

EMERGENCY ORDER  
No. 9

*Pink*  
*Rec-44*

DEPARTMENT OF TRANSPORTATION

Federal Railroad Administration  
[FRA Emergency Order No. 9]

CONSOLIDATED RAIL CORPORATION

EMERGENCY ORDER RESTRICTING  
MOVEMENT OF HAZARDOUS MATERIALS

The Federal Railroad Administration (FRA) of the Department of Transportation has determined that reasons of public safety compel the issuance of this emergency order prohibiting the transportation of hazardous materials on certain Consolidated Rail Corporation (Conrail) track known as the Raritan Branch.

Located between Raritan Junction, New Jersey, at approximately milepost 19.7, and Edison, New Jersey, at approximately milepost 26.5, the Raritan Branch leads into a large industrial complex. Two fifteen-car trains operate daily over this track, serving the various industries along the right of way. In the course of such operations, large amounts of hazardous materials are transported over the line, including hydrochloric acid, the poisonous gases chlorine and anhydrous ammonia, the flammable gases methyl chloride and liquified petroleum gas, and the flammable liquid ethyl benzene. For example, the Linde Division of Union Carbide, located at milepost 20.5 of the Raritan Branch, receives one car of liquified petroleum gas and one car of methyl chloride each month as well as one car of

hydrochloric acid every six weeks. Tennaco, also located at milepost 20.5, gets monthly shipments of seventeen tank cars loaded with chlorine and two tank cars loaded with anhydrous ammonia. Finally, Stauffer Chemical at milepost 26.3 receives four cars of chlorine and one car of ethyl benzene per month.

On May 3, 1978, an FRA inspector, accompanied by Conrail's track inspector, conducted a routine riding and walking inspection of the track. Sixteen areas were walked, and conditions were found to be representative of other areas inspected by riding. The May 3 inspection revealed numerous track defects including extremely poor tie conditions and serious rail defects. The FRA inspector noted 121 locations where tie conditions were far below FRA's minimal standards for Class I track. FRA Track Safety Standards prescribe that the maximum allowable distance between nondefective ties for Class I track is 100 inches. Although the typical violation involved distances of 120 to 140 inches, single violations were noted involving distances of 384, 504, 516, 624, 984, and 1680 inches—from 32 to 140 feet, respectively. A total of 113 violations of this particular standard were found. Appendix A to this emergency order details the precise locations and distances measured by FRA. Investigation by FRA later disclosed that the most recent major tie removal was accomplished in 1941.

In addition to numerous areas of noncompliance with crosstie regulations, there was a serious weakening of the subgrade between milepost 25.3 and milepost 25.4 due to poor drainage. (See Appendix A.) The proper spacing of nondefective crossties, in connection with effective ballast, provides lateral and

vertical support to the rail, which is necessary to prevent trains from derailing. If the lateral support is not present, because ties are defective, the likelihood of wide gage<sup>1/</sup> occurring while the track is under load also increases greatly. During FRA's inspection of the Raritan Branch, three such areas were discovered, including one location of 4 feet 10 1/2 inch gage, which is 2 inches wider than the standard gage and 3/4 inch wider than the maximum permitted by the Track Safety Standards for any movement of trains. In addition, three broken rails were found, which also pose a danger of derailment. Because of these rail, gage, and subgrade defects and the enormous numbers of crosstie violations, the possibilities of derailments on the line are very great.

On May 6, three days after the inspection, FRA served Conrail with a Notice of Track Conditions pursuant to 49 CFR Part 216 informing the carrier that FRA was considering the possibility of issuing an emergency order removing the Raritan Branch from service. After presenting the Notice, the FRA inspector researched the track inspection records for the Raritan Branch and found that no inspection had been made of it since August 17, 1977, a period of over eight months. The Track Safety Standards require inspections weekly.

In a letter dated May 9, Conrail indicated that a nine-man Extra Gang was working on the Branch installing ties by hand and that labor clearance had been secured to move additional tie repair gangs to this Branch to begin work on Thursday, May 11. These employees normally work a four-day week which ends Thursday. Since Conrail refused to pay the extra costs for weekend labor, the

---

<sup>1/</sup> Track gage is defined as the distance between the inside faces of the rail heads, measured at a point 5/8 inch below the top of the rail head. Standard gage is 4 feet 8 1/2 inches. The Track Safety Standards permit gage to widen to 4 feet 9 3/4 inches before a defect is considered to exist. Gage wider than 4 feet 9 3/4 inches usually indicates a lack of sufficient lateral support for the rail, and greatly increases the possibility of a derailment due to car or locomotive wheels dropping between the rails.

gangs were idle May 12 through May 14. On Monday, May 15, even though the equipment was on site and half the ties had been distributed, work was again delayed because of weather conditions. Work finally recommenced on Tuesday, May 16, and continued through Thursday, May 18. According to Conrail, a tie and surfacing unit made up of 55 employees had installed 734 ties in four-tenths of a mile of track by the morning of May 22. This work leaves over six miles of the 6.8-mile line unrepaired.

Thus, most of the Raritan Branch remains in poor condition. During a reinspection on May 17 of track beyond the repair area, the FRA inspector found 18 additional locations where the distance between nondefective ties exceeded 100 inches. Distances ranged between 204 and 612 inches--from 17 to 51 feet, respectively. Substandard gage and poor subgrade conditions were also found. (See Appendix B.)

In the meantime, despite the violation notices and the possibility of an emergency order, Conrail has continued business as usual on the Raritan Branch. There have been no restrictions of any kind on the movement of hazardous materials. For example, the FRA inspector noticed during the reinspection that Stauffer Chemical at milepost 26.3 had just been shipped four tank cars of deadly chlorine gas. The derailment of a car containing hazardous material would pose a threat not only to train crews, but also to the numerous persons who work in factories or attend classes along the line. Stretching between milepost 22 and milepost 24, the Raritan Industrial Park employs 5,000 workers in 200 factories and warehouses. Heller Industrial Park at milepost 24.5 is the site of ten warehouses

2. This order shall remain in effect until such track has been restored to compliance with Federal Railroad Administration standards for at least Class I track (49 CFR Part 213). This order does not authorize the Consolidated Rail Corporation to transport cars which do not contain placarded hazardous materials, over track which is not in compliance with the Track Safety Standards. Any such operation may subject Conrail to the imposition of penalties prescribed by the Federal Railroad Safety Act of 1970 (45 U.S.C. 438).

3. Transportation over such track of any car containing any hazardous material required to be placarded shall be and is prohibited by this order until the authorized designated official of the Consolidated Rail Corporation has certified that required repairs have been made and the track has been inspected by a representative of the Federal Railroad Administration. Subject to these procedures, service over the line may be restored incrementally.

A civil penalty of \$2,500 will be assessed for any violation of this order. (45 U.S.C. 438).

Opportunity for formal review of this Emergency Order will be provided in accordance with section 203 of the Federal Railroad Safety Act of 1970 (45 U.S.C. 432) and section 554 of Title 5 of the United States Code. Petition for such review must be submitted in writing to the Office of Chief Counsel, Federal Railroad Administration, Washington, D.C. 20590 in accordance with 49 CFR 216.25.

Issued in Washington, D.C., on MAY 23 1978

  
JOHN M. SULLIVAN  
Administrator

## APPENDIX A

- Consolidated Rail Corporation -

May 3, 1978, Inspection of Raritan Branch

---

Track inspected between mileposts	49 CFR 213
21.3 to 22.3	24 crosstie defects (.109)-maximum distance between nondefective ties- 1680 inches
22.7 to 23.6	58 crosstie defects (.109)-maximum distance between nondefective ties- 384 inches
23.8 to 24.2	31 crosstie defects (.109)-maximum distance between nondefective ties- 984 inches
25.2 to 25.6	3 rail defects-(.113) 3 gage defects-(.53) 8 crosstie defects (.109)-maximum distance between nondefective ties- 120 inches 2 subgrade defects (.33)

---

APPENDIX B

- Consolidated Rail Corporation -

May 17, 1978, Inspection of Raritan Branch

---

Track inspected between mileposts	49 CFR 213
21.1 to 22.1	4 crosstie defects (.109)-maximum distance between nondefective ties- 360 inches  1 gage defect (.53)
22.2 to 23.1	4 crosstie defects (.109)-maximum 492 inches
23.8 to 24.4	5 crosstie defects (.109)-maximum distance between nondefective ties- 612 inches
25.2 to 26.1	5 crosstie defects (.109)-maximum distance between nondefective ties- 348 inches  1 subgrade defect (.33)