

**REPORT:** FE-09-97  
**RAILROAD:** Soo Line Railroad (SOO)  
**LOCATION:** St. Paul, Minnesota  
**DATE, TIME:** Feb. 3, 1997, 11:25 a.m., CST

**PROBABLE CAUSE:**

The Track Gang employees did not comply with the provisions of the carrier's on-track safety rules and procedures manual.

**EMPLOYEE:** **Craft.....Maintenance of Way**  
Activity.....Cleaning and salting switches.  
Occupation..... Track Laborer  
Age..... 37 years  
Length of Service.....Six years  
Last Rules Training..... June 14, 1994  
Last Safety Training.....June 24, 1996  
Last Physical Examination.....May 4, 1993

The Track Laborer reported to work with the St. Paul Section on Feb. 3, 1997 at 7 a.m. He began working with the Assistant Foreman, a Truck Driver, and another Trackman, who were cleaning and salting switches. They loaded salt on the back of the boom truck and began working at the east roundhouse turnouts, working to the east toward the yard office. The Truck Driver was acting as a Lookout and was to sound the truck horn when a train approached.

Switch Crew 4705, comprising an Engineer, Conductor, and Brakeman, went to work on Feb. 3, 1997 at 7 a.m. This Crew serviced industries in and around St. Paul, Minnesota. Crew Members began preparing their train by switching on the Swamp tracks. Normally their train was prepared for them and ready on the Swamp tracks. However, on Feb. 3, 1997, and the previous four days, the Train Crew Members had to make up their own train by pulling cars from the Bowl tracks through the 32 Crossover to the Swamp tracks. The 32 Crossover Turnout on Track 41 was lined to the 32 Crossover.

The accident occurred at the 32 Crossover Turnout on Track No. 41 in the St. Paul Yard, St. Paul, Minnesota. Track No. 41 was part of the "Swamp" section of St. Paul Yard, located south of the yard office. Track No. 41 extended east to west and was adjacent to the yard office.

The 32 Crossover Turnout on Track No. 41 was also adjacent to the yard office. The 32 Crossover extended generally southwest to northeast and connected Track No. 41 to the Bowl tracks north of the yard office. Track No. 41 curved to the south with a 4-degree curve about 200 feet west of the 32 Crossover Turnout. Track No. 42 was located south of Track No. 41. The west end of Track No. 42 converged onto Track No. 41 about 450 feet west of the 32 Crossover Turnout. Track No. 41 descended slightly from the west end to the center and then rose slightly to the east end. A series of crossover turnouts known as the “top end” were on the Swamp tracks approximately 400 to 800 feet west of the yard office.

The Bowl tracks were north of the yard office. They extended from the hump westward to the yard office. The Bowl tracks terminated on the west end onto the north and south lead tracks.

The yard office consisted of a brick building with several temporary mobile structures located immediately to the west. A parking lot was south of the yard office across four Swamp tracks. The parking lot surface was about three feet below the tracks.

When the Track Crew began working at the “top end” switches, they had to wait about 30 minutes while Switch Crew 4705 was operating over the switches. Switch Crew 4705 shoved its cut eastward onto the Bowl tracks across the Divide Turnout onto the south Lead. They left a cut of cars on Track No. 41 and on the 32 Crossover. The Track Crew finished cleaning and salting the “top end” switches, and then began working on the switches on the south lead at the west end of the Bowl tracks.

The Track Laborer was working with another Trackman at Switch No. 26, located on the south lead just north of the yard office. The Assistant Foreman was working at the Divide Switch about 100 feet west of Switch No. 26, and the Truck Driver was the Lookout from the truck. The Track Laborer left Switch No. 26 without notifying the Lookout or the other Trackman, walked between the temporary yard office buildings to the 32 Crossover Turnout, and began salting the switch.

Switch Crew 4705 had gone back to the “top end” on the south Lead through the Divide Turnout from the Bowl tracks. The Crew Members had to cut a car out of their train for Track No. 41. They set a light hand brake on AMGX 613200 (an open-top, hopper car), pulling the remainder of the cut out of Track No. 41. AMGX 613200 was sitting by itself on Track No. 41 with its west end approximately 10 feet east of the 32 Crossover Switch points. Switch Crew 4705 pulled the rest of its cut clear of Track No. 42 and kicked one car onto Track No. 42. The car came to rest just in the clear. The Crew then pulled clear of Track No. 42 and let two cars roll slowly onto Track No. 41 toward the standing car. One ground member of the Crew was at the 41/42 switch, and the other was at the southwest corner of the car switched onto Track No. 42.

### **The Accident**

The Track Laborer began salting the 32 Crossover Switch by standing on the north side looking south. He then crossed into the center of the track facing east and continued salting the track. He was carrying a 50-pound bag of salt.

Flatcars Nos. TTJX 81978 and TTJX 82001, which were loaded with steel reinforcing bars, were rolling east onto Track No. 41 when they struck the Track Laborer. The moving cars carried him until they struck AMGX 613200. The cars did not couple. Upon impact, AMGX 613200 was shoved about two car lengths where it came to rest. The two TTJX cars rolled back to the west about half a car length. The Track Laborer was lying at the west end of AMGX 613200 across the south rail.

A non-railroad employee sitting in a transport van viewed the accident from a parking lot located south of the Swamp tracks. He flagged a member of Switch Crew 4705 and ran across the Swamp tracks to reach the Track Laborer. Emergency personnel were summoned along with St. Paul Police. The Track Laborer was transported to St. Paul - Ramsey Medical Center where he underwent surgery. He succumbed to his injuries and was pronounced dead on Feb. 13, 1997.

***Please see the attached diagram of the St. Paul yard, to better visualize the accident scene and the chain of events that led to the fatality.***

### **Post-Accident Investigation**

Preliminary information was compiled following the occurrence, and an investigation was initiated upon notification of the Track Laborer's death. The Soo Line Claims Department supplied copies of interviews conducted by the railroad immediately after the accident had occurred. Additional interviews were conducted with track personnel to supplement the railroad's information. Photographs of the accident scene were provided by Soo Line and the St. Paul Police Department.

Staff at the Ramsey Medical Center in St. Paul performed a drug and alcohol test on the Track Laborer on Feb. 3, 1997. Results of the test were negative.

The Soo Line's ON-TRACK SAFETY RULES AND PROCEDURES MANUAL became effective Aug. 1, 1996. These rules required that all Roadway Workers receive training at least once every year. Lookouts, Flagmen, Lone Workers, and Machine Operators must be qualified on the rules specific to their positions at least once every year. The Track Laborer received training and was qualified on the On-Track Safety Rules on June 24, 1996. His last hearing exam was held Aug. 5, 1996, with no problems noted. He had worked continuously in the St. Paul Yard since March 7, 1994, with only one furlough period. Although the entire Work Gang was responsible for adhering to the provisions of the On-Track Safety Rules and

Procedures Manual, neither the Watchman/Lookout nor the Track Laborer complied with the

designated procedures as outlined in the manual (see Page 4 for Applicable Rules).

Examination of the various positions of the Track Laborer and Switch Crew 4705 were made. The Switch Crew could be seen from Switch No. 26 where the Track Laborer was working prior to walking to the 32 Crossover. When the Track Laborer walked between the temporary buildings, his view of the Switch Crew ground personnel may have been blocked by the standing car on Track No. 42. He then turned and walked to the east toward the 32 Crossover, with his back toward the Switch Crew, and was subsequently struck by the rolling cut of cars.

The following summarizes the railroads's operating rules which were not followed:

**SOO Line's On-Track Safety Rules and Procedures**  
**Applicable Rules**

Rule 21.3 - Lookouts:

When visibility is limited by weather or for any other reason, other forms of on-track safety procedures should be used.

Rule 21.4 - Lone Worker

A Lone Worker may perform routine inspection or minor work when: the Lone Worker is able to visually detect the approach of a train at the maximum authorized timetable speed and be in a place of safety 15 seconds before the arrival of a train.

Rule 21.5 - Individual Train Detection

A Lone Worker using individual train detection must complete a Statement of On-Track Safety as outlined under Rule 21.6 prior to occupying or fouling a track.

Rule 21.6 - Statement of On-Track Safety

A Lone Worker using Individual Train Detection must complete this form prior to fouling a track. The On-Track Safety form must be in the employee's possession when in effect.

Rule 29.5 - Responsibilities of Lookouts

Lookouts are responsible for devoting their full attention to detecting the approach of trains and providing warning to employees.

Rule 29.6 - Responsibilities of Lone Workers

A Lone Worker is responsible for conducting a job briefing with his/her Supervisor or other designated employee. This briefing should include a planned itinerary, and on-track protection procedure to be used.

