

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

Requirements for Rail Tank Cars
Transportation of Hazardous Materials by Rail
(Rail Carriers and Tank Car Tanks Requirements)
OMB Control No. 2137-0559

(Expiration Date: August 31, 2018)

Introduction

This is to request the Office of Management and Budget's (OMB) renewed three-year approval of the information collection titled, "Requirements for Rail Tank Car Transportation of Hazardous Materials by Rail," under OMB Control No. 2137-0559, which is currently due to expire on August 31, 2018. The Department of Transportation (DOT) has collected information related to transportation by rail car since the creation of the DOT in 1967. This OMB control number was first approved on March 7, 1984, and was initiated as a result of an information collection for the approval of tank cars for Hydrcyancic Acid Service. This OMB Control Number was broadened on January 17, 1986, to include rail carrier and tank car requirements that contained information collections.

Part A. Justification

1. Circumstances that make collection of information necessary

This is a request for a renewal to OMB No. 2137-0559 for reporting requirements pertaining to the manufacture, inspection, and maintenance of rail tank cars used in the transportation of hazardous materials by rail. These regulations are promulgated under the Federal hazardous materials transportation law, 49 U.S.C. 5101-5127.

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

Rail carriers, shippers, the Pipeline and Hazardous Materials Safety Administration's (PHMSA) Office of Hazardous Materials Safety (OHMS), the Federal Railroad Administration (FRA), and the Association of American Railroads (AAR) use these requirements to ensure that rail tank cars are properly manufactured, maintained, and in safe condition for transporting hazardous materials.

Section 172.102; Special Provisions – B45, B46, B55, B61, B77, B81. These special provisions require approval of the Associate Administrator or the AAR Committee on Tank Cars before certain hazardous material packaging, or packaging components, such as reclosing combination pressure relief devices equipped with stainless steel or platinum rupture discs used on tank cars

transporting dinotrogen tetroxide or venting and pressure relief devices used on tank car tanks transporting hydrogen peroxide can be used for the transportation of hazardous materials by rail.

Section 173.31(a)(2). This section requires AAR Tank Car Committee approval when a tank car is proposed to be used for commodities other than those specified in its certificate of construction.

Section 173.31(b)(6)(ii). This section requires that before October 1 of each year, each tank car owner shall submit a progress report to the Associate Administrator for Safety, FRA. This progress report will contain the reporting mark of each tank car along with information from the previous year, including the status of each tank car and the total number of tank cars modified, reassigned, retired, or removed.

Section 173.314(g)(1). This section requires the shipper to notify the FRA whenever a tank car transporting hydrogen chloride, refrigerated liquids, or vinyl fluoride, stabilized is not received by the consignee within 20 days from the date of shipment. The report may be submitted electronically to HMassist@fra.dot.gov or by telephone at 202-493-6245.

Section 173.319(a)(3). This section requires the shipper to notify the FRA whenever a tank car containing a flammable cryogenic liquid is not received by the consignee within 20 days from the date of shipment. The report may be submitted electronically to HMassist@fra.dot.gov or telephone at 202-493-6245.

Section 174.20(b). This section requires each rail carrier to report to the Bureau of Explosives, for publication, all information as to any restrictions which it imposes against the acceptance, delivery, or transportation of any hazardous materials, over any portion of its lines.

Section 174.50. A bulk packaging, such as a tank car tank, that no longer conforms to applicable HMR requirements may not be forwarded by rail unless repaired or approved for movement by the Associate Administrator for Safety, FRA. Notification and approval must be furnished in writing or through telephonic or electronic means, with subsequent written confirmation provided within two weeks.

Section 174.63. This section requires that the Associate Administrator for Safety, FRA approve the transportation of bulk packages, such as portable tanks and cargo tanks, containing a hazardous material in container-on-flatcar (COFC) or trailer-on-flatcar (TOFC) service if not otherwise authorized for transportation.

Section 174.104(c), (d), (e), and (f).

(c) Before Division 1.1 or 1.2 explosive materials may be loaded into a rail car, the car must have been inspected and certified to be in compliance with the requirements of § 174.104(b) by a qualified person designated under 49 CFR 215.11. This certification shall be made in Car Certificate No. 1 on the form prescribed in paragraph (f).

(d) If the carrier furnishes the car to a shipper for loading Division 1.1 or 1.2 explosive materials, the shipper or his authorized employee shall, before commencing the loading of the car, inspect the interior thereof, and after loading certify that the car is in proper condition and properly loaded. This certification shall be made in the first signature line in Car Certificate No. 2 on the form prescribed in paragraph (f). In addition, the finished load must be inspected and certified to be in compliance with the requirements of this part by a qualified person designated under 49 CFR 215.11 before the car goes forward. This certification shall be made on the second signature line in Car Certificate No. 2 on the form prescribed in paragraph (f). If the loading is performed by the carrier, Car Certificate No. 2 may only be signed by a qualified person designated under §215.11 of this title.

(e) If a trailer or container contains Division 1.1 or 1.2 explosive materials, the loading and securing of the load on the tank car must be supervised by a representative of a shipper or carrier. The certification shall be made in Car Certificate No. 3 on the form prescribed in paragraph (f).

(f) The Car Certificate for use in connection with the inspection of rail cars for the carriage of Division 1.1 or 1.2 explosive materials shall be printed on strong tag board. It must be duly executed in triplicate by the carrier and the shipper if the shipper loads the shipments. One original Car Certificate must be filed by the carrier at the forwarding station in a separate file and the other two must be attached to the car, one to each outer side on a fixed placard board or as otherwise provided.

Section 174.114. When a car seal is changed on a tank car requiring “EXPLOSIVES 1.1 or EXPLOSIVES 1.2 (EXPLOSIVES A) placards” while en route or before delivery to a consignee, a record of the change must be made on or attached to the waybill or other form of memorandum which must accompany the car to its destination.

Section 179.22, 180.515, 180.517. These sections detail marking for a newly manufactured tank car, requalification tank car marking requirements, and reporting of details for a requalified tank car. Tank car reporting includes:

- (1) Type of inspection and test performed (a checklist is acceptable);
- (2) The results of each inspection and test performed;
- (3) Tank car reporting mark and number;
- (4) Tank car specification;
- (5) Inspection and test date (month and year);
- (6) Location and description of defects found and method used to repair each defect;
- (7) The name and address of the tank car facility and the name and signature of inspector;
and
- (8) The unique code (station stencil) identifying the facility.

Section 179.7, 180.505. Section 179.7 details the requirements for a tank car facility quality assurance program; the requirement is reiterated in § 180.505. This program must be approved by the AAR and is required to perform a variety of testing, inspection, and repairs on tank cars. The quality assurance program at a minimum must:

- (a) At a minimum, each tank car facility shall have a quality assurance program, approved by AAR, that—
- (1) Ensures the finished product conforms to the requirements of the applicable specification and regulations of the HMR;
 - (2) Has the means to detect any nonconformity in the manufacturing, repair, inspection, testing, and qualification or maintenance program of the tank car; and
 - (3) Prevents non-conformities from recurring.
- (b) At a minimum, the quality assurance program must have the following elements:
- (1) A statement of authority and responsibility for those persons in charge of the quality assurance program.
 - (2) An organizational chart showing the interrelationship between managers, engineers, purchasing, construction, inspection, testing, and quality control personnel.
 - (3) Procedures to ensure that the latest applicable drawings, design calculations, specifications, and instructions are used in manufacture, inspection, testing, and repair.
 - (4) Procedures to ensure that the fabrication and construction materials received are properly identified and documented.
 - (5) A description of the manufacturing, repair, inspection, testing, and qualification or maintenance program, including the acceptance criteria, so that an inspector can identify the characteristics of the tank car and the elements to inspect, examine, and test at each point.
 - (6) Monitoring and control of processes and product characteristics during production.
 - (7) Procedures for correction of nonconformities.
 - (8) Provisions indicating that the requirements of the AAR Specifications for Tank Cars (IBR, see §171.7 of this subchapter), apply.
 - (9) Qualification requirements of personnel performing non-destructive inspections and tests.
 - (10) Procedures for evaluating the inspection and test technique employed, including the accessibility of the area and the sensitivity and reliability of the inspection and test technique and minimum detectable crack length.
 - (11) Procedures for the periodic calibration and measurement of inspection and test equipment.
 - (12) A system for the maintenance of records, inspections, tests, and the interpretation of inspection and test results.
- (c) Each tank car facility shall ensure that only personnel qualified for each non-destructive inspection and test perform that particular operation.
- (d) Each tank car facility shall provide written procedures to its employees to ensure that the work on the tank car conforms to the specification, AAR approval, and owner's acceptance criteria.
- (e) Each tank car facility shall train its employees in accordance with subpart H of part 172 of this subchapter on the program and procedures specified in paragraph (b) of this section to ensure quality.

(f) No tank car facility may manufacture, repair, inspect, test, qualify or maintain tank cars subject to requirements of this subchapter, unless it is operating in conformance with a quality assurance program and written procedures required by paragraphs (a) and (b) of this section.

3. Extent of automated information collection

The burden has been made as simple as possible. The information requested is necessary to ensure safe operations, and is critical in evaluating and assuring the 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 authorized. It is estimated that 90% of submissions are electronic, based on historical conversations with stakeholders and data from submissions to PHMSA and FRA.

4. Efforts to identify duplication

There is no duplication, as the information is unique to specific situations. PHMSA and FRA, along with other stakeholders, work together to ensure that requirements are not duplicated. FRA is an active participant in PHMSA's rulemaking process, providing input and concurring on rulemaking matters. This aides in the assurance of avoiding duplicative information collection.

5. Efforts to minimize the burden on small businesses

Small businesses may request approvals under this information collection. The requirements for an approval have been made as simple as possible to lessen the burden on small businesses and other applicants while allowing PHMSA to ensure they meet an adequate level of safety.

6. Impact of less frequent collection of information

The frequency is determined by those affected. Only individuals applying for an approval are subjected to information collection burden.

7. Special circumstances

This collection of information is generally conducted in a manner consistent with the guidelines in 5 CFR 1320.5(d)(2), with the following qualifications: Requiring respondents to retain records, other than health, medical, government contract, grant-in-aid, or tax records more than three years.

8. Compliance with 5 CFR 1320.8

PHMSA published a 60-Day Notice and Request for Comments in the Federal Register under Docket No. PHMSA-2017-0018 (Notice No. 2017-01) on April 21, 2017, [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 on comment that was outside the scope of the notice.

PHMSA published a 30-Day Notice and Request for Comments in the Federal Register under Docket No. PHMSA-2017-0018 (Notice No. 2017-05) on September 28, 2017, [82 FR 45356] requesting public comment on the renewal of this information collection.

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

No guarantees of confidentiality are provided to applicants. None of the data collected contain personally identifiable information (PII) or business confidential information.

11. Justification for collection of sensitive information

Not applicable. No sensitive information is required.

12. Estimate of burden hours for information requested

<u>Total Number of Respondents</u>	<u>Total Number of Responses</u>	<u>Total Burden Hours</u>	<u>Total Salary Cost</u>
441	17,685	2,834	\$194,355

Section 172.102, special provisions B45, B46, B55, B61, B69, B77, B81 – Tank Car Approvals

Based on historical data, it is estimated that two requests are submitted annually for tank car approvals. PHMSA estimates that each approval takes 6.5 hours, based on discussions with stakeholders, for a total of 13 burden hours (2 responses x 6.5 hours). Each approval is expected

to cost \$68.58 per hour in salary¹, for a total of \$891.54 in salary cost (13 burden hours x \$68.58/hour).

<u>Regulation</u>	<u>Information Collection Request</u>	<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>
Section 172.102, special provisions B45, B46, B55, B61, B69, B77, B81	Tank Car Approvals	2	1	2	6.5	13	\$68.58	\$891.54

Section 173.31(a)(2) – AAR approval required when a tank car is proposed for commodity service other than specified on a certificate of construction

Each year, approximately 25 respondents will submit 48 responses to the AAR for transportation of a commodity other than what is authorized on the certificate of construction, for a total of 1,200 annual responses (25 respondents x 48 responses per respondent). PHMSA estimates that each response is estimate to take 10 minutes to complete, based on stakeholder feedback, for a total of 200 annual burden hours (1,200 responses x 10 minutes). PHMSA estimates that it costs \$68.58 per hour in salary² cost for a total of \$13,715.96 (200 burden hours x \$68.58/hour).

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Section 173.31(a)(2)	AAR approval required when a tank car is proposed for commodity service other than specified on a certificate of construction	25	48	1,200	10	200	\$68.58	\$13,715.96

Section 173.31(b)(6)(ii) – Annual tank car owner progress report to FRA

Approximately 100 tank car owners will submit one report per year, based on FRA data. From historical stakeholder feedback, PHMSA estimates that each report takes 1 hour to prepare, for a total of 100 burden hours (100 responses x 1 burden hour). It is estimated to cost \$68.58 per

¹ 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 (\$46.84) 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).

² Ibid.

hour in salary cost³ for a total of \$6,857.98 in salary cost for this information collection (100 burden hours x \$68.58/hour).

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Section 173.31(b)(6)(ii)	Annual tank car owner progress report to FRA	100	1	100	1	100	\$68.58	\$6,857.98

Sections 173.314, 173.319 – Compressed gases and cryogenic liquids in tank cars and multi-unit tank cars reporting

Based on historical data from stakeholders, it is estimated that there are 6 respondents, each reporting on these type of tank cars approximately 23.5 times per year, for a total of 141 annual responses (6 respondents x 23.5 responses). It is estimated to take 15 minutes to prepare each report for an approximate total of 35 annual burden hours (141 responses x 15 minutes). It is estimated to cost \$68.58 per hour in salary costs⁴ to complete the report, for a total of \$2,4009.29 in total salary cost (35 burden hours x \$68.58/hour).

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Section 173.314, 173.319	Compressed Gases and Cryogenic Liquids in Tank Cars and Multi Unit Tank Cars Reporting	6	23.5	141	15	35	\$68.58	\$2,400.29

Section 174.20(b) – Reporting to the Bureau of Explosives regarding any restrictions over any portion of the a railroad’s lines

Approximately 34 rail carriers will each file an average of 1.5 reports annually for a total of 51 annual responses (34 respondents x 1.5 responses), estimated from historical data. PHMSA estimates that each report takes approximately 20 minutes to prepare, based on historical feedback from stakeholders, for a total of 17 burden hours (51 responses x 20 minutes). It costs approximately \$68.58 per hour in salary cost⁵, for a total of \$1,165.86 in salary costs (17 burden hours x \$68.58/hour).

³ Ibid.

⁴ Ibid.

⁵ Ibid.

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Section 174.20(b)	Reporting to the Bureau of Explosives regarding any restrictions over any portion of its lines	34	1.5	51	20	17	\$68.58	\$1,165.86

Section 174.50 – Nonconforming bulk packages must be repaired or approved for movement by the FRA

Based on historical stakeholder data, PHMSA estimates that approximately 34 rail carriers will each report 10 leaking tank car tanks each year, for a total of 340 responses (34 respondents x 10 response). It is estimated to take approximately 10 minutes to develop the information necessary for the report, for a total of 57 burden hours (340 responses x 10 minutes). At an estimated salary cost of \$68.58 per hour⁶, it is estimated to cost a total of \$3,909.05 in salary costs (57 burden hours x \$68.58/hour).

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Section 174.50	Nonconforming bulk packages must be repaired or approved from movement by the FRA	34	10	340	10	57	\$68.58	\$3,909.05

Section 174.63 – FRA approval for transportation of bulk packages containing a hazardous material in COFC or TOFC service

PHMSA estimates that there are six requests per year, based on historical stakeholder data. Furthermore, it is estimated that each report will take approximately 30 minutes to develop, for a total of 3 burden hours (6 responses x 30 minutes). It is estimated to cost \$68.58 per hour⁷ in salary cost, for a total of \$205.74 in salary cost (3 burden hours x \$68.58/hour).

<u>Regulation</u>	<u>Information Collection Request</u>	<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>
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⁶ Ibid.

⁷ Ibid.

Section 174.63	FRA Approval for transportation of bulk packages containing a hazardous material in COFC or TOFC service	6	1	6	30	3	\$68.58	\$205.74
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Section 174.104(c), (d), (e), (f) – Division 1.1 or 1.2 explosive material inspection and Car Certificate requirements

Approximately 25 respondents make 2 shipments per month, for a total of 600 annual responses (25 respondents x 2 shipments x 12 months). Based on historical stakeholder data, it is estimated to take 20 minutes to prepare the certificate, for a total of 200 burden hours (600 responses x 20 minutes). It is estimated to cost \$68.58 per hour⁸ to prepare the certificate, for a total of \$13,715.96 in total salary cost (200 burden hours x \$68.58/hour).

<u>Regulation</u>	<u>Information Collection Request</u>	<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>
Section 174.104(c), (d), (e), (f)	Division 1.1 or 1.2 explosive material inspection and Car Certificate requirements	25	24	600	20	200	\$68.58	\$13,715.96

Section 174.114 – Record when a car seal is changed when the car is placarded with Division 1.1 or 1.2 explosive materials

Approximately 34 rail carriers will each change the seals on 5 railcars each annually, for a total of 170 responses (34 respondents x 5 responses). Each record is estimated to take 10 minutes to complete for a total of 28 total burden hours (170 responses x 10 minutes). These estimates are based on historical Stakeholder engagement. PHMSA estimates an hourly salary cost of \$68.58 per hour⁹, for a total salary cost of \$1,920.23 (28 burden hours x \$68.58/hour).

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Section 174.114	Record when a car seal is changed when the car is placarded with Division 1.1 or 1.2 explosive materials	34	5	170	10	28	\$68.58	\$1,920.23

⁸ Ibid.

⁹ Ibid.

Sections 179.22, 180.515, 180.517 – Initial marking, requalification marking, and requalification reporting requirements

It is estimated that approximately 100 companies manufacture or retest approximately 150 tanks cars each per year for a total of 15,000 responses (100 companies x 150 responses). Based on historical stakeholder data, it is estimated that the documentation for each tank car takes approximately 7 minutes to complete for a total of approximately 1,768 total burden hours (15,000 responses x 7 minutes). PHMSA estimates a salary cost of \$68.58 per hour¹⁰, for a total salary of \$121,249.08 (1,768 burden hours x \$68.58/hour).

<u>Regulation</u>	<u>Information Collection Request</u>	<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>
Sections 179.22, 180.515, 180.517	Initial marking, requalification marking, and requalification reporting requirements	100	150	15,000	7	1,768	\$68.58	\$121,249.08

Sections 179.7, 180.505 – Quality assurance program

Approximately 75 companies will develop and maintain a Quality Assurance Program. Based on stakeholder feedback, it is estimated that it will take approximately 5.5 hours to develop for a total of 413 burden hours (74 responses x 5.5 hours). It is estimated to cost \$68.58 per hour¹¹ for this burden, for a total of \$28,323.46 in salary cost (413 burden hours x \$68.58/hour).

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Sections 179.7, 180.505	Quality assurance program	75	1	75	5.5	413	\$68.58	\$28,323.46

13. Estimate of total annual costs to respondents

PHMSA does not estimate any out-of-pocket expenses for this burden.

14. Estimate of cost to the Federal Government

¹⁰ Ibid.

¹¹ Ibid.

The Government will receive approximately 17,685 approval requests or reports annually. It is estimated that each document will take approximately 3 hours to review, approve and prepare for a total of 53,055 burden hours (17,685 responses x 3 hours). The salary by a GS-13 in Washington, DC costs approximately \$46.62¹² per hour for a total of \$2,473,424.10 (53,055 burden hours x \$46.62).

<u>Number of Responses</u>	<u>Hours per Responses</u>	<u>Total Burden Hours</u>	<u>Salary Cost per Hour</u>	<u>Total Salary Cost</u>
17,685	3	53,055	\$46.62	\$2,473,424.10

15. Explanation of program changes or adjustments

There is no change in burden.

16. Publication of results of data collection

There is no publication for statistical use and no statistical techniques are involved. Approval letters are published on the PHMSA website.

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, entitled, “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.

¹² OPM 2018 Salary Table (<https://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/salary-tables/pdf/2018/DCB.pdf>)