

**BROTHERHOOD OF LOCOMOTIVE ENGINEERS  
AND TRAINMEN**

*A DIVISION OF THE RAIL CONFERENCE*

*INTERNATIONAL BROTHERHOOD OF TEAMSTERS*

**BEFORE THE NATIONAL TRANSPORTATION SAFETY BOARD**

**NTSB Accident Number RRD23LR007**

**Class: Regional**

**March 7, 2023**

**Proposed findings, probable cause, and safety recommendations in connection with the Norfolk Southern Railway employee fatality that occurred while performing a shove movement during industrial switching operations near Cleveland, Ohio on March 7, 2023.**

L.R. Fannon, BLET Safety Task Force, National Chairman  
S.D. Lawton, BLET Safety Task Force, Party Spokesman

**Final Submission**

The Brotherhood of Locomotive Engineers and Trainmen (“BLET”), a division of the International Brotherhood of Teamsters (“IBT”), was assigned party status by the Board in the above-referenced investigation. BLET respectfully submits these proposed findings, probable cause, and safety recommendations to the Board for consideration.

## Accident Synopsis

On March 7, 2023, at approximately 1:08 a.m. Eastern Standard Time (“EST”) <sup>1</sup>, a Norfolk Southern (“NS”) mixed freight train (C75B106) collided with a dump truck operated by Stein, LLC at a private highway/railroad grade crossing. The collision occurred while the NS C75B106 was performing a shove movement on the Dockside Track within the Cleveland-Cliffs, Inc. <sup>2</sup> steel plant in Cleveland, OH. At the time of the accident, the NS C75B106 consisted of one (1) locomotive (NS 5813) and twelve (12) railcars and was approximately 567 feet in length, with an approximate weight of 327 tons.

As a result of the accident, the Conductor that was riding the leading railcar during the shoving movement was fatally injured.



**Figure 1** – Post-accident photo of the highway/railroad grade crossing collision (*Photos courtesy of BLET*)

<sup>1</sup> All times throughout the report will be Eastern Standard Time.

<sup>2</sup> Cleveland-Cliffs Inc. is located in Cleveland, OH and is North America’s largest flat-rolled steel producer and supplier of iron ore pellets.

## Accident Narrative

### Train Information:

#### Train C75B106:

The NS C75B106 originates and terminates in the NS Campbell Road Yard. The train crew goes on-duty at 6:30 p.m. and services industrial facilities throughout the Cleveland, OH area as part of their normal daily duties. At the time of the accident, the train consisted of one (1) locomotive (NS 5813) and twelve (12) railcars and was approximately 567 feet in length, with an approximate weight of 327 tons.

### Method of Operation:

When the accident occurred, the train was operating on the Dockside Track, which is an industrial track on the NS Cloggsville Line. The NS Cloggsville Line is part of the NS Keystone Division.<sup>3</sup> The NS Cloggsville Line encompasses the NS Cleveland Belt, the NS Campbell Road Yard and several industrial facilities located in the Cleveland, OH area. While operating on the Dockside Track, inside the Cleveland-Cliffs, Inc. steel plant, the train was operating under rules that require movements to be made at restricted speed.<sup>4</sup> These rules permit trains to operate at a speed that allows the movement to be stopped within half the range of vision, and include specific provisions for controlling the movement, maintaining vigilance and maximum authorized speeds.

At the location of the incident there is a maximum authorized speed (“MAS”) of ten (10) miles per hour (“MPH”).

All train movements in and around the NS Campbell Road Yard are coordinated by the NS Rockport Yardmaster who is located at the NS Rockport Yard in Cleveland, OH.

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<sup>3</sup> See Appendix A at the end of this report for relevant portions of the NS timetable.

<sup>4</sup> See Appendix B at the end of his report for NS definition of “restricted speed”.



Figure 2 – Schematic showing industrial tracks surrounding the accident area (Courtesy of Google Earth and BLET)

## Norfolk Southern Railway Documents for TY & E <sup>5</sup> Employees:

Below is the list of the documents governing TY & E employees provided by NS for this accident investigation:

- NS Pittsburgh Division Timetable No.1 – *effective July 1, 2012*
- NS Operations Bulletin PBOPB-02 – *effective January 1, 2020*
- NS Operating Rules – *effective January 1, 2019*
- NS Safety and General Conduct Rules – *effective January 1, 2019*
- NS -1 – *effective January 1, 2019*
- General Notices and Track Bulletins

No additional information was provided regarding the documentation and/or rules in effect at this time of this accident. It is worth noting that trains in this area operate under the NS Pittsburgh Division Timetable No.1, which is dated July 1, 2012. Since the issuance of this timetable, the NS has changed its operations on several occasions. On January 1, 2020, the NS issued NS Operations Bulletin PBOPB-02, <sup>6</sup> which is a supplemental timetable that covers the accident area.

<sup>5</sup> Train, Yard, and Engine

<sup>6</sup> See Appendix C at the end of this report for relevant portions of NS PBOPB-02.

## **Train Crew Information:**

### **Locomotive Engineer:**

The Locomotive Engineer began his employment with NS in 1999. He was subsequently promoted to Locomotive Engineer in 2004. He completed his last general knowledge recertification test on September 9, 2021. He had no medical condition that would affect his performance and was deemed fit for duty.

### **Conductor:**

The fatally injured Conductor began his employment with NS in 2004. He completed his last general knowledge recertification test on March 29, 2022. He had no medical condition that would affect his performance and was deemed fit for duty.

## **Movements of NS C75B106:**

The NS C75B106 train crew reported for duty at 6:30 p.m. on March 6, 2023, at the NS crew office in the NS Campbell Road Yard which is located in Cleveland, OH.<sup>7</sup> As part of their daily duties, the train crew is responsible for servicing multiple industrial facilities in the area surrounding Cleveland, OH. After obtaining all the required paperwork, the train crew performed their normal duties throughout the course of their shift and completed their daily industrial switching work.

As part of their normal routine, the train crew had instructions to return to the NS Campbell Road Yard at the end of their shift. The Conductor mounted the leading railcar, and the train crew began a shoving movement<sup>8</sup> towards the NS Campbell Road Yard, which required the NS C75B106 to travel through the Cleveland-Cliffs, Inc. industrial facility while en route to their final destination. As the train crew performed their shoving movement, they approached a passive highway/railroad grade crossing<sup>9</sup> within the Cleveland-Cliffs, Inc. industrial facility. This highway/railroad grade crossing was equipped with crossbucks and stop signs for vehicular movement in both directions.

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<sup>7</sup> See Appendix D at the end of this report for map of accident area.

<sup>8</sup> See Appendix E at the end of this report for applicable NS rules governing shove movements.

<sup>9</sup> A “passive highway/railroad grade crossing” is one which is absent of the warning gates and illuminating signals (both audible and visual).

As the train approached the highway/railroad grade crossing, the Conductor observed a dump truck approaching the highway/railroad grade crossing and come to a complete stop. With the dump truck stopped, the Conductor instructed the Locomotive Engineer to continue the movement. As the leading railcar of the NS C75B106 approached the highway/railroad grade crossing, the dump truck began moving and the Conductor instructed the Locomotive Engineer to stop. Before the NS C75B106 could come to a stop, the train and dump truck collided at the highway/railroad grade crossing. The NS C75B106 was traveling at ten (10) MPH when the collision occurred.

After the collision, the Locomotive Engineer contacted the NS Rockport Yardmaster and notified him of what had occurred and requested that emergency personnel be sent to the accident site.



**Figure 3** - Photo of damaged platform and steps on the railcar that was being ridden by the Conductor at the time of the accident  
(Photo courtesy of BLET)

### **Locomotive Event Recorder and Security Video Evaluation:**

As part of the investigation, the locomotive event recorder data from the locomotive of the NS C75B106 and a security video provided by Cleveland-Cliff, Inc. was reviewed, and a timeline was developed:

<b>TIME (A.M.)</b>	<b>ACTIONS</b>	<b>TRAIN SPEED</b>
1:07:49	Radio transmission by Conductor: “5813 crossing clear no traffic”	11 MPH
1:07:51	Radio transmission by Locomotive Engineer: “yea ok”	11 MPH
1:07:59	Train visually begins slowing in video	11 MPH

1:08:27	Dump truck comes to a full stop in video	10 MPH
1:08:30	Radio transmission by Conductor: “Keep em’ comin’ 15 that that’ll do that’ll do”	10 MPH
1:08:32	Dump truck begins movement in video	
1:08:35	Train and dump truck collide in video	10 MPH
1:08:37	Emergency brake application on train	9 MPH
1:08:43	Radio transmission by Locomotive Engineer: “Lou you ok?”	5 MPH
1:08:43	Train comes to a stop	0 MPH
1:09:07	Radio transmission by Locomotive Engineer: “Hey Lou you alright?”	0 MPH

The locomotive event recorder data from the locomotive indicated that the train handling methods utilized by the Locomotive Engineer were within the normal operating procedures for the area and no exceptions were taken.

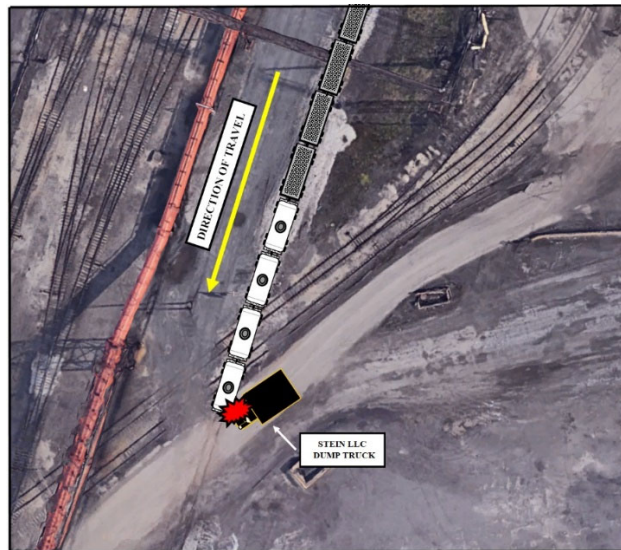


Figure 4 – Schematic of accident site (Courtesy of Google Earth and BLET)

## **NS Operating Rule 120:**

The NS Railway has specific rules and guidelines in place concerning the performance of shoving movements over certain highway/railroad crossings. These rules and guidelines are outlined in NS rule 120<sup>10</sup> and state in part:

*A. When cars not headed by an occupied engine are moved over a:*

- *public crossing*
- *private crossing located outside the physical confines of a rail yard*
- *pedestrian crossing located outside the physical confines of a rail yard*
- *yard access crossing*

*A member of the crew must be on the ground at the crossing to warn traffic until the leading end has passed over the crossing.*

*Rail movements over the crossing will be made only on proper signal from the employee.*

## **Stein, LLC Information:**

The highway/railroad grade crossing where the accident occurred is owned and maintained by Cleveland-Cliffs, Inc. and is within their industrial facility. However, the dump truck involved in the collision was operated by Stein, LLC. Stein, LLC has guidance and internal rules concerning railroad safety for their employees.<sup>11</sup> These internal rules include the following bullet points which are pertinent to this accident:

- *Trains do not travel on a predictable schedule – even though it may seem that way inside the mill. Always expect a train at every crossing.*
- *Trains have the right of way – you and your piece of equipment are “trespassing” when you enter working areas around tracks or move over a crossing.*
- *Trains can move in either direction at any time. A string of railcars can be pushed or pulled – even if you cannot see a locomotive, cars may still be in motion.*

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<sup>10</sup> See Appendix F at the end of this report for NS Rule 120 – Movements Over Highway-Rail Grade Crossings.

<sup>11</sup> See Appendix G at the end of this report for Stein, LLC railroad safety guidelines.



And finally,

- Certain crossing may be obstructed or the sight lines may be limited – especially depending on the piece of equipment you are operating. Position your piece of equipment before the crossing to provide the best line of sight. Observe the track line before you reach a crossing – that may give you the best view of any railroad traffic that is approaching. (Emphasis ours)

Post accident investigations at the accident site revealed that the Stein, LLC dump truck had an extremely limited, angled view of approaching railroad traffic at the highway/railroad grade crossing where the accident occurred (see **Figure 5**).



**Figure 5** – Post accident re-enactment view from the Stein, LLC dump truck driver's seat with arrow added depicting angle of NS C75B106's approach path (Photo courtesy of NTSB)

### **Post Accident Actions:**

After the accident, the NS issued a serious incident notice <sup>12</sup> to their entire workforce, outlining a general overview of the accident, as well as the fatally injured Conductor's work experience. The notice also included an explanation of NS Operating Rule 120, which specifically addresses shove movements made while operating over highway/railroad grade crossings.

Additionally, after the accident, Stein, LLC requested that Cleveland-Cliffs, Inc. make modifications to the highway/railroad grade crossing where the accident occurred. Once these modifications were made, it allowed the Stein, LLC dump trucks to approach the highway/railroad

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<sup>12</sup> See Appendix H at the end of this report for the NS serious incident notice issued March 7, 2023.

grade crossing at a 90° angle. This dramatically improved the Stein, LLC dump truck driver's line of sight and ability to see approaching railroad traffic.

### **Probable Cause**

The Brotherhood of Locomotive Engineers and Trainmen conclude that the probable cause of the March 7, 2023, accident at Cleveland, OH was the result of three (3) significant causal factors which led to the collision of the NS C75B106 and the Stein, LLC dump truck:

- The failure of the NS C75B106 train crew to adhere to the requirements of NS Operating Rule 120 – Movements Over Highway-Rail Grade Crossings.
- The failure of the Stein, LLC dump truck driver to adhere to the Stein, LLC internal rules concerning railroad safety. Although the Stein, LLC dump truck driver did stop at the stop sign at the highway/railroad grade crossing as required, he proceeded without having a clear and unobstructed view of the railroad tracks and the approaching NS C75B106. Due to the angle of the dump truck's approach to the highway/railroad grade crossing and the size of the dump truck, his vision and line of sight were extremely limited, which hindered his ability to see any approaching railroad movement.
- The lack of active warning lights or crossing gates at the location where the accident occurred. This accident occurred at night, while it was sleeting outside, in low lighting conditions, involving a dark tank railcar with no locomotive headlight or ditch lights to assist in illuminating the route. At the minimum, for this location, flashing warning lights should have been present to warn vehicular and pedestrian traffic of approaching railroad traffic. Multiple crossings throughout the facility have active warning lights, crossing gates and/or bells.

### **Proposed Recommendations**

#### **To Cleveland-Cliffs, Inc. and Stein, LLC:**

1. Develop and implement a program (using the circumstances of this accident) to further educate employees in the following areas: rail safety and potential hazards specific to the

industry and the surrounding area. Once programs are developed, ensure that courses and training are repeated annually to keep employees updated on rail safety and newly recognized hazards.

2. Work with rail carriers and rail labor to identify and implement changes to improve highway/railroad grade crossing conditions with additional safety devices (active warning lights, crossing gates, bells, etc.) and an appropriate line of sight for approaching vehicles in all areas where railroad operations occur.

**To Norfolk Southern Railway:**

1. Develop and implement a program (using the circumstances of this accident) to further educate train crew employees of the hazards associated with shove movements and switching operations made over highway/railroad grade crossings, with emphasis on specific hazards and procedures outlined in NS Operating Rule 120.
2. Develop and implement a program to ensure rail customers understand rail safety; potential hazards specific to the industry; and how to address concerns.
3. Develop and implement a program to work with customers at their facilities to implement changes to improve highway/railroad grade crossing conditions in all areas where regular railroad operations occur.
4. Working with customers and rail labor, develop a study to identify and implement changes to improve highway/railroad grade crossing conditions with additional safety devices (active warning lights, crossing gates, bells, etc.) and an appropriate line of sight for approaching vehicles in all areas where railroad operations occur.
5. Identify operational areas that need all relevant timetable, operational information, etc. updated. In addition, develop and direct resources with the sole purpose of making needed changes to ensure all operational areas are made current to reflect the most recent information (division timetables, etc.) with the intention of keeping all information current as operational changes occur.

**CERTIFICATE OF SERVICE**

*I certify that on October 24, 2023, I have electronically served upon Mr. Gregory Scott (gregory.scott@ntsb.gov), Investigator in Charge, National Transportation Safety Board, a complete and accurate copy of these proposed findings regarding the March 7, 2023, NS employee fatality that occurred while performing a shoving movement over a highway/railroad grade crossing within the Cleveland-Cliffs, Inc. industrial facility (RRD23LR007). An electronic copy of same was also forwarded to the individuals listed below in this certificate of service, as required by 49 CFR § 845.27 (Proposed Findings)*

Mr. Gregory Scott  
Investigator-in-Charge, RRD23LR007  
National Transportation Safety Board  
490 L'Enfant Plaza, SW  
Washington, DC 20594  
Email: [REDACTED]

Michael Alamprese, FRA  
Operating Practices, Inspector  
Email: [REDACTED]

David Gooden, NS  
Operations  
Email: [REDACTED]

Rocky Agozzino, Stein, LLC  
Email: [REDACTED]

Don Westerhoff, Cleveland-Cliffs, Inc.  
Email: [REDACTED]

Joseph Ciemny, SMART-TD  
Investigator – SMART-TD National Safety Team  
Email: [REDACTED]

Sincerely yours,

[REDACTED SIGNATURE]

L. Randy Fannon  
BLET National Vice President  
Safety Task Force National Chairmen  
Brotherhood of Locomotive Engineers &  
Trainmen  
7061 East Pleasant Valley Road  
Independence, OH 44131

Appendix A



**PITTSBURGH DIVISION**

**Northern Region**

**Timetable Number**

**1**

**In Effect**

**At 12:01 AM**

**Sunday, July 1, 2012**

**Eastern Standard Time**

**For The Government of Employees Only**

CLEVELAND LINE			
WEST	SIDINGS	MP	STATION
FORL	IN FEET	RD 0.0	CONWAY TERMINAL DISPATCHER ..... AAR-64 [14]
			ROCHESTER ..... [RM] [3]
			CLEVELAND LINE DISPATCHER ..... AAR-64 [13]
			(Fort Wayne Line)
		RD 8.7	DED-HCD (18'10") (Industry)
		RD 11.0	Midland
		RD 11.9	Midsteel
		RD 14.6	PAOH State Line
		RD 19.2	DED (Walsville)
		RD 23.4	Walsville
		RD 25.3	YELLOW CREEK ..... [RM] [3]
			(River Line)
		RD 26.5	RIVER ..... [RM] [3]
			(Yellow Creek R.T.)
		RD 36.7	ROGERS
		RD 37.4	HBD-DED-1 (Salemville)
		RD 42.7	SHALE ..... [RM] [3]
		RD 48.2	DED (Kensington)
		RD 54.4	BARARD
		RD 58.0	MOULT
		RD 58.0	HBD-DED-HCD (18'10") (Moultrie)
		RD 64.6	Home Spring Switch
		RD 66.0	MAHONING (Mahoning Sliding)
		RD 73.3	CP-73 ..... [RM] [3]
		RD 81.0	HBD-DED (Rockstown)
		RD 85.3	CP-86 ..... [RM] [3]
			Division Post (Dearborn Div.)



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CLEVELAND LINE			
STATION PAGE INFORMATION			
NOTE 1: Eastward trains must not pass Bayard without verbal permission of the Train Dispatcher/Control Operator regardless of aspect displayed at Bayard.			
<b>1. RULES IN EFFECT</b>			
<b>Between</b>	<b>Main 1 Track</b>	<b>Main 1 Rules</b>	<b>Main 2 Track</b>
Rochester and Yellow Creek		251-East	251-West
Yellow Creek and River		261	
River and Shale		251-East	251-West
Shale and Bayard		261	
Bayard and Alliance	171		
Alliance and CP-86		261-CSS	261-CSS
Tracks are numbered from South to North.			
NOTE: Between Alliance and CP-86, Cab Signal Rules, except Rules 554 and 556, are in effect.			
<b>2. MAXIMUM SPEEDS — PASSENGER</b>			
<b>Between</b>	<b>Main 1 Track</b>	<b>Main 2 Track</b>	<b>Other Tracks</b>
Alliance and CP-86	79	79	
Except:			
Alliance to MP RD 68.0	40	40	
MP RD 68.0 to MP RD 69.2, Head End Only	60	60	
MP RD 69.6 to MP RD 69.7	75	75	
MP RD 71.4 to MP RD 72.6	75	75	
MP RD 72.6 to MP RD 73.4, Head End Only	60	60	
MP RD 74.4 to MP RD 74.8	75	75	
MP RD 74.8 to MP RD 75.0	75	75	
MP RD 74.8 to MP RD 75.0	75	75	
MP RD 75.5 to MP RD 76.6	60	60	
MP RD 79.6 to MP RD 79.9	75	75	
MP RD 80.2 to MP RD 80.7	70	70	
MP RD 80.7 to MP RD 83.4	60	60	
MP RD 83.4 to MP RD 83.7	65	65	
MP RD 84.3 to MP RD 85.3	60	60	

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CLEVELAND LINE				
STATION PAGE INFORMATION				
2. MAXIMUM SPEEDS — FREIGHT				
Between	Main Track	Main 1 Track	Main 2 Track	Other Tracks
Hochester and MP RD 24.0		40	40	
Except: MP RD 12.0 to MP RD 13.1		10	10	
MP RD 18.0 to MP RD 19.0		35	35	
MP RD 24.0 and Yellow Creek		35	35	
Yellow Creek and River		35		
Except: Yellow Creek		20		
River and Shale		35	10	
Shale and Bayard		40		
Bayard and Alliance		40		
Except: MP RD 54.4 to MP RD 56.9		30		
MP RD 64.6 to MP RD 66.9		30		
Mahoning Siding				10
Cleveland Line Main Track to Fort Wayne Line, Main 1 Track		25		
Cleveland Line Main 1 and Main 2 Tracks to Fort Wayne Line, Main 1 and Main 2 Tracks		40	40	
Alliance and CP-86		60	60	
Except: MP RD 67.0 to MP RD 68.0		40	40	

**3. CHECKING LOCOMOTIVE SPEED INDICATOR**  
None.

**4. DIESEL UNIT RATINGS**

	DIESEL UNIT RATINGS IN TONS					
	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6
<b>Westward</b>						
Hochester to Yellow Creek	2180	3040	3110	3880	4810	7179
Yellow Creek to Alliance	1970	2740	2810	3530	4370	6605
Alliance to CP-86	4650	6510	6570	7840	9740	15346
<b>Eastward</b>						
CP-86 to Alliance	2300	3210	3280	4090	5070	7578
Alliance to Yellow Creek	3790	5300	5370	6510	8090	12532
Yellow Creek to Rochester	5240	7350	7390	8720	10850	17810

CLEVELAND LINE				
5. LOCOMOTIVE AND CAR RESTRICTIONS				
A. LOCATION OF WEIGHT RESTRICTIONS				
System Instruction EQ-1 applies.				
<b>AUTHORIZED:</b>				
Cleveland Line — 286,000 lbs.;				
EXCEPTION: 315,000 lbs. for cars with stenciled load limit.				
B. KENSINGTON MINE TIPPLE				
Engines are permitted under tippie provided tippie is up and in retracted position.				
C. TRAILING TONNAGE RESTRICTIONS — RAILRUNNER* EQUIPMENT				
Line Segments	Maximum Safe Trailing Tonnage	Empty	Light Load	Loaded
		Less Than 18 Tons	18-27 Tons	28 Tons or More
Cleveland Line	2,100	2,100	2,100	3,100
NOTE: *Railrunner Block MUST TRAIL Roadtrailers.				
D. TRAILING TONNAGE RESTRICTIONS — ROADRAILER TRAILERS				
Line Segments	Maximum Safe Trailing Tonnage (Note 1)	Empty	Light Load	Loaded
		Less Than 18 Tons	18-27 Tons	28 Tons or More (Note 2)
Cleveland Line	2,500	2,500	3,200	4,800
NOTE 1: Trailing Tonnage Includes Railrunner Block (if any) BEHIND Roadtrailers.				
NOTE 2: Must not exceed 4,600 tons behind LOADED (28 Tons or More) drawbar connected trailers.				
6. SWITCHES AND DERAILS				
A. SPRING SWITCH				
Switch Located at	Connecting	With	Normal Position is for Movement	
MP RD 64.6	Cleveland Line	Siding	Cleveland Line	
Spring Switch				
B. SWITCHES				
The following is a list of hand-throw, Main Track switches in non-signalized territory for use in identifying switches.				
MP RD 55.2	— Bayard			
MP RD 55.65	— Rinker			
MP RD 60.95	— Homeworth			
MP RD 64.6	— East Mahoning Siding			
MP RD 66.15	— Mahoning Siding Crossover			
MP RD 66.2	— Alliance Castings			

CLEVELAND LINE	
<b>6. SWITCHES AND DERAILS (CONT.)</b>	
<b>C. ELECTRICALLY LOCKED SWITCHES — 261-ABS TERRITORY</b>	
The following hand-operated switches in 261-ABS territory are not equipped with electric locks. Trains may not clear the Main Track at these locations unless the Maximum Authorized Speed on the Main Track is 20 MPH or less or the Maximum Authorized Speed on a Signaled Siding is 30 MPH or less.	
Milepost	Name of Switch
RD 33.8	Hoops Fertilizer
RD 75.1	Atwater Switch
RD 80.2	Wicks Lumber
RD 82.6	Ohio Edison
<b>7. COMMUNICATION INFORMATION</b>	
Base Station	AAR Channel
Middlefield.....	64
Yellow Creek.....	64
New Salisbury.....	64
Shale.....	64
Bayard.....	64
Alliance.....	64
Ravenna.....	64
<b>8. DETECTOR INSTRUCTIONS</b>	
None.	
<b>9. DISTRICT INSTRUCTIONS</b>	
<b>A. HIGHWAY CROSSINGS</b>	
1. <b>MP RD 9.2</b> Trains must not block private crossing at MP RD 9.2.	
2. <b>MP RD 23.4</b> Trains must not block highway crossing at MP RD 23.4.	
3. <b>MP RD 84.3</b> Trains must not block private crossing at grade at MP RD 84.3.	
4. <b>Alliance</b> Eastward trains approaching Alliance must communicate with the Train Dispatcher if the train is not cleared through Alliance. If train is to be held, it must not block private road crossing at MP RD 70.07, between the hours of 2:00 P.M. and 4:00 P.M., Monday through Friday. Trains must stop at Wolf Road, MP RD 76.36, if train length would block private crossing at MP RD 70.07.	

CLEVELAND LINE			
<b>9. DISTRICT INSTRUCTIONS (CONT.)</b>			
<b>B. LOCATION OF RUNNING TRACKS</b>			
Running Track	Between	In Charge of	Restricted Speed not exceeding
Yellow Creek (E)	River and Branch	Dispatcher	15 MPH
<b>C. RIVER — SHALE</b>			
Main 2 Track is out of service between River and Shale. Trains and Engines operating on this track must Stop and Flag the following crossings which are equipped with automatic warning devices. This restriction applies to Main 2 Track only: MP RD 27.89 — Dardos Crossing MP RD 28.65 — Washington Street MP RD 37.33 — Main Street			
<b>D. SOLID BULK COMMODITY TRAIN HANDLING INSTRUCTIONS</b>			
1. <b>Supplementary Instructions to apply in handling solid bulk commodity trains between Shale and MP RD 32.8:</b>			
<b>Trains having engine equipped with operative pressure-maintaining feature:</b> Retaining valves will not be used on trains with equipped engines. <b>Trains having engine that has neither dynamic brake nor pressure-maintaining feature:</b> Retaining valves must be set in high pressure position, beginning at the head end, on 30% of the number of cars in the train. Conductor must know that the retaining valves are in the proper position and so inform Engineer before passing Shale. Eastward trains required to set retainers at Shale must stop with entire train west of Shale before setting retainers. <b>Trains having engine equipped with inoperative pressure-maintaining feature:</b> Trains must have retaining valves set in slow direct exhaust position, beginning at the head end, on 25% of the number of cars in train. When retaining valves are used in slow direct exhaust position, and it is known that the engine has inoperative pressure-maintaining feature, retainers should be set before passing Bayard, MP RD 54.4, and need not be placed in direct release again until the train arrives at destination. If the pressure-maintaining feature fails, and the dynamic brake is inoperative, instructions governing trains with non-equipped engines will apply.			
2. <b>Between MP RD 36.0 and MP RD 42.0, Eastward Solid Bulk Commodity trains will not exceed 25 MPH on Main 1 Track.</b>			



<b>CLEVELAND LINE</b>	
<b>9.</b>	<b>DISTRICT INSTRUCTIONS (CONT.)</b>
<b>E. CAB SIGNAL EXCEPTIONS</b>	<p>The following exceptions are authorized for trains and engines not equipped with cab signals:</p> <ul style="list-style-type: none"> <li>• Work trains, wreck trains and ballast cleaners moving to and from work.</li> <li>• Engines to and from shop.</li> <li>• Engines used in switching and transfer service, yard engines with or without cars.</li> </ul> <p>These moves must be made at Restricted Speed, not exceeding 15 MPH between Alliance and CP-86.</p>
<b>F. EASTWARD TRAINS APPROACHING ROCHESTER</b>	<p>Before passing the automatic signal at MP RD 5.4, all eastward trains must contact the Conway Terminal Dispatcher (AAR-64/RCI-144) for instructions. If instructed to hold at Vanport, eastward trains must not pass MP RD 3.0 without permission of the Train Dispatcher/Control Operator.</p>
<b>G. MP RD 14.3 — S.H. BELL</b>	<p>Do not spot or pull cars west of the loading dock without the presence of the S.H. Bell foreman.</p>
<b>H. MP RD 18.6 — WEAVERTON ENVIRONMENTAL</b>	<p>Locomotives must not go on or west of the pit.</p>
<b>I. MP RD 18.5 — GROWMARK</b>	<p>Locomotives must not go on the scale or west of the scale.</p>
<b>J. CLOSE CLEARANCES</b>	<p>Due to close clearances, employees are prohibited from riding the side of moving equipment at the following locations:</p> <ul style="list-style-type: none"> <li>MP RD 8.3 — Arrow Terminal</li> <li>MP RD 18.5 — Growmark</li> <li>MP RD 18.5 — Parsons Coal Industry</li> <li>MP RD 18.5 — Seaforth Mineral Ore</li> <li>MP RD 66.0 — Whitacre Greer: North Side</li> </ul>

## Appendix B

- Is covered under the hours of service laws;
- Inspects, installs, constructs, repairs, or maintains track, roadbed, bridges, and signal and communication systems;
- Inspects, repairs, or maintains locomotives, passenger cars or freight cars, or other on-track equipment when such equipment is in service that constitutes a train movement;
- Determined that an on-track roadway maintenance machines or hi-rail vehicle may be used without repair of a non-complying condition;
- Directly instructs, mentors, inspects, or tests, as a primary duty, any person while that other person is engaged in a safety related task; or
- Is responsible for conducting periodic tests and inspections of safety-related employees.

**Siding**—An auxiliary track for meeting or passing trains, shown as a siding in the Timetable.

**Controlled Siding**—A siding equipped with controlled signals that authorize trains or engines to enter or leave the siding.

**Signaled Siding**—A siding with **Rule 261** in effect governing all train and engine movements on the siding.

**Signal Aspect**—The appearance of a fixed signal, which conveys an indication, as viewed either:

- From the direction of an approaching train or engine.
- On the cab signal display unit.

**Signal Indication**—The required action conveyed by the aspect of a signal.

**Special Instructions**—Instructions so captioned in the Timetable.

### Speeds:

**Limited Speed**—For passenger trains, not exceeding 45 MPH; for freight trains, not exceeding 40 MPH.

**Maximum authorized speed** - The highest speed permitted for the movement of trains permanently established by Timetable or Operations Bulletin. Trains must be governed by temporary speed restrictions and equipment speed restrictions if more restrictive than permanent speeds.

**Medium Speed**—A speed not exceeding 30 MPH.

**Restricted Speed** — A speed that will permit stopping within half the range of vision, short of train, engine, obstruction, railroad car, men or equipment fouling track, any signal requiring a stop, or any derail or switch lined improperly and looking out for a broken rail, but not exceeding:

- 20 MPH, or
- 15 MPH when diverting through any turnout or crossover governed by Conrail Signal indications

**Slow Speed** — A speed not exceeding 15 MPH.

**Speed Control** — A device on an engine that will cause a penalty brake application if the Engineer fails to reduce the train's speed to the speed required by the cab signal indication.

**Station** — A location designated in the Timetable by name.

**Switches:**

**Dual-Control Switch** — A power-operated switch that is also equipped for hand-throw operation.

**Electrically Locked Switch** — An electrical locking device applied to a hand-operated switch or derail.

**Power-Operated Switch** — A switch that is operated electrically or electro pneumatically. Such switches may or may not be equipped for hand-throw operation.

**Spring Switch** — A switch equipped with a spring mechanism arranged to restore the switch points to normal position after having been trailed through.

**Timetable** — A publication containing system and/or division instructions relating to operations.

**Track Authority** — Authorization to use controlled track, received in writing or copied and repeated at the direction of the Train Dispatcher using radio or other communication. Track Authority must be written on the prescribed form.

**Train** — An engine or more than one engine coupled, with or without cars, displaying a marker.

## Appendix C

<b>CLOGGSVILLE LINE</b>				
EAST ↓	SIDINGS IN FEET	MP	STATION	NOTE
			CLEVELAND TERMINAL DISPATCHER..... AAR-64 <b>648</b>	1
		CD 190.7	MAX (Chicago Line)..... CP	
		GZ 491.5	CP-491..... CP	
		GZ 490.5	HBD-DED-HCD-E	
		GZ 488.6	CP-488..... CP	
			CLEVELAND/SANDUSKY DISPATCHER.... AAR-76 <b>924</b>	
		GZ 486.8	KNOB..... CP	
		GZ 485.5/ B 185.5	Cloggsville (Cleveland District)	
	<b>STATION PAGE INFORMATION</b>			
NOTE 1: Movements will be made under the direction of the Lake Division Cleveland District Dispatcher at Ft. Wayne, IN.				
<b>1. RULES IN EFFECT</b>				
			Main 1 Track	Main 2 Track
<b>Between</b>			<b>Rules</b>	
MAX and Cloggsville			261	261
<b>2. MAXIMUM SPEEDS</b>				
			Main 1 Track	Main 2 Track
<b>Between</b>			<b>MPH</b>	
CP-190 and MAX			25	25
MP GZ 492.8 and MP GZ 490.9			30	30
MP GZ 490.9 and MP GZ 486.5			50	50
MP GZ 486.5 and MP GZ 486.0			40	40
MP GZ 486.0 and Cloggsville			35	35
Auxiliary Track between Knob and CP-488				10
All Tracks between MP CB 6.2 and MP CB 0.0 on the Cleveland Belt including both legs of Wye				10
<b>3. CHECKING LOCOMOTIVE SPEED INDICATOR</b>				
None.				
<b>4. DIESEL UNIT RATINGS</b>				
None.				

<b>CLOGGSVILLE LINE</b>			
<b>5. LOCOMOTIVE AND CAR RESTRICTIONS</b>			
<b>LOCATION OF WEIGHT RESTRICTIONS</b>			
The following weight restrictions are in effect for locomotives and cars on the Cleveland Belt between Mahoning Road, MP CB 0.0, and MP CB 6.2:			
4-axle locomotive	291,000 lbs.	4-axle cars	263,000 lbs.
6-axle locomotive	420,000 lbs.	6-axle cars	300,000 lbs.
All excessive-dimension Plate C loads received for delivery to the RT Railway at Campbell Road Yard must be interchanged to the Harvard Tracks at the west end of the yard.			
Cleveland District Dispatcher at Ft. Wayne must be notified before a train with a car height in excess of 19'3" proceeds east of CP-488. Any train with a car height in excess of 19'3" must only use Main 1 Track at Cleveland between MP B 179.5 and MP B 183.0.			
<b>6. SWITCHES AND DERAILS</b>			
None.			
<b>7. COMMUNICATION INFORMATION</b>			
<b><u>RADIO</u></b>			
Emergency		Code 911	
CYO		Code 653	
Chief Dispatcher		Code 640	
Cleveland/Sandusky Dispatcher		Code 924	
Cleveland Terminal Dispatcher		Code 648	
Toledo East Dispatcher		Code 647	
<b><u>TELEPHONE</u></b>			
CYO			
Chief Dispatcher			
Cleveland/Sandusky Dispatcher			
Cleveland Terminal Dispatcher			
Toledo East Dispatcher			
<b>8. DETECTOR INSTRUCTIONS</b>			
Eastward trains must remain on Road Channel 2 until receiving High Car Detector transmission.			

## CLOGGSVILLE LINE

### 9. DISTRICT INSTRUCTIONS

#### A. MOVEMENT ON TRACKS OTHER THAN MAIN TRACKS BETWEEN CP-488, KNOB AND MAHONING ROAD

Movement to the Auxiliary Track located adjacent to Main 1 between CP-488 and Knob through power-operated switches at CP-488 or Knob must not be made without first obtaining authority from the Rockport Yardmaster who can be contacted on Radio Channel TX76 RX76 or TX22 RX22. Hand-operated switches on the Auxiliary Track providing access to the east leg or west leg of the Wye will be in normal position when lined for the Wye. The divide switch of the Wye located at MP CB 6.0, in the vicinity of Ridge Road, will be left lined as last used. All trains, engines, and On-Track equipment will proceed expecting to find this switch lined against their movement until determined otherwise. This switch will have no normal position. Movement of trains, engines, and On-Track equipment on the Auxiliary Track, east leg of the Wye, west leg of the Wye, and the Cleveland Belt from MP CB 6.2 to Mahoning Road, MP CB 0.0, will be made in accordance with the direction of the Cleveland East 55th Street Yardmaster and will be made in accordance with **Rule 137**. The Cleveland Belt between MP CB 6.2 and Mahoning Road, MP CB 0.0, is not a Main Track. All switches between the divide switch at MP CB 6.2 and Campbell Road, MP CB 2.2, will be left lined for movement on the Cleveland Belt.

#### B. ADDITIONAL MOVEMENTS

Eastward and westward movements on the Cleveland Belt must not pass Reed Road, MP CB 2.7, without permission from the Rockport Yardmaster.

#### C. ROCKPORTYARD

1. Trains operating on Main 1 or Main 2 Cloggsville Line adjacent to Rockport Yard must sound engine bell approaching and passing this location.
2. **Flats Industrial Railroad Interchange, MP CZ 486.1**  
Hand-operated derails are in service on east end of interchange Tracks 1 and 2, "AJ" Yard. Derails will be secured with NS locks. When delivering cars, crews are to leave them no more than one (1) car length from derail on either track account grade.

## CLOGGSVILLE LINE

### 9. DISTRICT INSTRUCTIONS (CONT.)

#### D. RAILROAD CROSSINGS AT GRADE

##### NON-INTERLOCKED

CSXT (Note 1)	MP CB 0.7	West Third Street
CV (Note 2)	MP CB 1.6	CV Crossing
CV (Note 2)	MP CB 1.8	CV Crossing
CSXT (Note 3)	MP CB 2.6	Jennings

**NOTE 1:** If the indicator light displays Stop, Stop must be made short of Stop Sign and instructions posted at the Stop Sign must be complied with. Sound 14(b) before proceeding.

**NOTE 2:** Swing Gate — All trains and engines must approach this crossing at grade prepared to stop. If swing gate is lined against movement, a crew member will walk to the gate and look in both directions for any opposing or crossline movements. If there are no approaching movements, crank the switch gate to allow for movement. Sound 14(b) before proceeding.

**NOTE 3:** If the indicator light displays Stop, Stop must be made short of Stop Sign and instructions posted at the control box location must be complied with. Sound 14(b) before proceeding.

##### NON-INTERLOCKED JUNCTIONS

MP CB 0.7	West Third Street	CSXT
MP CB 1.6	CV Crossing	CV
MP CB 1.8	CV Crossing	CV
MP CB 2.0	Campbell Road	RT
MP CB 2.3	Campbell Road	CV

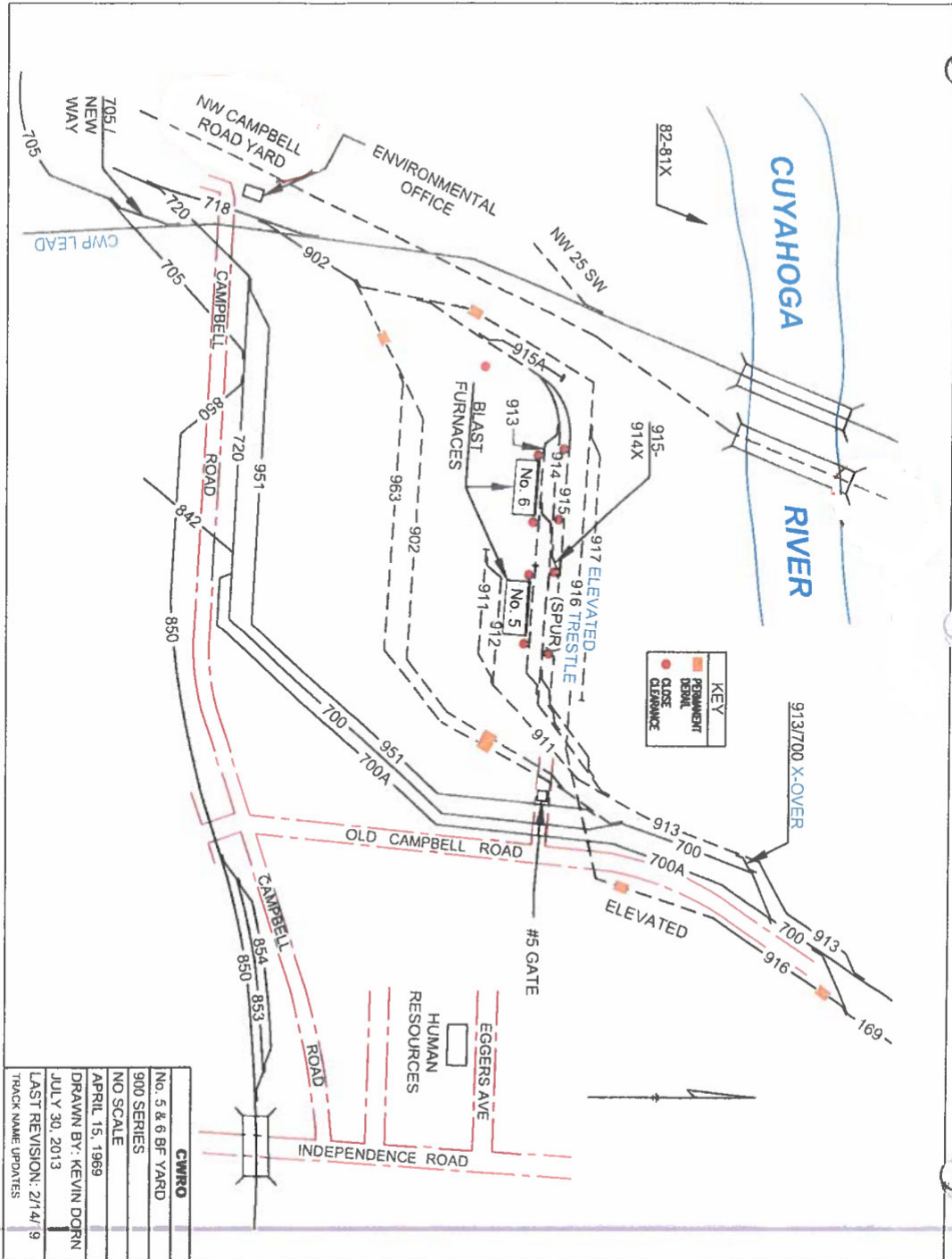
Foreign line trains and engines will use NS Tracks as follows:  
 W&LE Railroad between Belt Junction, MP CB 1.0, and West Third Street, MP CB 0.7.  
 W&LE Railroad between Belt Junction, MP CB 1.0, and Divide Switch, MP CB 6.2.

#### E. ROCKPORTYARD

##### CP-491 and MP 493.5

Engine bell to be sounded continuously while passing Rockport Yard area.

# Appendix D





## Appendix E

### SHOVE MOVEMENTS

#### 215. Shoving Equipment at Any Location

- (a) When shoving equipment at any location, a crewmember, or other qualified employee, must take action to prevent damage, protect against conflicting movements, and avoid fouling other tracks.

A crewmember or other qualified employee must be located at, on, or ahead of the leading end, except when:

1. A crewmember or other qualified employee is in a position to visually determine:
  - there is sufficient room in the track to hold the equipment being shoved, and
  - there are no conflicting movements, and
  - intervening road crossings are properly protected
  - intervening switches and derails are properly lined for the intended movement
2. The movement is governed by shove circuits and made in accordance with special instructions.
3. A train may back up one (1) train length on a main track or signaled siding provided the crew knows the train length, and:
  - Does not exceed 15 MPH.
  - Does not exceed the train's authority.
  - Does not enter or foul a public or private road crossing, or pedestrian crossing.
  - Is not made into or within yard limits, Form Y limits, drawbridges or railroad crossings at grade.
  - Does not pass any signal requiring Stop or Restricted speed.
  - Does not pass a Controlled Point unless a member of the crew is in position to continuously observe the signal governing the shoving movement and determine that the train's movement has occupied the circuit evidenced by that signal assuming its most restrictive aspect.

- (b) The employee directing the shoving movement must:
  - 1. Not engage in any task unrelated to the oversight of the shoving movement.
  - 2. Inform the Engineer or Remote Control Operator:
    - the means of communication to be used, and
    - how point protection for the shove movement will be provided
- (c) Employees are prohibited from protecting shove movements while operating or riding in a moving vehicle.  
Employees may protect shove movements while positioned in a stationary vehicle provided:
  - A visual determination that the track is clear is made prior to initiation of the shoving movement, and
  - The employee can visually observe the movement for the duration of the shoving movement

#### **216. Shoving, Backing, or Pushing Movements**

- (a) When radio communication is used in connection with the shoving, backing, or pushing of a train, engine, or other On-Track equipment, the employee directing the movement shall specify the direction of the move (as established in a Job Safety Briefing) and distance seen to be clear.
- (b) The distance of the movement must be specified in 50 foot "car lengths" and the movement must stop in one-half (1/2) the distance last received unless additional instructions are received.

**EXCEPTION:** When within 5 car lengths of the coupling or stop, the person directing the move will call out distances in car lengths, as:

- "five cars"
- "four cars"
- "three cars," etc.

After acknowledging "five cars," the Engineer will not be required to further acknowledge countdown if so doing would interfere with safe operation. During this countdown, the Engineer will stop the move immediately after moving 1 car length unless receiving additional signals from the person directing the move.

- (e) If the instructions are not understood or continuous radio contact is not maintained, the movement will be stopped immediately. The movement may not be resumed until:
  1. The misunderstanding has been resolved.
  2. Radio contact has been restored.
  3. Communication has been achieved by hand signals or other procedures.

**217. Operating a Train from Other than Leading End**

- (a) When the Engineer operates a train from other than the leading end of the movement, a crewmember or other qualified employee must be stationed at, on or ahead of the leading end of the movement to:
  - observe conditions ahead
  - maintain hand signal, radio communication, or communicating signal to the Engineer
  - avoid fouling other tracks
- (b) When operating on a main track and the crewmember or qualified employee stationed at, on or ahead of the leading end is equipped with a whistle or horn as well as an emergency brake valve, the movement, unless further restricted, may proceed at a speed not to exceed 30 MPH.
- (c) When operating on a main track and the crewmember or qualified employee is not equipped with a whistle or horn as well as an emergency brake valve, movement must not exceed Restricted Speed.

## Appendix F

### **MOVEMENTS OVER HIGHWAY – RAIL GRADE CROSSINGS**

#### **120. Cars Not Headed by an Occupied Engine over a Highway – Rail Grade Crossing**

- (a) When cars not headed by an occupied engine are moved over a:
- public crossing
  - private crossing located outside the physical confines of a rail yard
  - pedestrian crossing located outside the physical confines of a rail yard
  - yard access crossing

A member of the crew must be on the ground at the crossing to warn traffic until the leading end has passed over the crossing.

Rail movements over the crossing will be made only on proper signal from the employee.

- (b) These actions are not required if the crossing is clear, and:
1. Crossing gates are in the fully lowered position, and are not known to be malfunctioning; or
  2. The crossing is equipped with flashing lights, crossbucks, or stop signs and it is clearly seen that no traffic is approaching or stopped at the crossing, and the leading end of the movement over the crossing does not exceed 15 MPH; or
  3. A qualified employee, other than a crewmember, with the ability to communicate with trains is stationed at the crossing to warn traffic; or
  4. The crossing has been rendered inaccessible to highway motor vehicles.

#### **121. Clearing Crossings**

- (a) Trains, engines, or cars when left unattended must clear crossings and crossing signal circuits. When practicable the equipment must be at least 300 feet from public or private crossing.
- (b) Public crossings must not be obstructed unnecessarily.

## Appendix G



- Trains do not travel on a predictable schedule – even though it may seem that way inside the mill. Always expect a train at every crossing.
- Trains have the right of way – you and your piece of equipment are “trespassing” when you enter working areas around tracks or move over a crossing.
- Trains cannot proceed through blue lights that are set properly on their track. Report any and all infractions of a train moving through a blue light immediately to the foreman on duty.
- Trains can move in either direction at any time. a string of railcars can be pushed or pulled – even if you cannot see a locomotive, cars may still be in motion.
- Certain crossing may be obstructed or the sight lines may be limited – especially depending on the piece of equipment you are operating. Position your piece of equipment before the crossing to provide the best line of sight. Observe the track line before you reach a crossing – that may give you the best view of any railroad traffic that is approaching.
- Reduced visibility at night makes crossings even more dangerous. Be proactive as you approach any crossing – look for railcars and movement. Report any and all instances of strings of cars that are moved at night without proper illumination on the lead car.
- Do not rely on hearing train horns, bells, etc. Railroads have specific rules for sounding warnings at specific types of crossings, but railroad operators will make errors.
- Rails must be locked out (de-railers) when loading railcars or when working within 6 feet of the rail.
- If there is a stop sign at crossing – all operators and all vehicles must come to a complete stop before proceeding. No exceptions.
- If lights are flashing or arms are down at a crossing – all vehicles must wait even if no rail traffic is in sight. Contact the foreman on duty if the lights remain on or arms remain down – do not proceed across even if other mill vehicles are crossing.

## Appendix H

# SERIOUS INCIDENT NOTICE

March 7, 2023



### Incident Description

**While the investigation of this tragic incident is ongoing, the following information is known:**

On Tuesday, March 7, 2023, at approximately 1:15 am EST, a 46-year-old conductor with 18 years of service was fatally injured when he was struck by a vehicle while riding a shove move over a private crossing in Cleveland, OH.

**Although this incident is still under investigation, the following information is known:**

- The two-person crew went on duty at 6:30 pm EST on Monday, March 6, 2023, and had completed their work at the Cleveland-Cliffs Works facility at the time of the incident.
- At the time of the incident, the injured conductor was positioned on the leading end of a tank car with a lantern and used the radio to direct the shove movement.

### Safety Considerations

Safety considerations in this publication should be used to elevate awareness on how to work safely in the railroad environment.

- Always pause to identify risks, process the information to choose the safe course of action, and proceed with the task in a safe manner.
- A job safety briefing may be performed at any time during the operation if work changes, becomes confusing, new tasks are started, or a rule violation is observed. Be sure to stop work as needed and move to a safe area.
- Follow all rules relating to shove moves.

### Rules for Discussion

*Although the incident remains under investigation, this Serious Incident Notice is an opportunity to refresh on certain rules. Rule excerpts are provided for review to minimize risks when performing work tasks.*

#### Operating Rule 120 – Cars Not Headed by an Occupied Engine over a Highway-Rail Grade Crossing

(a) When cars not headed by an occupied engine are moved over a:

- public crossing
- private crossing located outside the physical confines of a rail yard
- pedestrian crossing located outside the physical confines of a rail yard
- yard access crossing

A member of the crew must be on the ground at the crossing to warn traffic until the leading end has passed over the crossing. Rail movements over the crossing will be made only on proper signal from the employee.

(b) These actions are not required if the crossing is clear, and:

1. Crossing gates are in the fully lowered position, and are not known to be malfunctioning; or
2. The crossing is equipped with flashing lights, crossbucks, or stop signs and it is clearly seen that no traffic is approaching or stopped at the crossing, and the leading end of the movement over the crossing does not exceed 15 MPH; or
3. A qualified employee, other than a crewmember, with the ability to communicate with trains is stationed at the crossing to warn traffic; or
4. The crossing has been rendered inaccessible to highway motor vehicles.

### Other Rules for Review

Operating Rule 1 – Job Safety Briefings

Operating Rule 26 – Riding Side of Equipment

Operating Rule 215 - Shoving Equipment at Any Location