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Railroad Investigation Report: RIR-22/02

Decatur & Eastern Illinois Railroad Conductor Fatality

Tuscola, IL

November 11, 2020

1. Factual Information

1.1 Accident Summary

On November 11, 2020, about 9:43 a.m. local time, a Decatur & Eastern Illinois Railroad (DREI) conductor of train DREI 200-11 was killed while picking up railcars in the industrial facility of Cabot Corporation (Cabot) in Tuscola, Illinois.¹ The Cabot industrial facility rail entrance was equipped with two gates next to the track that are required to be open for entry. As train DREI 200-11 approached the entrance, the conductor, who was riding the lead railcar in the direction of movement, encountered a gate that was fouling the track.² The conductor positioned himself on the end ladder of the railcar and attempted to open the gate to clear the track without stopping and dismounting. Surveillance video showed the conductor grabbed the end of the gate with his hand and was pulled off the ladder onto the track, where he was struck by the train.³ (See figure 1.) The weather at the time was dry, daylight, 34°F and partly cloudy.

¹ (a) All times in this report are local time unless otherwise indicated. (b) Visit [ntsb.gov](https://www.ntsb.gov) to find additional information in the [public docket](#) for this NTSB investigation (case number RRD21FR004). Use the [CAROL Query](#) to search safety recommendations and investigations. (c) DREI is an American regional railroad that is a subsidiary of WATCO and operates in eastern Illinois and western Indiana.

² *Fouling* the track is the placement of an object or an individual in such a position that the object or individual could be struck by a passing train.

³ No parties were established; however, the DREI and the Federal Railroad Administration participated with the NTSB in the investigation.

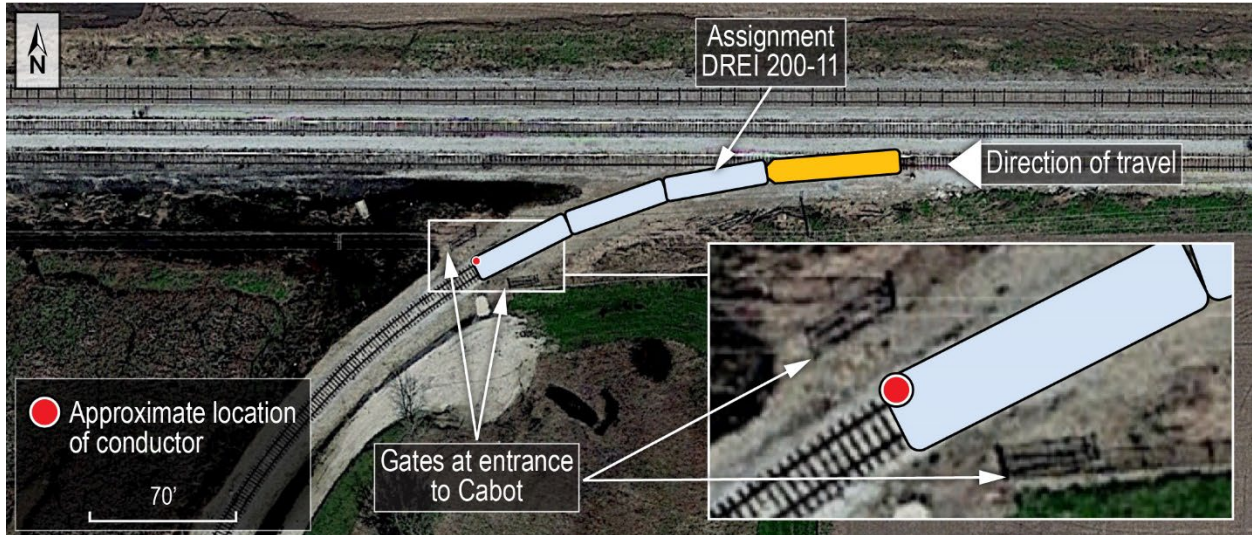


Figure 1. Location of conductor and train DREI 200-11.

Train DREI 200-11's crew consisted of an engineer, a conductor and a conductor trainee. The crew started work in the Tuscola yard about 6:25 a.m., switching, pulling and spotting railcars for several local customers.⁴ About 8:35 a.m., the crew picked up seven railcars to deliver to the Union Pacific Railroad interchange track and departed the yard.⁵ The crew arrived at the interchange to deliver the railcars about 9:10 a.m. The crew then departed the interchange about 9:25 a.m. to pick up three railcars and return to the Cabot industrial facility.

The DREI trainmaster called the crew's company cell phone twice between 9:25 a.m. and 9:35 a.m. to instruct them to assist another crew after their work at Cabot was complete. The conductor trainee answered both phone calls and briefed the rest of the crew on the changes in work assignment. During interviews, the engineer told National Transportation Safety Board investigators that the crew expected that their return to Cabot at 9:25 a.m. would be the last assignment of the day. The engineer also told investigators that the conductor said assisting the other crew would add 4 or 5 hours of work. The engineer and conductor trainee stated the conductor then became visibly angry and increased his pace of work when told of the change in work assignment. During the interviews with investigators, witnesses shared that the conductor had a history of becoming angry when plans changed.

With the new assignment, the crew picked up three railcars and began to shove those railcars towards Cabot with the conductor trainee controlling the movement (via

⁴ (a) A *switch* is a track structure with movable rails to divert rolling stock from one track to another. (b) *Spotting* is the act of placing a railcar in a specific location on a track.

⁵ *Interchange* is a track or yard where two or more railroads meet and exchange rolling stock.

radio communication with the engineer) from the south side of the lead railcar and the conductor riding the north side of the lead railcar.⁶ The crew stopped at the Cabot track switch that controlled train movement into the Cabot industrial facility, and the conductor trainee dismounted the railcar to line the switch into the facility. The conductor remained on the north side ladder of the lead railcar and assumed control over the train movement, giving instructions to the engineer to shove into Cabot. As the crew began to shove the railcars into the Cabot industrial facility, the conductor trainee mounted the south side of the lead railcar. During interviews, the engineer and conductor trainee told investigators that there was not a job briefing when the conductor took control over the movement.

Investigators were able to obtain and review surveillance video of the Cabot facility and observed the actions of the conductor. About 9:42 a.m., as the crew was shoving into the Cabot industrial facility, the conductor positioned himself on the end ladder of the lead railcar in the direction of movement and attempted to open the entrance gate fouling the track. (See figure 2.) As the conductor's hand made contact with the gate, he was pulled from the railcar onto the track where he was struck by the moving train.



Figure 2. Gate fouling the track at the Cabot industrial facility.

⁶ A *shoving movement* is the process of pushing railcars or a train from the rear.

The conductor trainee radioed the engineer to stop the movement and dismounted the equipment. The engineer walked back and phoned the DREI general manager upon finding the unresponsive conductor. The engineer then called 911, and the Douglas County Sheriff's Department; Tuscola police, fire, emergency medical technician; and Douglas County coroner were notified and arrived on scene about 10:00 a.m.

1.2 Before the Accident

The train crew went on duty about 6:00 a.m. on Wednesday, November 11, 2020, at the Tuscola Yard. At the start of their shift, the crew printed the switching orders for their assignment and conducted a job briefing with the DREI trainmaster to review their movements for the day. The job briefing was completed about 6:20 a.m. This local crew assignment was the regular assignment for the engineer and conductor. All three employees had received more than the required statutory rest period prior to reporting for duty.

This was the conductor trainee's second week of training on assignment DREI 200-11. The crew agreed that the conductor trainee would perform the conductor duties for the day under the conductor's direction.

1.3 Personnel Information

The conductor and engineer were both hired by DREI on September 4, 2018. DREI issued the conductor's certification on September 7, 2018, and the engineer's certification on September 9, 2018. A review of the conductor and engineer training records indicated that they both had completed their last rules training on September 24, 2020, and both employees had passed with a score of 100 percent. Before working for DREI, both employees had worked for CSX and had worked together for about 2 1/2 years.

The conductor trainee was hired by DREI on September 9, 2020, and received initial classroom training prior to starting field training. The conductor trainee was assigned to work with assignment DREI 200-11 on November 2, 2020, and was scheduled to move to another assignment the following week.

1.4 Operating Rules

Train operating rules at DREI are outlined in the General Code of Operating Rules (GCOR) and WATCO Transportation Safety Rules.⁷ Safety rules associated with train movement into the Cabot facility that were in effect at the time of the conductor's fatality are discussed below.

GCOR Operating Rule 6.5 Shoving Movements

Equipment must not be shoved until the engineer and the employee protecting the movement have completed a job briefing concerning how protection will be provided. Employee must be in position, provide visual protection of the equipment being shoved and must not engage in unrelated tasks while providing protection.

Equipment must not be shoved until it is visually determined that:

- Portion of track to be used is clear of equipment or conflicting movements.
- The track will remain clear to the location where movement will be stopped.
- Switches and derails are properly lined.

GCOR Operating Rule 7.10 Movement Through Gates or Doorways

Before moving engines, railcars, or other equipment through gates, doorways, or similar openings, stop to ensure that the gates, doorways, or openings are completely open and secure. When overhead or side clearances are close, make sure movement is safe. Do not ride on side of a railcar, engine, or other equipment when moving through gates, doorways, or similar openings where close clearance exists.

WATCO Safety Rule T-17 Riding In or On Moving Equipment

Determining Whether to Ride:

- If you are entering or work in an area with a limited side clearance and cannot clearly observe the track condition because of debris, snow, ice, water, grain, or mud, do not ride on the side of the railcar or engine exterior. Do not position yourself between or adjacent to the structure and a moving railcar or engine. When determining whether railcars or equipment should be ridden, alternatives should be considered to complete the task without necessitating riding equipment.

⁷ (a) DREI, *General Code of Operating Rules, Eighth Edition*, April 1, 2020. (b) WATCO Transportation Safety Rules requested by National Transportation Safety Board on November 13, 2020.

1.5 Toxicological Testing

In accordance with Title 49 *Code of Federal Regulations* Part 219.201, the Douglas County coroner obtained specimens from the conductor to test for the presence of alcohol and other drugs.⁸ The results were negative for all tested substances.

1.6 Postaccident Actions

Within a week after the conductor's fatality, DREI management conducted safety briefings for DREI employees emphasizing GCOR rules on shoving movements and movement through gates or doors, and safety rules on riding on moving equipment. Additionally, DREI management increased efficiency testing for employees. Efficiency testing evaluates a worker's skills and overall ability to perform a task safely and correctly, and reinforces compliance with rules.

On November 19, 2020, the Switching Operations Fatality Analysis (SOFA) Working Group issued an industry-wide SOFA Alert discussing the prevalence of close clearances in the railroad industry. The alert reminded all employees to remain vigilant during switching operations by avoiding close- or no-clearance hazards and by holding job briefings whenever the job or situation changes.

2. Analysis

After starting work, the crew picked up railcars to shove into the Cabot industrial facility. While approaching the entrance gates to the Cabot industrial facility, the conductor assumed control of the train's movement from the trainee conductor without conducting a job safety briefing. Operating rules require that job safety briefings be held before equipment can be shoved.

Surveillance video footage reviewed by investigators showed that the conductor was aware that the gate was fouling the track and repositioned himself on the end ladder of the railcar to open the gate while the train was in motion. Operating rules require crews to stop and dismount to make sure gates are completely open and secure. As a result of his attempt to open the gate while riding a moving railcar, the conductor was pulled from the railcar onto the track and struck by the moving train.

⁸ The Federal Railroad Administration postaccident toxicology testing tests urine specimens for amphetamines, barbiturates, benzodiazepines, cannabinoids, cocaine, MDMA/MDA, methadone, opiates/opioids, phencyclidine, tramadol, ethyl alcohol, brompheniramine, chlorpheniramine, diphenhydramine, doxylamine, and pheniramine.

Following the conductor's death, DREI management conducted safety briefings for DREI employees on the rules associated with train movement. DREI also increased the efficiency testing of employees to reinforce safety rules and to evaluate skills and ability. Further, SOFA issued an alert reminding employees to avoid close or no-clearance hazards and to hold job briefings whenever a job or situation changes.

3. Probable Cause

The National Transportation Safety Board determines that the probable cause of the conductor's fatality was a result of his attempt to open the entrance gate at Cabot industrial facility fouling the track and being pulled from the end ladder of the moving railcar onto the track where he was subsequently struck by the train and killed.

The National Transportation Safety Board (NTSB) is an independent federal agency dedicated to promoting aviation, railroad, highway, marine, and pipeline safety. Established in 1967, the agency is mandated by Congress through the Independent Safety Board Act of 1974, to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, "accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person" (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB's statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)).

For more detailed background information on this report, visit the NTSB investigations website and search for NTSB accident ID RRD21FR004. Recent publications are available in their entirety on the NTSB website. Other information about available publications also may be obtained from the website or by contacting—

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