

Tractor-Trailer Uncoupling Results in Accident

SAFETY ALERT

ISSUE #: 09-2014

Enform

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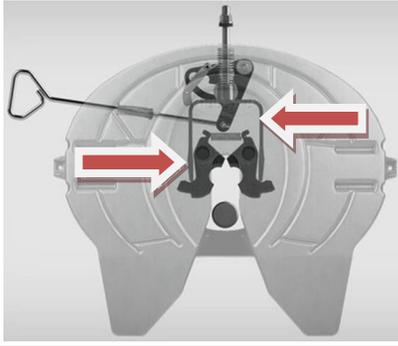
For more information on this event, please contact: safety@enform.ca

Description of Incident:

A tractor trailer was making a left hand turn onto an access road. The trailer became uncoupled resulting in an uncontrolled decent down the hill and a collision with the security shack located at the bottom of the hill.

	<p>Fifth wheel pin/washer out of locking position</p>
	<p>Pin/washer is not sitting flush against fifth wheel</p> <p>To ensure a secure lock, the pin/washer must be flush with the 5th wheel.</p>
	<p>Snow and ice not cleaned properly before trailer coupling</p>

By industry, for industry



Yolk and jaw did not function properly due to snow and ice packing into the coupling mechanism

What Caused It:

- Failure to check/monitor/observe: Driver conducted tug test & brake checks, however this was not adequate. The employee failed to verify that the pin/washer was flush against the fifth wheel, ensuring a secure lock.
- Failure to identify hazard/risk: Driver failed to identify that cold conditions (-35°C) could affect the functioning of the fifth wheel. Frozen grease and snow build up under the fifth wheel contributed to decreased function of the fifth wheel locking mechanism.
- Lack of knowledge/situational awareness: Units were brought up on a winter road, causing significant snow and ice buildup around the fifth wheel plate which made the grease stiffer than normal. The driver was not aware that partially locked jaws (i.e. yolk not fully engaged) could still result in a successful tug test.

Corrective/Preventive Actions:

Investigation provided the following learnings/recommendations:

- Physical checks alone are not adequate to determine a solid coupling, particularly with winter conditions and a fully loaded trailer. Before initiating a trip, as part of the pre-trip inspection, confirm that:
 - the pin/washer is flush against the fifth wheel ensuring a secure lock,
 - there is no gap between the fifth wheel & trailer,
 - locks are completely closed around kingpin, and
 - a pull test is performed.
- Fifth wheel and coupling mechanisms must be fully cleaned and cleared of any snow, ice, or debris before trailer engagement.