

October 7, 1913.

**In re Investigation of Accident on the Great Northern Railway,
near Allouez, Wis., on July 31, 1913.**

On July 31, 1913, there was a collision between a switching train and some ore cars which were being unloaded on the docks of the Great Northern Railway at Allouez, Wis., resulting in the death of 2 employees and the injury of 6 employees.

After investigation of this accident, the Chief Inspector of Safety Appliances submits the following report:

At the place where the accident occurred the tracks of the Great Northern Railway are laid on trestle work extending out into Lake Superior; the tracks are about 75 feet above the water line. Approaching the trestle from the south there are two lead tracks known as the east and west leads, one for movements to the dock and one for movements away from the dock. Branching off from these leads in fan shape are several docks, and there are a number of tracks on each dock, an interlocking plant operated from a tower on the trestle governing the movements of trains to the several docks. After passing this tower, however, there are several crossovers which are not connected with the interlocking plant but are operated manually when movements are made from one track to another on the outer end of the trestle.

The dock on which this accident occurred was dock No. 4, and was the one furthest east of this group. On this dock there are several parallel tracks numbered beginning at the west side 1, 2, 4, 5 and 6, respectively. At night the work of placing and unloading cars on these docks is directed by an assistant superintendent, a general foreman, a dock foreman for each dock, a dump foreman, and a switch foreman in charge of a switching crew. The switching engine pushes drags of loaded cars on the dock and places them over pockets into which the ore is unloaded on the different tracks as directed by the general foreman and the dock foreman. When cars are to be placed on a track on which cars are standing this is accomplished by pushing them in slowly and coupling on to the standing cars carefully so as not to move the cars already placed.

On the night of this accident engine No. 1135, with switch foreman Trade in charge, pushed 12 loaded cars up on the trestle and placed 31 of them on track No. 5. The engine and 11 cars remaining were then backed out on to the east lead track and crossed over to the west lead track, stopping in on track No. 2. At this point there is a curve toward the west in the lead track so that it is impossible for the engine to see where he was pushing the 11 cars. There were 34 loaded cars standing on track No. 2 in three groups, the first string containing 14 cars which were not properly located for unloading; there was a space of about one car length and then another section of 6 cars, at which men were at work

unloading ore; there was another space of about 20 feet and then 14 cars. The cars being pushed by engine 1135 struck the cars standing on track No. 2 hard enough to close up the spaces between the different sections and to drive the first section of 14 cars forward a distance of about 48 feet. Some of the men who were at work were run over and others were knocked into the ore pockets.

This accident occurred at 9: 03 p.m., and at the time the weather was clear.

Switch Foreman Tredo stated that his instructions from the dock foreman were to leave part of his cars on track No. 3 and then pick up 14 cars on track No. 2 and go out on the east main line and wait until the empty cars had been removed from track No. 3. While he was carrying out these orders the assistant general foreman asked him what his instructions were, and then directed him to proceed. As his engine, pushing the 11 cars approached the 14 cars standing on track No. 2, he signaled the engineman to stop, and when his signals were not observed he attempted to stop the cars by opening the angle cock so as to set the air, but was unable to do so. When his train struck the standing cars it did not couple with them. He said as the cars approached switchman Cronmiller was hanging on the side of the first car. When picking up cars it was customary for the brakeman to ride on top except when there were just a few cars in the section, and in this instance the brakeman was on the outside of the car on the engineman's side of the track. He stated further that the air was not applied on the cars pushed by engine No. 1135 until after the cars standing on the siding were struck. He did not know that men were working on cars on this track, and states further that it was not customary to set the hand brakes on cars left on the tracks, as the tracks are practically level. It was the custom for a member of the switching crew to go ahead and warn men working on a track when a switching train entered that track, but in this case it was not done, as he did not know that men were working there.

Brakeman Clark stated that the only signal he saw after starting in on track No. 2 was the proceed signal. He did not see any stop signal of any kind. He said that he was on the side of a car looking for a signal from the field man because the curve hid the head man, and that had he been on top of the cars there could have been no difficulty in seeing signals. Head Brakeman Cronmiller stated that he gave the signal to go ahead when the train entered track No. 2, and started to climb up to the top of the cars. As the train approached the standing cars he gave stop signals, and when these were not observed he tried to open the angle cock so as to apply the air brakes, but was unable to do so. Engineer Coleman, who was in charge of engine 1135 stated that he received no signal whatever after receiving the proceed signal directing him to enter track No. 2. He stated that at the time of the collision the engine was running about 5 or 6 miles an hour and that he had no intimation that anything

was wrong before the collision occurred.

Dump Foreman Veermen stated that it was his duty to see that the men dumped the cars wherever they were placed in position for unloading. He stated that on the night of the accident he was near the six cars on which these men were working but was looking in another direction, and the first notice he had of the accident was when he heard the injured men calling for help. In this case he did not see in what position the men were working, although he had frequently warned them not to get on the rails.

Dock Foreman Backen, who was in charge of dock No. 4 on the night of this accident, stated that at the time of the accident he was talking with Foreman Fielder. He thought when the cars passed him they were going at an excessive rate of speed, but he had no means of stopping them. He stated that the ordinary way of protecting men under such circumstances was to warn them to keep away from cars while a coupling was made, and this was done by calling to them to watch out. In this case, however, he did not warn the men; he considered it unnecessary to warn them, as a coupling could be made without moving the cars a distance of more than 4 or 5 feet. He had frequently warned men not to go under the cars or to straddle the rails while at work unloading, but he knew that this was done.

General Foreman Fielder stated that he had general supervision over the outside work on the docks at night. He thought from the way the men were injured that some of them were straddling the rails when the cars were struck. There were about 12 men at work on these cars, two to each car. When engine 1135 passed him he thought it was going at the rate of about 10 miles per hour but that it would be stopped before striking the standing cars. Just before the collision occurred, however, he saw the writer, Foreman, giving violent stop signals; at that time the writer was on the side of the car repeated the stop signal, but apparently they were not observed. He also said that in cases of this kind it was customary to warn men who were working on cars, but he did not know whether or not it had been done in this case.

This accident was caused by the failure of Yardman Cronemiller and Clark to obey the rule requiring them to ride on top of the cars they were handling so as to be able to transfer signals to the engine-man. A contributing cause was the error in judgement of Engineman Coleman in moving his engine at such speed while switching on this dock.

The rules of the railroad company require trainmen to ride on top of the cars while on the dock. Had the men been on top of the out of 11 cars they were on then, as required by the rules, signals could have easily been transferred to the engineman and the speed of the cars so controlled that the accident could not have occurred.

During the heavy ore season as many as 1,000 cars of ore per day are handled on this dock and about 300 men are employed. There

is no method provided for notifying the dock laborers of the approach of a train except by word of mouth from the foreman, and in this case the men unloading the ore received no warning and had no notice of the impending danger, so that they had no chance to get out from under or off from the tops of cars.

In view of this volume of business it is believed that the present practice of warning and protecting men are entirely inadequate, and some adequate method or device for this purpose should be adopted.

Rule No. 55 of the Great Northern Railway reads as follows:

A blue flag by day and a blue light by night, displayed at one or both ends of an engine, car or train, indicates that working are under or about it. When this protected it must not be coupled to or moved. Workmen display the blue signals and the same workmen are alone authorized to remove them. Other cars must not be placed on the same track so as to intercept the view of the blue signals without first notifying the workmen.

There appears to be no good reason why this rule should not be strictly observed as a means of protecting dock employees who are working under or about the ore cars while they are being unloaded on the dock. Had this rule been in effect, and had its requirements been observed, this accident would not have occurred.

The rules of the company requiring trainmen to ride on top of cars should also be rigidly enforced.

All the employees involved in this accident were experienced men, and none of them was on duty contrary to the hours of service law.