EMERGENCY ORDERS
No. 21
Northwestern Pacific Railroad

[4910-06]

DEPARTMENT OF TRANSPORTATION Federal Railroad Administration

[FRA Emergency Order No. 21, Notice No. 1]

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Northwestern Pacific Railroad;

Emergency Order to Prevent Operation of Trains on Northwestern Pacific Railroad's trackage from Arcata, California, to Mile Post 63.4 between Schellville and Napa Junction, California

The Federal Railroad Administration (FRA) of the United States Department of Transportation (DOT) has determined that public safety compels issuance of this Emergency Order requiring the Northwestern Pacific Railroad (NWP) of Eureka, California, to discontinue operation by anyone of trains on the NWP rail line from mile post 295.5 at Arcata, California to mile post 63.4 between Schellville, California and Napa Junction, California until the NWP inspects and properly repairs its track and grade crossing signals, and it trains its employees how to properly maintain the safety of its track and grade crossing signals.

Authority

Authority to enforce Federal railroad safety laws has been delegated by the Secretary of Transportation to the Federal Railroad Administrator. 49 CFR § 1.49. Railroads are subject to

FRA's safety jurisdiction under the Federal railroad safety laws, 49 U.S.C. §§ 20102, 20103. FRA is authorized to issue emergency orders where an unsafe condition or practice "causes an emergency situation involving a hazard of death or personal injury." 49 U.S.C. § 20104. These orders may impose such "restrictions and prohibitions . . . that may be necessary to abate the situation." (*Ibid.*)

Background

The NWP operates on a 286-mile line between mile post 295.5 near Arcata, California and mile post 63.4 between Schellville, California and Napa Junction, California. The North Coast Railroad Authority, a California public agency formed pursuant to California Government Code Section 93000 *et seq.*, owns and operates that portion of the NWP between Healdsburg, mile post 68, and Arcata. Another portion over which the NWP operates and for which it is responsible for maintenance, Healdsburg to mile post 63.4 near Napa Junction, is owned by the Northwestern Pacific Railroad Authority, a joint powers agency representing the Golden Gate Bridge, Highway and Transportation District, the County of Marin, and the North Coast Railroad Authority. Operations are currently being conducted under contract by Rail-Ways, Inc.

The majority of NWP's operations involve the transportation of freight; however, in the past, the railroad also has conducted passenger operations between Willits and Healdsburg. The NWP connects to the California Northern Railroad, another freight railroad, at Schellville. It also connects to the California Western Railroad, which operates both freight and passenger trains, at Willits. The California Western operates over about one mile of NWP trackage in order to interchange freight operations with the NWP at Willits and to reach its passenger terminal in Willits.

The NWP traditionally hauls mostly timber and wood products, but it also hauls some hazardous materials, especially over the portion of the line south of Willits. Maximum authorized train speed on the line is 30 m.p.h., although train speed over that portion of the line affected by Emergency Order No. 14 is restricted to 10 m.p.h.

The NWP is subject to the jurisdiction of FRA. Portions of its operations currently are subject to Emergency Order No. 14 issued on June 7, 1990, when the line of railroad was known as the Eureka Southern Railroad. Emergency Order No. 14 remains in effect from mile post 145.5 near Willits to Ft. Seward, mile post 216.6 It prohibits transportation of passengers until the track complies with class 1 track standards and prohibits transportation of hazardous materials until the track complies with class 1 track standards or is designated by the railroad as excepted track. Concurrent with this emergency order, FRA is amending Emergency Order No. 14 to prohibit the transportation of hazardous materials until the track complies with class 1 track standards.

Northern Portion, Willits to Arcata

In 1990, FRA became concerned about the track conditions on the NWP, then known as the Eureka Southern Railroad, between Willits and Eureka. At the time, the railroad hauled over the line passengers and liquified petroleum gas, a regulated hazardous material. FRA found that the track between Willits and Eureka did not meet class 1 track standards and posed an immediate threat of death or injury to persons. FRA issued Emergency Order No. 14 under which the Eureka Southern Railroad was prohibited from hauling passengers until the track met class 1 track standards and from hauling hazardous materials until the track either met class 1 standards or was designated by the railroad as excepted. The excepted track provision, found at

49 CFR § 213.4, limits the hauling of hazardous materials to five cars per train and places other restrictions on the designated track.

On October 1, 1990, because of improved conditions, FRA lifted Emergency Order No. 14 between mile posts 142.5 and 145.5, near Willits, and between mile posts 216.6 and 284.1, Fort Seward to Eureka. Since 1990, the NWP has complied with the terms of the emergency order for the remainder of the affected area by discontinuing hauling passengers and hazardous materials between Fort Seward and Willits.

The northern portion of the NWP has been subject to flooding for the past several years. Due to flooding which occurred within the last year, the NWP has discontinued operations on the northern portion from Nashmead (mile post 175.5) to Arcata. The railroad continues to operate on the northern portion between Willits and Nashmead. The NWP has applied to the Federal Emergency Management Agency (FEMA) for funding for repair of flood damage that occurred in 1995, 1997 and 1998. As a result of the application, FEMA, with FRA's assistance, recently conducted a survey of track conditions between Willits and Eureka. FEMA has agreed to provide \$1 million to NWP for repair of flood damage.

Southern Portion, Willits to Mile Post 63.4

In 1997, FRA, in partnership with the California Public Utilities Commission (CPUC), reviewed NWP's compliance with Federal safety statutes and regulations on the portion of the line south of Willits. The review revealed widespread noncompliance similar to noncompliance that FRA and the CPUC previously had discovered on this line in the past several years. In conducting numerous inspections of the NWP in the previous years, FRA and CPUC inspectors identified hundreds of defective track conditions, many of which became the basis for

recommendations for civil penalty assessments against the railroad. The railroad frequently failed to make corrections even after defective conditions were identified by FRA or the CPUC.

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The review conducted by FRA and CPUC also revealed that the NWP was not performing required periodic tests of its locomotive air brake equipment, and that all of the railroad's locomotives exhibited defective conditions which posed a hazard to the personal safety of NWP personnel operating the equipment. FRA and the CPUC concluded that the NWP was in need of a system-wide program to train its employees to recognize safety violations and to perform necessary repairs promptly and correctly.

On June 11, 1997, representatives of FRA and the CPUC met with NWP's executive director, Dan Hauser, and its general manager, Jack Tremain, as well as two members of the railroad's Board of Directors. The group agreed to and signed a Safety Compliance Agreement under which the NWP would perform specified repairs and employee training by determined deadlines. However, one year after the agreement was executed, the NWP had performed only three of the 11 action items identified by the Compliance Agreement. On June 28, 1998, the Federal Railroad Administrator issued a Compliance Order based mostly upon the terms of the prior Agreement. In summary, the Compliance Order, which remains in effect, directs the NWP to:

- Cease passenger operations between Willits and Schellville until the track is repaired to class 1 track standards;
- 2. Limit hauling of hazardous materials between Willits and Schellville to two cars per train, and prohibit hauling of any hazardous materials over trackage that is within 100 feet of a bridge or public road and which does not meet class 1 track

standards;

- Develop and furnish to FRA and the CPUC a track maintenance plan and program;
- 4. Establish a program of employee training on the Federal Track Standards;
- 5. Certify abilities of each individual conducting track inspections;
- 6. Establish a program of employee training regarding inspections of locomotive power and equipment;
- 7. Certify abilities of each individual conducting inspections of locomotive power and equipment;
- 8. Certify inspection reports of locomotive power and equipment inspections;
- Certify that proper repairs have been made of all defects found as a result of locomotive power and equipment inspections;
- 10. Perform testing on passenger and freight cars relative to single car tests and repair tests.

FRA reviewed NWP's compliance with the Compliance Order in September and October, 1998, and found that the railroad is not following many of the Order's directives. Track inspections conducted by FRA and the CPUC discovered that the trackage within 100 feet of bridges and public road between Willits and mile post 63.4, over which hazardous material are hauled, does not meet class 1 track standards. The railroad has failed to develop a track maintenance program, and it dropped its training of track inspection personnel after only two classes of a 24-class training program. Furthermore, the NWP has an inadequate number of employees who are qualified to inspect track.

Recent Safety Surveys

In light of the NWP's failure to comply with the Compliance Order after several months, FRA and the CPUC surveyed operations on the southern portion of the railroad in September and October, 1998, to assess its overall safety. In October and November, 1998, FRA inspectors accompanied inspectors from the FEMA on surveys of track damage caused by past flooding on the northern portion. In both portions, the inspectors found numerous defects that pose an immediate hazard of death or injury to persons.

Grade Crossing Signals

FRA's regulations addressing grade crossing signal system safety, found at 49 CFR Part 234, require railroads to repair, "without undue delay," any essential component of a grade crossing signal that fails to perform its intended function, and until the repair is made, the railroad is to provide alternative measures of safeguarding the crossing. See 49 CFR § 234.207. These temporary measures, delineated in 49 CFR § 234.105, provide for manual flagging by railroad personnel whenever a train must occupy a grade crossing where the signals are not properly functioning. Properly functioning grade crossing signals, and temporary flagging in the event of a signal failure, are absolutely essential to the safety of the grade crossing. Trains traveling through a grade crossing, even at very slow speeds, are not able to stop suddenly to avoid a car in the crossing. Therefore, motorists attempting to cross a grade crossing must be adequately warned about a train's approach so that a potentially deadly accident can be averted.

In recent inspections of grade crossings on the NWP and from information provided by the railroad itself, FRA and CPUC inspectors found that 32 of the railroad's 127 grade crossing signals are not operational. While the railroad has instructed train crews to stop and flag each

crossing where the signal is out of service, FRA and CPUC inspectors found one instance when a train crew did not perform this safety duty. Furthermore, many of the grade crossing signals have been out of service for several months, in violation of the Federal regulations' requirement to repair the signals "without undue delay."

Many of the grade crossings where the signals are out of service are situated in towns along the NWP line. In Petaluma, one grade crossing serves 22,000 vehicles per day, while another serves 13,000 every day. The NWP operates four to six train movements through these crossings each day, Monday through Friday. At other crossings where the grade crossing signals are out of service, the daily vehicle count ranges from 200 to 6,000. Vehicles in these counts include trucks carrying hazardous materials, including flammable substances.

FRA and CPUC inspectors also found that NWP employees generally lack the supervision, knowledge, test equipment, and supplies necessary to adequately maintain the grade crossing signals. The railroad's two signal maintainers have no signal standards or instructions, nor are they knowledgeable about all necessary signal maintenance. They do not have proper test equipment, such as meters, meggers, relay testers, and shunts. Tests required by FRA's grade crossing safety regulations are past due at all 127 grade crossings, including relay, insulation resistance, and warning tests. In addition, the NWP lacks sufficient parts and materials to adequately maintain the warning system. Numerous NWP circuit plans are outdated, illegible, or simply non-existent. They need to be corrected, redrawn, and in some cases, redesigned, yet the railroad lacks procedures to correct or redraw circuit plans.

Track Safety

FRA's track safety regulations, found at 49 CFR Part 213, prescribe minimum safety

requirements for railroad track. There are six classes of track defining maximum speed and minimum maintenance requirements. By designating track as a certain class, a railroad commits to maintaining that track to the standards established by the track safety regulations for that class. Much of the NWP's trackage from Willits to Schellville is designated as class 2 track. However, the numerous track defects found by FRA and the CPUC, as well as the NWP's apparent lack of commitment to properly repair the track, indicate that much of the track does not meet even the standards for class 1, the lowest class of track.

FRA and the CPUC conducted track inspections on the southern portion of the NWP between September 28 and October 15, 1998. A total of six inspections covered the line from mile post 63.4 between Schellville and Napa Junction to Willits at mile post 139.5. Inspectors identified 298 defective conditions in 148 miles of track. The majority of the defects (254) were defective crosstie conditions, including defective joint ties and ties not effectively distributed to support 39 feet of track. In many places, the ties were broken, split, or impaired to the extent that they allowed the ballast to work through. They could not hold spikes and they were allowing the tie plates or the base of the rail to move laterally more than a half inch.

These defects pose particularly serious threats to safety. Effective ballast and crossties provide the lateral and vertical support of the rail to prevent trains from derailing. Without this support, the track gage, the distance between the inside faces of the rail heads, may become too wide or too tight. Gage that is either wider or narrower than allowed by FRA regulation greatly increases the possibility of derailment due to car or locomotive wheels dropping off the rails.

The FRA and CPUC track inspectors also found 12 areas where water carrying facilities associated with the track were inadequate to perform proper drainage. Two of these drainage

facilities are associated with railroad bridges. At one location, a wooden box culvert has collapsed. Under the regulations (49 CFR § 213.33) each drainage facility associated with a track structure must be kept free of obstruction to accommodate expected water flow for the area it serves. If drainage surrounding the track is not adequate, the condition can lead to wash-outs which will disturb the lateral and vertical support of the rail causing wide or tight gage and possible derailments. Adequate drainage is especially important for the NWP during the winter months when rainfall typically is greater.

Finally, the track safety regulations require that vegetation immediately adjacent to the track bed must be controlled so that it does not pose a fire hazard, obstruct visibility of signs and signals, interfere with railroad employees' trackside duties, prevent proper functioning of signals, or prevent employees from inspecting moving equipment. See 49 CFR § 213.37. FRA and CPUC inspectors report that in many areas along the NWP trackage they inspected, the vegetation obstructs any view of the track structure. Some vegetation creates a fire hazard to timber bridges, trestles, and wooden box culverts. Other vegetation obstructs the visibility of signs and signals along the right-of-way and at grade crossings. While vegetation naturally occurs and re-occurs along any railroad track, it cannot be allowed to flourish to the extent that it inhibits the safe operation of the railroad. Vegetation that has been allowed to grow to the point where signals cannot operate properly or cannot be seen, or where it prevents railroad personnel from inspecting the track, or where it becomes conducive to setting fire to bridges and other wooden track structures, poses an imminent threat to the safety to railroad employees and to the traveling public.

Between November 4 and November 13, 1998, FRA and FEMA inspectors surveyed 262

separate locations on the northern portion of the railroad that the NWP identified as storm damaged. The inspectors found numerous locations where proper drainage is not possible because the drainage facilities are plugged or in disrepair or because ditches are plugged, overgrown or inadequate. The area between Willits and Arcata is noted for its constant earth movement, mud flows, sinks and heaves. Most of the repairs that have been made by the NWP to alleviate the flooding problems have been temporary in nature. At some locations, the railroad inserted new culverts to drain water from ponded areas but failed to install the culverts at the correct depth or angle. In numerous locations, the NWP has used plastic and rubber pipe, rather than metal pipe, which is quickly crushed by the weight of work trains. It is not likely that the drainage facilities in place will be adequate to withstand the next rainy season this winter.

Because of inadequate drainage and poor subgrade, the railroad has difficulty maintaining proper surface and alignment of track. The FRA and FEMA inspectors found numerous locations where the track surface, alignment, and crossties were unacceptable for class 1 track standards. In addition, overgrown vegetation at many locations brushes rolling stock and prevents railroad personnel from inspecting the track. In some locations, the vegetation poses a fire hazard to track carrying structures.

Finding and Order

The results of the surveys by FRA, CPUC, and FEMA inspectors of tracks and signals along the NWP line have led FRA to conclude that continued use of this rail line poses an imminent and unacceptable threat to public safety. Furthermore, a past pattern of failure by the NWP to comply with Federal railroad safety laws and regulations persuades FRA that reliance upon the cooperation of the NWP to make the necessary repairs to the track and to the signals on

any part of its rail line is inadequate to protect public safety. I find that the unsafe conditions discussed above create an emergency situation involving a hazard of death or injury to persons. Accordingly, pursuant to the authority of 49 U.S.C. § 20104, delegated to me by the Secretary of Transportation (49 CFR § 1.49), it is ordered that the Northwestern Pacific Railroad shall discontinue, and shall not permit, the operation of trains over its trackage between mile post 295.5 near Arcata and mile post 63.4 between Schellville and Napa Junction while this Emergency Order remains in effect. This Emergency Order is not meant to prohibit the operation of work trains operated for the specific and sole purpose of effecting repairs on the railroad. Maximum speed of such train movements shall be 10 m.p.h.

Relief

The NWP may obtain full relief from this Emergency Order by performing the following requirements:

- (1) Properly repair and inspect all grade crossing signals and certify to the Federal Railroad Administrator that all necessary repairs and inspections have been performed and that all required tests are up-to-date.
- (2) Adopt a set of grade crossing signal standards and instructions acceptable by

 FRA. The standards and instructions should be submitted in writing to the

 Regional Administrator for Region 7 who will notify the NWP within 14 days of
 the submission whether or not the standards and instructions are approved. If they
 are not approved, the Regional Administrator will describe what additional
 measures must be taken to secure approval.
- (3) Update, correct and/or redraw circuit plans for each the grade crossing signal

- system to meet compliance with 49 CFR §§234.201 and 234.203. A list of locations of the updated, corrected or redrawn circuit plans should be submitted to the Regional Administrator for Region 7.
- (4) Provide proper and adequate test equipment for signal maintainers.
- Repair all track not subject to Emergency Order No. 14 to class 1 track standards as detailed in 49 CFR Part 213. [Note: Emergency Order No. 14 already requires the Northwestern Pacific Railroad to repair all track subject to that order to class 1 track standards or designate the track as excepted track in accordance with 49 CFR § 213.4. By separate notice, Emergency Order No. 14 is being amended to require repair to class 1 track standards for the hauling of passengers and all hazardous materials. Otherwise, the railroad may designate the track still subject to that order as excepted.]
- (6) Clear all vegetation from drainage facilities and away from signs and signals and track bed so that the track meets the requirements of 49 CFR § 213.37;
- (7) Furnish FRA with a 12-month track maintenance plan that includes, at a minimum the number and location (mile by mile) of crossties to be installed, location and extent of rail surfacing, location and nature of drainage facility maintenance, location and nature of vegetation control, extent of rail replacement, schedule for accomplishing programs, and criteria used to determine the location and extent of tie renewal and replacement (e.g., traffic density, track inspection data, and accident history).
- (8) Establish a program of employee training on the Federal Track Standards to

ensure that employees performing inspection, maintenance, and restoration work are qualified in accordance with 49 CFR § 213.7. The training program shall ensure that track inspectors, track foremen, and first level track supervisors can assure compliance with the requirements of 49 CFR Part 213. FRA is to be furnished a copy of the training program.

- (9) Certify in writing that each individual conducting track inspections has sufficient knowledge, skills, and ability to successfully conduct the types of inspections which will be performed by that individual. Records of that certification are to be maintained by the railroad.
- (10) Obtain approval from the Federal Railroad Administrator that all of the requirements of this Emergency Order have been met and properly performed. To obtain relief, NWP should inform in writing the Federal Railroad Administrator, with a copy to the Regional Administrator of FRA's Region 7, that it believes all of the requirements of this Emergency Order have been met. Within 30 days of the notification, FRA will conduct inspections of the line, and within seven days of the inspections, will inform the railroad in writing whether this Emergency Order is lifted. If FRA does not lift the order, the written response will specifically describe what additional measures need to be taken to meet all of the requirements of this Emergency Order.

Partial Relief

In order for FRA to consider granting partial relief from this Emergency Order, the NWP must first meet all of the system-wide requirements, *i.e.*, requirements 2, 4, 7, 8, and 9. The

NWP may then obtain partial relief for any portion of the line for which all of the requirements of this Emergency Order are met. NWP should inform in writing the Federal Railroad Administrator, with a copy to the Regional Administrator of FRA's Region 7, that it believes all of the requirements of this Emergency Order have been met for a specified section of the railroad's line. Within 30 days of the notification, FRA will conduct inspections of that specified portion of the line, and within seven days of the inspections, will inform the railroad in writing whether this Emergency Order is lifted for that specified portion. If FRA does not lift the order for the specified portion, the written response will specifically describe what additional measures need to be taken to meet all of the requirements of this Emergency Order.

Penalties

Any violation of this order shall subject the person committing the violation to a civil penalty of up to \$22,000. 49 U.S.C. §§ 21301. FRA may, through the Attorney General, also seek injunctive relief to enforce this order. 49 U.S.C. § 20112.

Effective Date and Notice to Affected Persons

This Emergency Order shall take effect at 6:01 p.m. (PST) on November 27, 1998, and apply to all operations of trains on or after that time. Notice of this Emergency Order will be provided by publishing it in the Federal Register. Copies of this Emergency Order will be sent by mail or facsimile prior to publication to: Northwestern Pacific Railroad Authority through the North Coast Railroad Authority Board of Directors, the Golden Gate Bridge, Highway and Transportation District, and Marin County. A copy will also be sent to Rail-Ways, Inc.

Review

Opportunity for formal review of this Emergency Order will be provided in accordance

with 49 U.S.C. § 20104(b) and section 554 of Title 5 of the United States Code. Administrative procedures governing such review are found at 49 CFR part 211. See 49 CFR §§ 211.47, 211.71, 211.73, 211.75, and 211.77.

Issued in Washington, D.C. on November 25, 1998.

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