



MULLEN TRUCKING, LP SUBMISSION

**Bridge Strike & Collapse
Mt. Vernon, WA
05/23/2013**

**HWY-13-MH-012
(4 Pages)**



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June 2, 2014

Mr. Robert Accetta
Investigator-in-Charge
Office of Highway Safety
National Highway Transportation Board
490 L'Enfant Plaza, SW
Washington, DC 20594

Re: Party Submission under 49 CFR 831.14
Collapse of Bridge Span
May 23, 2013, Mr. Vernon, Washington
NTSB Investigation: HWY13MH012

Dear Mr. Accetta:

Thank you for your May 29 e-mail forwarding the supplemental Materials Laboratory Factual Report dated May 23, 2014. We had been awaiting receipt of that report before finalizing our submission of proposed findings as to causation and safety recommendations.¹

Summary

We would like to thank the NTSB for allowing Mullen to participate in the factual investigation upon which the NTSB will be opining upon causation and making safety recommendations.

There is no doubt that an oversize load on a flatbed trailer being hauled by one of our employees operating one of our tractors impacted the bridge on Interstate 5 over the Skagit River in Mount Vernon, Washington, on May 23, 2013, and that that impact resulted in a section of the bridge collapsing. The causes of the incident, and what can be learned from them, however, are much more involved.

We propose that the NTSB's opinions and recommendations include the following components:

Causation

- A pilot car was proceeding ahead of the Mullen tractor and trailer in the right lane with a height pole set to 16' 2". Although the pilot car driver denied that the pole hit any part of the bridge, she concedes having been using her cell phone at the time of the incident, including the approach to the bridge. One witness operating a vehicle behind and to the left of the pilot car saw the pole strike four or five bridge elements. The pilot car did not alert the Mullen driver to any hazard associated with operation in the right lane.

¹ Reference conversations between Mullen counsel and NTSB Assistant General Counsel James Rodriguez.

- As the Mullen tractor and trailer approached the bridge, they were forced to the right, into the low portion of the bridge's arched sway braces, by a tractor and trailer that was passing on the left, ultimately impacting or being impacted by the Mullen load.²
- There was no signage on the bridge to alert drivers of high loads to any hazard associated with operation in the right lane despite the bridge sway braces and portals having been damaged multiple times prior to this incident, presumably by other high loads.³
- There was no signage on the bridge to alert drivers of high loads to any hazard associated with operation in the right lane despite the WSDOT "Bridge List" revealing minimum vertical clearances northbound or eastbound of 14'3" and southbound or westbound of 14'4" and:
 - the WSDOT Traffic Manual requiring Low Clearance warning signs where there is 15'3" or less of vertical clearance; and
 - the Manual on Uniform Traffic Control Devices (MUTCD) requiring Low Clearance warning signs where there is 15' or less of vertical clearance.⁴
- WSDOT knew, through its high-load permitting process, that the load on this truck was 15'9" and that the truck's intended route was over a bridge with a right-lane clearance more than a foot lower in the right lane, but failed to caution or warn the driver.
- A WSDOT officer inspected the high load permit at a weigh station six miles before the bridge and also knew that the load's intended route would take over the bridge, but failed to caution or warn the driver.
- After the accident the sway braces were modified to eliminate their arches, raising the clearance in the right lane and shoulder. The incident would not have happened if these modifications had been made earlier.

Recommendations

- Washington State should consider modifications to any other similarly-constructed bridges to eliminate any arched sway bracing in order to raise the clearance in the right lane and shoulder. Only when such modifications cannot reasonably be made should the State rely upon Low Clearance warnings.
- When the State knows, through its permitting process or weigh station inspection procedures, that a high load has the potential to impact specific bridges or other restrictions, it should alert operators.

² The NTSB Human Performance Factual Report describes the detailed investigations of the drivers of the pilot car and the oversize load, including behavioral factors (activities prior to the incident), medical factors (general health, vision, hearing, medications, alcohol and drug consumption, psychological factors, sleep habits), operational factors (licensing, general experience, training, training materials, route experience, vehicle experience, accident history), task factors (details as to the accident trip, hours-of-service, internal workload, portable electronic devices, other potential distractions and various environmental distractions). No such information has been disclosed as to the driver of this other truck. No summary or transcript of any interview has been provided.

³ While the NTSB investigation found that samples of the steel used to construct the upper chords of span 8 complied with the material design specifications of ASTM A242M, there was no analysis of the weakening of the structure by the prior impacts, no microscopic examination of the fracture surfaces, no investigation of the bolts that appeared to have replaced rivets at critical nodes or of the rivets that did not extend through connections.

⁴ "The Low Clearance ... sign ... shall be used to warn road users of clearances less than 12 inches above the statutory maximum vehicle height." The statutory maximum vehicle height in Washington State is 14'.

- Washington State's bridge inspection procedures should not tolerate any failure to inspect nodes or junctions because they are covered by vegetation.
- Washington State should prohibit cell phone use or texting by pilot car operators in areas of restricted maneuverability such as the subject bridge for the subject load.
- Washington State should mandate that pilot car height poles are mounted vertically and on the right side of the vehicle.

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We thank you once again for this opportunity to participate in the process. We look forward to discussing our comments and suggestions.

Very truly yours /



**Director
Health, Safety, Environment & Risk Management
Mullen Group**