## SUMMARY

## DERAILMENT OF FIVE TANK WAGONS DURING SHUNTING WORK IN KILPILAHTI ON 19 FEBRUARY 2010

On Friday, 19 February 2010, five tank wagons pushed by a shunting unit bumped against a railbarrier stop on track 204 at the Neste Oil Oyj unloading terminal in Kilpilahti, Finland. The first barrier wagon fell down the embankment, hitting a gas pipeline at the bottom. The second protection wagon came to a stop at the edge of the embankment, and the three Russian wagons behind it, containing industrial gasoline, were derailed. Neither the gas pipeline nor the wagons suffered any leaks. The wagons containing industrial gasoline had to be emptied before clearance work could begin.

The immediate cause of the accident was the shunting foreman's failure to escort the wagons all the way. He was under the impression that there was enough room for the wagons on the track. The shunting foreman's activities were influenced by the following factors:

- While trying to disengage the brakes, the conditions for the shunting foreman were hot.
  They were then cold during the long (3 km) pushing movement
- It was the foreman's third night shift in a row and he was very tired
- It was the foreman's first shift as an independent shunting foreman at Kilpilahti
- The shunting foreman had not received sufficient training to act as a shunting foreman at the unloading terminal.

To avoid similar accidents in the future, the Accident Investigation Board recommends that long and heavy rows of wagons should be pulled into the unloading terminal in Kilpilahti. It is further recommended that work orientation be carried out such that the person receiving orientation training accompanies the shunting unit as an additional crew member. This would enable the person receiving the orientation training to familiarise him or herself with the duties of a shunting foreman. An orientation plan and an orientation training card should also be provided.