Request for Information (RFI)

RFI Number: 693JK326RF103

Title: Evaluation of Electric Vehicle Failures Impact on Hazardous Transportation Safety

Date Issued: 7/31/2026

Responses Due: 8/24/2026

1. Introduction

The Pipeline and Hazardous Materials Safety Administration (PHMSA)is issuing this Request for Information (RFI) to gather input from interested parties regarding the continuation of ongoing mission critical services related to hazardous materials safety. This RFI is for market research and planning purposes only and does not constitute a Request for Proposal (RFP) Invitation for Bid (IFB), or Request for Quote (RFQ). No contract will be awarded based on responses to this RFI.

Through this RFI, PHMSA is gathering insights from qualified organizations to inform future strategies in Research and Development.

2. Topics of Interest

a. Advanced Computational & Thermal Modeling:
Demonstrated expertise in developing and executing high-fidelity computational fire models (e.g., CFD, FDS) to simulate battery failure mechanics, thermal runaway propagation, pool fire behaviors, and heat transfer through containment barriers.

b. Fire Dynamics & Emissions Data Collection:
Accredited laboratory instrumentation to capture real-time, high-precision fire dynamics metrics during active burns, including Total Heat Release Rate (HRR), radiant and convective heat flux profiles, temperature gradients, and chemical off-gassing.

c. Hazmat Packaging Failure Analysis:
Specialized experience evaluating the physical and chemical degradation of 49 CFR-compliant hazardous materials packaging (such as specialized steels, polymers, and composites) when exposed to extreme thermal and chemical fire environments.

d. Full-Scale EV Battery Burn Testing: Operational access to permitted, environmentally compliant facilities equipped to safely conduct full-scale destructive thermal runaway and total burn tests on commercial heavy-duty electric vehicle (EV) high-voltage battery packs.

3. Objective

The objective of this RFI is to gather information from experienced organizations with demonstrated capabilities in the above categories (a-d).

4. Requested Information

- Company name, address and point of contract information
- Description of relevant company capabilities
- One (1) relevant past performance example
- Provide detailed information the above topics (a-d).
- Provide company certifications/classifications such as (but not limited :
  - Small business
  - Woman Owned
  - GSA
  - 8a

Page limit for responses is 10 pages excluding cover page.