

# Structure Policy Directive

*Number:* SPD 1-8  
*Effective Date:* January 19, 2018  
*Supersedes:* N/A

*TITLE* Material Storage Under Bridges

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## *DIRECTIVE*

The storage of materials is not allowed under bridges on State right of way unless authorized. Authorization for material storage, temporary or permanent, is dependent upon adhering to setback limits and the fire hazard created by the material and the associated risk to the integrity of the bridge.

The following materials shall not be stored beneath bridges on State right of way without prior approval from the State Bridge Maintenance Engineer:

- Explosives or explosive materials
- Flammable and combustible materials together
- Incompatible materials, such as chlorine and ammonia, or batteries and fuels, in the same secondary containment facility

When authorized, materials stored under bridges must adhere to the following requirements:

- Comply with all current applicable policies, laws, and regulations for the material being stored, including but not limited to:
  - 23 Code of Federal Regulations (CFR) 710.405
  - Right of Way Manual Chapter 15 Exhibit 15-EX-12
  - Caltrans Safety and Health Manual
  - Caltrans Maintenance Manual
  - Title 8 Regulations
  - Stormwater permits
  - Construction Contract Specifications
- Appropriate measures must be taken to prevent unauthorized access to storage areas.
- Maintain a minimum setback of 10 feet from the perimeter of any above ground column footing or pile cap.
- Maintain a minimum setback of 20 feet from the face of any bridge column.

- Maintain space to maneuver manlift vehicles under all bridge spans, hinges, and bent caps. Generally, access must be 12 feet wide and extend from a public street to the bridge member.
- Maintain vertical clearance of at least 6 feet, measured from the lowest bridge member across the width of the bridge and the top of any storage material.
- Drainage systems must not be obstructed. Maintain a minimum clearance of 3 feet from all drain outlets near the base of columns.

### *BACKGROUND*

Following a bridge collapse in Atlanta, Georgia on I-85 in March 2017, caused by a fire of stored high-density polyethylene (HDPE) conduit, the California Department of Transportation (Caltrans) recognized that although a low probability, an event similar to the Georgia I-85 failure could occur in California and took the opportunity to review its under bridge material storage policies.

Many entities within Caltrans manage the use of leased airspace beneath bridges including but not limited to: Maintenance, Construction and Right of Way. The intent of this policy is to formalize and establish the best practices for managing the risk of material stored under bridges so that each of these entities can develop or modify guidance for their use of leased airspace that is consistent and minimizes the risk of or exposure to a material fire that may adversely affect the structural integrity of a bridge.

### *RESPONSIBILITIES*

#### Structure Policy Board (SPB):

Establish the storage of materials under bridges policy.

#### State Bridge Maintenance Engineer:

Develop and maintain an exception process and acceptance criteria for requests to store the following materials under bridges:

- Explosives or explosive materials
- Flammable and combustible materials together
- Incompatible materials, such as chlorine and ammonia, or batteries and fuels, in the same secondary containment facility

Approves/denies exception requests for material storage under bridges that do not meet the above requirements.

Ensures that any under bridge material storage which appears to violate this policy observed during routine bridge safety inspections is documented and the responsible entity is contacted to immediately resolve the violation by

submitting an exception request and/or removal or other acceptable placement of the material.

Right of Way and Land Surveys Chief:

Develops leased airspace agreements which include provisions for use of State right of way that are in accordance with the above requirements. Monitor and inspect leased airspace parcels and maintain airspace material inventories for all leased parcels.

Division of Construction Chief:

Provides that the California Standard Specifications include provisions for use of State right of way that are in accordance with the above requirements.

Division of Maintenance Chief:

Provides that the Caltrans Maintenance Manual includes provisions for use of State right of way that are in accordance with the above requirements.

Division of Local Assistance Chief:

Shares this Directive with local agencies to reduce risk of fires under locally owned bridges.

*APPLICABILITY*

All entities involved in the design, construction, and maintenance of bridges and transportation structures located on:

- The State Highway System, in accordance with Streets & Highways Code 137 and the Caltrans Highway Design Manual.
- Public roads in California, in accordance with the Federal Code of Regulations 23 CFR 625.3 and Caltrans Local Assistance Procedures.

This Directive does not apply to the parking of vehicles or tire mounted equipment under bridges.

*APPROVAL*

The members of the Structure Policy Board hereby approve this Directive.

APPROVED BY:



THOMAS A. OSTROM  
State Bridge Engineer  
Deputy Division Chief  
Structure Policy & Innovation  
Division of Engineering Services

1/18/18  
Date