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

INTRODUCTION

This is to request the Office of Management and Budget's (OMB) three-year approved clearance for the information collection entitled "Requirement for Rail Tank Car Transportation of Hazardous Materials by Rail," which is currently due to expire on August 31, 2010.

This information collection is being revised due to proposed revisions under Docket HM-246, Notice of Proposed rulemaking (NPRM), "Requirement for Rail Tank Car Transportation of Hazardous Materials by Rail."

Part A. Justification

1. <u>Circumstances that make collection of information necessary.</u>

This is a request for a revision of an existing approval under OMB No. 2137-0559 for information and recordkeeping requirements pertaining to the manufacture, inspection, and maintenance of rail tank car tanks 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. Docket No. FRA-2006-25169 (HM-246), "Hazardous Materials; Improving the Safety of Railroad Tank Car Transportation of Hazardous Materials," Notice of Proposed Rulemaking (NPRM), published on April 1, 2008 [73 FR 17817], proposes changes to the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) in order to enhance the safety of railroad tank cars which transport poisonous by inhalation (PIH) hazardous materials. This is a joint rulemaking with the Pipeline and Hazardous Materials Safety Administration (PHMSA) and the Federal Railroad Administration (FRA). This proposed rule will impose a small increase in the information collection and recordkeeping burden by requiring enhanced tank car performance standards for head and shell impacts; operational restrictions for trains hauling tank cars containing PIH materials; interim operational restrictions for trains hauling tank cars not meeting the enhanced performance standards; an allowance to increase the gross weight of tank cars that meet the enhanced tank-head and shell puncture-resistance systems; the demonstration of compliance test report; and a progress report on the status of the PIH fleet of tank cars to be provided to FRA.

Each year, despite an enormous effort on the part of the railroad industry, a few tank cars leak or have structural problems caused by cracks and other flaws in the tank wall. Some of these cars

have broken and exploded, discharging cargo. Even if a leakage of hazardous materials does not result in any immediate threat to human life, a release of hazardous material could damage the environment; resulting in significant clean-up costs or causing a disruption in railroad service.

<u>Proposed Changes from Docket No. FRA-2006-25169 (HM-246), "Hazardous Materials;</u> <u>Improving the Safety of Railroad Tank Car Transportation of Hazardous Materials," Notice of Proposed Rulemaking (NPRM), affecting the information collection:</u>

This NPRM is proposing requirements aimed at enhancing safety in the transportation of PIH materials shipped by railroad tank cars. This is a joint PHMSA/FRA proposed rulemaking. The proposals affecting information collection and recordkeeping burden include:

- a. Section 173.31(b)(8)(iii). Requirement to submit a Progress Report to FRA on the status of rail tank cars that transport PIH materials. No later than 5 years after the effective date of the HM-246 final rule, each tank car owner shall submit to the Federal Railroad Administration, Hazardous Materials Division, Office of Safety Assurance and Compliance, 1200 New Jersey Avenue, SE., Washington, DC, 20590, a progress report that shows the total number of inservice tank cars subject to paragraphs (b)(3)(ii) and (b)(7) of § 173.31, and of those tank cars, the number of cars in compliance with §§179.16(b) and 179.24 of the HMR. In this report, the tank car owner must also certify that its fleet does not contain any tank car subject to paragraph § 173.31(b)(8)(iii).
- b. As an alternative to §§179.16(b) and 179.24 requirements noted above, submit a Risk assessment for tank cars used to transport PIH materials; Section 174.86(b)(c)(2).

Section 174.86(c)(2). As an alternative to complying with paragraph § 174.86(b)(c)(1), a railroad may provide for alternative risk mitigations and complete a risk assessment for tank cars used to transport PIH materials that includes appropriate data and analysis establishing that the operating conditions over the subject track provide at least an equivalent level of safety as a traffic control system complying with part 236 of this title, including consideration of the contribution of the traffic control system to broken rail detection, provided: (i) The risk assessment has been submitted to FRA's Associate Administrator for Safety, for review; and (ii) The Associate Administrator has determined in writing that the risk assessment established that the requirement of paragraph (c)(2) is met.

c. Requirement to include an "M" or "N" specification marking on tank cars used to transport PIH materials; Section 179.22 (e)& (f).

<u>Section 179.22(e).</u> Each tank that requires a tank-head puncture-resistance system prescribed in § 179.16(b), shell puncture-resistance system prescribed in § 179.24, but has no thermal protection system, must have the letter "M" substituted for the letter "A" or "S" in the specification marking.

<u>Section 179.22(f)</u>. Each tank car that requires a tank-head puncture-resistance system prescribed in 179.16(b), a shell puncture-resistance system prescribed in 179.24, and a thermal protection

system, must have the letter "N" substituted for the letter "A,""J,""M,""S," or "I" in the specification marking.

d. Requirement to certify and test tank car designs and complete a Demonstration of Compliance test report to FRA certifying the tank cars meet required specifications and passed the required tests. Appendix C to Part 179 - Procedures or Enhanced Tank-Head and Shell Puncture-Resistance Systems Tests.

This Appendix provides performance criteria for the impact evaluation of tank cars designed to carry material poisonous by inhalation (PIH). Each of the following criteria describes a collision scenario in which the integrity of the tank must be maintained. These performance criteria are intended to prevent loss of lading during train collisions and derailments.

Appendix C to Part 179 (a)(1)-(5) Tank Heads.

Appendix C to Part 179 (b)(1)-(5) Tank Shell.

Appendix C to Part 179(c)(1)-(5) Demonstration of Compliance.

Demonstration of Compliance. Compliance with the tank-head and shell-puncture-resistance system requirement tests above must be shown by any of the methods prescribed in this paragraph, or by a combination of these methods. Before a design is implemented, the party seeking to comply must submit all relevant documentation and analysis to FRA, and FRA will acknowledge in writing that compliance with the requirement has been met.

These proposed changes are designed to enhance safety for rail tank cars transporting PIH materials.

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

Rail carriers, shippers, Pipeline and Hazardous Materials Safety Administration's Office of Hazardous Materials Safety, 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. The requirements in the HMR are as follows.

<u>Section 172.102</u>; <u>Special Provisions -- B-45</u>, <u>B-46</u>, <u>B-55</u>, <u>B-61</u>, <u>B-69</u>, <u>B-77</u>, <u>B-78</u>, <u>and B-81</u>. These special provisions require approval of the Associate Administrator for Hazardous Materials Safety or the AAR Committee on Tank Cars before certain hazardous material packages, or packaging components, can be used for the transportation of hazardous materials by rail.

<u>Section 173.10(b)(1).</u> A shipper must obtain written permission from the delivering carrier and file it with the originating carrier before certain tank cars may be offered for transportation, and before the loaded unit tanks may be removed from the car frame on carrier tracks.

<u>Section 173.31(a)(2).</u> Requires approval of the AAR Tank Car Committee for a tank car to be used for commodities other than those specified in its certificate of construction.

<u>Section 173.31(b)(6)(ii)</u>. Before October 1 of each year, each owner shall submit to the Associate Administrator for Safety, FRA a progress report that shows the reporting mark of each tank car, the status of each tank car during the previous year, and the total number of tank cars modified, reassigned, retired, or removed the previous year.

<u>Section 173.314.</u> Compressed gases in tank cars and multi-unit tank cars. Requires the shipper to notify the Associate Administrator for Safety, c/o HM Division Chief, Federal Railroad Administration whenever a tank car 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 @ 202-493-6229.

<u>Section 173.319.</u> Cryogenic liquids in tank cars. Requires the shipper to notify the Associate Administration for Safety c/o HM Division Chief, Federal Railroad Administration 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 @ 202-493-6229.

<u>Section 174.20(b)</u>. Local or carrier restrictions. Each carrier must report to the Bureau of Explosives for publication the full information as to any restrictions which it imposes against the acceptance, delivery, or transportation of hazardous materials, over any portion of its lines under the section.

<u>Section 174.50.</u> Nonconforming or leaking packages. Leaking packages other than tank cars may not be forwarded until repaired, reconditioned, or overpacked in accordance with § 173.3. A bulk packaging that no longer conforms may not be forwarded 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.

<u>Section 174.63.</u> Portable tanks, IM portable tanks, IBCs, cargo tanks, and multi-unit tank car tanks. This section requires that the Associate Administrator for Safety, FRA approve the transportation of certain bulk packages, such as portable tanks and cargo tanks on railcars.

<u>Section 174.104 (c), (e), and (f).</u> Division 1.1 or 1.2 (explosive) materials; car selection, preparation, inspection and certification.

- (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 paragraph (b) of this section by a qualified person designated under § 215.11 of this title. The certification shall be made in Car Certificate No. 1 on the form prescribed in paragraph (f) of this section.
- (e) Each trailer or container containing Division 1.1 or 1.2 explosives must be certified as being properly secured on the railcar.

(f) Each 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.

<u>Section 174.114.</u> Record to be made of change of seals on "Cars loaded with Division 1.1 or 1.2 (explosive) materials." Requires record of seal change when a railcar containing explosives requiring an EXPLOSIVE 1.1 or EXPLOSIVE 1.2 placard is opened during transportation.

<u>Section 174.204(a)(1).</u> Tank car delivery of gases, including cryogenic liquids. Requires approval of a carrier to remove containers on the carrier track. The shipper must obtain written permission from the delivering carrier for removal of the containers and provide a copy to the originating carrier.

<u>Section 179.3(a).</u> Procedures for securing approval. Under these specifications, applications for approval of designs, materials and construction, conversion, or alteration of tank car tanks must be submitted in prescribed form to the Executive Director-Tank Car Safety, AAR, for consideration by its Tank Car Committee and other appropriate committees. Based on appropriate committee action, approvals or rejections will be issued by the executive director.

<u>Section 179.4(a).</u> Changes in specifications for tank cars. Proposed changes in, or additions to, specifications for tanks must be submitted to the Executive Director-Tank Car Safety, AAR, for consideration by its Tank Car Committee.

Section 179.5. Certificate of Construction.

- (a) Before a tank car is placed in service, the party assembling the completed car shall furnish a Certificate of Construction, Form AAR 4-2 to the owner, the Department, and the Executive Director-Tank Car Safety, AAR, certifying that the tank, equipment, and car fully conforms to all requirements of the specification.
- (b) When cars or tanks are covered in one application and are identical in all details are built in series, one certificate shall suffice for each series when submitted to the Executive Director-Tank Car Safety, AAR.
- (c) If the owner elects to furnish appurtenances such as valves and safety devices, the owner shall furnish to the Bureau of Explosives, and to the Executive Director-Tank Car Safety, AAR, a report in prescribed form, certifying that the appurtenances comply with all the requirements of the specifications.
- (d) When cars or tanks which are covered on one application and are identical in all details are built in series, one certificate shall suffice for each series when submitted to the Secretary. One copy of the Certificate of Construction must be furnished to the Executive Director-Tank Car

Safety, AAR for each car number of consecutively numbered group or groups covered by the original application.

<u>Section 179.6.</u> Repairs and alterations. For procedure to be followed in making repairs or alterations, see appendix R of the AAR Specifications for Tank Cars.

Section 179.7. Quality Assurance Program. This section requires tank car facilities to have a Quality Assurance Program (QAP). Paragraph (a) sets forth performance standards for the program. Paragraphs (b)(1) through (b)(12) require that the QAP meets certain minimum requirements. Paragraph (c) requires tank car facilities to ensure that only personnel qualified to perform a particular non-destructive inspection and test perform that operation. Paragraph (d) requires each tank car facility to 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. Paragraph (e) cross-references training requirements. Paragraph (f) specifies that tank car facilities must have a QAP and written procedures.

<u>Section 179.11(a).</u> Welding Certification. Welding procedures, welders and fabricators shall be approved.

<u>Section 179.18.</u> Thermal Protection Systems. A complete record of each analysis of a thermal protection system shall be made, retained, and upon request, made available for inspection and copying by an authorized representative of the Department.

<u>Section 179.22.</u> Marking. In addition to other marking requirements in the HMR, the following marking requirements apply:

- (a) Each tank car must be marked according to the requirements in Appendix C of the AAR Specifications for Tank Cars.
- (b) Each tank car that requires a tank-head puncture-resistance system must have the letter "S" substituted for the letter "A" in the specification marking.
- (c) Each tank car that requires a tank-head puncture-resistance system, a thermal protection system, and a metal jacket must have the letter "J" substituted for the letter "A" or "S" in the specification marking.
- (d) Each tank car that requires a tank-head puncture-resistance system, a thermal protection system, and no metal jacket must have the letter "T" substituted for the letter "A" or "S" in the specification marking.

<u>Section 179.100-9(a)</u>. Welding. All joints shall be fusion-welded in compliance with the requirements of AAR Specifications for Tank Cars, Appendix W. Welding procedures, welders and fabricators shall be approved.

Section 179.100-12(a) and (b). Manway nozzle, cover and protective housing.

- (a) Nozzle must be welded to the tank and the opening reinforced in an approved manner in compliance with the requirements of AAR Specifications for Tank Cars, Appendix E, Figure E10.
- (b) Manway cover shall be machined to approved dimensions and be of forged or rolled carbon or alloy steel, rolled aluminum alloy or nickel when required by the lading.

<u>Section 179.100-13(a), (b), and (c).</u> Venting, loading and unloading valves, measuring and sampling devices. The interior pipes of the loading and unloading valves shall be anchored and, except as prescribed in §§ 179.102 or 179.103, may be equipped with excess flow valves of approved design. Mounting and anchoring and closure devices on thermometer wells shall be approved.

<u>Section 179.100-16(b).</u> Attachments. Attachments to tank cars not otherwise specified shall be applied by approved means.

<u>Section 179.100-17.</u> Closures for openings. Closures for openings shall be of an approved design.

<u>Section 179.102-4(b) and (e).</u> Vinyl fluoride, stabilized. Insulation for tank cars used to transport vinyl fluoride shall be of approved materials. Only an approved gauging device may be installed.

<u>Section 179.102-17(c)</u>, (d), and (e). Hydrogen chloride, refrigerated liquid. Insulation for tank cars used to transport hydrogen chloride, refrigerated liquid shall be of approved material. Safety valves must be trimmed with monel or other approved material. Loading and unloading valves must be trimmed with Hastelloy B or C, monel, or other approved material.

114A Class Cars:

<u>Section 179.103-1(a).</u> Type. DOT class 114A tank cars may be built of any approved cross section.

Section 179.103-2. Manway cover. Manway cover must be of an approved design.

<u>Section 179.103-3(b) and (c).</u> Venting, loading and unloading valves, measuring and sampling devices. Under frame sills, as an alternative to the protective housing cover must be of an approved design. Excess flow valves must be of an approved design.

<u>Section 179.103-5(a) and (b).</u> Bottom outlets. Tanks may be equipped with bottom outlet valves of approved design.

General Service Cars:

<u>Section 179.200-10.</u> Welding. Welding procedures, welders and fabricators shall be approved.

<u>Section 179.200-14.</u> Expansion capacity. Allows other approved designs for reinforcing plates. The dome head shall be of approved contour and shall be designed for pressure on concave side.

<u>Section 179.200-15(a) and (c).</u> Closures for manways. Manway covers must be of approved type. Metals of manway covers must be approved.

<u>Section 179.200-16.</u> Gauging devices, top loading and unloading devices, venting and air inlet devices. Gauging devices, top loading and unloading devices, vacuum relief devices and protective housings, venting, and air inlet devices, when installed, must be of approved design.

<u>Section 179.200-17.</u> Bottom outlets. Bottom outlets shall be of approved construction. The permanent attachment of supplementary exterior fittings shall be approved by the AAR Tank Car Committee.

<u>Section 179.200-19.</u> Reinforcements when used and appurtenances not otherwise specified. All attachments to tank and dome shall be applied by approved means.

Lined Tanks:

<u>Section 179.201-3(a) and (b).</u> Lined materials. Paragraph (a) allows other approved lining materials to line tank cars. Paragraph (b) requires the car owner to furnish the party applying the lining a report certifying the tank has been brought into compliance with the regulations before a car is lined. After lining, the party applying the lining must furnish the owner a report certifying the tank has been lined in compliance with all requirements of the specification.

<u>Section 179.201-8.</u> Sampling devices and thermometer well. Sampling devices and thermometer wells, when used, must be of approved design. Interior pipes of the sampling device must be equipped with excess flow check valves of approved design.

Section 179.201-9. Gauging devices. Gauging devices must be of approved design.

DOT 115 Class Cars:

<u>Section 179.220-4</u>. Annular space between inner container and outer shell shall contain an approved insulation material.

<u>Section 179.220-7(b), (f), and (g).</u> Materials. The plates may be clad with other approved materials. All appurtenances on the inner container in contact with the lading must be made of approved material compatible with the plate material of the inner container. <u>Section 179.220-8.</u> Tank heads. Tank head must be of approved contour.

<u>Section 179.220-13.</u> Inner container manway nozzle and cover. Inner container manway nozzle must be of approved design.

<u>Section 179.220-15(b)</u>. Support system for inner container. Inner container and outer shell must be permanently electrically bonded to each other either by the support system used, piping, or by a separate electrical connection of approved design.

<u>Section 179.220-17(a), (c), (d), and (f).</u> Gauging devices, top loading and unloading devices, venting and air inlet devices. Gauging devices, top loading and unloading devices, venting and air inlet devices must be of approved design.

Section 179.220-18(a)(b). Bottom outlets. Bottom outlets must be of approved design.

<u>Section 179.220-20.</u> Reinforcements when used, and appurtenances not otherwise specified. All attachments to inner container and outer shell must be applied by approved means.

<u>Section 179.220-22(b).</u> Closure for opening. Openings in outer shell used during construction for installation shall be closed in an approved manner.

106A & 110AW Class Tank Car Tanks:

<u>Section 179.300-3.</u> Type and general requirements. Heads shall be of approved design.

<u>Section 179.300-7(a).</u> Materials. The plates may be clad with other approved materials.

<u>Section 179.300-9(a).</u> Welding. Welding procedures, welders, and fabricators must be approved in accordance with AAR Specifications for Tank Cars, Appendix W.

<u>Section 179.300-12(b)</u>. Protection of fittings. Loading and unloading valves shall be protected by a detachable protective housing of approved design which shall not project beyond the end of the tank and shall be securely fastened to the tank head.

<u>Section 179.300-13(a).</u> Venting, loading and unloading valves. Valves shall be of approved type.

<u>Section 179.300-15(a)</u>. Pressure relief devices. Tanks shall be equipped with one or more safety relief devices of approved design.

<u>Section 179.300-20(a)</u>. Reports. Before a tank is placed in service, the inspector shall furnish to the builder, the tank owner, Bureau of Explosives and the Secretary, Mechanical Division, AAR, a report certifying that the tank and its equipment comply with all requirements of this specification.

DOT 113 & 107A:

<u>Section 179.400-3(a)(2).</u> Type. Have the annular space evacuated after filling with an approved insulating material.

<u>Section 179.400-4(d).</u> Insulation system and performance standard. Insulating materials must be approved.

<u>Section 179.400-11(d).</u> Welding. Each welding procedure, welder and fabricator must be approved.

<u>Section 179.400-13(a) and (c).</u> Support system for inner tank. Inner tank must be supported within the outer jacket by a support system of approved design. Inner tank and outer jacket must be permanently bonded to each other electrically, by the support system, piping, or a separate electrical connection of approved design.

<u>Section 179.400-16(a)</u>. Access to inner tank. The access closure must be of approved material and design.

<u>Section 179.400-17(b)</u>. Inner tank piping. Any pressure building system provided for the purpose of pressurizing the vapor space of the inner tank to facilitate unloading the liquid lading must be approved.

<u>Section 179.400-19(a) and (b).</u> Valves and gages. All valves must be made of approved materials. A gage to indicate quantity of liquefied lading within the inner tank must be of approved design. A vapor phase pressure gauge with a manually operated shut-off valve located as close as practicable to the outer jacket must be of approved design.

<u>Section 179.400-20(c)</u>. Pressure relief devices. Duplicate pressure relief device may be used when an approved three-way selector valve is installed.

DOT 107A Class Cars:

<u>Section 179.500-5(b) Note 1.</u> Material. Steel must conform to the requirements specified in the § 179.500-5(b) chart as to chemical composition. Note 1: Alternate steel containing other alloying elements may be used if approved.

<u>Section 179.500-8(a).</u> Openings in tanks. External threading of an approved type shall be permissible on the internal threaded ends.

<u>Section 179.500-12(a) and (c).</u> Pressure relief devices. Tank shall be equipped with one or more pressure relief devices of approved type and discharge area, mounted on the cover or threaded into the non-marked end of the tank. Cars used for the transportation of flammable gases shall have the safety devices equipped with an approved ignition device.

<u>Section 179.500-18(a) and (c).</u> Inspection and reports. Before a tank car is placed in service, the party assembling the completed car shall furnish to the car owner, Bureau of Explosives, and Secretary, Mechanical Division, AAR, a report in proper format certifying that the tanks and their equipment comply with all the requirements of this specification. Inspectors shall make a report of each accepted tank to the builder, to the company, or the person for whom use of the

tanks are being made, to the builder of car structure, the Bureau of Explosives, and the Secretary, Mechanical Division, AAR.

<u>Section 180.505.</u> Quality Assurance Program. The quality assurance program requirements of § 179.7 of this subchapter apply.

<u>Section 180.509</u>. Requirements for inspection and test of specification tank cars. Paragraphs (a)(2) and (3) require that each tank car that successfully passes a periodic inspection and test must be marked as prescribed in § 180.515, and that a written report as specified in § 180.517(b) must be prepared for each tank car that is inspected and tested under this section.

- (c) Frequency of inspection and tests. Each tank car shall have an inspection and test according to the requirements of this paragraph.
- (c)(iii)(A) Lining and coating inspection and test. Each owner of a lining or coating shall determine the periodic inspection interval, test technique and acceptance criteria for the lining or coating. The owner must maintain all supporting documentation used to make the determination, such as the lining or coating manufacturer's recommended inspection interval, test technique, and acceptance criteria at the owner's principal place of business. The supporting documentation used to make such inspection and test interval determinations and techniques must be made available to FRA upon request.
- (k) Alternative inspection and test procedures. Allows the use of an alternative inspection and test procedure provided the procedure is based on a damage-tolerance evaluation, examined by the AAR Tank Car Committee, and approved by the Associate Administrator for Safety, FRA.

<u>Section 180.515.</u> Markings. This section specifies the marking requirements for tank cars after a successful tank inspection and test.

- (a) The tank car facility must mark the date of the inspection and test and the due date of the next inspection and test on the tank car in accordance with Appendix C of the AAR Specifications for Tank Cars.
- (b) Pressure converted tank cars must have new specification and conversion date permanently marked in letters and figures at least 0.95 cm (0.375 inch) high on the outside of the manway nozzle or the edge of the manway nozzle flange on the left side of the car. The marking may have the last numeral of the specification number omitted (e.g., DOT 111A100W instead of DOT 111A100W1).
- (c) When pressure tested within six months of installation and protected from deterioration, the test date marking of a reclosing pressure relief device is the installation date on the tank car.

<u>Section 180.517.</u> Reporting and record retention requirements. (a) Each owner of a specification tank car shall retain the certificate of construction (AAR Form 4-2) and related papers certifying that the manufacture of the specification tank car identified in the documents is in accordance with the applicable specification. The owner shall retain the documents

throughout the period of ownership of the specification tank car and for one year thereafter. Upon a change of ownership, the requirements of the AAR Specifications for Tank Cars apply.

(b) Each tank car that is inspected as specified in § 180.509 must have a written report, in English, prepared according to this paragraph. The owner must retain a copy of the inspection and test reports until successfully completing the next inspection and test report and must include: (1) type of inspection and test performed (a checklist is acceptable); (2) results of each inspection and test performed; (3) owner's reporting mark; (4) DOT specification; (5) inspection and test date (month and year); (6) location and description of defects found and method used to repair each defect; and (7) name and address of the tank car facility and the signature of inspector.

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 safe transport 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. However, we do not require any information to be submitted to us, therefore, it is not practicable.

4. <u>Efforts to identify duplication.</u>

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

5. Efforts to minimize the burden on small businesses.

The burden has been made as simple as possible.

6. <u>Impact of less frequent collection of information.</u>

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

7. <u>Special circumstances.</u>

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.

A notice of proposed rulemaking (NPRM) under Docket No. FRA-2006-25169, HM-246), "Improving the Safety of Railroad Tank Car Transportation of Hazardous Materials" was

published in the Federal Register on April 1, 2008 [73 FR 17817], requesting comments on proposed safety enhancements to rail tank cars carrying poisonous by inhalation (PIH) materials. The comment period closes on June 2, 2008.

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.

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

11. Justification for collection of sensitive information.

Not applicable. No sensitive information is required.

12. Estimate of burden hours for information requested.

Total estimate of annual burden hours:

2,689 hours (Current) + 2, 255 hours (HM-246 NPRM) = 4,944 total burden hours.

Total estimate of annual burden costs:

\$102,586.25 (Current) + \$67,650.00 (HM-246 NPRM) = \$ 170,236.25 total burden costs.

Estimate of Current Hours and Cost:

Sections 173.314 and 173.319.

It is estimated that, annually, there are approximately 6 respondents; 141 responses; and 186 cars. It will take approximately 15 minutes to prepare each of the 141 reports submitted to FRA each year: 141 responses x 15 minutes = 2,115 minutes divided by 60 minutes/hour = 35.25 annual burden hours. The total cost burden for this requirement is approximately \$25 average hourly wage x 35.25 burden hours = \$881.25.

Section 172.102, special provisions B-45, B-46, B-55, B-61, B-69, B-77, and B-81.

It is estimated that two requests are submitted for approval annually.

Each request will take approximately 5 hours to complete at a cost of \$ 30 average hourly wage for engineers/specialist time. The total hour burden for this requirement is 10 hours.

2 requests x 5 hours = 10 hours x \$30 = \$300.

The total cost burden for this requirement is a cost of \$300.

Section 173.31(a)(2).

Approximately 1,200 tank cars are approved annually at a cost of \$150 per tank. Approximately 25 respondents will each spend approximately 10 minutes filling out the required authorization request. Each respondent will submit approximately 48 requests per year. Burden is estimated as 25 respondents x 48 requests/respondent x 10 minutes/request divided by 60 minutes/hour = 200 hours. The total hour burden is 200 hours. The total cost burden for this requirement are estimated at 200 hours x \$150 per tank = \$30,000.00.

Section 173.31(b)(6)(ii).

Approximately 100 tank car owners will submit one report per year. Preparation of the report is estimated to take one hour. The cost of a professional engineer/manager is \$30 average hourly wage. The estimated hours burden for this requirement is 100 owners x 1 report x 1 hour/report = 100 hours x \$ 30 average hourly wage = \$3,000.00

Section 174.20(b).

Approximately 34 rail carriers will each file an average of 1.5 reports annually for a total of 51 reports filed annually. Each report will take approximately 20 minutes to prepare. The estimated hour burden for this requirement is 34 carriers x 1.5 report/carrier x 20 min/report divided by 60 minutes/hour = 17 hours x \$20 average hourly wage = \$340.00.

Section 174.50.

Approximately 34 rail carriers will each report 10 leaking tank car tanks.

It is estimated that it takes approximately 10 minutes to develop the information necessary for the report. The hour burden for this requirement is estimated as 34 carriers x 10 reports/each x 10 minutes/report divided by 60 minutes/hour = 57 hours x \$20 average hourly wage = \$1,140.00.

Section 174.63.

Requests are non-reoccurring and are estimated to be approximately 6 requests per year. It is estimated that each report will take approximately 30 minutes to develop and submit. The hour burden for this requirement is estimated to be 6 requests x 30 min/request = 3 hours x \$25 average hourly wage = \$75.00.

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

Approximately 25 respondents make two shipments per month, for a total of 600 shipments annually. The burden on respondents is approximately 20 minutes per shipment. The hourly burden for this requirement is estimated to be 25 respondents x 2 shipments/month x 12 months x 20 min/shipment divided by 60 minutes/hour = 200 hours x \$25 average hourly wage = \$5,000.00

Section 173.114.

Approximately 34 rail carriers will each change the seals on 5 railcars annually. The hourly burden for this requirement is estimated to be 34 carriers x 5 seals x 10 min/seal divided by 60 minutes/hour = 29 hours x \$25 average hourly wage = \$725.00.

Sections 179.22, 180.515, and 180.517.

It is estimated that approximately 100 companies manufacture or retest approximately 150 tanks cars each per year. Therefore, 15,000 tank cars are either manufactured or retested annually. It is estimated that the documentation for each tank car takes approximately 6.5 minutes each. The hour burden for this requirement is estimated to be 100 companies x 150 tank cars/each x 6.5 min/tank car divided by 60 minutes/hour = 1,625 hours x \$30 average hourly wage = \$48,750.00.

Sections 179.7 and 180.505.

Approximately 75 companies will develop and maintain a Quality Assurance Program. It is estimated that it will take approximately 5.5 hours to implement this requirement. The hour burden for this requirement is estimated to be 75 companies x 5.5 hours = 412.5 hours x \$30 average hourly wage = \$12,375.00.

Estimate of proposed annual burden hours and costs (HM-246 NPRM)

255 + 2,000 = 2,255 burden hours.

\$7,650.00 + \$60,000 = \$67,650.00 burden costs.

(1) Requirement to submit a Progress Report to FRA on the status of the fleet of rail tank cars that transport PIH materials; Section 173.31(b)(8)(iii).

Section 173.31(b)(8)(iii).

No later than 5 years after the effective date of final rule, each tank car owner shall submit to the Federal Railroad Administration, Hazardous Materials Division, Office of Safety Assurance and Compliance, 1120 Vermont Ave., N.W., Mail Stop 25, Washington, DC, 20590, a progress report that shows the total number of in-service tank cars subject to paragraphs (b)(3)(ii) and (b) (7) of this section and of those tank cars, the number of cars in compliance with §§179.16(b) and 179.24 of this subchapter. In this report, the tank car owner shall also certify that its fleet does not contain any tank car subject to paragraph (b)(8)(ii). It is estimated that 1/5 of the fleet will meet this requirement each year for during the five years before this requirement becomes effective.

Approximately 15,300 tank cars (PIH) divided by (1/5 of fleet) = 3,060 x 5 min/report = 15,300 min = 255 burden hours \$30 average hourly wage = \$7,650.00 burden costs.

(4). Requirement to certify and test tank car designs and complete a Demonstration of Compliance test report to FRA certifying the tank cars meet required specifications and passed

the required tests. Appendix C to Part 179-Procedures or Enhanced Tank-Head and Shell Puncture-Resistance Systems Tests.

This Appendix provides performance criteria for the impact evaluation of tank cars designed to carry material poisonous by inhalation (PIH). Each of the following criteria describes a collision scenario in which the integrity of the tank must be maintained. These performance criteria are intended to prevent loss of lading during train collisions and derailments.

Appendix C to Part 179 (a)(1)-(5) Tank Heads.

Appendix C to Part 179 (b)(1)-(5) Tank Shell.

Appendix C to Part 179(c)(1)-(4) Demonstration of Compliance.

Compliance with the tank-head and shell-puncture-resistance system requirement tests above must be shown by any of the methods prescribed in this paragraph, or by a combination of these methods. Before a design is implemented based on the methods in (2) through (4) below, the party seeking to comply must submit all relevant documentation and analysis to FRA and FRA will acknowledge in writing that compliance with the requirement has between met.

Burden Hours: Approximately 5 owners with submit 2 designs. The first design will take 250 hours complete and certify and the second design will take 125 hours to complete and certify. The two designs will take 25 hours to test/certify = 250 hours + 125 hours + 25 hours = 400 burden hours x 5 owners = 2,000 burden hours x \$30 average hourly wage = \$60,000.00.

13. <u>Estimate of total annual costs to respondents.</u>

There is no cost burden to respondents except those identified in item 12 above.

14. <u>Estimate of cost to the Federal government.</u>

The Government will receive approximately 340 approval requests annually. It is estimated that each approval will take approximately 3 hours to review, approve and prepare. The cost of each approval is estimated to be \$35 per hour. Therefore, the estimated annual cost to the Federal government is $340 \text{ requests } \times 3 \text{ hr/request} = 1,020 \text{ hours } \times $35,700.00.$

15. Explanation of program changes or adjustments.

There is a slight increase in burden due to the revisions proposed in Docket No. FRA-2006-25169, NPRM, "Improving the Safety of Railroad Tank Car Transportation of Hazardous Materials."

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.

Approved OMB number is prominently displayed in the text of 49 CFR 171.6.

18. <u>Exceptions to certification statement.</u>

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

Part B. Collections of Information Employing Statistical Methods.

1. <u>Describe potential respondent universe and any sampling selection method to be used.</u>

Not applicable.

2. <u>Describe procedures for collecting information, including statistical methodology for stratification and sample selection, estimation procedures, degree of accuracy needed, and less than annual periodic data cycles.</u>

Not applicable.

3. <u>Describe methods to maximize response rate</u>.

Not applicable.

4. <u>Describe tests of procedures or methods</u>.

Not applicable.

5. Provide name and telephone number of individuals who were consulted on statistical aspects of the information collection and who will actually collect and/or analyze the information.

Not applicable.