

Derailment of cars of a freight train Nr. 2134 on 20 June 2014 on railway infrastructure used by “Statoil Fuel & Retail Latvia” Ltd. and “Neste Latvija” Ltd and attached to the Ziemeļblazma park of Mangalu station

Summary

Railway accident occurred on 2014/20/06, at around 22.35 hrs. on private-used railway infrastructure attached to Mangalu station Ziemeļblazma park. Accident occurred when train Nr. 2134 moved on the switch point Nr.6.

In result of accident seven railway tank-cars derailed and four of them overturned and from two of overturned tank cars leaked diesel. Total 54,575 tons of dangerous goods (diesel) spilled into the environment. Leaking diesel was restricted by emergency services. To reduce aftermath damages, special train of state company “Latvian railway” and firefighting cars of State Fire and Rescue Department was involved.

Infrastructure manager was –“Statoil Fuel & Retail Latvia” Ltd. and “Neste Latvija” Ltd. Railway undertaker was –“LDZ CARGO” Ltd.

Trains traffic on tracks Nr.1, Nr.2, Nr.3 and switches Nr.6, Nr.10 was stopped for 63 days.

When investigators arrived to Incident place, they established, that on right side of the switches Nr.6 was prints of blow from inside and from outside.

Further investigation showed, that making switch Nr.6 blade seating checking procedure, lockers rising was observed. In addition was established, that right blade lockers differed from drawings construction.

Experts of Technical University of Riga was involved in investigation process and the condition of switch Nr.6 and tank-cars condition was examined, as well as technical requirements for railway undertaking’s tank cars_and locomotives data recorders information.

In result, TAIIB made two safety recommendations, which refer to:

- incoming trains receiving technology;
- switch checking technology.

Direct and immediate causes of the accident was:

Switches Nr.6 right blade movement to inside of track occurred because of right blade locker raising when freight train was moving along the switch.

Underlying causes was:

Standard right blade locker was not installed on the switch Nr.6 and on switch checking time was not recognized, that locker construction did not guarantee blade safe fixation and had differences from drawing.

Root causes was:

In infrastructure manager's requirements was not included switches' lockers' additional fixation

Recommendations

Recommendation 2015-1

Infrastructure manager should make changes in own requirements and should include switches' lockers' fixation norm with padlocks or another device, which guarantee lockers' fixation according to switches, that is used for route of incoming trains.

Recommendation 2015-2

State company "Latvian railways" should update railway tracks maintenance documentation, where specify checking and defect detection technology for switches drive mechanism and switches details