This petition is filed by the Association of American Railroads ("AAR"), on behalf of itself and its member railroads, pursuant to 49 C.F.R. § 106.95. This petition is being filed in conjunction with a Joint Petition for Rulemaking also filed today by AAR and several stakeholder trade associations. The Joint Petition for Rulemaking seeks to convert the current interim final rule mandating that tank cars used to transport materials classified as poisonous or toxic by inhalation ("TIH/PIH") be constructed to the HM-246 specification into a final rule. The Joint Petition for Rulemaking reflects the fact that collaborative research undertaken by industry and government partners over the last seven years has confirmed that HM-246 specification cars have the highest accident survivability rate over other designs and are the best technology to transport TIH/PIH materials. However, notwithstanding this, and the fact that the HM-246 specification has been in place in the form of an interim final rule since January 13, 2009, the tank car owners have been unwilling to agree to any schedule for phasing out the use of legacy tank cars not meeting those standards. Because indefinite continued use of the legacy cars poses an unacceptable safety risk, AAR hereby seeks a six-year phase out period for

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1 AAR is a trade association whose membership includes freight railroads that operate 83 percent of the line-haul mileage, employ 95 percent of the workers, and account for 97 percent of the freight revenues of all railroads in the United States; and passenger railroads that operate intercity passenger trains and provide commuter rail service.

2 The Chlorine Institute ("CI"), American Chemistry Council ("ACC"), The Fertilizer Institute ("TFI"), Association of American Railroads and Railway Supply Institute ("RSI") (collectively referred to herein as "Industry Partners"), in cooperation under the Advanced Tank Car Collaborative Research Program ("ATCCRP").
noncompliant legacy tank cars. This phase out schedule mirrors the original timeframe proposed by PHMSA in its notice of proposed rulemaking.

I. Background

In response to several rail tank car accidents that resulted in the release of chlorine and anhydrous ammonia, in 2006 AAR began to release a series of Casualty Prevention Circulars (“CPCs”) that mandated the use of a safer tank car design for TIH/PIH transportation. On March 31, 2008, AAR published CPC 1187, the final modification of AAR Standard M-1002, an interchange standard specifying upgraded tank cars for TIH/PIH transportation. CPC-1187 included a ten-year phase out schedule for tank cars that did not meet the CPC 1187 specification. Specifically, the AAR standard provided that non-compliant tank cars would not be accepted for interchange after December 31, 2018.

The next day, PHMSA released a notice of proposed rulemaking (“NPRM”) that sought to develop an enhanced tank car specification to transport TIH/PIH materials. The NPRM proposed to give the industry two-years to develop an enhanced TIH/PIH tank car specification, and six years thereafter to phase out legacy tank cars. If that schedule had been adhered to, and assuming a typical notice and comment period, legacy tank cars would have been prohibited after roughly January 2017.

The NPRM had the consequence of dis-incentivizing car owners and lessors from purchasing new CPC-1187 compliant tank cars for TIH transportation, pending the issuance of the final rule and certainty as to the final technical specifications. To provide regulatory certainty during the evaluation of an enhanced tank car standard, in July 2008 the railroads, car owners/lessors, and car manufacturers jointly petitioned PHMSA to adopt AAR’s CPC-1187 standard as an interim rule.

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3 On February 2, 2015, AAR filed a petition for rulemaking to prohibit the use of railroad tank cars with shells or heads constructed of non-normalized steel for the transport of TIH/PIH materials after December 31, 2016. AAR filed its petition because non-normalized steel cars pose an increased safety risk, and many shippers continue to use them. On November 29, 2016, PHMSA notified AAR that its non-normalized steel petition merited consideration in a future rulemaking. Regardless of whether PHMSA chooses to address the use of non-normalized steel tanks for TIH/PIH service in that proceeding or in the proceeding requested by the instant petition, AAR requests that PHMSA prioritize the phase-out of non-normalized steel tank cars so that they are prohibited no later than two years from the effective date of a final HM-246 specification rule.


5 Id.

6 Id. at 17,846.

7 Petition for an Interim Standard for Tank Cars Used to Transport TIH Materials, July 15, 2008. Submitted by ACC, ASLRRRA, AAR, CI, and RSI.
On January 13, 2009, PHMSA issued a final rule, referred to herein as “Interim HM-246 Standard.”\(^8\) The Interim HM-246 Standard adopted AAR’s CPC-1187 tank car (also referred to as the “I-Car”) for the transportation of TIH/PIH until further research could be completed on enhanced tank car specifications.\(^9\) PHMSA declined to promulgate a phase out schedule for legacy cars until the conclusion of the research and adoption of a final rule incorporating that specification.\(^10\)

Because PHMSA adopted the I-Car design, AAR agreed to suspend the CPC-1187 interchange standard.\(^11\) The effect was that the December 2018 phase out deadline for tank cars that did not comply with the CPC-1187 design was suspended until a new tank car standard was developed.

Research for an enhanced tank car standard has been a collaborative effort involving stakeholder trade associations, their members, and the federal government. The industry and government partners joined together as the ATCCRP. ATCCRP commissioned over 20 research projects to identify the most practicable, safest tank car for transporting TIH/PIH materials.

ATCCRP researched the performance of existing TIH/PIH tank car specifications under various impact scenarios, as well as the performance of new materials and tank car designs. The general conclusions from the research were that the I-Car design provides significant improvement in accident survivability over legacy tank cars, and that there is no design feature or material that would provide significantly greater improvement over the I-Car.

II. A Six-Year Phase Out is Critical to Obtaining the Safety Benefits of HM-246 Cars.

Given the I-Car’s superior performance, and the fact that ATCCRP has now concluded its research, there is no need to continue to delay the phase out of legacy tank cars used to transport TIH/PIH. PHMSA should require the six-year phase out period that it proposed in the NPRM to bring the entire North American fleet of TIH/PIH tank cars into compliance with the HM-246 specification. Starting that six-year period now would extend the deadline until January 2023, or approximately six years later than PHMSA had first proposed, and four years later than AAR’s interchange standard provided.

Attrition alone will not result in timely replacement of the legacy car fleet with HM-246 compliant cars. Only 10% of the current TIH/PIH tank car fleet are HM-246 compliant cars. Of the remaining 90%, 18% are made of non-normalized steel (these cars are the specific focus of

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\(^9\) Id.

\(^10\) Id. at 1,778.

\(^11\) The AAR Tank Car Committee, comprised of railroads, rail car owners and manufacturers and hazmat shippers with active participation from DOT, Transport Canada and the National Transportation Safety Board, reviews and establishes industrywide standards for the design and operation of tank cars in North America.
AAR’s February 2015 petition). The remainder (72%) of the current TIH/PIH fleet consists of legacy normalized steel cars, the oldest of which is only 27 years old. Under DOT rules, this car could be used for another 23 years; it will take another 47 years before the newest legacy car reaches the end of its DOT life. Assuming the number of TIH/PIH shipments remain consistent with 2015 shipments, over a million shipments of TIH/PIH will occur over the next 50 years. Subjecting the public to that level of risk over that length of time simply cannot be justified.

Since 2008, it has been understood by all involved in TIH/PIH transport that tank cars not meeting at least the HM-246 standard will need to be removed from TIH/PIH service before the end of their useful lives. The only question was which tank car design would replace them. Since 2009, manufacturers have been building all new cars to the HM-246 standard. As the Joint Petition filed today reflects, all stakeholders understand and agree that the HM-246 standard represents the best available technology for transporting TIH/PIH materials, and that no newer standard will replace it: “Modeling conducted under the private Next Generation Rail Tank Car (NGRTC) Project and ATCCRP has indicated that the interim TIH tank cars provide a significant level of improvement in accident survivability compared to the TIH tank cars built prior to issuance of the HM-246 specifications.”

Car building capacity is not an issue. Currently, based on the Railway Supply Institute’s data, demand for tank cars is far below builder’s capacity. Builders can easily meet the demand for new HM-246 tank cars. As noted above, six years is the period PHMSA originally proposed for legacy car phase out back in 2008, and certainly the passage of time since then does not justify a longer period. Removal of the legacy cars from service over six years must begin once the final standard is published (with the removal of non-normalized steel cars no later than within the first two years).

III. Proposed Regulatory Language

Accordingly, AAR proposes that a new paragraph 4 be added to 49 C.F.R. §173.31:

“(4) After [six years], tank cars used for the transportation of materials poisonous by inhalation must meet the HM-246 specification.”

12 The construction of tank cars using non-normalized steel was stopped in 1989, but as indicated above, a significant number of these cars remain in use. AAR believes that PHMSA should immediately require the phase-out of non-normalized steel tank cars consistent with AAR’s February 2015 petition. However, in no event should non-normalized steel tanks be used more than two years after the effective date of the rule sought herein.

13 Railway Supply Institute, ARCI Third Quarter Reporting Statistics.
IV. **Conclusion**

For the reasons stated above, AAR respectfully requests that PHMSA grant this petition.

Respectfully Submitted,

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