WASHINGTON State FACE Program
Fatality Assessment & Control Evaluation

CONSTRUCTION
FATALITY NARRATIVE

FACE NIOSH National Institute for Occupational Safety and Health

Trucking Supervisor Crushed between Two Belly Dump Trailers

INCIDENT FACTS

REPORT #: 71-172-2018s

REPORT DATE: June 18, 2018

INCIDENT DATE: January 10, 2017

VICTIM: 60 years old

INDUSTRY: Highway, street and bridge construction

OCCUPATION: Trucking supervisor

SCENE: Construction job site truck staging area

EVENT TYPE: Crushed between

SHARP Safety & Health Assessment & Research for Prevention

Washington State Department of Labor & Industries

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A 60-year-old construction company trucking operations supervisor was crushed while assisting a truck driver coupling a belly dump trailer to his truck when the trailer shifted.

The victim was an experienced truck driver and a trucking supervisor who had been with his employer, a heavy civil construction company, for 27 years.

On a rainy day shortly before 7 a.m., he was assisting a company truck driver who was unable to raise the landing legs of his belly dump trailer, also known as a bottom dump trailer. The driver had driven trucks for 34 years, but this was his first day pulling a belly dump trailer and he was unfamiliar with its operational features.

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The landing legs supported the weight of the trailer on the pavement and needed to be raised for the truck to be able to couple with the trailer properly. The driver unsuccessfully attempted to pull the pin locking the legs in the down position. He had backed his truck toward the trailer and heard a sound that he believed indicated that the truck's 5th wheel's jaws had closed and locked onto the belly dump trailer's kingpin, but he did not visually confirm the coupling had occurred.

The victim determined that the truck's back was not elevated high enough to relieve the weight of the trailer so that the safety pins could be removed and the landing legs raised. He placed boards behind the truck's rear tires with the intention of having the truck back onto the boards to raise it.

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The victim was standing towards the rear of the truck in a narrow space between two trailers where the driver could not clearly see him. He told the driver to unlock the 5th wheel slide, which he did from the cab. He then told him to move the truck forward to allow the truck some movement before backing onto the boards.

As the truck moved forward, the kingpin, which was not properly secured, came loose from the 5th wheel jaws and slid across the 5th wheel plate, causing the trailer to shift sideways, crushing the victim between the fenders of the two belly dump trailers.

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Photo 1. The incident scene with the two belly dump trailers and trucks. The truck that the victim was assisting the driver with coupling the trailer to is shown in the foreground.

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Photo 2. The incident scene showing both trailers from the rear.

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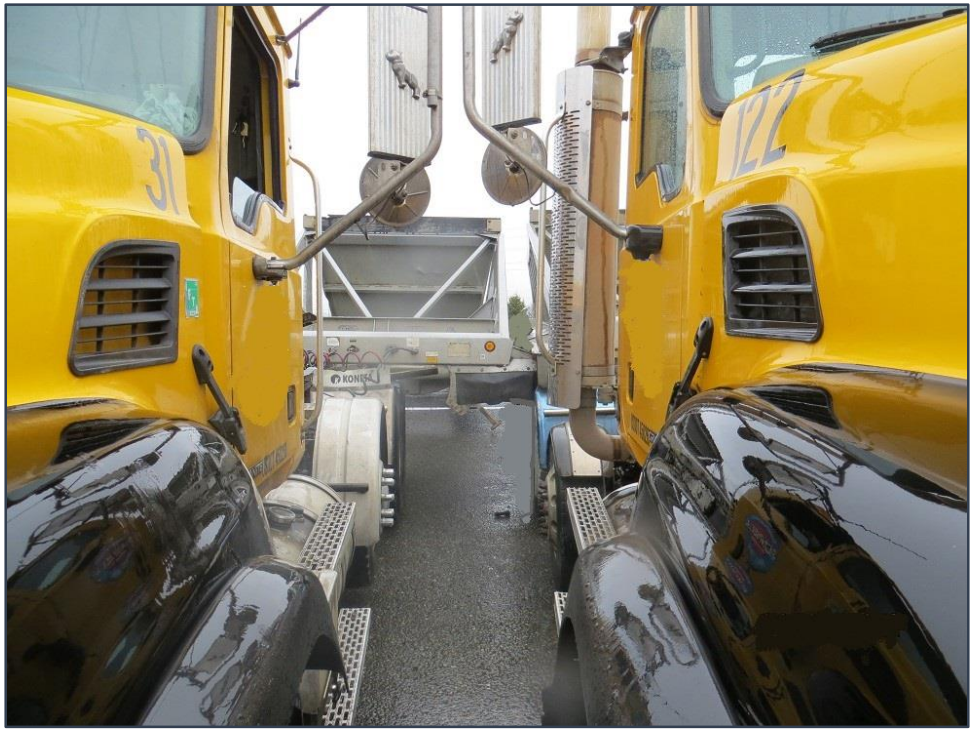

Photo 3. The incident scene showing the trailer shifted to the side.

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Photo 4. The incident scene showing the belly dump trailer's king pin and the truck's 5th wheel.

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Photo 5. The incident scene showing the driver's trailer belly dump doors in the open position with the landing gear legs in the "down" position. The belly dump doors were opened after the incident.

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Photo 6. The incident scene showing the boards under the truck's rear tires.

Recommendations

- Drivers should visually confirm that the 5th wheel closes and locks on to the trailer's king pin.
- Develop and implement written safety procedures for connecting belly dump trailers that reflect the operator's manual and established best practices.
- Ensure that drivers are familiar with and know how to use the specific operational features of the trucks and trailers to which they are assigned; if they are not, then train them and observe that they are able to use them.
- Never work in tight spaces or pinch points between vehicles in motion and trailers.
- When performing duties outside of trucks, always wear an ANSI class 2 or 3 high-visibility safety vest or other safety apparel.

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This bulletin was developed to alert employers and employees of a tragic loss of life of a worker in Washington State and is based on preliminary data ONLY and does not represent final determinations regarding the nature of the incident or conclusions regarding the cause of the fatality.

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