufacture of UN pressure receptacles, which would increase the potential of hazards to public 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). However, it is not possible to substantially reduce or eliminate the requirements contained in this collection and still maintain standards necessary to assure safe transportation.

8. Compliance with 5 CFR 1320.8

PHMSA published a 60-Day Notice and Request for Comments under Docket No. PHMSA-2021-0055 (Notice No. 2021-04) on May 18, 2021, in the *Federal Register* [86 FR 27009] requesting public comment on the renewal of this information collection, along with 3 other information collections. PHMSA received no comments.

PHMSA published a 30-Day Notice and Request for Comments under Docket No. PHMSA-2021-0055 (Notice No. 2021-06) on August 10, 2021, in the *Federal Register* [86 FR 43719] requesting public comment on the renewal of this information collection, along with 3 other information collections.

9. Payments or gift to respondents

There is no payment or gift provided to respondents associated with this collection of information.

10. Assurance of confidentiality

All information to be collected complies with the Freedom of Information Act, the Privacy Act of 1974, and OMB Circular A-108. The PHMSA Privacy Officer and the information collection subject matter experts completed initial privacy identification, assessing whether this information collection requires a Privacy Impact Assessment (PIA). As an existing information collection that does not contain public Personally Identifiable Information (PII), this information collection does not require a PIA.

11. Justification for collection of sensitive information

Not applicable. Information is not of a sensitive nature.

12. Estimates 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 Annual Burden Costs</u>
210	210	818	\$66,070	\$20,250

PHMSA estimates that there are 35 annual respondents who submit an approval to manufacture a UN Pressure Receptacle. Based on historical stakeholder feedback, each approval is expected to take approximately 6 hours to complete for a total of 210 burden hours (35 response x 6 hours/response). It is estimated to cost \$80.82<sup>1</sup> per hour in salary cost for a total of \$16,972 (210 burden hours x \$80.82). Furthermore, it is estimated to cost \$25 per hour in burden cost for the IIA inspection, for a total of \$5,250 in burden cost (210 burden hours x \$25).

<u>UN Pressure Receptacle Approval – New Request - § 178.70</u>	<u>Annual Respondents</u>	<u>Annual Approval Requests</u>	<u>Annual Responses</u>	<u>Hours per Response</u>	<u>Total Burden Hours</u>	<u>Salary Cost Per Hour</u>	<u>Total Salary Cost</u>	<u>Burden Cost per Hour</u>	<u>Total Burden Cost</u>
Reporting	35	1	35	6	210	\$80.82	\$16,972	\$25	\$5,250

PHMSA estimates that there are 100 respondents who submit request for a modified approval to manufacture a UN Pressure Receptacle annually. Based on historical stakeholder feedback, each modified approval is expected to take approximately 6 hours to complete for a total of

<sup>1</sup> Occupation labor rates based on 2020 Occupational and Employment Statistics Survey (OES) for “Chemical Engineers (17-2041)” (<https://www.bls.gov/oes/current/oes172041.htm>). The hourly mean wage for this occupation (\$55.20) 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).

600 burden hours (100 response x 6 hours/response). It is estimated to cost \$80.82<sup>2</sup> per hour in salary cost for a total of \$48,492 (600 burden hours x \$80.82). Furthermore, it is estimated to cost \$25 per hour in burden cost for the IIA inspection, for a total of \$15,000 in burden cost (600 burden hours x \$25).

<b>UN Pressure Receptacle Approval – Modified Request - § 178.70</b>	<b><u>Annual Respondents</u></b>	<b><u>Annual Approval Requests</u></b>	<b><u>Annual Responses</u></b>	<b><u>Hours per Response</u></b>	<b><u>Total Burden Hours</u></b>	<b><u>Salary Cost Per Hour</u></b>	<b><u>Total Salary Cost</u></b>	<b><u>Burden Cost per Hour</u></b>	<b><u>Total Burden Cost</u></b>
Reporting	100	1	100	6	600	\$80.82	\$48,492	\$25	\$15,000

PHMSA annually conducts enforcement inspections to review the approval for the UN pressure receptacles. Based on historical stakeholder feedback, PHMSA estimates there are 75 annual inspections. Each inspection is estimated to take approximately 6 minutes for a total of 8 burden hours (75 respondents x 6 minutes/response). It is estimated to cost \$80.82<sup>3</sup> per hour in salary cost for a total of \$606 (8 burden hours x \$80.82). PHMSA does not estimate any out-of-pocket expenses.

<b>UN Pressure Receptacle Approval - § 178.70</b>	<b><u>Annual Respondents</u></b>	<b><u>Annual Approval Requests</u></b>	<b><u>Annual Responses</u></b>	<b><u>Minutes per Response</u></b>	<b><u>Total Burden Hours</u></b>	<b><u>Salary Cost Per Hour</u></b>	<b><u>Total Salary Cost</u></b>	<b><u>Burden Cost per Hour</u></b>	<b><u>Total Burden Cost</u></b>
Recordkeeping	75	1	75	6	8	\$80.82	\$606	\$0	\$0

13. Estimate of total annual costs to respondents

As described above, based on historical stakeholder feedback, it is anticipated to cost \$25 per hour for the IIA reporting approval pre-audit, for a total of \$20,250 total burden cost (810 burden hours x \$25/hour).

14. Estimate of cost to the Federal government

There is no estimated cost to the Federal Government.

15. Explanation of program changes or adjustments

The change in this information collection burden is due to a reevaluation of this burden by PHMSA. Specifically, in evaluating this information collection, PHMSA determined this requirement for the approval should be separate between new applications and modified applications. In addition, PHMSA has revised the hourly burden estimates (increased for

<sup>2</sup> Ibid.

<sup>3</sup> Ibid.

approval submission and decrease in recordkeeping burden) to better reflect current estimates. These were revised based on stakeholder and program feedback and evaluation.

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

This information collection OMB Control Number is prominently displayed in the HMR, specifically under § 171.6, titled, “Control Numbers under the Paperwork Reduction Act.”

18. Exceptions to certification statement

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