

BRIDGE ADVISORY NUMBER: **BA-2024-01**

DATE: January 12, 2024

SUBJECT: **Materials Stored Under Highway Bridges**

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On November 10, 2023, a fire severely damaged a section of Interstate 10, a crucial artery for drivers in Los Angeles, California. Although the investigation is still under way, a preliminary investigation indicated that materials stored under the roadway fed the massive blaze. FHWA released memorandum *Documentation and Treatment of Materials Stored Under a Highway Bridge* on November 15, 2023, as a reminder of the dangers of storing flammable, explosive, or hazardous materials under bridges and other elevated structures. As defined in CFR 650.313(q), a critical finding includes “any condition posing an imminent threat to public safety”. The memo states that the discovery of flammable, explosive, or hazardous materials stored underneath a highway bridge should be treated as a critical finding and reported as such.

In response, MDOT updated the Michigan Structure Inspection Manual (MiSIM) [Chapter 10 Critical Findings](#) to note that flammable, explosive, or hazardous materials stored underneath a bridge present a potential hazard that should be reviewed by the bridge owner. FHWA considers the plain language definition of flammable as “capable of being easily ignited and burning quickly.” Team leaders should be cognizant of identifying the storage of flammable materials during routine inspections and submit a critical finding if they exist. Bridge owners are responsible for taking action in accordance with the National Bridge Inspection Standards (NBIS).

For additional information see the attached FHWA Memorandum *Documentation and Treatment of Materials Stored Under a Highway Bridge*.



U.S. Department  
of Transportation

**Federal Highway  
Administration**

# Memorandum

Subject: **ACTION:** Documentation and  
Treatment of Materials Stored Under a  
Highway Bridge

Date: 11/15/2023

From: Emily Biondi /s/  
Associate Administrator  
Office of Environment and Planning

In Reply Refer To:  
HEPR-1 and HIBS-1

Hari Kalla /s/  
Associate Administrator  
Office of Infrastructure

To: Division Administrators and Division  
Directors

The recent fire that resulted in the closure of a bridge on the Santa Monica Freeway section of Interstate 10 (I-10) in Los Angeles, California, has caused the detour of approximately 290,000 vehicles a day, adversely affecting the lives of local travelers, the movement of goods and services, and the local and regional economies. Although the investigation is still ongoing, this incident appears to be very similar to the fire that resulted in the 2017 collapse of the Interstate 85 (I-85) bridge over Piedmont Avenue in Atlanta, Georgia. This event in California again raises serious concerns about storing materials, including flammable, explosive, or hazardous materials, under bridges and other elevated structures.

After the investigation of the I-85 bridge collapse, FHWA issued information to remind the State Departments of Transportation (SDOT) of the pertinent Federal regulations on the storage of materials in the right-of-way (ROW) (23 CFR 710.403 and 710.405). Specifically, 23 CFR 710.403 requires that any alternative use of the ROW must be “[c]onsistent with the . . . safety of the facility, and such use must not impair the highway or interfere with the free and safe flow of traffic.” Also, should an alternative use of the ROW be allowed, 23 CFR 710.405 requires the development and execution of a Right-of-Way Use Agreement ensuring, among other things, the safety of the facility. FHWA guidance concerning 23 CFR 710.405 ([Frequently Asked Questions \(FAQs\) – Right-of-Way \(ROW\) – Policy and Guidance – Real Estate – FHWA \(dot.gov\)](#)) provides:

**32. Q: § 710.405. Are there fundamental restrictions on ROW use agreements?**

**A:** The real property cannot be used for non-highway purposes if the real property is necessary, either currently or in the foreseeable future, for safe and secure operation and maintenance of the highway facility. If such conflicts exist, the real property would be considered unavailable. The only exception may be for interim uses, which are terminated when the real property is needed for highway purposes.

The proposed non-highway use must meet the conditions in 23 CFR 710.405(a), including preservation of safety of the facility and its users. ***The FHWA views the manufacture or storage of flammable, explosive, or hazardous material on the ROW as presumptively a safety hazard.*** [Emphases added] This presumption does not preclude the transverse or longitudinal installation of such items as petroleum pipelines that have been approved in accordance with the regulations.

Similarly, within the scope of the proposed non-highway use of the facility, there is a presumption that ***any structures, buildings, or facilities which utilize combustible materials (such as wood, wood fiber, plastic etc.) that may be fire hazards do not satisfy 23 CFR 710.405(a). Such non-highway uses cannot be allowed under or adjacent to overpasses and bridges, absent a showing that such uses would provide for the safe and secure operation and maintenance of the highway facility.*** [Emphasis added]

Although the FHWA has not defined flammable as used in the FAQ cited above, FHWA considers the plain language definition of flammable—“capable of being easily ignited and of burning quickly”—as being consistent with the direction and intent of the response.

Additionally, in April 2018, the National Transportation Safety Board issued a Safety Alert ([SA-073](#)) on “Protecting Bridges from Fire Damage and Collapse.” The Safety Alert recommended that SDOTs remove materials from beneath bridges if they pose a risk of a fire event, improve surveillance and lock storage areas to restrict entry.

In light of the I-85 and I-10 fires, bridge owners should continue to direct inspectors, during their routine inspections, to be observant of materials, including flammable, explosive, or hazardous materials, stored under bridges, document any such materials stored in the ROW in the inspection report, and, if concerns exist, to communicate those concerns appropriately to the SDOT bridge inspection program manager. The discovery of such materials stored underneath a highway bridge should be treated as a critical finding requiring immediate follow-up action in accordance with our regulations and guidance ([NBIS Regulations and Guidance](#)) to ensure public safety, and must be reported to the FHWA (23 CFR 650.313(q)).

Please share this memorandum with the appropriate officials and staff from the highway-bridge-owning State, Federal, and Tribal agencies in your State. In doing so, remind them of the requirements of the pertinent Federal regulations, and of the

direction to treat the discovery of materials, including flammable, explosive, or hazardous materials, stored in the ROW underneath bridges as an inspection critical finding.

If you have any questions or need additional information related to right of way, please contact Nic Thornton at (202)366-1352 or [Nicholas.Thornton@dot.gov](mailto:Nicholas.Thornton@dot.gov), or issues related to bridges or structures, please contact Joey Hartmann at (202)366-4599 or [Joey.Hartmann@dot.gov](mailto:Joey.Hartmann@dot.gov).

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