



FRA-AIP 200611-01

REVIEW DATE: January 1, 2025

### 1. GRANTEE:

American Industrial Transport, Inc. 100 Clark Street St. Charles, MO 63301

## 2. PURPOSE:

- a. This approval authorizes the use of an Alternative Inspection and Test Program (AIP) as allowed by 49 CFR 180.509(1) Alternative inspection and test procedures. This letter provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated herein. The most recent revision supersedes all previous revisions.
- b. The damage tolerance analysis or service reliability assessment performed in the development of this AIP only considered the hazards and risks associated with the transportation in commerce.
- c. The approval to use an AIP is non-transferrable.
- 3. REGULATIONS AFFECTED: 49 CFR 180.509(e)(1)(iii).
- 4. <u>BASIS</u>: This approval is based on the application of AMERICAN RAILCAR INDUSTRIES approved November 28, 2006 and subsequent letter from AMERICAN INDUSTRIAL TRANSPORT, INC. dated August 13, 2020 submitted in accordance with 49 CFR 180.509(1).

# 5. INSPECTION AND TEST PROCEDURES:

#### a. Definitions

- 1. Service Reliability Assessment the process, using in-service data, to determine the time a tank car or component will continue to function as designed under specified conditions.
- 2. Tank Car Owner the person to whom a rail car's reporting marks are assigned, as listed in the Universal Machine Language Equipment Register (UMLER).
- 3. Damage-Tolerance Analysis Determination of the probable locations and modes of damage due to fatigue, corrosion or accidental damage. The analysis must establish a period of time/load cycles during which it is demonstrated that widespread fatigue or corrosion damage will not occur in the tank car structure.
- BENCHMARK TESTING AMERICAN INDUSTRIAL TRANSPORT, INC. must develop a sampling plan to measure the adequacy of tank shell butt welds within 60.96 cm (2 feet) of the bottom longitudinal centerline with an approved Nondestructive Testing (NDT) method at the time of manufacture. This does not provide any relief from the requirements of Association of American Railroads (AAR) Manual of Standards and Recommended Practices (MSRP) Section C-III Appendix W. For tank cars lacking these measurements, AMERICAN INDUSTRIAL TRANSPORT, INC. must perform Inspection and Test of tank shell butt welds within 60.96 cm (2 feet) of the bottom longitudinal centerline at the time of next qualification but not to exceed the maximum allowable interval given in 49 CFR 180.509(c)(3) or the maximum allowable interval permitted by an applicable AIP. The sample size must be determined by following recognized industry sampling standards.
- c. <u>DESIGN LEVEL OF RELIABILITY AND SAFETY</u> AMERICAN INDUSTRIAL TRANSPORT, INC. must maintain an analysis (e.g., finite element analysis, damage-tolerance analysis, or service reliability assessment) that the structure will not develop defects that reduce the design level of reliability and safety or fail within its operational life or prior to the next required inspection. AMERICAN INDUSTRIAL

TRANSPORT, INC. must maintain all documentation used to make such determination at its principal place of business and make the data available to the Federal Railroad Administration (FRA) or an authorized representative of the Department of Transportation upon request.

- d. <u>SENSITIVITY AND RELIABILITY</u> AMERICAN INDUSTRIAL TRANSPORT, INC. must develop and execute a sensitivity and reliability study to determine the level of reliability, sensitivity and minimum detectable flaw size for the NDT methods and techniques used to maintain the design level of reliability and safety.
- CONTROL AMERICAN INDUSTRIAL TRANSPORT, INC. must perform Inspection and Test of tank shell butt welds within 60.96 cm (2 feet) of the bottom longitudinal centerline on a representative subgroup of the fleet covered by this AIP based the identified crack development and growth other factors utilization, and to ensure applicability of this program. All tank cars in this sample must have benchmark testing as defined in section (b) above. These reports must be made available to FRA or a designated representative upon request. The sample size must determined by following recognized industry sampling standards.

### 6. SPECIAL PROVISIONS:

- a. A person who is not a holder of this approval who receives a package covered by this alternative inspection and test approval may reoffer it for transportation provided no modification or change is made to the package or its contents and it is reoffered for transportation in conformance with this approval and the HMR.
- b. A current copy of this approval must be maintained at each facility where the package is maintained and/or repaired.
- c. Marking of each tank car is required and must meet the marking and labeling requirements of 49 CFR Part 172, Subpart D. The car must be identified by a stencil or decal placed above the tank specification number. The stencil must have at least 1 1/2-in high (38.1 mm) letters and numbers and display "FRA-AIP 200611". Additionally,

the car must have the initial qualification year (QUALIFIED) and the next qualification year (DUE). This interval must be developed from the Service Reliability Assessment. Marking must occur at time of next shopping by a tank car facility, not to exceed the maximum allowable interval given in 49 CFR 180.509(c)(3) or the maximum allowable interval permitted by an applicable Approved Alternative Inspection Program.

- 7. <u>COMPLIANCE</u>: Failure by a person to comply with any of the following may result in suspension or revocation of this approval and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 et seq.:
  - a. The grantee must comply with all terms and conditions prescribed in this approval and the Hazardous Materials Regulations, 49 CFR 171-180.
  - b. Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this approval must receive training on the requirements and conditions of this Alternative Inspection and Test Program in addition to the training required by §§ 172.700 through 172.704.
  - c. No person may use or apply this Alternative Inspection and Test Program, including display of its number, when this approval has lapsed or is otherwise no longer in effect.

## 8. REPORTING REQUIREMENTS:

- a. AMERICAN INDUSTRIAL TRANSPORT, INC. must notify the Associate Administrator for Railroad Safety, Chief Safety Officer, in writing no later than 30 days after any incident involving tank shell butt welds within 60.96 cm (2 feet) of the bottom longitudinal centerline of a Tank Car conducted under terms of this AIP.
- b. AMERICAN INDUSTRIAL TRANSPORT, INC. must report in writing to the Associate Administrator for Railroad Safety, Chief Safety Officer no later than 30 days after notification of occurrence, instances of corrosion damage or tank failure not considered in the damage-tolerance analysis or service reliability assessment that adversely affects tank shell butt welds within 60.96 cm (2 feet) of

the bottom longitudinal centerline on any Tank Car subject to this AIP.

- c. AMERICAN INDUSTRIAL TRANSPORT, INC. must maintain a listing of tank cars by reporting mark and number operating under this approval to include the status of the above required marking and must report this listing to FRA every 5 years or upon request.
- d. AMERICAN INDUSTRIAL TRANSPORT, INC. shall report CONTROL results to FRA every 5 years or upon request.

### 9. LIMITATIONS:

a. If a tank car operating under this approval is transferred from AMERICAN INDUSTRIAL TRANSPORT, INC. to another Tank Car Owner then the tank car will no longer be subject to the relief granted under this approval and all the above required stenciling must be removed. The qualification due date must be changed to reflect the new Tank Car Owner's Qualification Interval in accordance with the new Tank Car Owner's qualification and maintenance program.

# 10. CANCELLATION:

FRA may rescind this approval for failure to comply with its terms.

Issued in Washington, D.C.:

Karl Alexy

Associate Administrator for Railroad Safety Chief Safety Officer

November 9, 2020

Address all inquiries to: Randy M Keltz Jr., Manager, Tank Car Safety Programs, Federal Railroad Administration, U.S. Department of Transportation, West Building, 1200 New Jersey Avenue, Southeast, Washington, D.C. 20590.

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| REVISION HISTORY |         |  |
|------------------|---------|--|
| REV              | DATE    | DESCRIPTION  |
|                  | 11/2006 | Original approval  |
| А                | 10/2020 | Updated format; added review terms; added control conditions; added limitations; updated company name as requested |
|                  |         |  |